

पेटेंट कार्यालय  
शासकीय जर्नल

**OFFICIAL JOURNAL  
OF  
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पेटेंट कार्यालय का एक प्रकाशन  
PUBLICATION OF THE PATENT OFFICE

## **INTRODUCTION**

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01<sup>st</sup> January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

**( Shri Rajendra Ratnoo )**  
**CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS**

**30<sup>th</sup> JULY, 2021**

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**THE PATENT OFFICE  
KOLKATA, 30/07/2021**

**Address of the Patent Offices/Jurisdictions**

**The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-**

<p><b>1</b> Office of the Controller General of Patents, Designs &amp; Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office, S.M. Road, Antop Hill, Mumbai – 400 037</p> <p>Phone: (91)(22) 24123311, Fax : (91)(22) 24123322 E-mail: <a href="mailto:cgpdtm@nic.in">cgpdtm@nic.in</a></p>	<p><b>4</b> The Patent Office, Government of India, Intellectual Property Rights Building, G.S.T. Road, Guindy, Chennai – 600 032.</p> <p>Phone: (91)(44) 2250 2081-84 Fax : (91)(44) 2250 2066 E-mail: <a href="mailto:chennai-patent@nic.in">chennai-patent@nic.in</a></p> <p>❖ The States of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.</p>
<p><b>2</b> The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office, S.M. Road, Antop Hill, Mumbai – 400 037</p> <p>Phone: (91)(22) 24137701 Fax: (91)(22) 24130387 E-mail: <a href="mailto:mumbai-patent@nic.in">mumbai-patent@nic.in</a></p> <p>❖ The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu &amp; Dadra and Nagar Haveli</p>	<p><b>5</b> The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector -V, Salt Lake City, Kolkata- 700 091</p> <p>Phone: (91)(33) 2367 1943/44/45/46/87 Fax: (91)(33) 2367 1988 E-Mail: <a href="mailto:kolkata-patent@nic.in">kolkata-patent@nic.in</a></p>
<p><b>3</b> The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi – 110075</p> <p>Phone: (91)(11) 25300200 &amp; 28032253 Fax: (91)(11) 28034301 &amp; 28034302 E-mail: <a href="mailto:delhi-patent@nic.in">delhi-patent@nic.in</a></p> <p>❖ The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.</p>	<p>❖ Rest of India</p>

Website: [www.ipindia.nic.in](http://www.ipindia.nic.in)

[www.patentoffice.nic.in](http://www.patentoffice.nic.in)

**All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.**

**Fees: The Fees may either be paid in cash or may be sent by Bank Draft or Cheques payable to the Controller of Patents drawn on a scheduled Bank at the place where the appropriate office is situated.**

**पेटेंट कार्यालय**  
कोलकाता, दिनांक 30/07/2021  
• कार्यालयों के क्षेत्राधिकार के पते

विभिन्न जगहों पर स्थित पेटेंट कार्यालय के पते आंचलिक आधार पर दर्शित उनके प्रादेशिक अधिकार क्षेत्र के साथ नीचे दिए गए हैं:-

1	कार्यालय : महानियंत्रक, एकस्व, अभिकल्प तथा व्यापार चिह्न, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत, फोन: (91) (22) 24123311 फ़ैक्स: (91) (22) 24123322 ई. मेल: cgpdtm@nic.in	4	पेटेंट कार्यालय, भारत सरकार इंटेलेक्चुअल प्रॉपर्टी राइट्स बिल्डिंग, इंडस्ट्रियल इस्टेट एसआईडीसीओ आरएमडी गोडाउन एरिया एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड, गायन्डी चेन्नई - 600 032. फोन: (91) (44) 2250 2081-84 फ़ैक्स: (91) (44) 2250-2066 ई. मेल: chennai-patent@nic.in ❖ आन्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र, लक्षदीप
2	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, फोन: (91) (22) 24137701 फ़ैक्स: (91) (22) 24130387 ई. मेल: Mumbai-patent@nic.in ❖ <input type="checkbox"/> गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित क्षेत्र, दमन तथा दीव, दादर और नगर हवेली.	5	पेटेंट कार्यालय, भारत सरकार कोलकाता, (प्रधान कार्यालय) बौद्धिक संपदा भवन, सीपी-2, सेक्टर- V, साल्ट लेक सिटी, कोलकाता-700 091, भारत. फोन: (91) (33) 2367 1943/44/45/46/87 फ़ैक्स:/Fax: (91) (33) 2367 1988 ई. मेल: kolkata-patent@nic.in  ❖ भारत का अवशेष क्षेत्र
3	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, प्लॉट सं. 32, सेक्टर- 14, द्वारका, नई दिल्ली- 110 075. फोन: (91) (11) 25300200, 28032253 फ़ैक्स: (91) (11) 28034301, 28034302 ई. मेल: delhi-patent@nic.in हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान, उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित क्षेत्र चंडीगढ़		

वेबसाइट: <http://www.ipindia.nic.in>  
[www.patentoffice.nic.in](http://www.patentoffice.nic.in)

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाएं, विवरण या अन्य दस्तावेज़ या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे। शुल्क: शुल्क या तो नगद रूप में या Controller of Patents के नाम में देय बैंक ड्राफ्ट या चेक के द्वारा भेजी जा सकती है जो उसी स्थान के किसी अनुसूचित बैंक में प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है।

## **SPECIAL NOTICE**

### **18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.**

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

**(Shri Rajendra Ratnoo)**  
**CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS**

## **SPECIAL NOTICE**

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules there under, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18<sup>th</sup> months , grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every **Friday**.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

## **SPECIAL NOTICE**

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.

## **Early Publication:**

The following patent applications have been published under section 11A (2) of The Patents (Amendment) Act 2005 and rule 24A of The Patents (Amendment) Rules, 2006. Any person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011012105 A

(19) INDIA

(22) Date of filing of Application :20/03/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : LARGE QUANTITY BAG HAVING ANTI-COUNTERFEITING FEATURE

(51) International classification	:B42D0025355000, B65D0075300000, D21H0021420000, B65D0033200000, B01D0046240000	(71)Name of Applicant : <b>1)ASHOK CHATURVEDI</b> Address of Applicant :305, III FLOOR, BHANOT CORNER, PAMPOSH ENCLAVE, GK-1, NEW DELHI-110048 (INDIA). Delhi India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)ASHOK CHATURVEDI</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention describes a flexible package of good burst strength having stringent features to provide security against counterfeiting. The package with or without gussets may be re-closable or non-reclosable. The package includes a front panel and a rear panel arranged in opposite to the front panel defining an interior space of the package, and atleast one longitudinal continuous polymeric security strip on atleast one panel. The security strip may be opaque, transparent or translucent.

No. of Pages : 25 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011023791 A

(19) INDIA

(22) Date of filing of Application :06/06/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ASEPTIC LIQUID PACKAGING CONTAINER

(51) International classification	:B65D0065460000, B65D0003220000, B32B0029000000, B32B0027100000, B32B0027320000	(71) <b>Name of Applicant :</b> <b>1)Chaturvedi, Ashok</b> Address of Applicant :305, III FLOOR, BHANOT CORNER, PAMPOSH ENCLAVE, GK-1, NEW DELHI-110048 (INDIA) Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Chaturvedi, Ashok</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An aseptic liquid packaging container (100) is disclosed. The liquid packaging container made from a cup stock paperboard and may be a laminate structure (200b) configured to form the container. It can be a plurality of layers configured to form the laminate structure (200b) wherein at least one layer of the plurality of layers is a cup stock paperboard layer (204b).

No. of Pages : 12 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011024080 A

(19) INDIA

(22) Date of filing of Application :09/06/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR ENHANCING AN EXPRESSION OF A DIGITAL PICTORIAL IMAGE

(51) International classification	:B42D0025290000, C12Q0001040000, C07K0016240000, A61K0039020000, G06T0007000000	(71) <b>Name of Applicant :</b> <b>1)TALENT UNLIMITED ONLINE SERVICES PVT LTD</b> Address of Applicant :202, S/F 94 Meghdoot Nehru Place, South Delhi, Delhi - 110019, India Delhi India (72) <b>Name of Inventor :</b> <b>1)ANKIT PRASAD</b> <b>2)RAHUL PRASAD</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A system (100) and a method are provided for enhancing an expression of a digital pictorial image on a graphical user interface (GUI) (106a) of an electronic device (101). An expression enhancing engine (EEE) (110) receives a user selection of the digital pictorial image via an input interface, in communication with a sensing unit (107). The EEE (110) enhances the expression of the digital pictorial image in real time by modifying a size of the digital pictorial image to a selected scaling size; retrieving media content associated with the user selection of the digital pictorial image from a data storage device (115, 128); and reconstructing the digital pictorial image of the modified size with the media content. The EEE (110), in operable communication with a media playback device (105), renders the reconstructed digital pictorial image with the media content on the GUI (106a) in real time.

No. of Pages : 64 No. of Claims : 19

(54) Title of the invention : A Modular Architectural Light Fixture For Cleaning Air Pollutants and Pathogens

(51) International classification	:F21V0029760000, A61N0001040000, F28F0001120000, A61N0001320000, F21S0002000000	(71) <b>Name of Applicant :</b> <b>1)WADHWA, Abhay Mohan</b> Address of Applicant :Y-166, Regency Park 2, DLF Phase 4, Gurgaon Haryana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)WADHWA, Abhay Mohan</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Disclosed herein a modular lighting apparatus(1) and a method for disinfecting air circulating in an area, wherein said apparatus(1) comprising a housing(2) provided with inlets(9) and outlets(10) for receiving in air containing pathogens and exiting out air free from pathogens, at least two blowers/wind tunnels(4) having ends coinciding with the inlet(9) and the outlet(10) of the housing(2), one or more UVC light source(8) secured within the wind tunnels(4), and wherein said at least two wind tunnels(4) cross-sectionally tapering along the horizontal are anti-parallelly and adjacently disposed within the housing(2), wherein fans provided on said inlet(9) and outlet side(10) are arithmetically dependent for actively pulling in the air containing pathogens from downward direction to create a vortex of air so as to augmenting it to run over the UVC light source(8) for efficiently exhausting out the disinfected air upwardly at an angle between 15 and 45 degrees from the horizontal(H).

No. of Pages : 29 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011026030 A

(19) INDIA

(22) Date of filing of Application :20/06/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : NON MEDICAL CLOTH PROTECTIVE MASKS

(51) International classification	:A41D0013110000, A62B0023020000, A41B0009020000, A62B0018020000, B32B0003260000	(71) <b>Name of Applicant :</b> <b>1)KS KNITFABS</b> Address of Applicant :Plot No. 737C-737D, Sec 37, Pace City II, Gurugram, Haryana 122001, India Haryana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Sameer Bajaj</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The embodiments herein relates to a non-medical cloth protective face mask with bacterial filter layer comprises of a plurality of layers. The plurality of layers is shaped to generally follow a contour of a human face extending around respiratory organs. Further, the plurality of layers include (i) a first layer forming the outermost layer of the plurality of layers, (ii) a second layer forming the bacterial filter layer, (iii) a third layer forming a protective air permeable layer and (iv) a fourth layer forming the innermost layer of the plurality of layers. The non-medical cloth protective face mask also includes two ear loops, wherein the ear loops extend from the first layer forming the outermost layer to hold the face mask comfortably in place while wearing.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011029348 A

(19) INDIA

(22) Date of filing of Application :09/07/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A TROCAR CANNULA PORT ASSEMBLY TO PREVENT INFECTION DUE TO AEROSOL SPREAD

(51) International classification	:A61B0017340000, A61M0013000000, A61J0001140000, A61M0039240000, A61M0016080000	(71) <b>Name of Applicant :</b> <b>1)GUPTA, Paritosh</b> Address of Applicant :36 Gandhi Nagar Naria Sunderpur Varanasi, Uttar Pradesh- 221005, India Uttar Pradesh India (72) <b>Name of Inventor :</b> <b>1)GUPTA, Paritosh</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a trocar cannula port assembly capable of making the traditional port assembly safe by adding another valve (2a) with suction port proximal to the valve (2b) with insufflation port and adding a suction silicone cup (4) at the distal end of the port preventing escape of abdominal gases from the site of the port into the operating room. The suction port (5) of the port assembly may get attached to suction machine via a modified suction chamber (9).

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011029914 A

(19) INDIA

(22) Date of filing of Application :14/07/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PORTABLE HANDHELD INFRARED THERMOMETER AND ITS METHOD OF OPERATION

(51) International classification	:G01J0005020000, G01J0005000000, G01J0005080000, G01J0005040000, G01J0005060000	(71) <b>Name of Applicant :</b> <b>1)Indian Institute of Technology Kanpur</b> Address of Applicant :Dean, Research & Development, Room Number 151, Faculty Building, Post Office: IIT Kanpur, Kanpur- 208016, Uttar Pradesh, India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Baquer Mazhari</b>
(33) Name of priority country	:NA	<b>2)Biswanath Panda</b>
(86) International Application No	:NA	<b>3)Suraj Mallik</b>
Filing Date	:NA	<b>4)Vignesh Tirumalai Govindasamy</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates generally to a device for measuring temperature. In particular, the invention provides a portable hand-held device for non-contact body temperature measurement.

No. of Pages : 16 No. of Claims : 8

(54) Title of the invention : SYNERGISTIC AGROCHEMICAL COMPOSITION FOR REDUCING PHYTOTOXICITY IN CROPS TREATED WITH HERBICIDE.

(51) International classification	:A01N0043800000, A01N0047360000, A01N0043760000, A01N0043653000, A01N0043900000	(71) <b>Name of Applicant :</b> <b>1)RAJDHANI PETROCHEMICALS</b> Address of Applicant :Phase-1, Industrial Growth Center, SIDCO, Samba-184121, Jammu and Kashmir, India Jammu & Kashmir India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SHAH, Bhavesh V.</b>
(33) Name of priority country	:NA	<b>2)PATEL Dipakkumar</b>
(86) International Application No	:NA	<b>3)SHAH, Kenal V.</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A synergistic agrochemical composition comprising herbicides; and plant health additives for reducing phytotoxicity in crops on post herbicide application and combination thereof. More particularly, the present invention relates to a agrochemical composition comprising bioactive amounts of (A) a herbicide selected from Acetyl CoA Carboxylase (ACCase) Inhibitor for control of grassy weeds or mixture thereof; (B) a one or more herbicide(s) selected from the group of various class of compounds for control of broad-leaved weeds and grassy weeds and sedges in economical crops or mixture thereof; and (C) a plant health additive(s) for reducing phytotoxicity in crops on post herbicide application or mixture thereof. The present invention further relates to process for preparing the said compositions in specific ratio. The present invention further relates to the process for preparing the said composition along with at least one inactive excipient; and formulations thereof. The present invention further relates to the synergistic agrochemical composition and to reduce phytotoxicity in crops on post herbicide application, wherein active ingredient present in fixed ratio shows synergy in an herbicidal activity.

No. of Pages : 63 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011042200 A

(19) INDIA

(22) Date of filing of Application :29/09/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A MICRO-CHANNEL HEAT EXCHANGER TEST RIG

(51) International classification	:F28D0009000000, H01L0023473000, F28F0003040000, F21V0029650000, F28F0003120000	(71)Name of Applicant : <b>1)Dr. SATYENDRA SINGH</b> Address of Applicant :PROFESSOR, MECHANICAL ENGINEERING DEPARTMENT, BIPIN TRIPATHI KUMAON INSTITUTE OF TECHNOLOGY DWARAHAT, ALMORA, PIN CODE: 263653, UTTARAKHAND Uttarakhand India <b>2)SHIVASHEESH KAUSHIK</b> <b>3)SHAILESH RANJAN KUMAR</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. SATYENDRA SINGH</b> <b>2)SHIVASHEESH KAUSHIK</b> <b>3)SHAILESH RANJAN KUMAR</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Present invention based on micro-channel heat exchanger for improving the thermo-hydraulic behaviour of fluid flow. Micro-channel heat exchanger consists of four plates namely two central plates & two heater plates with two different designs of micro-channels and placed between the rectangular slots available near the edges of cylindrical groove in central plate heater plate, assembled in horizontal direction above the both sides of the central plate. The proposed invention is used for testing the performance, fluid flow properties and thermal behaviour of different shapes of micro-channel heat exchanger, used in various electronic devices such as laptops, super computers, CNC machines, medical equipments like MRI machines etc. for increasing the life of the equipments.

No. of Pages : 19 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011051239 A

(19) INDIA

(22) Date of filing of Application :25/11/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : CERVICAL RANGE OF MOVEMENT INSTRUMENT [CRI]

(51) International classification	:A61H0001020000, G02B0027200000, A61F0005055000, A63B0023025000, A61B0005055000	(71) <b>Name of Applicant :</b> <b>1)Swami Rama Himalayan University</b> Address of Applicant :Swami Ram Nagar, Jolly Grant Dehradun Uttarakhand India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Kunal Das</b>
(33) Name of priority country	:NA	<b>2)Nitika Agrawal</b>
(86) International Application No	:NA	<b>3)Vipul Nautiyal</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A Cervical Rotational Movement Instrument (CRI) (200), for determination of movements of a neck region of a user, comprises a dome-shaped frame (205) adapted to receive a head portion of the user, wherein the dome-shaped frame (205) includes a first curved member (210) parallel to a sagittal plane (110), a second curved member (220) parallel to a coronal plane (120) and normal to the first curved member (210), and a third curved member (230) parallel to a transverse plane (130) and normal to the first (210) and the second (220) curved members. Two fabric straps (270) with two respective optical pointers (272), the two fabric straps (270) being adapted to be wrapped around a face, a pre-auricular area, a temple, a vertex and a chin of the user. The two optical pointers (272) are adapted to be located at the vertex, and the chin of the user.

No. of Pages : 26 No. of Claims : 10

(54) Title of the invention : MAGNETIC REPULSION ENGINE

(51) International classification	:H02K0053000000, H02K0007075000, F02B0075320000, F16C0039060000, H02N0011000000	(71) <b>Name of Applicant :</b> <b>1)Manoj Kohli</b> Address of Applicant :10 Dugalkhola ( Near - Police Line ) Post - Almora Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Manoj Kohli</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is an energy producing device using magnetic pistons. It works on magnetic repulsion. Therefore this device is also called magnetic repulsion engine. The process of repelling each other by similar poles is a natural tendency of magnets. In the magnetic repulsion engine, the three magnets are arranged (as FIG. 1) in such a way that the magnet 1 and 2 are placed as they having similar poles opposite to each other. Same sequence also followed by magnet 2 and magnet 3. A ferromagnetic gate is inserted between stationary magnet and moving magnet to interfere their repulsive magnetic field. And the middle magnet works like a piston. The ferromagnetic gate is constructed by one or more small magnets and ferromagnetic metal or mu metal sheet. The role of small magnets present in gate seat is to repel both side magnets (magnet 1 and 2, magnet 2 and 3). The arrangement of ferromagnetic metal and small magnets in the gate is such that the attraction and repulsion force applied by the gate to the stationary magnet and piston magnet will be equal. The ferromagnetic gate inserted between the magnets can be pulled or pushed with applying zero force. The piston is connected to a connecting rod and crankshaft system, which converts linear motion to rotational motion. A piston with stationary magnets is used in this engine so that the piston can be moved back and forth with more power. A powerful engine is made using two or more such assemblies. The purpose of using two or more assemblies is to increase the power of the engine.

No. of Pages : 24 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111001337 A

(19) INDIA

(22) Date of filing of Application :12/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A LOW-COST SUBSURFACE LANDSLIDE MONITORING AND EARLY WARNING SYSTEM

(51) International classification	:G08B0021100000, G08B0025000000, G08B0031000000, A61B0005010000, G06N0099000000	(71) <b>Name of Applicant :</b> <b>1)Dr Varun Dutt</b> Address of Applicant :G2, C7,South Campus, Indian Institute of Technology Mandi, VPO- Kamand, District Mandi, Himachal Pradesh, India. Himachal Pradesh India
(31) Priority Document No	:NA	<b>2)Dr K.V. Uday</b>
(32) Priority Date	:NA	<b>3)Priyanka</b>
(33) Name of priority country	:NA	(72) <b>Name of Inventor :</b>
(86) International Application No	:NA	<b>1)Dr Varun Dutt</b>
Filing Date	:NA	<b>2)Dr K.V. Uday</b>
(87) International Publication No	: NA	<b>3)Priyanka</b>
(61) Patent of Addition to Application Number	:NA	<b>4)Ankush Pathania</b>
Filing Date	:NA	<b>5)Praveen Kumar</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an IoT and MEMS-based low-cost subsurface landslide monitoring and early warning system comprising a sensing unit, data logging and thresholding unit, and an alerting unit. The sensing unit further consists of multiple nodes comprising of a plurality of sensors such that each sensor is connected to the master-microcontroller (MMC) unit, and the MMC is responsible for reading the sensor values of both Surface Sensors (SSs) and Buried Sensors (BSs). System issues alert based upon the statistical and predictive algorithms based upon the previously acquired data values. Alerts of different severity levels are generated based on the previous dataset for a range of soil movements. Simultaneously, a Global System for Mobile (GSM) service sends the sensed data over the cloud at minute-scale intervals. An appropriate depth of failure zone can be estimated from the system, which can reference the mitigation scheme for landslide disaster risk reduction.

No. of Pages : 17 No. of Claims : 9

(54) Title of the invention : CLASSIFICATION MODEL IMPROVING ACCURACY USING NEIGHBORHOOD COMPONENT ANALYSIS FOR HEART DISEASE PREDICTION FOR MULTIPLE CLASSIFIERS USING MACHINE LEARNING

(51) International classification	:G06K0009620000, G06N0020000000, G06F0016350000, G16H0050700000, G06N0020200000	(71)Name of Applicant : <b>1)Ritu Aggarwal</b> Address of Applicant :Maharishi Markandeshwar Engineering College and Maharishi Markandeshwar Institute of Computer Technology & Business Management, Maharishi Markandeshwar Deemed to be University, Mullana, Ambala, Haryana, India, 133207 Haryana India <b>2)Dr. Suneet Kumar</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Ritu Aggarwal</b> <b>2)Dr. Suneet Kumar</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

In the health care systems the prediction of heart disease is a critical challenge .the major reason for increasing rate in morality and disability in the world is the cardiac disease. The early prediction and symptoms of heart disease helps the medical physicians to make it more efficiently treating and decisions regarding patients. With the use of machine learning classifiers a better solution could be finding. In this paper proposed an approach that is neighborhood component analysis which is used for selecting the most relevant features. In NCA approach the performance rate in terms of accuracy is achieved higher as compared to other approaches. The aim of this study to build a classification model using the neighborhood component analysis. This NCA is used and applying on the multiple classifiers of machine learning. For the multiple classifiers the experimental results obtained by NCA are providing greater performance because NCA provide higher accuracy. in this paper proposed a classification model using NCA with the four machine learning classifiers such as random Forest, decision tree, Na<sup>+</sup>ve bayes , support vector machine and shows the comparative analysis between existing systems are discussed. The information used for this paper by the UCI machine learning repository. In UCI have a Cleveland dataset .in this paper for Cleveland dataset have taken 303 instances and 75 attributes are used. This dataset has preprocessed dataset. This paper depicts the higher accuracy score with the multiple classifiers such as Random forest using NCA is 99.342105 %, for SVM 99.342105% ,for NB 99.342105 % and for DT is 98.026316 %.When Applying NCA and compare it's with existing system it provides better and more accurate results. The result shows not only accuracy for the proposed method, but obtains better results for multiple classifiers that exhibit their reliability.

No. of Pages : 25 No. of Claims : 6

(54) Title of the invention : INTEGRATING THE BLOCKCHAIN TECHNOLOGY INTO AN MOBILE-HEALTH SYSTEM

<p>(51) International classification :H04L0029080000, G01W0001020000, B60S0001080000, H04L0012240000, G01D0021020000</p> <p>(31) Priority Document No :NA (32) Priority Date :NA (33) Name of priority country :NA (86) International Application No :NA Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)BRAHMDUTT BOHRA</b> Address of Applicant :ASSISTANT PROFESSOR,DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING POORNIMA UNIVERSITY RAMCHANDRAPURA P.O.VIDHANI,VATIKA RD,SITAPURA JAIPUR,RAJASTHAN-303905 Rajasthan India</p> <p><b>2)DILPREET KAUR ARORA</b> <b>3)BHAWANA SAINI</b> <b>4)JYOTI LIM CHAND BANGARE</b> <b>5)Dr. MANOJ LIMCHAND BANGARE</b> <b>6)JOHN PIMO. S</b> <b>7)Dr. P. RAJKUMAR</b> <b>8)Dr. M. ANANTHI</b> <b>9)Dr. A KANAKA DURGA</b> <b>10)DR K. SANKAR</b></p> <p>(72)Name of Inventor : <b>1)BRAHMDUTT BOHRA</b> <b>2)DILPREET KAUR ARORA</b> <b>3)BHAWANA SAINI</b> <b>4)JYOTI LIM CHAND BANGARE</b> <b>5)Dr. MANOJ LIMCHAND BANGARE</b> <b>6)JOHN PIMO. S</b> <b>7)Dr. P. RAJKUMAR</b> <b>8)Dr. M. ANANTHI</b> <b>9)Dr. A KANAKA DURGA</b> <b>10)DR K. SANKAR</b></p>
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## (57) Abstract :

Aspects of the present disclosure relate to system (100) and method (200) for weather monitoring and reporting using the fuzzy logic and IoT. The system (100) comprises of sensors namely a temperature sensor (102) for sensing the temperature, a humidity sensor (104) for measuring the water content in the air, a rain sensor (106) for detecting the rain, a node microcontroller unit (MCU) (108) and an IoT platform (110). The node microcontroller (108) is the brain of the system (100), it collects and sends the data to the IoT platform (110) for analysis and visualization. The present disclosure also discloses a method (200) for monitoring and reporting using the fuzzy logic. In this method (200) the data collected by the sensors is initially fuzzified. After the fuzzification (206) the data, inference based rules are applied (208) on the fuzzified values. Finally, the result is defuzzified (210) so that it can be displayed using the various visualization tools on the IoT platform (110).

No. of Pages : 24 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111021223 A

(19) INDIA

(22) Date of filing of Application :11/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A MULTI-STEP AUTHENTICATION PROCESS FOR A DIGITAL TRANSACTION

(51) International classification	:G06Q0020400000, G06Q0020320000, G06Q0020380000, G06Q0020200000, H04L0012280000	(71) <b>Name of Applicant :</b> <b>1)THE AQUARIAN INVENTORS</b> Address of Applicant :#12, Civil Lines, Madrampura, Jaipur- 302006, Rajasthan , India Rajasthan India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Shailesh Vaya</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention provides a multi-step authentication process for a digital transaction, the process includes allowing a user to provide a plurality of device specific address that the user uses to access the internet. The plurality of device specific addresses provided by the user are then stored. An initiated transaction is identified, wherein identification includes identifying device specific address of the initiated transaction. The device specific address the user is using to initiate a transaction is verified with the stored plurality of device specific addresses. If the device specific address of the initiated transaction is different from the stored plurality of device specific addresses, then the user is alerted. The user is allowed to complete the transaction if the user confirms of initiating the transaction. A system for a multi-step authentication for a digital transaction is also provided.

No. of Pages : 23 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111029855 A

(19) INDIA

(22) Date of filing of Application :02/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A DIAPER ALARM DEVICE

(51) International classification	:A61F0013420000, G01R0031500000, G08B0021200000, G01M0003160000, H01L0051000000	(71) <b>Name of Applicant :</b> <b>1)SANTOSH KUMARI</b> Address of Applicant :HOUSE NO 3348 SECTOR 19 D CHANDIGARH 160019 Chandigarh India <b>2)PRATEEK GUPTA</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SANTOSH KUMARI</b>
(33) Name of priority country	:NA	<b>2)PRATEEK GUPTA</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure discloses an alarm device (100) for detecting and reporting diaper change condition. The alarm device (100) comprises a pair of conductive wires (102) positioned within a diaper, an alarm module (104), and a switching element (106). The alarm module (104) and the switching element (106) are part of a reusable assembly (18). The reusable assembly (18) is detachably attached by the pair of conductive wires (102) using a connector mechanism (108). When wetness level in a diaper reaches a predetermined level, the pair of conductive wires (102) switch to close connection, facilitating the switching element (106) to switch the alarm module (104) to ON condition to generate an alarm. The generated alarm alerts a parent or a caregiver by reporting diaper change condition. The reusable assembly is reused to detect and report wetness level of a diaper by connecting to a corresponding pair of conductive wires.

No. of Pages : 21 No. of Claims : 12

(54) Title of the invention : SENSOR BASED ARTIFICIAL NERVOUS SYSTEM TO ASSIST PARALYZED PEOPLE

<p>(51) International classification :G06N0003063000, A61N0001360000, A61N0002000000, G06N0003040000, G16H0050500000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Radhey Shyam Meena</b> Address of Applicant :Ministry of New &amp; Renewable Energy (MNRE), National Solar Mission (NSM) Division, Block 14, CGO Complex , Lodhi Road, New Delhi 110003 India Delhi India</p> <p><b>2)Dr. Nisheeth Joshi</b></p> <p><b>3)Dr.I.Sharath Chandra</b></p> <p><b>4)Dr. Ravi Kumar</b></p> <p><b>5)Mr. Abhaya Kumar Sahoo</b></p> <p><b>6)Dr. Chittaranjan Pradhan</b></p> <p><b>7)Yazusha sharma</b></p> <p><b>8)Tarun Jaiswal</b></p> <p><b>9)Prof.Biju Balakrishnan</b></p> <p><b>10)Dr. Md. Khaja Mohiddin</b></p> <p><b>11)Dr. Anirban Das</b></p> <p><b>12)Dr.S.Balamurugan</b></p> <p><b>13)Dr. Pavithra G</b></p> <p><b>14)Dr.T.C.Manjunath</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Radhey Shyam Meena</b></p> <p><b>2)Dr. Nisheeth Joshi</b></p> <p><b>3)Dr.I.Sharath Chandra</b></p> <p><b>4)Dr. Ravi Kumar</b></p> <p><b>5)Mr. Abhaya Kumar Sahoo</b></p> <p><b>6)Dr. Chittaranjan Pradhan</b></p> <p><b>7)Yazusha sharma</b></p> <p><b>8)Tarun Jaiswal</b></p> <p><b>9)Prof.Biju Balakrishnan</b></p> <p><b>10)Dr. Md. Khaja Mohiddin</b></p> <p><b>11)Dr. Anirban Das</b></p> <p><b>12)Dr.S.Balamurugan</b></p> <p><b>13)Dr. Pavithra G</b></p> <p><b>14)Dr.T.C.Manjunath</b></p>
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## (57) Abstract :

The Sensor-Based Artificial Nervous System to assist Paralyzed People (SANS) helps the paralyzed people to make use of the SANS by wearing the artificial bypass synapse (ABS) to join two disconnected biological neurons of the human body parts automatically. The biological neuron is transferring the brain signals to the muscle. For paralyzed people, these neurons have been disconnected. Due to this, the body parts are not functioning after the disconnected neuron. To overcome this problem, an artificial bypass synapse helps to join the two disconnected biological neurons. The user needs to wear the ABS in between the two disconnected biological neurons. The pre-synaptic cells have been used to transfer the brain signals from the brain to ABS, and the postsynaptic cell is transferring the signals from ABS to muscle. The photodiode, transistor, and artificial neuron circuit are the internal part of the ABS which connects the two disconnected biological neurons artificially. After the successful transfer of the signals through ABS, the disconnected body parts can function normally. The SANS control unit helps to monitoring and managing the successful functioning of the whole SANS system. By using this SANS, the paralyzed people to make use of the SANS by wearing the ABS to join the two disconnected biological neurons of human body parts automatically.

No. of Pages : 16 No. of Claims : 3

(54) Title of the invention : EXTRUDED FRIED SNACK FROM TARO

(51) International classification	:A23J0003260000, A23L0007130000, A21D0013420000, A23L0019180000, A23L0029244000	(71) <b>Name of Applicant :</b> <b>1)VIVEK KUMAR</b> Address of Applicant :Department of Food Technology, Harcourt Butler Technical University, Kanpur, Uttar Pradesh 208002, India Uttar Pradesh India
(31) Priority Document No	:NA	<b>2)H. K. SHARMA</b>
(32) Priority Date	:NA	<b>3)ANJALI SRIVASTAVA</b>
(33) Name of priority country	:NA	(72) <b>Name of Inventor :</b>
(86) International Application No	:NA	<b>1)VIVEK KUMAR</b>
Filing Date	:NA	<b>2)H. K. SHARMA</b>
(87) International Publication No	: NA	<b>3)ANJALI SRIVASTAVA</b>
(61) Patent of Addition to Application Number	:NA	<b>4)MANISHA PARASHAR</b>
Filing Date	:NA	<b>5)ALAK KUMAR SINGH</b>
(62) Divisional to Application Number	:NA	<b>6)AKSHAY KUMAR SINGH</b>
Filing Date	:NA	

(57) Abstract :

A taro bhujia (112), the taro bhujia (112) comprising: flour mixture (110) consisting essentially of mashed taro corms (102), gram flour (104), corn flour (106), moth flour (108), salt and oil, wherein the flour mixture (110) comprises about 62 to 78 grams of mashed taro corms (102), 4 to 21 grams of gram flour (104), 6 to 20 grams of corn flour (106), 3 to 13 grams of moth flour (108), and 1.5 to 3.0 grams of salt; wherein the flour mixture (110) was kneaded by adding 10 to 15 grams of refined oil, wherein a dough may be prepared by adding water into the flour mixture (110) to maintain 50 to 56% moisture content, wherein the dough was passed through extrusion and then the extruded sample was fried in 1 to 1.5 liter refined oil maintained at 150 to 180oC for about 20 to 80 seconds.

No. of Pages : 14 No. of Claims : 10

(54) Title of the invention : ANN BASED SWITCHING OF CAPACITOR BANK IN AN EV POWERED BY MODIFIED FUEL CELL

(51) International classification	:H01M0008124000, H01M0008061200, H01M0008124600, H02K0053000000, H01M0008242500	(71) <b>Name of Applicant :</b> <b>1)Dr. Samta Manori</b> Address of Applicant :Dehradun Institute of Technology University, Dehradun, Uttarakhand, India. E-mail: samta.manori@gmail.com Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Samta Manori</b>
(33) Name of priority country	:NA	<b>2)Ms. Anita Dhyani</b>
(86) International Application No	:NA	<b>3)Dr. Ashutosh Trivedi</b>
Filing Date	:NA	<b>4)Dr. Ashok Manori</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Battery and fuel cell, combined with the Ultra-Capacitors (UC), has major advantage as an electric vehicle™s power source. Appropriate switching of UC bank with battery storage can provide better utilization of UCs. Switching performance of the capacitor bank can be improved by the proper mapping of drive cycle using Artificial Neural Network (ANN). With proper mapping, size and rating of capacitive switching bank can be reduced which reduces the cost and increases the life of bank as the switching losses are less. With the predictive series parallel combinations of UCs, switching frequency of the UC bank and heating losses can be reduced. Due to increased demand of green and sustainable resources of energy for power consumption, Solid Oxide Fuel Cells (SOFC) have attracted much interest of researchers and industries as an alternative power generation device due to their improved efficiency, working temperature, start-up time and environment friendly characteristics. Fuel cells generate electrical energy from chemical energy without any combustion, and hence, they have become one of the decisive technologies for production of hydrogen energy in the coming generations. Thus, by implementation of a thin film based SOFC along with a battery powered EV, can greatly enhance the power density and efficiency of the electric vehicle with reduced size of power supply.

No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030021 A

(19) INDIA

(22) Date of filing of Application :05/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BATTERY MANAGEMENT SYSTEM (BMS) IN ELECTRIC VEHICLE (EV).

(51) International classification	:H02J0007000000, B60L0058220000, B60L0003000000, H01M0010440000, B60L0058120000	(71)Name of Applicant : <b>1)Dr. Jaipal Saroha (Professor)</b> Address of Applicant :Dept. of Instrumentation Kurukshetra University Kurukshetra, Thanesar, Haryana 136119, India. Haryana India
(31) Priority Document No	:NA	<b>2)Dr. V M Murthy</b>
(32) Priority Date	:NA	<b>3)Dr. Ashok Manori (Assistant Professor)</b>
(33) Name of priority country	:NA	(72)Name of Inventor :
(86) International Application No	:NA	<b>1)Dr. Jaipal Saroha (Professor)</b>
Filing Date	:NA	<b>2)Dr. V M Murthy</b>
(87) International Publication No	: NA	<b>3)Dr. Ashok Manori (Assistant Professor)</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The active cell balancing is one of the most critical part of Battery Management System (BMS) in Electric Vehicle (EV). Active cell balancing increases the efficiency by reduced heat dissipation in passive elements while maintaining equal charge distribution in each series connected cell of Battery / Pack. In a system many cell balancer circuit can work independently or synchronously.

No. of Pages : 10 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030050 A

(19) INDIA

(22) Date of filing of Application :05/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN INTEGRATED DIGITAL PLATFORM FOR PRE-BOOKING TO HOSPITALIZE

(51) International classification	:G06Q0050220000, G16H0040200000, G06Q0010020000, G16H0010600000, E05B0065100000	(71)Name of Applicant : <b>1)Dr. Naveen Upreti</b> Address of Applicant :Assistant Director, IEEMA, New Delhi Delhi India <b>2)Dr. Vijayta Fulzele</b> <b>3)Dr. Roopali Fulzele</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Naveen Upreti</b> <b>2)Dr. Vijayta Fulzele</b> <b>3)Dr. Roopali Fulzele</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In the present scenario, the healthcare infrastructure of India is not adequate. During the pandemic patients who require an immediate attention and hospitalization fail to find any hospitals that can provide them healthcare solutions. Due to such mismatch in demand and supply, delays in getting the treatment from the hospital observed. At times these delays results in mortality of patients<sup>TM</sup> lives. To address this serious concern, the present invention discloses a 24X7 Integrated Digital Platform that will provide a real time information about the availability of beds in different hospitals of specific states or regions and would allow the patients to pre-book the beds or other hospital facilities if available. The present invention will also help to save a lot of time, efforts, resources and panic situations can also be avoided which in turn will become first remedy for the patient and his or her family members or guardian

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030176 A

(19) INDIA

(22) Date of filing of Application :05/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD FOR PREDICTING AND EARLY WARNING OF MENTAL DISORDERS USING NEURAL NETWORKS

(51) International classification	:G06K0009620000, G16H0050300000, A61B0005000000, A61B0005160000, G16H0020700000	(71)Name of Applicant : <b>1)Dr. Kamal Upreti</b> Address of Applicant :Associate Professor, Department of Artificial Intelligence & Machine Learning, Inderprastha Engineering College, Ghaziabad- 201010. Uttar Pradesh India <b>2)Dr. Mohammed Hameed Alhameed</b> <b>3)Mohammad Shabbir Alam</b> <b>4)Mohammad Shahnawaz Nasir</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Kamal Upreti</b> <b>2)Dr. Mohammed Hameed Alhameed</b> <b>3)Mohammad Shabbir Alam</b> <b>4)Mohammad Shahnawaz Nasir</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Aspects of the present disclosure relate to a method of predicting and early warning of mental disorders using neural networks. The method (100) comprises steps of acquiring psychological test information (102), of a mental disorder patient by performing a pre-designed psychological test on the patient, performing (106), feature selection on the psychological test database (104), creating a neural network (108), by performing data pre-processing, training, and testing using the psychological test database (104) determining (110), psychological characteristic information of the mental disorder patient by implementing the tested neural network (108) predicting (112), the classification and risk level of a mental disorder. This method can be extensively used in home, hospital, public places and to monitor mentally ill people.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030196 A

(19) INDIA

(22) Date of filing of Application :05/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SMART WALKING ASSISTANCE DEVICE FOR VISUALLY IMPAIRED PEOPLE

(51) International classification	:G09B0021000000, A61H0003060000, G01S0015930000, G06K0009000000, G08B0007060000	(71) <b>Name of Applicant :</b> <b>1)SHARDA UNIVERSITY</b> Address of Applicant :32-34, Knowledge Park III, Greater Noida, 201310, Uttar Pradesh (UP), India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Srishti Agarwal</b>
(33) Name of priority country	:NA	<b>2)Dr. Mohit Sahni</b>
(86) International Application No	:NA	<b>3)Dr. Lalit Chauhan</b>
Filing Date	:NA	<b>4)Dr. R. M. Mehra</b>
(87) International Publication No	: NA	<b>5)Dr. Sunil Chauhan</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a smart walking assistance device (1000) for visually impaired people which enabling them to move or walk independently. The device (1000) comprises a plurality of ultrasonic sensors (100) configured to detect an obstacle at about ground level to about waist level of the visually impaired people, a liquid detection sensor (200), a flame detection sensor (300), a light detection sensor (400), and a control unit (500) connected to the ultrasonic sensors (100) which is further connected to an alarm such that the control unit (500) receives signals from the ultrasonic sensors (100) and triggers the alarm upon detection of the obstacle. Each of the liquid detection sensor (200), flame detection sensor (300), and light detecting sensor (400) is connected with a different warning mechanism to alert the visually impaired people. A method of detecting obstacles by the device (1000) for visually impaired people is also provided.

No. of Pages : 23 No. of Claims : 10

(54) Title of the invention : PERFORMANCE MONITORING DEVICE FOR A REAL TIME MANUFACTURING MACHINE

<p>(51) International classification :G05B0019406900, G06F0009455000, B29C0045760000, E02F0009260000, H01L0027320000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Prof. Ajay K.S. Singholi, G.B.Pant Engineering College</b> Address of Applicant :Professor, Mechanical and Automation Engineering, G.B.Pant Engineering College, New Delhi, India - 110020, Email id : ajay.igit@gmail.com Mobile No : 9810120349 Delhi India</p> <p><b>2)Dr. Rajkumar Natarajan, Eclerx</b></p> <p><b>3)Dr.G. Kumaravel, University of Technology and Applied Sciences Ibri</b></p> <p><b>4)Dr.S.Kirithiga</b></p> <p><b>5)Anita Pritam, College of Engineering and Technology</b></p> <p><b>6)Maitri Mallick, KMBB College of Engineering and Technology</b></p> <p><b>7)Dr. Shivappa H.A., Dr. Ambedkar Institute of Technology</b></p> <p><b>8)Dr. Makarand Upadhyaya, University of Bahrain</b></p> <p><b>9)Lakshmi Devadas, ETAP Automation Pvt Ltd</b></p> <p><b>10)Jenopaul. P, Adi Shankara Institute of Engineering and Technology</b></p> <p><b>11)L. Vadivel Kannan, PSNA College of Engineering and Technology</b></p> <p><b>12)Dr. Pavithra G, Dayananda Sagar College of Engg.</b></p> <p><b>13)Dr. T.C.Manjunath, Dayananda Sagar College of Engg.</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Prof. Ajay K.S. Singholi, G.B.Pant Engineering College</b></p> <p><b>2)Dr. Rajkumar Natarajan, Eclerx</b></p> <p><b>3)Dr.G. Kumaravel, University of Technology and Applied Sciences Ibri</b></p> <p><b>4)Dr.S.Kirithiga</b></p> <p><b>5)Anita Pritam, College of Engineering and Technology</b></p> <p><b>6)Maitri Mallick, KMBB College of Engineering and Technology</b></p> <p><b>7)Dr. Shivappa H.A., Dr. Ambedkar Institute of Technology</b></p> <p><b>8)Dr. Makarand Upadhyaya, University of Bahrain</b></p> <p><b>9)Lakshmi Devadas, ETAP Automation Pvt Ltd</b></p> <p><b>10)Jenopaul. P, Adi Shankara Institute of Engineering and Technology</b></p> <p><b>11)L. Vadivel Kannan, PSNA College of Engineering and Technology</b></p> <p><b>12)Dr. Pavithra G, Dayananda Sagar College of Engg.</b></p> <p><b>13)Dr. T.C.Manjunath, Dayananda Sagar College of Engg.</b></p>
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## (57) Abstract :

This invention provides monitoring device that performs is monitoring on operations of an actual machine using an acquisition unit which acquires actual operation data that designates actual operations of each portion of an actual machine from a control device which controls the actual machine; a display item setting unit that sets display items that are comprised in a timing chart that is displayed on a display device; and a storage unit, wherein the storage unit stores reference operation data indicating a reference operation of each portion of the actual machine, first related information that associates specific actual operation data and reference operation data with the display items, and second related information that connections components that are included in a virtual machine on an image that simulates the actual machine with the specific actual operation data and the reference operation data. The display device which includes a liquid crystal display (LCD), an organic EL display (Organic Light Emitting Diode, OLED), or the like and displays an image outputted from the monitoring device.

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030363 A

(19) INDIA

(22) Date of filing of Application :06/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AIR TREATMENT APPARATUS

(51) International classification	:B01D0046000000, A61L0009030000, B41J0002175000, B01D0053260000, F24F0003160000	(71) <b>Name of Applicant :</b> <b>1)Shree Guru Gobind Singh Tricentenary University</b> Address of Applicant :Chandu-Budhera Badli road Gurugram Haryana 122505 India Haryana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Abhishek Swami</b>
(33) Name of priority country	:NA	<b>2)Vaishali Wadhwa</b>
(86) International Application No	:NA	<b>3)Lavisha Batra</b>
Filing Date	:NA	<b>4)Shalini Yadav</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses an air treatment apparatus. The air treatment apparatus (100) includes: a housing (10); an intake port (20) disposed on the housing (10) for receiving atmospheric air; and an outlet port (30) disposed on the housing (10) for expelling treated air into atmosphere. The air treatment apparatus (100) further includes a first filter (40a); a second filter (40b); and a third filter (40c) such that the atmospheric air received from the intake port (20) passes sequentially through the first filter (40a), the second filter (40b) and the third filter (40c) and the treated air is expelled into the atmosphere through the outlet port (30).

No. of Pages : 13 No. of Claims : 10

(54) Title of the invention : DETECTION &amp; ALERT SYSTEM FOR ANIMALS SAFETY ACROSS RAILWAY TRACKS

<p>(51) International classification :B61L0023040000, H04L0029060000, G08B0013240000, B61L0023000000, G08B0019000000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number:NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. Bineet Kumar Gupta</b> Address of Applicant :Designation : Associate Professor Department :DCA Institute Address : Shri Ramswaroop Memorial University Barabanki UP India 225003 Email : bkguptacs@gmail.com Mobile : 9621340860 Uttar Pradesh India</p> <p><b>2)Mr. Abhay Kumar Yadav</b></p> <p><b>3)Shobhit Sinha</b></p> <p><b>4)Dr. Suresh M B</b></p> <p><b>5)Dr. Deepak Gupta</b></p> <p><b>6)Dr. Ashish khanna</b></p> <p><b>7)Mr. Pradeep Kumar KG</b></p> <p><b>8)Dr. Aditya Pai H</b></p> <p><b>9)Dr. Gufran Ahmad Ansari</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. Bineet Kumar Gupta</b></p> <p><b>2)Mr. Abhay Kumar Yadav</b></p> <p><b>3)Shobhit Sinha</b></p> <p><b>4)Dr. Suresh M B</b></p> <p><b>5)Dr. Deepak Gupta</b></p> <p><b>6)Dr. Ashish khanna</b></p> <p><b>7)Mr. Pradeep Kumar KG</b></p> <p><b>8)Dr. Aditya Pai H</b></p> <p><b>9)Dr. Gufran Ahmad Ansari</b></p>
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(57) Abstract :

According to the present disclosure, there is a proposed cattle detection system with 170 three levels of security and detection, using three levels of security and detection, that helps prevent train track accidents by implementing three levels of security and detection with different sensors placed along cattle corridors. The Invention can be described in three divisions, Invention important part is detection of intrusion across Page 9 of 9 railway tracks. Once Intrusion is detected alarm is activated across tracks with the 175 train horn sound so that the animals crossing tracks are alerted with signal and are on safe side of track.

No. of Pages : 12 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030397 A

(19) INDIA

(22) Date of filing of Application :06/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BUOYANCY DEVICE TO LIFT OBJECTS FROM THE BOTTOM OF A WATER BODY.

(51) International classification	:B65B0043460000, B63C0007100000, B31B0070040000, B65B0043180000, B65D0030200000	(71) <b>Name of Applicant :</b> <b>1)KHRODIA, Akshansh</b> Address of Applicant :C-1/19, Mansarover Colony, Moradabad, Pin: 244001, Uttar Pradesh, India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KHRODIA, Akshansh</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a buoyancy device (1) that includes an outer lift bag (2) having width (W1), height (H1), an opening (8) and an integrated loop (4). The buoyancy device also has an inner lift bag (3) having width (W2), height (H2), an opening (8) and an integrated loop (4). The inner lift bag (3) is positioned in the inner volume of the outer lift bag (2). The inner lift bag (3) is aligned in such an orientation so that the integrated loops (4) of both lift bags meet at point (A). The point (A) on the integrated loops (4) is connected to one end of a chord (5). The other end of the chord (5) is connected to a hook (6). The hook (6) is capable of attaching a submerged object (7).

No. of Pages : 22 No. of Claims : 9

(54) Title of the invention : A METHOD OF CULTURING CHIMERIC EMBRYOS THROUGH AGGREGATION SOMATIC CO-CULTURE •

<p>(51) International classification :C12N0005073000, A01K0067027000, C12N0005073500, A01H0001080000, C12N0005071000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)GLA University, Mathura</b>  Address of Applicant :GLA University, 17km Stone, NH-2, Mathura-Delhi Road, CHAUMUHAN MATHURA UTTAR PRADESH India 281406 Uttar Pradesh India</p> <p>(72)<b>Name of Inventor :</b>  <b>1)Dr. Juhi Pathak</b>  <b>2)Dr. S. D. Kharche</b>  <b>3)Dr. Anjana Goel</b></p>
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(57) Abstract :

The present invention discloses a method of culturing non- human chimeric embryos through aggregation somatic co-culture comprising; obtaining parthenogenetic embryonic stem cells (pESCs); obtaining fertilized tetraploid embryos; and aggregation of tetraploid embryos and pESCs through tetraploid complementation technique on a somatic monolayer cell culture. The present invention further disclose a kit comprising culture system for culturing aggregation of non- human tetraploid embryos and pESCs through tetraploid complementation technique comprising somatic monolayer cell culture wherein the kit comprises; WOW (Well of the well) system having mCR2aa medium; oviduct epithelial cells monolayer (OE) in mCR2aa medium; granulosa cumulus cells monolayer (GC) in mCR2aa medium.

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030591 A

(19) INDIA

(22) Date of filing of Application :08/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMPUTER IMPLEMENTED FOOD ORDERING AND DELIVERING SYSTEM AND METHOD

(51) International classification	:G06Q0030060000, G06Q0050120000, G06Q0010080000, G06Q0030020000, A23L0033000000	(71) <b>Name of Applicant :</b> <b>1)LEONIS FOODS PRIVATE LIMITED</b> Address of Applicant :S-6/23, Nathupur DLF Phase 3, Farrukhnagar, Nathupur 67, Gurgaon, Haryana-122002, INDIA Haryana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mayur Dhir</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Online food ordering is a norm in the present world. There are a lot of restaurants that provide home delivery of online orders. In any family, the food preference of each individual may differ. Multiple orders need to be placed with different restaurants according to each member<sup>TM</sup>s liking. But placing different orders to different restaurants is not free from hassle of minimum order requirement, additional packaging and delivery charges etc. The present invention provides a computer implemented system (100) and method (300) for online food ordering and delivering, where a customer can place order for multiple items according to his choice/portion preference from different ordering hubs (103) / restaurants located at different locations within the first pre-set radius (41) from the user location (31) and get this user order (50) processed and delivered as a single order (80).

No. of Pages : 27 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030597 A

(19) INDIA

(22) Date of filing of Application :08/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A COMPOSITION FOR ABSORBING VOMIT/SPIT

(51) International classification	:D06M0015110000, A61L0015460000, C08K0005000000, A61K0008190000, A01N0025100000	(71) <b>Name of Applicant :</b> <b>1)TAIMED HYGIENE PVT LTD</b> Address of Applicant :G-10, NIDHI PLAZA-1, LOCAL SHOPPING COMPLEX, CHOWKI NO-02, GULABI BAGH Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)AMIT BANSAL</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present embodiment provides a composition for absorbing a liquid waste. The liquid waste includes agricultural wastes, vomit and spit. The composition includes a polyacrylate salt, a starch, a fragrance and an antibacterial salt. The composition further includes a layer of polyvinyl alcohol to prevent the absorption of water. The composition helps in solidifying the liquid waste into a tamper and leak proof gel like substance.

No. of Pages : 11 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030669 A

(19) INDIA

(22) Date of filing of Application :08/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A THREE-PHASE NON-INVASIVE AND SECURE COVID-19 DIAGNOSIS SYSTEM

(51) International classification	:A61B0005145500, A61B0005000000, G16H0050200000, G16H0010200000, C12Q0001684400	(71) <b>Name of Applicant :</b> <b>1)University of Petroleum and Energy Studies</b> Address of Applicant :Bidholi Campus, Energy Acres, P.O. Bidholi via Premnagar, Dehradun-248007, Uttarakhand India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DR. ANURAG JAIN</b>
(33) Name of priority country	:NA	<b>2)DR. SHAMIK TIWARI</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides an integrated system for diagnosis of COVID 19 infections in a patient. The whole system is divided into three phases. As shown in phase 1, an artificially assisted chatbot can guide an individual by asking some questions about the common symptoms. In case of even a single symptom, the next level of diagnosis can be considered which consists of the use of a thermal scanner and pulse oximeter in the second phase. In case of high temperature and low oxygen saturation level, the next level of diagnosis will be recommended, where chest radiography images can be analyzed through an AI-based model to diagnose the presence of the Covid-19 virus in the human body.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030670 A

(19) INDIA

(22) Date of filing of Application :08/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN IOT BASED THREE-PHASE NON-INVASIVE AND SECURE COVID-19 DIAGNOSIS SYSTEM

(51) International classification	:H04L0012580000, H04L0029080000, G06K0009620000, H04W0004700000, A61B0006020000	(71) <b>Name of Applicant :</b> <b>1)University of Petroleum and Energy Studies</b> Address of Applicant :Bidholi Campus, Energy Acres, P.O. Bidholi via Premnagar, Dehradun-248007, Uttarakhand India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DR. ANURAG JAIN</b>
(33) Name of priority country	:NA	<b>2)DR. SHAMIK TIWARI</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a Phase wise model by combining initial screening and X-ray images. The present invention reduces the human intervention through chatbot based initial screening, sensor based IOT devices and deep learning-based X-ray analysis. The present system provides a solution with help of technologies like artificial intelligence (AI) and the internet of things (IoT) to reduce the crowd in hospitals during the time of COVID 19 pandemic by assisting in observation of patients from their homes. This will not only save the cost but also reduces the time in taking the necessary step. Moreover, this will also help in reducing the spread of coronavirus. It also reduces the arrival rate of emergency cases in hospitals.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030673 A

(19) INDIA

(22) Date of filing of Application :08/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM OF STAND-ALONE ELECTRONICALLY TEMPERATURE CONTROLLED UTENSILS

(51) International classification	:F25D0031000000, B01J0020020000, F25B0027000000, B01D0001000000, A47J0036240000	(71) <b>Name of Applicant :</b> <b>1)University of Petroleum and Energy Studies</b> Address of Applicant :Bidholi Campus, Energy Acres, P.O. Bidholi via Premnagar, Dehradun-248007, Uttarakhand India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DR RAHUL NIJHAWAN</b>
(33) Name of priority country	:NA	<b>2)SHARIK KUNWAR</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This invention relates to stand-alone electronically temperature controlled utensils. Disclosed herein a system of stand-alone electronically temperature controlled utensils comprises lower part (100) and upper part (200); wherein lower part comprises Heating and Cooling unit (101), Microcontroller unit: (102), Battery unit (103), Display (104), Exhaust (105); wherein said Upper part of the mug (200) contains buttons (201) to set temperatures as needed by the user during the time of use; which gives the mug stand-alone functionality.

No. of Pages : 21 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030679 A

(19) INDIA

(22) Date of filing of Application :08/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR PIPE INSERT STRUCTURE

(51) International classification	:B67D0003000000, B67D0001000000, B67D0001140000, F16K0031600000, H04R0001100000	(71) <b>Name of Applicant :</b> <b>1)Pearl Precision Products Pvt. Ltd.</b> Address of Applicant :B-47, Sector-81, Noida-201305, UP , India. Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Naresh Kumar Garg</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In an embodiment of the present disclosure, a pipe insert structure for increasing the strength of a tap is disclosed. The device includes a tap body, a disc for decoration fitting and at least one spindle cover. The device further includes a tap handle, at least one ceramic disc and a metal pipe portion that fits inside the body of the tap. It is further disclosed that the metal pipe portion is inserted inside the body of the tap when the injection-molded body of the tap is hot.

No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : SYSTEM AND METHOD FOR MONITORING WELL-BEING OF AN INFANT WEARING A WEARABLE-BAND

<p>(51) International classification :A61B0005000000, G06F0011300000, G06F0001160000, A61B0008120000, A61N0001372000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. Rohit Sharma</b></p> <p>Address of Applicant :Assistant Professor, Department of Electronics &amp; Communication Engineering, Faculty of Engineering and Technology, SRM Institute of Science and Technology, NCR Campus, Delhi- NCR Campus, Delhi-Meerut Road, Modinagar Ghaziabad Uttar Pradesh India Uttar Pradesh India</p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. Rohit Sharma</b></p> <p><b>2)Mr. Utpal Pandey</b></p> <p><b>3)Manish Kumar Singh</b></p> <p><b>4)Rachit Patel</b></p> <p><b>5)Vivek Kumar Srivastav</b></p> <p><b>6)Preet Kamal Singh</b></p> <p><b>7)Dr. Piyush Charan</b></p> <p><b>8)Mr. Krishna Pandey</b></p> <p><b>9)Vipin Sharma</b></p> <p><b>10)Satish Khatak</b></p>
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(57) Abstract :

The present disclosure relates to a method for monitoring well-being of an infant wearing a wearable-band, said method comprising the step of: sensing periodically, by a set of sensors being embedded on the band such that to enable the set of sensors to sense one or more parameters, a set of parameters associated with well-being of the infant wearing the band; comparing, by a control unit, the received set of parameters with a set of predefined thresholds, wherein the set of predefined thresholds is based on the received set of parameters; generating, by the control unit an alert signal if the received set of parameters breaches the set of predefined thresholds, wherein the generated alert signal signifies well-being of the infant wearing the band is affected.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030803 A

(19) INDIA

(22) Date of filing of Application :09/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : EXTENDABLE DOWN ROD

(51) International classification	:B08B0003020000, B60D0001360000, E21B0023000000, C21D0009000000, F02K0001760000	(71) <b>Name of Applicant :</b> <b>1)ITS Engineering College</b> Address of Applicant :46, Knowledge Park III, Greater Noida, Uttar Pradesh 201308, India. Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mahip Singh</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an extendable down rod, comprising multiple rods 1, 2 and 3 categorized into a primary 1, secondary 2 and tertiary rods 3 having different cross-sectional area, wherein the primary rod 1 is attached to a ceiling for providing stability to a fan 4 suspended to tertiary rod 3, a latch arrangement including a fixed 6 and hinged guide 5 for securing fan 4, wherein the fixed guide 6 is inclined up to a pre-defined angle thus forming a slot 8, a spring guided hook engaged with the slot 8, wherein upon application of a force above a threshold limit on fan 4 drives the hook to rotate hinged guide 5 for passing of the hook through the slot 8 to drop down the fan 4 up to a pre-determined height to restrict a user from hanging on to fan 4 for suicide and/or cleaning purposes.

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030840 A

(19) INDIA

(22) Date of filing of Application :09/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A BEVERAGE PROCESSING APPARATUS AND ASSEMBLY

(51) International classification	:B05B0011000000, H01L0021670000, G03G0021000000, B25C0001060000, B65H0003060000	(71) <b>Name of Applicant :</b> <b>1)HCL Technologies Limited</b> Address of Applicant :806, Siddharth, 96, Nehru Place, New Delhi - 110019, INDIA Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Yuvraj D Patil</b>
(33) Name of priority country	:NA	<b>2)Mohan Sriram</b>
(86) International Application No	:NA	<b>3)Akash Khavare</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A beverage processing apparatus (101) is disclosed that may include a dispenser head (102) to dispense a beverage powder and a liquid, and a roller support (104) positioned offset the dispenser head (102). The roller support (104) may receive a feeding roller (204) of a cartridge (200) and allow rotation of the feeding roller (204). The feeding roller (204) may feed a filter sheet (202). The apparatus (101) may further include a roller driver (106) positioned offset the dispenser head (102) opposite the roller support (104). The roller driver (106) may receive a collecting roller (206) of the cartridge (200), and rotate the collecting roller (206) to cause the collecting roller (206) to collect the filter sheet (202) fed by the feeding roller (204). A portion of the filter sheet (202) may extend between the roller support (104) and the roller driver (106) and below the dispenser head (102).

No. of Pages : 38 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030865 A

(19) INDIA

(22) Date of filing of Application :09/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A DIGITAL PLATFORM FOR SHOWCASING THE EXHIBITION ONLINE

(51) International classification	:G06Q0010100000, G06Q0050000000, H04L0012911000, G06Q0050100000, G06Q0010040000	(71)Name of Applicant : <b>1)Dr. Naveen Upreti</b> Address of Applicant :Assistant Director, IEEMA, New Delhi Delhi India <b>2)Dr. Vijayta Fulzele</b> <b>3)Dr. Roopali Fulzele</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Naveen Upreti</b> <b>2)Dr. Vijayta Fulzele</b> <b>3)Dr. Roopali Fulzele</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In usual the Physical Exhibition held on specific time or place and generally goes for 3 to 7 days. If someone is willing to go to these Exhibition then he has to go in these fixed time periods, sometimes the visitor are not able to attend these Exhibition due this reason, noticing this problem the inventor has developed A Digital Platform for the Virtual Exhibition where the organization can exhibit or show their existing or new cutting-edge technologies online and a interested visitor can access these Exhibition 24x7 and 365 days of years. As the Physical Exhibition required a huge space for arranging the logistics and organization have to spent a huge cost of money on the pre-event of the Exhibition, the invention will allow organizations to save these cost by providing a virtual Digital Platform where the organizations can exhibit their product, technologies and services on a single Platform.

No. of Pages : 18 No. of Claims : 10

(54) Title of the invention : SMART PHONE BASED SYSTEM FOR ATTENDANCE REGISTRATION WITH HANDWRITING RECOGNITION AND METHOD THEREOF

<p>(51) International classification :G06Q0010100000, G06Q0050200000, G07C0001100000, G06K0009000000, G07C0001120000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)ANVEKAR, DINESH KASHINATH</b> Address of Applicant :19, HALCYON DEFENCE ENCLAVE, BAGALUR CROSS, SATHNUR, BENGALURU-562149, KARNATAKA, INDIA Karnataka India</p> <p><b>2)RAJUK, VENUGOPAL KUPPANNA</b></p> <p><b>3)SHAHABADKAR, RAMESH</b></p> <p><b>4)SHAHABADKAR, KRUTIKA RAMESH</b></p> <p><b>5)SAHA, SANCHARI</b></p> <p><b>6)BOLUGALLU, SHANTHI MANDEKOLU</b></p> <p><b>7)YADAHALLI, RAVI MALLESHAPPA</b></p> <p><b>8)MOHAPATRA, SASMITA</b></p> <p><b>9)PARIMI, PHANINDAR RAVI</b></p> <p><b>10)MUNIRATHNAM, LAKSHMINARAYANA</b></p> <p><b>11)KIRESUR, MANJULA VASANT</b></p> <p><b>12)SIDDARAJU, NANDINI KANDAVARA</b></p> <p>(72)Name of Inventor :</p> <p><b>1)ANVEKAR, DINESH KASHINATH</b></p> <p><b>2)RAJUK, VENUGOPAL KUPPANNA</b></p> <p><b>3)SHAHABADKAR, RAMESH</b></p> <p><b>4)SHAHABADKAR, KRUTIKA RAMESH</b></p> <p><b>5)SAHA, SANCHARI</b></p> <p><b>6)BOLUGALLU, SHANTHI MANDEKOLU</b></p> <p><b>7)YADAHALLI, RAVI MALLESHAPPA</b></p> <p><b>8)MOHAPATRA, SASMITA</b></p> <p><b>9)PARIMI, PHANINDAR RAVI</b></p> <p><b>10)MUNIRATHNAM, LAKSHMINARAYANA</b></p> <p><b>11)KIRESUR, MANJULA VASANT</b></p> <p><b>12)SIDDARAJU, NANDINI KANDAVARA</b></p>
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## (57) Abstract :

The invention relates to a smart phone based system and method for attendance registration within a campus. The system comprises an attendance registration module installed in the smart phone (220); and an attendance server (230) storing an attendance database being in a wireless communication mode (235) with the attendance registration module. The attendance registrant (210) has to initiate his/her attendance registration process by using his/her smart phone when reaches his/her campus (200). The registration module is configured to receive from the server (230) a one time random phrase (OTRP) to be displayed in a screen of the smart phone (220), thereafter the attendance registrant (210) is requested though a message to write the OTRP on paper whose image is to be sent to the server (230) using the same smart phone (220). The server (230) is configured to check location of the attendance registrant (210) using GPS and the authenticity of his/her handwriting image through an artificial intelligence tool (400), which allows the attendance database to be updated and simultaneously an attendance status message to be sent to the smart phone (220).

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030902 A

(19) INDIA

(22) Date of filing of Application :09/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM FOR AUTOMATED TRAFFIC RULES VIOLATION DETECTION AND REPORTING FOR EMERGENCY VEHICLES

(51) International classification	:G08G0001096500, G08G0001017000, G08G0001087000, G08G0001096700, G11B0027300000	(71) <b>Name of Applicant :</b> <b>1)UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> Address of Applicant :BIDHOLI CAMPUS, ENERGY ACRES, P.O. BIDHOLI VIA PREMNAGAR, DEHRADUN - 248007, UTTARAKHAND INDIA Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MR. HIMANSHU SAHU</b>
(33) Name of priority country	:NA	<b>2)DR. KIRAN KUMAR RAVULAKOLLU</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Discloses herein a system for automated traffic rules violation detection and reporting for emergency vehicles comprises a front and the rear consist of set of camera sensor (1) and (2) which capture the video footage of the vehicle in front of the emergency vehicle and rear view of the traffic; a siren (3) which is checked and the system for violation detection and reporting; a set of proximity sensor (4, 5) which measures the distance of the vehicle parked in front and rear of the emergency vehicle (6) is the communication component which sends the data to the corresponding authority.

No. of Pages : 26 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111030903 A

(19) INDIA

(22) Date of filing of Application :09/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN INDEPENDENT HYBRID TRI MODE FUEL SYSTEM FOR VEHICLE USING GREEN ENERGY WITH SEAMLESS AUTOMATED TRANSFER CAPABILITY BETWEEN MODES

(51) International classification	:B60L0008000000, B60K0016000000, B60L0058120000, F03D0009000000, B60K0015035000	(71) <b>Name of Applicant :</b> <b>1)University of Petroleum and Energy Studies</b> Address of Applicant :Bidholi Campus, Energy Acres, P.O. Bidholi via Premnagar, Dehradun-248007, Uttarakhand India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DR. KAUSHIK GHOSH</b>
(33) Name of priority country	:NA	<b>2)MS. SUGANDHA SHARMA</b>
(86) International Application No	:NA	<b>3)DR. SHWETA MONGIA</b>
Filing Date	:NA	<b>4)PARAS ADLAKHA</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides an Independent Hybrid Tri Mode fuel system using Green Energy Vehicle is both independent of refuelling stations and pollution free. The system will not require to be taken to the refuelling stations, as solar panels will be fitted to the roof of the buses along with wind turbine at front. The energy produced from these two sources will be stored in common lead batteries, such that the cumulative energy is used for running the vehicles. In absence of sun, energy will be produced during the movement of the wind turbines fitted onto them. That is, at a time, the vehicle runs on a single source of energy only. Our design philosophy is to store the cumulative energy in batteries and run the vehicle thereby. Moreover, absence of one source will enable the vehicle to run seamlessly on another source without requiring changing to another source explicitly.

No. of Pages : 20 No. of Claims : 6

(54) Title of the invention : A SYSTEM FOR GENERATION OF ALARM AND DETECTION OF FACE IN BREAKAGE OF SOCIAL DISTANCING

(51) International classification	:H04N0007180000, G08B0013196000, G06K0009000000, G08B0021040000, B60R0001000000	(71) <b>Name of Applicant :</b> <b>1)UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> Address of Applicant :BIDHOLI CAMPUS, ENERGY ACRES, P.O. BIDHOLI VIA PREMNAGAR, DEHRADUN - 248007, UTTARAKHAND INDIA Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DR VIRENDER KADYAN</b>
(33) Name of priority country	:NA	<b>2)DR T P SINGH</b>
(86) International Application No	:NA	<b>3)ANIRUDH AGGARWAL</b>
Filing Date	:NA	<b>4)PULKIT SHARMA</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a system for generation of alarm and detection of face in social distance protocol breaking. The system comprising a video camera, a processor (Raspberry pie or beagle bone), a speaker, and a control board. The CCTV camera or any HD video camera can be installed at a height of 10 feet or more where it can capture the bird view of people gathered or moving at a place. These information are break on basis of frames which are tried to be processed on processor that help in identification of concerned person (as an object) that break the norms of social distance again and again. In case a person has break the rule only once then only an announcement is made. If at any place some people are breaking rules at frequent basis then announcement system will be activated as well as the control board installed at a control room can help in generation of alert to the building supervisor that can take action accordingly at the concerned place.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031055 A

(19) INDIA

(22) Date of filing of Application :10/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYNTHESIS OF NANO CURCUMIN LOADED TOPICAL GEL AND ITS PHARMACOLOGICAL EVALUATION

		(71)Name of Applicant :
		1)Dr. Lalit singh
		Address of Applicant :Professor & Director,Shri Ram Murti Smarak College of Engineering & Technology, Bareilly (Pharmacy), Ram Murti Puram, Bhojipura, 13 K.M., Bareilly-Nainital Highway, Bareilly, U.P., India, Pin Code-243202 Uttar Pradesh India
		2)Dr. Mohit
		3)Dr. Ritesh Jain
		4)Dr. Birendra Shrivastava
		5)Dr. Keshari Kishore Jha
		6)Dr. Manish Kumar Mishra
		7)Dr. Piush Sharma
		8)Dr. Parveen Kumar
		9)Dr. Arindam Chatterjee
		10)Dr. Dinesh Kumar
		11)Dr. Ganesh N. Sharma
		12)Dr. Deenanath Jhade
		13)Mr. Anish Chandy
		14)Mr. Azeem Ahmed
		(72)Name of Inventor :
		1)Dr. Lalit singh
		2)Dr. Mohit
		3)Dr. Ritesh Jain
		4)Dr. Birendra Shrivastava
		5)Dr. Keshari Kishore Jha
		6)Dr. Manish Kumar Mishra
		7)Dr. Piush Sharma
		8)Dr. Parveen Kumar
		9)Dr. Arindam Chatterjee
		10)Dr. Dinesh Kumar
		11)Dr. Ganesh N. Sharma
		12)Dr. Deenanath Jhade
		13)Mr. Anish Chandy
		14)Mr. Azeem Ahmed
(51) International classification	:A61K0047100000, A61K0009000000, G16B0040000000, A61K0047320000, A61K0031050000	
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to formulation of curcumin loaded topical gels were using Carbopol 934P and menthol by applying face centered central composit design. The impact of independent variables (Carbopol 934P and menthol) was observed on dependent variables. Data optimization was done by using design expert as a statistical tool to find the optimized batch using response surface meythodolgy followed by data validation. Validation check was done was done by formulating different batches and evaluated experimentally.

No. of Pages : 15 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031068 A

(19) INDIA

(22) Date of filing of Application :11/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM FOR MONITORING PLANTATION AND A METHOD THEREOF

(51) International classification	:H04N0007180000, G06T0007000000, G06K0009460000, A61B0005000000, H04N0005225000	(71)Name of Applicant : <b>1)H.P DEPARTMENT OF ENVIRONMENT</b> Address of Applicant :H.P DEPARTMENT OF ENVIRONMENT, SCIENCE & TECHNOLOGY, PARYAVARAN BHAWAN, SHIMLA Himachal Pradesh India <b>2)JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Dr. Yugal Kumar</b>
(33) Name of priority country	:NA	<b>2)Meenakshi Sood</b>
(86) International Application No	:NA	<b>3)Anjana Kumari</b>
Filing Date	:NA	<b>4)Dr. Pradeep Kumar Singh</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In one aspect of the present invention, a system (100) for monitoring plantation is disclosed. The system (100) includes an image capturing unit (102) having a plurality of RGB sensors for capturing and analyzing images of at least one part of the plantation; a processor (104) for processing the received and analyzed images; an expandable IoT-based memory (106) for storing all the analysis of the analyzed images, characterized such that new information retrieved from the images automatically upgraded in a database (108) and alerting over cloud enabled authenticated platform to associated research centres; and a user interface (110) for displaying the status of the plant.

No. of Pages : 21 No. of Claims : 10

(54) Title of the invention : IOT BASED SMART GREEN HOUSE SYSTEM

<p>(51) International classification :A01G0009140000, A01G0009240000, A01G0009220000, A01G0009160000, G06Q0050020000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. Vikas Kumar</b> Address of Applicant :Assistant Professor, Faculty of Agriculture, Vivekananda Global University, Jaipur, Rajasthan, India. Pin: 303012 Rajasthan India</p> <p><b>2)Dr. Pothuganti Karunakar</b></p> <p><b>3)Mr. Stephen Jebamalai Raj</b></p> <p><b>4)Mrs. M. Shanmathi</b></p> <p><b>5)Ar. V. Selvaraj</b></p> <p><b>6)Mrs. Navalgund Akkamahadevi</b></p> <p><b>7)Mr. Harsha B. K</b></p> <p><b>8)Dr. Ramesh Babu P</b></p> <p><b>9)Dr. Madijagan M</b></p> <p><b>10)Dr. Jayapandian N</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. Vikas Kumar</b></p> <p><b>2)Dr. Pothuganti Karunakar</b></p> <p><b>3)Mr. Stephen Jebamalai Raj</b></p> <p><b>4)Mrs. M. Shanmathi</b></p> <p><b>5)Ar. V. Selvaraj</b></p> <p><b>6)Mrs. Navalgund Akkamahadevi</b></p> <p><b>7)Mr. Harsha B. K</b></p> <p><b>8)Dr. Ramesh Babu P</b></p> <p><b>9)Dr. Madijagan M</b></p> <p><b>10)Dr. Jayapandian N</b></p>
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(57) Abstract :

The Smart Green House concept has been brought into the agricultural area to promote plant development in a short period of time. With an IoT-enabled framework controlled by a Smart Green House Intelligence Decision Support System, the system's quality can be improved. The system uses multiple sensors strategically positioned throughout a greenhouse to make decisions about actions such as water supply and nutrition level. All of the sensors and control systems operate in an automated setting, allowing small farmers to benefit from the greenhouse technology. This invention presents a framework or paradigm for small-scale farmers and individuals to simply construct smart greenhouses in their own communities. It also supplies less manpower and a limited number of natural resources for agricultural development.

No. of Pages : 20 No. of Claims : 5

(54) Title of the invention : A SYSTEM FOR IDENTIFYING INDICATORS OF SUSTAINABLE SMART-AGRICULTURE DRIVEN BY BIG DATA USING MODIFIED-TISM

(51) International classification	:G06Q0010060000, A01N0037060000, G06Q0050020000, G01W0001100000, G09B0019000000	(71)Name of Applicant : <b>1)Dr. Mohd Adil</b> Address of Applicant :Department of Management Studies National Institute of Technology (NIT) Hamirpur Himachal Pradesh India <b>2)Mr. Nikhil Dogra</b> <b>3)Dr. Asad Ullah</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Mohd Adil</b> <b>2)Mr. Nikhil Dogra</b> <b>3)Dr. Asad Ullah</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

It is widely acknowledged that adoption of sustainable policies is a tool for the inclusive growth of the country. Although, manufacturing industry has received a considerable attention as compared to service industry, sustainability in agriculture is the newest approach. The purpose of this invention is to explore key indicators of sustainable smart agriculture driven by big data. First, the key indicators that affect sustainability are identified and then the contextual relationships among them are investigated. Modified total interpretive structural model (M-TISM) is employed to investigate the interrelationships amongst the identified indicators. The invention indicate that the weather prediction and big data learning are the key indicators having high driving power. It implies that any change in these indicators would bring a significant change in other key indicators as well. Therefore, managers are cautioned to continuously monitor and deal with them with utmost care.

No. of Pages : 10 No. of Claims : 3

(54) Title of the invention : ANALYSIS OF IOT BASED WEATHER MONITORING AND REPORTING SYSTEM USING FUZZY LOGIC

<p>(51) International classification :H04L0029080000, G01W0001020000, G01D0021020000, H04L0012240000, H04W0004700000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. Kamal Upreti</b> Address of Applicant :Associate Professor, Department of Artificial Intelligence &amp; Machine Learning, Inderprastha Engineering College, Ghaziabad-201010. Uttar Pradesh India</p> <p><b>2)Dr. Chaitanya P. Agrawal</b></p> <p><b>3)Dr. Durgesh Mishra</b></p> <p><b>4)Mr. Bhuwansing Ambadas Damahe</b></p> <p><b>5)Dr. Vartika Singh</b></p> <p><b>6)Dr. Umesh Kumar Singh</b></p> <p><b>7)Mr. Abhishek Sharma</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. Kamal Upreti</b></p> <p><b>2)Dr. Chaitanya P. Agrawal</b></p> <p><b>3)Dr. Durgesh Mishra</b></p> <p><b>4)Mr. Bhuwansing Ambadas Damahe</b></p> <p><b>5)Dr. Vartika Singh</b></p> <p><b>6)Dr. Umesh Kumar Singh</b></p> <p><b>7)Mr. Abhishek Sharma</b></p>
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## (57) Abstract :

Aspects of the present disclosure relate to system (100) and method (200) for weather 5 monitoring and reporting using the fuzzy logic and IoT. The system (100) comprises of sensors namely a temperature sensor (102) for sensing the temperature, a humidity sensor (104) for measuring the water content in the air, a rain sensor (106) for detecting the rain, a node microcontroller unit (MCU) (108) and an IoT platform (110). The node microcontroller (108) is the brain of the system (100), it collects and sends the data to the IoT platform (110) 10 for analysis and visualization. The present disclosure also discloses a method (200) for monitoring and reporting using the fuzzy logic. In this method (200) the data collected by the sensors is initially fuzzified. After the fuzzification (206) the data, inference based rules are applied (208) on the fuzzified values. Finally, the result is defuzzified (210) so that it can be displayed using the various visualization tools on the IoT platform (110).

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031289 A

(19) INDIA

(22) Date of filing of Application :12/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : GRAPHENE BASED NANOMATERIALS DERIVED FROM DREPANOSTACHYUM FALCATUM FOR WATERPURIFICATION

(51) International classification	:C01B0032184000, H01L0029160000, B29D0007010000, C01B0032182000, H01M0004620000	(71)Name of Applicant : <b>1)Nanda Gopal Sahoo</b> Address of Applicant :Professor Rajendra Singh Nanoscience and Nanotechnology Centre, Department of Chemistry, Kumaun University, Nainital Uttarakhand India <b>2)Chetna Tewari</b> <b>3)Sandeep Pandey</b> <b>4)Gaurav Tatrari</b> <b>5)Anita Rana</b> <b>6)Himani Tiwari</b> <b>7)Anirban Dandapat</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Nanda Gopal Sahoo</b> <b>2)Chetna Tewari</b> <b>3)Sandeep Pandey</b> <b>4)Gaurav Tatrari</b> <b>5)Anita Rana</b> <b>6)Himani Tiwari</b> <b>7)Anirban Dandapat</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention aims to explore the wondrous properties of extensively potassium rich bamboo herb, and thus provides a temperature dependent process of synthesis of graphene based materials via a simple, economically feasible and environment friendly method, and recites its application in the field of bio imaging and water treatment. Thus, the present invention provides a process for the synthesis of 2D/3D graphene based materials from the extract and fibrous parts of the Drepanostachyumfalcatum plant by using two-stage thermal process. More particularly, the present invention provides a process for synthesis of metal doped graphene oxide sheets (MDGOs) and graphenenano ribbons (GNR).

No. of Pages : 19 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031316 A

(19) INDIA

(22) Date of filing of Application :13/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYNTHESIS OF AMIDE DERIVATIVES OF VANILLIC ACID: IN SILICO EVALUATION DOCKED AGAINST ANTIDIABETIC TARGET

(51) International classification	:G16B0015000000, G16C0020500000, C23C0014080000, G06F0009440100, C07D0401120000	(71)Name of Applicant : <b>1)Shanti Bhushan Mishra</b> Address of Applicant :United Institute of Pharmacy, UPSIDC Industrail Area, Naini, Prayagraj, U.P., Pin code: 211010. Uttar Pradesh India <b>2)Nishi Gupta</b> <b>3)Alok Mukerjee</b> <b>4)Anil Kumar Singh</b> <b>5)Shradhanjali Singh</b> <b>6)Amit Kumar Singh</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Shanti Bhushan Mishra</b> <b>2)Nishi Gupta</b> <b>3)Alok Mukerjee</b> <b>4)Anil Kumar Singh</b> <b>5)Shradhanjali Singh</b> <b>6)Amit Kumar Singh</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to the synthesis of novel amide derivatives of vanillic acid i.e. the discovery of new analogues (3a-3k) and their evaluation as antidiabetic agents via Invitro methods whereas molecular docking studies have been performed using Autodock. All the eleven new synthesized analogues were docked with protein target PDB ID: 3IJ8. Docking studies significantly suggested that the binding free energy of the compound 3a resembles with that standard drug Acarbose iz. -6.8 kcal/mol and -6.4 kcal/mol respectively. The in vitro screening results suggested that compounds 3a and 3g posses significant inhibition of both amylolytic enzymes (a-amylase & a-glucosidase) with IC50values of 3.71 mmol/ml, 4.56 mmol/ml and 4.92 mmol/ml, 5.35 mmol/ml respectively.

No. of Pages : 5 No. of Claims : 2

(54) Title of the invention : METHOD AND SYSTEM FOR AUTOMATED TESTING OF AN APPLICATION ON GAMING CONSOLES

(51) International classification  (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number: Filing Date (62) Divisional to Application Number Filing Date	:G06F0011360000, G06F0011220000, G07F0017320000, A63F0013300000, A63F0013235000	(71) <b>Name of Applicant :</b> <b>1)HCL Technologies Limited</b> Address of Applicant :806, Siddharth, 96, Nehru Place, New Delhi Delhi India
		(72) <b>Name of Inventor :</b> <b>1)Vineeth Amalraj Susai Michael</b> <b>2)Prathameshwar Pratap Singh</b> <b>3)Yogesh Gupta</b>

## (57) Abstract :

This disclosure relates to method and system for automated testing of an application on a set of gaming consoles. For each of the set of gaming consoles, the method (300) includes receiving (301) a command to send an activating signal to a gaming console from an Infrared (IR) module (205). The IR module (205) includes an IR Light Emitting Diode (LED) (211). For each of the set of gaming consoles, the method (300) further includes sending (302) the activating signal from the IR module (205) to an IR receiver of the gaming console via the IR LED (211) to activate the gaming console; initiating (303), upon activation, the application on the gaming console; receiving (304) instructions for a set of test operation actions for the application by a virtual Input/Output (I/O) controller (214) from an automated Universal Serial Bus (USB) simulator (204); and performing (305) each of the set of test operation actions on the application through the virtual I/O controller (214).

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031323 A

(19) INDIA

(22) Date of filing of Application :12/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : STAIRCASE MOBILITY SYSTEM

(51) International classification	:A61G0005100000, A61G0003080000, A61G0007100000, A61G0005120000, B63B0029040000	(71) <b>Name of Applicant :</b> <b>1)HCL Technologies Limited</b> Address of Applicant :806, Siddharth, 96, Nehru Place, New Delhi - 110019 Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Mahesh</b>
(32) Priority Date	:NA	<b>2)Vadiraj Hubli</b>
(33) Name of priority country	:NA	<b>3)Veeresh Somalingayya</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A staircase mobility system (100) is disclosed. The system (100) includes a base assembly (102) and a seat assembly (108). The seat assembly (108) includes a seat base (110), a back support (112) and a pair of armrests (126). The seat assembly (108) is configurable between a first configuration and a second configuration. In the first configuration the back support (112) is positioned vertically above the seat base (110) and each of the pair of armrests (126) is aligned in a first position. In the second configuration, the back support (112) is positioned vertically below the seat base (110), each of the pair of armrests (126) is aligned in a second position. Each of the pair of armrests (126) is configured to securely lock the wheelchair assembly (114) to the seat assembly (108) upon docking the compatible wheelchair assembly (114) by moving from the second position to the first position.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031357 A

(19) INDIA

(22) Date of filing of Application :13/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A CARBON MONOXIDE (CO) DETECTION AND VENTILATION SYSTEM

(51) International classification	:E05F0015720000, H01L0051520000, E05F0015710000, E06B0003440000, G01N0033000000	(71)Name of Applicant : <b>1)Manan Sajad Malik</b> Address of Applicant :Babur reyan lane, iqbal colony HMT zainakote Srinagar, Jammu and kashmir Jammu & Kashmir India <b>2)Farhana Fayaz batoo</b> <b>3)Er. Rouf ul alam bhat</b> <b>4)Jahangeer Aurshad</b> <b>5)Dr Abdul Mueed Hafiz</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Manan Sajad Malik</b> <b>2)Farhana Fayaz batoo</b> <b>3)Er. Rouf ul alam bhat</b> <b>4)Jahangeer Aurshad</b> <b>5)Dr Abdul Mueed Hafiz</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a carbon monoxide detection with automatic ventilation system (100) that comprises a first actuator (104) attached between a gas cylinder (106) and a gas heater (102), a first RF module (118) coupled to the gas heater (102), a sensor (116) coupled to the gas heater (102), a second actuator (136) coupled to a window (134), and a second RF module (124) coupled to the window (134). The system is configured to activate the first actuator (104) to stop a gas flow between the gas cylinder (106) and the gas heater (102) in response to detection of the carbon monoxide level is increased above a threshold level. The first RF module coupled to the gas heater (102) transmits a signal to the second RF module (124) coupled to the window (134). The second RF module (124) is configured to turn on the second actuator (136) coupled to the window (134). The second actuator (136) is configured to open the window (134) to reduce the carbon monoxide level inside the room.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031415 A

(19) INDIA

(22) Date of filing of Application :13/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SMART MONITORING SYSTEM FOR ELECTRICAL APPLIANCES

(51) International classification	:G08B0021040000, H05B0047105000, B60L0003040000, F24F0011300000, G06K0007100000	(71) <b>Name of Applicant :</b> <b>1)SHARDA UNIVERSITY</b> Address of Applicant :32-34, Knowledge Park III, Greater Noida, 201310, Uttar Pradesh (UP), India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sonia Rani</b>
(33) Name of priority country	:NA	<b>2)Dr. Mohit Sahni</b>
(86) International Application No	:NA	<b>3)Dr. Lalit Chauhan</b>
Filing Date	:NA	<b>4)Dr. R. M. Mehra</b>
(87) International Publication No	: NA	<b>5)Dr. Sunil Chauhan</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Dr. Pankaj Gupta</b>
Filing Date	:NA	<b>7)Dr. Piyush Kumar Gupta</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a monitoring system (1000) for electrical appliances (E) for saving power consumption. The system (1000) comprises a plurality of sensors (100) for detecting the presence or absence of a person, a control unit (200) to receive an input from the sensors (100), a display unit (300) is configured to display the count of the persons upon receiving an output from the control unit (200), and a relay (400) which is configured to be in switch-on or switch-off state upon receiving the output of the presence or absence of the person from the control unit (200) thereby controlling activation or deactivation of the electrical appliances (E). A method of monitoring electrical appliances (E) by the system (1000) is also provided.

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031529 A

(19) INDIA

(22) Date of filing of Application :14/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ELECTRONIC-IONIC POLYMER SENSOR FOR VOLTAGE GENERATION

(51) International classification	:G01N0033000000, H01B0001120000, B01D0067000000, C08L0025180000, H01M0008103900	(71)Name of Applicant : <b>1)GRAPHIC ERA (DEEMED TO BE) UNIVERSITY</b> Address of Applicant :566/6, Bell Road, Clement Town, Dehradun 248002, Uttarakhand, India Uttarakhand India <b>2)GRAPHIC ERA HILL UNIVERSITY, DEHRADUN CAMPUS</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Dr. Varij Panwar</b>
(33) Name of priority country	:NA	<b>2)Sumeshwar Singh</b>
(86) International Application No	:NA	<b>3)Shiv Ashish Dhondiyal</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an electronic-ionic polymer sensor for voltage generation comprising a polymer blend membrane, wherein said polymer blend membrane comprises a TER polymer, a polyvinylpyrrolidone (PVP), and a polymer mixture of two ionomers; and an ionic liquid. The TER polymer is a polymeric mixture of Vinylidene fluoride, Trifluoroethylene, and Chlorotrifluoroethylene. The polymer mixture is PEDOT:PSS and wherein said ionomers are poly(3,4-ethylenedioxythiophene) and polystyrene sulfonate. Further, various experiments performed taking different ratios of the TER polymer, the polyvinylpyrrolidone (PVP), and said polymer mixture used for preparing the polymer blend membranes. A method of fabrication of electronic-ionic polymer blend sensor is also disclosed. The electronic-ionic polymer sensor having sensing voltage up to 27 V is disclosed.

No. of Pages : 32 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031538 A

(19) INDIA

(22) Date of filing of Application :14/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN AUTOMATED SYSTEM AND METHOD FOR REGULATING RELEASE OF FRAGRANCE

(51) International classification	:H04N0005262000, G01N0035000000, G01N0030880000, G05D0023190000, G05B0019042000	(71) <b>Name of Applicant :</b> <b>1)KC GREEN REVOLUTION PVT. LTD.</b> Address of Applicant :A-170, Ambedkar Colony, Chhatarpur Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)BIPIN BIHARI PADHI</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present embodiment provides an automated system (100) and a method (200) for regulating a release of a fragrance. The automated system (100) includes an input unit (102) and a processing unit (104). The input unit (102) takes a plurality of values as an input from a user. The plurality of values include a date, a day, a time, a number of operating days, an off day, an hours of operation, a start time, a refill days, a peak hour and a sleep hour. The processing unit (104) determines a dispensing frequency of the fragrance on the basis of the plurality of values and regulates the release/spray of the fragrance. The present system (100) and method (200) is user-friendly and operates according to the requirements of the user.

No. of Pages : 29 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031720 A

(19) INDIA

(22) Date of filing of Application :14/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : VEHICULAR LAMP SYSTEM ADAPTED TO INDICATE A TURN AND INCLEMENT WEATHER CONDITION

(51) International classification	:B60Q0001440000, B60Q0001500000, B60Q0001200000, B60Q0001340000, B60Q0001300000	(71) <b>Name of Applicant :</b> <b>1)SHARDA UNIVERSITY</b> Address of Applicant :32-34, Knowledge Park III, Greater Noida, 201310, Uttar Pradesh (UP) Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Satyaprakash</b>
(33) Name of priority country	:NA	<b>2)Pinakana Sai Deepak</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a vehicular lightening system adapted to indicate a vehicle taking turn or changing lane during an inclement weather condition. The system comprising: a vehicle body having a rear portion, front portion and side portions; a safety light switch positioned within the inside of the vehicle body; and an electronic circuit board having at least one light emitting diode disposed on the rear portion and/or front portion and/or side portions and in electrical communication with the safety light switch. The safety light switch is capable to control the electronic circuit board so as to activate the at least one light emitting diode to a first color during inclement weather and switches to a second color upon activation of a turn indicator when the vehicle is taking turn or changing lane so as to indicate an ensuing vehicle of turning or lane changing of the vehicle during the inclement weather condition.

No. of Pages : 17 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031725 A

(19) INDIA

(22) Date of filing of Application :14/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A NOVEL SYSTEM FOR DIABETIC FOOT ULCER (DFU) CLASSIFICATION USING DEEP LEARNING FRAMEWORK AND EMBEDDED GPU

(51) International classification	:G06N0003040000, G06K0009620000, G06N0003080000, A61P0017020000, G06K0009660000	(71) <b>Name of Applicant :</b> <b>1)Dr. Seema Verma</b> Address of Applicant :504, Ramanujan Awas, Banasthali Vidyapith, Dist Tonk, Rajasthan - 302005, India. Rajasthan India <b>2)Madhava Prabhu S</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Seema Verma</b>
(33) Name of priority country	:NA	<b>2)Madhava Prabhu S</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

One of the major complications that has embraced the attention of research community is the accurate classification of Diabetic Foot Ulcers (DFU) in the Diabetic patients due to its high mortality index, and may result in amputations. Hence, this builds the aim and focus in our invention. Our work is carried out using low powered embedded Graphics Processing Unit called Jetson Nano that runs multiple neural networks simultaneously, and deep learning algorithm is applied for image classifications. The performance of the proposed approach is compared, and analyzed with Dense Net, VGGNet, and MatConvNet architectures. Results showed a significant improvement concerning the existing approaches by achieving maximum accuracy of 97.9%, 0.01 of AUC score, 0.0104 of MSE, 99% of Precision, 97% of F-Score, 90% of Specificity, and 87% of Sensitivity. Consequently, outperforming the existing CNN architectures.

No. of Pages : 20 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111031759 A

(19) INDIA

(22) Date of filing of Application :15/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SUN TRACKING MECHANISM WITH AN IOT BASED AUTOMATED MOVABLE PLATFORM

(51) International classification	:H02S0020320000, F24S0050200000, F24S0030000000, F24S0030452000, G01S0003786000	(71)Name of Applicant : <b>1)Dr. Mohd Tariq</b> Address of Applicant :Department of Electrical Engineering, ZHCET, Aligarh Muslim University Uttar Pradesh India <b>2)Miss Alina Naaz</b> <b>3)Mr. Mohd Azam</b> <b>4)Dr.Mohamed I. Mosaad</b> <b>5)Dr.Fahd A. Banakhr</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Mohd Tariq</b> <b>2)Miss Alina Naaz</b> <b>3)Mr. Mohd Azam</b> <b>4)Dr.Mohamed I. Mosaad</b> <b>5)Dr.Fahd A. Banakhr</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A solar tracking system mechanism is invented with movable platform to increase the solar energy production, by allowing the positioning of the panel of the solar panels in the perpendicular direction to the rays of the sun for whole sun hours. A four wheeled (4-wheeled) automated movable dual-axis smart solar tracking system is disclosed in the invention, which also includes the motor drive for controlling the servo motor and DC motor, and also comprising of the intelligent/smart unit which includes the microcontroller (arduino uno). The smart unit controls all the sensors and motor drive.

No. of Pages : 11 No. of Claims : 5

(54) Title of the invention : SYSTEM AND METHOD OF MONITORING AND PREVENTING THE SPREAD OF INFECTIOUS VIRUS

(51) International classification	:A61B0005000000, H04L0029080000, G16H0040670000, A61B0005020000, G08B0025010000	(71)Name of Applicant : <b>1)Harjeet Singh</b> Address of Applicant :Lecturer, Computer science and engineering department, Thapar polytechnic college, Patiala R/O House no 169, street no 9, Manjit Nagar, Patiala, Pin code-147004, Punjab Punjab India
(31) Priority Document No	:NA	<b>2)Harpreet Kaur</b>
(32) Priority Date	:NA	<b>3)Husanbir Singh Pannu</b>
(33) Name of priority country	:NA	(72)Name of Inventor :
(86) International Application No	:NA	<b>1)Singh Harjeet</b>
Filing Date	:NA	<b>2)Kaur Harpreet</b>
(87) International Publication No	: NA	<b>3)Pannu Husanbir Singh</b>
(61) Patent of Addition to Application Number	:NA	<b>4)Singh Yadwinder</b>
Filing Date	:NA	<b>5)Singh Amandeep</b>
(62) Divisional to Application Number	:NA	<b>6)Maini Raman</b>
Filing Date	:NA	

## (57) Abstract :

The present invention discloses A system (100) of monitoring and preventing the spread of infectious virus. The system (100) comprising, a face mask (102) having a temperature sensor (104), a SPO2 sensor (106), a pulse sensor (108), a GPS sensor (110) and a wireless communication module (112) capable of storing and transferring data collected from mentioned sensors to an application programming interface (API) client device (114). The system (100) includes a health authorities unit (116) comprising a web server (118), a processing module (120) capable generating a severity report of user<sup>TM</sup>s condition, an interface module (124) capable of notifying a health personnel regarding the condition of the user as per the generated report and a notifying module (122) configured to alert the local health authorities. Further, the health authorities unit (116) is capable automatically reserving an admission slot in the hospital if the condition of the user is not well.

No. of Pages : 26 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111032241 A

(19) INDIA

(22) Date of filing of Application :17/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : LOW POWER RECTIFIER USING CMOS TECHNOLOGY

(51) International classification	:H03K0019018500, G08B0013191000, H03K0003030000, H01L0027080000, H01L0025110000	(71) <b>Name of Applicant :</b> <b>1)Raghvendra Singh</b> Address of Applicant :Assistant Professor, Electronics and Communication Department , Rama University, Kanpur-209217 Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Raghvendra Singh</b>
(33) Name of priority country	:NA	<b>2)Anand Kumar Gupta</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to the designing of Low power Rectifier using CMOS Technology. We designed a new diode less full wave rectifier based single ended to differential output circuit comparator and p-MOS, whereas the results shown that diode less rectifier used in circuit single ended to differential output plays a vital role than that off marketed ones.

No. of Pages : 24 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111032243 A

(19) INDIA

(22) Date of filing of Application :17/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A BOPET FILM SUBSTRATE WITH ENHANCED OXYGEN BARRIER

(51) International classification	:B32B0027360000, C08J0007040000, B32B0027080000, C08K0003360000, C08K0003340000	(71) <b>Name of Applicant :</b> <b>1)UFLEX LIMITED</b> Address of Applicant :A 107 108, Sector IV, Noida, Uttar Pradesh-201301, India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Anand Prakash Gupta</b>
(33) Name of priority country	:NA	<b>2)Komal Sharma</b>
(86) International Application No	:NA	<b>3)Mirdul Johari</b>
Filing Date	:NA	<b>4)Sailaja V Sharma</b>
(87) International Publication No	: NA	<b>5)Vijay Yadav</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Anantshree Chaturvedi</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a transparent, high-barrier polyester film structure (300A or 300B) is disclosed. The film structure (300A or 300B) includes a biaxially-oriented PET film substrate (302) coated inline or offline with a coating formulation (304). The coating formulation (304) involves a crosslinked network of PVOH copolymers in the range of at least 2-15% further crosslinked with self-linked network of silica precursors in the range of at least 0.5-5%, forming an interpenetrating network (IPN). The composition also includes nanoclay.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111032278 A

(19) INDIA

(22) Date of filing of Application :17/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AUTOMATIC TRANSPOSITION ARRANGEMENT

(51) International classification	:G06Q0030060000, G06Q0020120000, G06Q0020100000, G06Q0020400000, G06Q0020020000	(71) <b>Name of Applicant :</b> <b>1)Anurag Bajpai</b> Address of Applicant :D-702, Rail Vihar, Sector-15, Part- 2, Gurgaon, Haryana- 122001, INDIA Haryana India <b>2)ANAMIKA VERMA</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Anurag Bajpai</b>
(33) Name of priority country	:NA	<b>2)ANAMIKA VERMA</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A process (100) of automatic transposition arrangement for online shopping is disclosed. The process comprises selecting a product for placing order based on available products followed by selecting (104) payment option from available payment instruments. Further, the process includes settling a payment against the order placed, wherein the payment option comprises mandate based payment option(s) along with regular payment option(s).

No. of Pages : 18 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111032281 A

(19) INDIA

(22) Date of filing of Application :17/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ONLINE LEARNING AND CONTENT DELIVERY SYSTEM FOR TEACHING BASED ON HASHGRAPH AND FOG COMPUTING TECHNOLOGY

(51) International classification	:H04L0029080000, H01L0029510000, C07K0014780000, G06Q0050200000, H04L0012803000	(71) <b>Name of Applicant :</b> <b>1)GRAPHIC ERA HILL UNIVERSITY, BHIMTAL CAMPUS</b> Address of Applicant :Sattal Rd, Bhimtal, Uttarakhand 263156, India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Naveen Tewari</b>
(33) Name of priority country	:NA	<b>2)Dr. Mukesh Joshi</b>
(86) International Application No	:NA	<b>3)Dr. Sandeep Kumar Budhani</b>
Filing Date	:NA	<b>4)Dr. M C Lohani</b>
(87) International Publication No	: NA	<b>5)Dr. Raj Kishor Bisht</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Mr. Rajendra Singh Bisht</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses a system for delivering fast, low cost, and secured content for Teaching and Learning facility in educational institute. The disclosed system comprises a plurality of the fog nodes (FN1, FN2, FN3) having one or more fog devices connected to each educational institute at a city level; a fog server (105) connected to the plurality of fog nodes (FN1, FN2, FN3) for managing and distributing the data and load balancing; and a Hashgraph network (102) configured to create a secured, fast, low-cost Wi-Fi communication medium between different devices. Further, the disclosure presents a method for communication between students and teachers residing at a city level.

No. of Pages : 21 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202111032282 A

(19) INDIA

(22) Date of filing of Application :17/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD OF PRODUCTION OF SYNTHETIC SEEDS AND PLANTLET REGENERATION

(51) International classification	:A01H0004000000, A61K0036898000, A01N0037100000, C10G0003000000, A61K0036738000	(71) <b>Name of Applicant :</b> <b>1)GRAPHIC ERA (DEEMED TO BE) UNIVERSITY</b> Address of Applicant :566/6, Bell Road, Clement Town, Dehradun 248002, Uttarakhand, India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. MANU PANT</b>
(33) Name of priority country	:NA	<b>2)Er. ANKITA LAL</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a method of production of synthetic seed formulation, storage and subsequent in vitro and ex vitro regeneration of complete plantlets of *Aerides multiflora* orchid. The method comprises the step of treatment of the *Aerides multiflora* seed explant with an initiation medium composition to obtain protocorms and treating the protocorms to prepare the synthetic seeds. The synthetic seeds can be used for plant regeneration medium. The initiation medium comprises Benzylaminopurine (BAP); Naphthalene Acetic Acid (NAA); and sucrose.

No. of Pages : 35 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021006444 A

(19) INDIA

(22) Date of filing of Application :14/02/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : UPGRADED RAILWAY TRACK SECURITY DEVICE FOR CURVED AND STRAIGHT TRACKS

(51) International classification	:A61F0002280000, G06F0003044000, A61B0017200000, A61F0002460000, E01B0001000000	(71) <b>Name of Applicant :</b> <b>1)KARAN SANJAY AHIRE</b> Address of Applicant :CHANDRAKALA BUILDING, JUNA SATARA SUTAR GALLI, NEAR MAMAJI TOKIJI BHUSAWAL, JALGAON - 425201, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	<b>2)NIDHI JAIN</b>
(32) Priority Date	:NA	<b>3)PUSHKARAJ PRAMOD VERNEKAR</b>
(33) Name of priority country	:NA	(72) <b>Name of Inventor :</b>
(86) International Application No	:NA	<b>1)KARAN SANJAY AHIRE</b>
Filing Date	:NA	<b>2)NIDHI JAIN</b>
(87) International Publication No	: NA	<b>3)PUSHKARAJ PRAMOD VERNEKAR</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Upgraded Railway Track Security Device For Curved And Straight Tracks • The primary object of the present invention to provide Life saver device which saves the life of lakhs of people those are travelling in the train.to avoid accidents comprises. In the present invention GSM 900 attached with the Arduino, combination of LDR, Receiver, laser rays passing prism. The invention is used for curved and straight tracks. The security device which intimate immediately at the time of cutting or cracking railway track. and also the status of the railway tracks with the the exact location of the crack and cutting of the track. It immediately send the message/information through phone call to the station master or to the provided number. Railway track Security device is Cost effective device, less power, low maintenance. automated self control device.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021049490 A

(19) INDIA

(22) Date of filing of Application :12/11/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS FOR RECOVERY OF POTASSIUM SALTS FROM INCINERATION BOILER ASH IN MOLASSES BASED DISTILLERIES

(51) International classification	:B03B0009040000, C04B0018060000, C05D0001000000, C05C0005020000, C01G0055000000	(71) <b>Name of Applicant :</b> <b>1)Vasantdada Sugar Institute</b> Address of Applicant :At post Manjari (Bk.), Tal. Haveli, Dist. Pune. Pune -412307, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sumit R. Yadav</b>
(33) Name of priority country	:NA	<b>2)Avinash B. Deshmukh</b>
(86) International Application No	:NA	<b>3)Kakasaheb Konde</b>
Filing Date	:NA	<b>4)Sanjay Patil</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

PROCESS FOR RECOVERY OF POTASSIUM SALTS FROM INCINERATION BOILER ASH IN MOLASSES BASED DISTILLERIES Abstract Disclosed is a process (100) for recovery of potassium salts from incineration boiler ash in molasses based distilleries that provides a provide a pollution free, environment friendly, cost effective method for recovery and production of potassium salts from incineration boiler ash. The process (100) produces potassium salts either in pure form or as a mixture and minimizes the problem of incineration boiler ash disposal. The boiler ash is mixed in water by continuous stirring to form a leachate solution. Up to 90% water content of the leachate solution is evaporated and the concentrated solution is then subjected to fractional cooling crystallization at temperature ranging from 30°C to 45°C to recover the crystals of potassium salts. Figure: Not Applicable

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021057485 A

(19) INDIA

(22) Date of filing of Application :31/12/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : TOOL FOR TOUCHLESS OPERATIONS

(51) International classification	:G06F0003010000, G06K0009000000, E03C0001050000, G06F0003030000, H04L0027260000	(71) <b>Name of Applicant :</b> <b>1)MIT Academy of Engineering</b> Address of Applicant :Dehu Phata, Alandi (D), Pune, Maharashtra Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Samanta, Soumabha Ranajit</b>
(33) Name of priority country	:NA	<b>2)Hatte, Prafulla Ratnakar</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT TOOL FOR TOUCHLESS OPERATIONS Described herein is a multi-task device 100 that includes one or more operating sections 104, 108 and at least one holding section 102. The operating sections 104 are configured to accommodate operational surfaces 1, 2, f and one or more tools a, b, c, d. The operational surfaces are further configured to apply one or more forces of same or different magnitudes on external surfaces and the tools are configured to perform at least one operation. The holding section 102 hold the multi-task device 100 for applying forces of same or different magnitudes on the external surfaces by the operational surfaces and performing operations by the tools. The present device is a touchless operation tool that assists a user to perform day to day activities without requiring the user to touch a potentially contaminated surface by hands. REFER FIGURE 1

No. of Pages : 28 No. of Claims : 10

(54) Title of the invention : A COMPOSITION OF ALUMINA GRAPHITE POWDER BATH FOR SINTERING PROCESS

(51) International classification	:C04B0035645000, C04B0035640000, B22F0003160000, C22C0033020000, C30B0011000000	(71) <b>Name of Applicant :</b> <b>1)GHUGE, Vinayak Dadarao</b> Address of Applicant :Workshop, Mechanical Engineering Dept, VNIT, Nagpur, 440010 Maharashtra India <b>2)MAKIREDDI, Diwakar</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)GHUGE, Vinayak Dadarao</b>
(33) Name of priority country	:NA	<b>2)MAKIREDDI, Diwakar</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to a composition of alumina graphite powder bath for sintering process. The proposed invention used as a bath to cover alumina and alumina composite samples during the sintering process. In alumina graphite powder bath sintering, the mixture of alumina (poor heat conductor) and graphite (good heat conductor) is used to ensure uniform conductive heating of green samples. The proposed powder supplies the heat energy in all the directions of the sample evenly due to conduction mode of heat transfer. Compared to pure alumina and pure graphite powders, the alumina-graphite powder bath (AGPB) sintering produced more densified structures. The structure consists of highly densified, uniform hard, hexagonal grain structures and grain boundary junctions.

No. of Pages : 15 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121008625 A

(19) INDIA

(22) Date of filing of Application :01/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ACHIEVING DESIRES / ASPIRATIONS PEACEFULLY AND JOYFULLY WITH MEDITATION

(51) International classification	:G06Q0010100000, A61B0005160000, A61B0005000000, G09B0019000000, G06Q0010060000	(71)Name of Applicant : <b>1)Dr. Akula Chandramouli</b> Address of Applicant :55A/43, Brindavan Society, Thane (West) 400601, Maharashtra, India Maharashtra India <b>2)Dr. Madakasira K Kaushik</b> <b>3)Ms. Minnakuru Deepika</b> <b>4)Mr. Akula Yuva Bharat</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Akula Chandramouli</b> <b>2)Dr. Madakasira K Kaushik</b> <b>3)Ms. Minnakuru Deepika</b> <b>4)Mr. Akula Yuva Bharat</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT ACHIEVING DESIRES / ASPIRATIONS PEACEFULLY AND JOYFULLY WITH MEDITATION Everyone™s progress is assessed based on the achievement and that measures the success/status. This achievement could be personal/professional/organizational and is driven by the desires/aspirations/goals. For achieving one should take actions and while doing so face lot of challenges leading to stress, anxiety, depression. This further causes problem in mental as well as physical health problems impacting the whole economy. Hence, we need to address this in such a way that individuals are able to handle the challenges smartly which is possible through an alert and attentive mind. The mind can be alert through the practice of meditation. Thus, help individuals to achieve their desires peacefully and joyfully through meditation that enables the mind to be calm and alert. This whole thing is achieved through offline and online mobile app and wearable device. Figure 1

No. of Pages : 6 No. of Claims : 10

(54) Title of the invention : A METHOD FOR FACE RECOGNITION OF INDIVIDUAL USING DEEP LEARNING TECHNIQUES AND SMART ANDROID APPLICATIONS AND SYSTEM THEREOF

(51) International classification	:G06K0009000000, G06K0009620000, G06Q0050000000, G06N0020000000, G06K0009460000	(71)Name of Applicant : <b>1)Santosh Kumar</b> Address of Applicant :Department of Computer Science and Engineering, Dr SPM IIITNR, Atal Nagar Raipur, Chhattisgarh, Pincode-273303 Chattisgarh India <b>2)Mithilesh Kumar Chaube</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Santosh Kumar</b> <b>2)Mithilesh Kumar Chaube</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A METHOD FOR FACE RECOGNITION OF INDIVIDUAL USING DEEP LEARNING TECHNIQUES AND SMART ANDROID APPLICATIONS AND SYSTEM THEREOF Discloses herein a method for identification and verification individual based on captured their masked faces comprising the steps of: (a) detecting face and acquisition of face image database (masked faces, unmasked faces, and partially masked face images) using smart devices; (b) pre-processing and filtering of the captured face database; (c) processing the pre-processed grayscale image ; (d) extracting discriminatory features from the pre-processed and enhanced by the deep learning models/frameworks; (e) storing captured face image database obtained in step (c) with other user<sup>TM</sup>s recorded information and assigning an unique number to each users in a server based database; (f) identifying/classifying the test face image of individuals by comparing the stored face image database in step (d) to a extracting features from the captured in real time using deep learning techniques; wherein the method and system utilize the web services/interfaces for getting face images as test data from users for accurate matching with stored facial features in step (d), (h) after the matching of facial features, and wherein the learning system enables users to use it as working Android system to detect people in crowd near. Figure 1: Illustrates the face detection and training model deep learning techniques

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121010384 A

(19) INDIA

(22) Date of filing of Application :11/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR TREATING CLARIFIED UNDERFLOW MUDDY JUICE TO RECOVER SUCROSE

(51) International classification	:B01D0033040000, C02F0001520000, C02F0011140000, B01D0037030000, B01D0036020000	(71) <b>Name of Applicant :</b> <b>1)Suresh Sitaram Joshi</b> Address of Applicant :Flat No. F-2 704, Shivsagar Platinum, Anandnagar, Suncity Road, Wadgaon Budruk, Pune-411051, Maharashtra ,India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Suresh Sitaram Joshi</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

SYSTEM AND METHOD FOR TREATING CLARIFIED UNDERFLOW MUDDY JUICE TO RECOVER SUCROSE System (100) and method recovers sucrose by treating waste of clarified underflow muddy juice received after clarification process in sugarcane industry and achieves more recovery of sucrose when compared with prior-arts. System (100) includes a first unit (10), a second unit (20), a first stage gravity belt filter (30), a third conditioning unit (40), a fourth unit (50), a second stage gravity belt filter (60) and a dewatering unit (70). First unit (10) agitates clarified underflow muddy juice in presence of water with defined temperature. Second unit (20) churns with flocculating agent. First stage gravity belt filter (30) filters to provide first stage discharged mud which is conditioned in the third conditioning unit (40). Fourth unit (50) churns with flocculating agent. Second stage gravity belt filter (60) filters to provide second stage discharged mud which is dewatered. (To be published with Figure 1)

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121010948 A

(19) INDIA

(22) Date of filing of Application :15/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SELF-HEALING CONCRETE COMPOSITION AND A PROCESS OF PREPARATION THEREOF

(51) International classification	:C04B0028040000, C12N0001200000, A01N0063000000, C02F0003340000, C04B0018140000	(71) <b>Name of Applicant :</b> <b>1)Symbiosis International (Deemed University)</b> Address of Applicant :Gram: Lavale, Taluka Mulshi, District Pune, Pin: 412115 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr.Sayali Sandbhor</b>
(33) Name of priority country	:NA	<b>2)Mr.Siddharth Jain</b>
(86) International Application No	:NA	<b>3)Mr.Shubham Puranik</b>
Filing Date	:NA	<b>4)Mr.Nutan Mhetras</b>
(87) International Publication No	: NA	<b>5)Mr.Garnaik Sritam</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A SELF-HEALING CONCRETE COMPOSITION AND A PROCESS OF PREPARATION THEREOF The present invention relates to a self-healing bacterial composition and the process (100) of preparation of the self-healing bacterial composition. The self-healing bacterial composition comprises Ordinary Portland Cement (OPC), fine aggregates, and coarse aggregates in a ratio of 1:1.5:3 respectively. The self-healing concrete composition also comprises a bacterial solution comprising at least one of Bacillus bacteria and water. The bacterial solution may comprise a bacterial media comprising nutrient broth powder having ingredients selected as a Peptic digest of animal tissue, sodium chloride (NaCl), yeast, and a beef extract, and wherein the final pH of the nutrient broth medium is  $7.4 \pm 0.2$  at  $25^{\circ}\text{C}$ . (To be Published with Fig. 1)

No. of Pages : 61 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121012799 A

(19) INDIA

(22) Date of filing of Application :24/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : NOVEL MAGNETO-LIPOSOMES FOR ACTIVE FIBROSARCOMA TUMOR TARGETING AND COMBINATORIAL CHEMO-, RADIO- AND MAGNETIC HYPERTHERMIA THERAPY OF CANCER

(51) International classification	:A61K0041000000, A61N0001400000, C07D0487040000, B82Y0005000000, C07F0015000000	(71) <b>Name of Applicant :</b> <b>1)SECRETARY, DEPARTMENT OF ATOMIC ENERGY</b> Address of Applicant :Anushakti Bhavan, O.Y.C. Building, C.S.M. Marg, Mumbai 400001, India Maharashtra India (72) <b>Name of Inventor :</b> <b>1)Neena G. Shetake</b> <b>2)Amit Kumar</b> <b>3)Badri N. Pandey</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract Novel Magneto-Liposomes for Active Fibrosarcoma Tumor Targeting and Combinatorial Chemo-, Radio- And Magnetic Hyperthermia Therapy of Cancer The present invention relates to novel Magneto-Liposomes used for active targeting of Fibrosarcoma tumor and a combinatorial chemo- radio - and magnetic hyperthermia therapy for cancer. It is a method of synthesis of a novel magneto-liposomal nano-formulation using combination of super-paramagnetic iron oxide nanoparticles (SPIONs) and doxorubicin (Dox), which are co-encapsulated in a liposomal carrier. It is an efficient and active tumor targeting and dual delivery of Dox and SPIONs by cRGD-LMD with minimal-to-no-observable side effects in normal tissue/organs. Figure 6

No. of Pages : 63 No. of Claims : 13

(54) Title of the invention : METHODS AND SYSTEMS FOR DISEASE CONTROL IN AN ENVIRONMENT THROUGH AUTOMATED HEALTH AND HYGIENE COMPLIANCE

(51) International classification	:G08B0021240000, G16H0050800000, A61B0005000000, H04L0009320000, G16H0040200000	(71) <b>Name of Applicant :</b> <b>1)INDKARTA LLP</b> Address of Applicant :Office 24 Second Flr, Mohan Ganga Nivas,,Koregaon Park, Pune ,Maharashtra,411001,India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Syed Amer</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT METHODS AND SYSTEMS FOR DISEASE CONTROL IN AN ENVIRONMENT THROUGH AUTOMATED HEALTH AND HYGIENE COMPLIANCE A method and a system for methods and systems for disease control in an environment through automated health and hygiene compliance, is disclosed. The method includes scanning an RFID of a user to authenticate the identity of the user and measuring the health parameters of the user upon authentication. The method further includes facilitating the sanitization of the hands of the user based on a mist of sanitizer generated from one or more nozzles of the apparatus. The method further includes performing analyses on the health parameters of the users collected from the apparatus and generating insights with regards to prediction of a disease outbreak and/or a level of medical compliance of a user or an institution. The method further includes presentation of the insights to the competent authorities for health and hygiene compliance. To be published with Fig. 2

No. of Pages : 58 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121016691 A

(19) INDIA

(22) Date of filing of Application :09/04/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SECURITY MANAGEMENT SYSTEM

(51) International classification	:G06N0020000000, G06N0007000000, G06N0020200000, G06N0003080000, G06N0005040000	(71) <b>Name of Applicant :</b> <b>1)Aashutosh Magdum</b> Address of Applicant :Sumati Bungalow, 8/1083, Magdum Mala, Sangli Road, Ichalkaranji 416115, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Aashutosh Magdum</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method for facilitating security management is provided. A first edge node of a plurality of edge nodes includes a plurality of sensors for monitoring a geographical region. Processing circuitry, included in the edge node, detects an object within the geographical region based on a plurality of sensor outputs of the plurality of sensors. The processing circuitry determines, using a first machine learning model, an intent of the detected object. The processing circuitry provides the determined intent as input to a second machine learning model for threat assessment of the detected object. The processing circuitry assigns a threat level from a plurality of threat levels to the detected object based on an output of the second machine learning model. The processing circuitry initiates a threat alert procedure when the threat level assigned to the detected object exceeds a threshold value.

No. of Pages : 82 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121018095 A

(19) INDIA

(22) Date of filing of Application :19/04/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A FREEZE DRIED PARENTERAL COMPOSITION OF OMADACYCLINE TOSYLATE AND PROCESS FOR PREPARATION THEREOF

(51) International classification	:A61K0009190000, A61K0009000000, A61K0009200000, A61K0009480000, A61K0047400000	(71) <b>Name of Applicant :</b> <b>1)GUFIC BIOSCIENCES LIMITED</b> Address of Applicant :N.H.No.8, Near Grid, Kabilpore 396 424, Navsari, Gujarat, India. Gujarat India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PATEL, Mitesh Natavarlal</b>
(33) Name of priority country	:NA	<b>2)DAVE, Mafatlal Tribhovandas</b>
(86) International Application No	:NA	<b>3)ANKLESARIA, Beena Pourusashap</b>
Filing Date	:NA	<b>4)CHOKSI, Pranavkumar Jayesh</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed herein is a stable, freeze dried pharmaceutical composition, free of Sucrose comprising Omadacycline Tosylate along with a suitable stabilizing agent for parenteral administration. The pharmaceutical composition provides a process for stabilization of Omadacycline Tosylate thereby improving the shelf life during storage. The invention further discloses a process for preparation of said composition.

No. of Pages : 25 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121019582 A

(19) INDIA

(22) Date of filing of Application :28/04/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ADVANCED MANHOLE COVER

(51) International classification	:E02D0029140000, E01F0009600000, F16C0033660000, E02D0027120000, E04G0021320000	(71) <b>Name of Applicant :</b> <b>1)Dr. Nitin Kardekar</b> Address of Applicant :SUBAK, S No 136, Yashodeep Chowk, Warje Malwadi, Pune Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Nitin Kardekar</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed is an advanced manhole cover (1000) that comprises a base member (10), a top member (20). The base member (10) has a plurality of threaded holes (40b) that are aligned with a plurality of threaded holes (40t) of the top member (20) to respectively facilitate insertion of a plurality of socket screws (30) there through. The top member (20) has a flange (60) that facilitates snug fitment of the top member (20) and the base member (10). The top member (20) has an anti- skid projection (70) on top surface thereof. The socket screws (30) have an adjustable leveling configuration allow the leveling of manhole cover to the level of the road and in addition to providing locking of the top member (20) with the base member (10).

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121020058 A

(19) INDIA

(22) Date of filing of Application :01/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PHARMACEUTICAL COMPOSITION CONTAINING QUINAZOLINE COMPOUND FOR TREATING COLORECTAL CANCER

(51) International classification	:A61K0031517000, C07D0239940000, A61P0019020000, A61K0048000000, A61P0001040000	(71)Name of Applicant : <b>1)Dr. Kishor Vasant Otari</b> Address of Applicant :Professor and Principal, Department of Pharmacology, Navsahyadri Institute of Pharmacy, Nasrapur, Pune, India Maharashtra India <b>2)Mrs. Trushali Ajay Mandhare</b> <b>3)Ms. Pooja Suhas Kashid</b> <b>4)Ganesh Ramchandra Phadtare</b> <b>5)Mrs. Rupanjali Sandipani Gaikwad</b> <b>6)Ms. Adiba A. Rahiman Mulla</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Kishor Vasant Otari</b> <b>2)Mrs. Trushali Ajay Mandhare</b> <b>3)Ms. Pooja Suhas Kashid</b> <b>4)Ganesh Ramchandra Phadtare</b> <b>5)Mrs. Rupanjali Sandipani Gaikwad</b> <b>6)Ms. Adiba A. Rahiman Mulla</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to pharmaceutical composition containing quinazoline compound for treating colorectal cancer. The objective of the present invention is to solve the problems in the prior art related pharmaceutical composition for treatment of colorectal cancer. The present invention discloses of a pharmaceutical composition for treating colorectal cancer containing a quinazoline compound or a pharmaceutically acceptable salt thereof as an active ingredient.

No. of Pages : 24 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121020247 A

(19) INDIA

(22) Date of filing of Application :03/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PLUG AND PLAY CHARGER DEVICE FOR SUPPLYING POWER TO AN ELECTRIC VEHICLE

(51) International classification	:H02J0007000000, B60L0053160000, H01R0031020000, H01R0013660000, H01R0024280000	(71) <b>Name of Applicant :</b> <b>1)MAGENTA EV SOLUTIONS PRIVATE LIMITED</b> Address of Applicant :102, ALPHA GARDENS, PLOT 26, SECTOR 14,KOPARKHAIRANE, NAVI MUMBAI, MAHARASHTRA Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Darryl Dias</b>
(33) Name of priority country	:NA	<b>2)Maxson Lewis</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**PLUG AND PLAY CHARGER DEVICE FOR SUPPLYING POWER TO AN ELECTRIC VEHICLE** The embodiments herein relates to a plug and play charger device 200 that is adapted to provide power supply to an electric vehicle 212. The plug and play charger device 200 includes a connector 202 that is configured to receive an input power from an input power source, a controller that determines an output power and conditions the input power based on the determined output power, and an output connector 110 that supplies the determined output power to the electric vehicle 212. The connector 202 includes a charger system connector 202 that is a wire gland configured with the plug and play charger device 200, receives the input power from the input power source, and an input power connector 204 that is configured to connect with the charger system connector 202 for supplying the input power from the input power source to the plug and play charger device 200. FIG. 2

No. of Pages : 25 No. of Claims : 9

(54) Title of the invention : SYSTEM FOR DETECTING FACE MASK FOR CONTROLLING COVID SPREADING USING IOT AND ARTIFICIAL INTELLIGENCE

<p>(51) International classification :A61K0008730000, H04N0021440000, A45D0044000000, G06K0009000000, G06N0005040000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)ABHRA PRATIP RAY</b> Address of Applicant :Assistant Professor, Department of Physics, Pratibha College of Commerce and Computer Studies, Pune, Maharashtra, India Maharashtra India</p> <p><b>2)DR.T.A. SIVAKUMAR</b></p> <p><b>3)DR. MEGHNA SHARMA</b></p> <p><b>4)PROF. PARVINDER SINGH</b></p> <p><b>5)ANVESHA KATTI</b></p> <p><b>6)CHAITALI BHOWMIK</b></p> <p><b>7)AMITA ARORA</b></p> <p><b>8)ASHLESHA GUPTA</b></p> <p><b>9)MANVI SIWACH</b></p> <p><b>10)DR. PARAG S JAWARKAR</b></p> <p>(72)Name of Inventor :</p> <p><b>1)ABHRA PRATIP RAY</b></p> <p><b>2)DR.T.A. SIVAKUMAR</b></p> <p><b>3)DR. MEGHNA SHARMA</b></p> <p><b>4)PROF. PARVINDER SINGH</b></p> <p><b>5)ANVESHA KATTI</b></p> <p><b>6)CHAITALI BHOWMIK</b></p> <p><b>7)AMITA ARORA</b></p> <p><b>8)ASHLESHA GUPTA</b></p> <p><b>9)MANVI SIWACH</b></p> <p><b>10)DR. PARAG S JAWARKAR</b></p>
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## (57) Abstract :

The present invention relates to system for detecting face mask for controlling covid spreading using IoT and artificial intelligence. The objective of the present invention is to solve the problems in the prior art technologies related to detecting face mask for controlling covid spreading.

No. of Pages : 30 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121020586 A

(19) INDIA

(22) Date of filing of Application :06/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : NEW AIR & WATER MAINTACE HYDRO POWER MACHINE

(51) International classification	:C02F0103000000, G07F0017340000, H04W0052020000, G06F0040169000, A61K0031410000	(71) <b>Name of Applicant :</b> <b>1)devesh kumar patel</b> Address of Applicant :village majhota post silon teh. rajnagar distt. chhatarpur MP(471101) Madhya Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)devesh kumar patel</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This machine is capable of running in the run of the river.And the river water is capable of running in both big or low condition.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121021618 A

(19) INDIA

(22) Date of filing of Application :13/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM AND A METHOD FOR ENHANCING DECISION MAKING AND PREDICTING STUDENT<sup>TM</sup>S LEARNING BEHAVIOUR

(51) International classification	:G06F0016248000, G06N0003080000, G06N0005040000, G06N0020000000, E21B0049000000	(71) <b>Name of Applicant :</b> <b>1)VARSHA B. KHOT</b> Address of Applicant :Survey No. 34/35, Flat No. C2-702 Premia, Near Zeal Engg. College, Narhe Dhayari Road, Narhe, Pune 411041. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)VARSHA B. KHOT</b>
(33) Name of priority country	:NA	<b>2)Dr. Satish N Gujar</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A SYSTEM AND A METHOD FOR ENHANCING DECISION MAKING AND PREDICTING STUDENT<sup>TM</sup>S LEARNING BEHAVIOUR A system 101 and a method 500 for enhancing decision making and predicting student<sup>TM</sup>s learning behaviour is disclosed. The system 101 may be communicatively coupled with a plurality of external systems (104-a-104-n). Each external system may explore a plurality of structured and unstructured data exploration events, corresponding to network data in at least one data exploration event. The system 101 may pre-process the noisy or inconsistent data obtained after data exploration in order to cleanse the data and the system 101 may transform it into desired format for analysis. The system 101 may further be configured to do descriptive analytics of the pre-processed data and classify each data set into a group of a plurality of models in order to predict learning behaviour of the students. [To be published with Figure 1]

No. of Pages : 27 No. of Claims : 7

(54) Title of the invention : A METHOD OF MANUFACTURING BIODEGRADABLE ABSORBENT MULTI-LAYERED NONWOVEN FABRIC COMPRISING THERAPEUTIC MINERALS

(51) International classification	:A61Q0019000000, D04H0001425000, A61F0013000000, B32B0005020000, D04H0001498000	(71) <b>Name of Applicant :</b> <b>1)Pranay Bhaskar Sahu</b> Address of Applicant :197-198 Aspire, Kalpataru Crest CHS, LBS Marg, Bhandup West, Mumbai 400078, India. Maharashtra India <b>2)Shubhashree Pranay Sahu</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Pranay Bhaskar Sahu</b>
(33) Name of priority country	:NA	<b>2)Shubhashree Pranay Sahu</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present disclosure is about an innovative absorbent multi-layered bio-degradable nonwoven fabric comprising therapeutic minerals and its method of manufacturing. Such a tailored nonwoven comprises of a minimum of two layers, the first layer (top layer) comprises absorbent cellulosic staple fibres (natural or regenerated man-made) with special cross-section (non-round cross-section) as it helps to trap the therapeutic mineral particles, the side opposite to the first layer (top layer) has 100% short cut cellulose fluff pulp fibres as a second layer (back layer). During the nonwoven manufacturing step itself, the therapeutic minerals are deposited on the first layer using coating or impregnation or printing technology such that the therapeutic minerals are designed to trap on the first layer (top layer). The disclosed innovative nonwoven can be tailored for medical disposables products, cosmetic face masks, bandages, medical gauze, sanitary napkins, diapers, panty-liners, dry and wet wipes for personal care, home and industrial applications. Representative figures: Fig 3 & 4

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121023542 A

(19) INDIA

(22) Date of filing of Application :27/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ASSEMBLY AND METHOD FOR REDUCING DOFFING TIME FOR SET OF BOBBINS ON RING SPINNING MACHINE

(51) International classification	:D01H0009040000, D01H0009100000, H04W0024020000, E05D0007000000, G02B0006440000	(71) <b>Name of Applicant :</b> <b>1)Bhagyashree Innovative Textile Machinery Private Limited</b> Address of Applicant :Shop No. 26, Shubh Shagun Complex, Rishikesh CHSL, Plot No.-29, 30 & 31, Sector-34, Kamothe, Navi Mumbai, Maharashtra - 410209, India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)NARAWADE, Prashant Khandu</b>
(33) Name of priority country	:NA	<b>2)MAVAL, Vedant Kailas</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure pertains to an assembly (100), and a method (800) for reducing doffing time for one or more set of bobbins. The assembly (100) includes a set of rail plates (102) adapted to accommodate one or more gripper bobbin holders (104), and facilitates replacing set of full bobbins (202) with set of empty bobbins (204) on ring spinning machine. The assembly (100) enables gripping the set of full bobbins (202) by means of self-operated bobbin holder (104) from top inner side and replacing with the set of empty bobbins (204) through rotation of one hundred and thirty five degrees to two hundred and twenty five degrees degree in addition to lifting and lowering the assembly. The assembly (100) enables operating in line with the ring spinning machine width and is safe and requires less space for operation.

No. of Pages : 36 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121023543 A

(19) INDIA

(22) Date of filing of Application :27/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : RING SPINNING BOBBIN HOLDER ASSEMBLY

(51) International classification	:E21B0033140000, F16M0011160000, B62D0037020000, G06F0016250000, G05G0005060000	(71) <b>Name of Applicant :</b> <b>1)Bhagyashree Innovative Textile Machinery Private Limited</b> Address of Applicant :Shop No. 26, Shubh Shagun Complex, Rishikesh CHSL, Plot No.-29, 30 & 31, Sector-34, Kamathe, Navi Mumbai, Maharashtra - 410209, India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)NARAWADE, Prashant Khandu</b>
(33) Name of priority country	:NA	<b>2)MAVAL, Vedant Kailas</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure pertains to a ring spinning bobbin holder assembly (100). The assembly (100) includes a front end with a one or more set of pair of locking legs (102) configured in a close position and an open position and a locking leg holder (104) including a first end and a second end, where the first end is coupled to the one or more set of pair of locking legs (102). The assembly (100) includes a casing (112) with a movable upper presser (108), and a movable inner presser (110) coupled to the movable arm (106) coupled between the casing (112), and the front end, where upon exerting a pre-determined force on the movable arm (106), the movable arm (106) with the movable inner presser (110) moves from a first pre-determined position to a second pre-determined position, where a movable upper presser (108) coupled to the second end of the locking leg holder also moves from the first predetermined position to the second predetermined position and enables in attaining close position of the one or more set of pair of locking legs (102),and facilitates movement of the front end inside the bobbin (302).

No. of Pages : 29 No. of Claims : 11

(54) Title of the invention : RETRO-FITMENT KIT FOR THREE-WHEELER AUTO RICKSHAW TO CONVERT IC ENGINE INTO ELECTRICAL DRIVE USING GEAR BOX

(51) International classification	:F02M0025080000, B62K0013040000, B60L0050500000, B62K0005020000, F01N0013000000	(71)Name of Applicant : <b>1)Dr. Vilas Arjun Pharande</b> Address of Applicant :Principal and Guide, Arvind Gavali College of Engineering, Satara, MH, India. E-mail: vilas.agcesatara@gmail.com Maharashtra India
(31) Priority Document No	:NA	<b>2)Mr. Aakash Sunil Naykude</b>
(32) Priority Date	:NA	<b>3)Mr. Aniket Avinash Darekar</b>
(33) Name of priority country	:NA	<b>4)Mr. Abhishek Shankarrao Katkar</b>
(86) International Application No	:NA	<b>5)Mr. Akash Narendra Borate</b>
Filing Date	:NA	(72)Name of Inventor :
(87) International Publication No	: NA	<b>1)Dr. Vilas Arjun Pharande</b>
(61) Patent of Addition to Application Number	:NA	<b>2)Mr. Aakash Sunil Naykude</b>
Filing Date	:NA	<b>3)Mr. Aniket Avinash Darekar</b>
(62) Divisional to Application Number	:NA	<b>4)Mr. Abhishek Shankarrao Katkar</b>
Filing Date	:NA	<b>5)Mr. Akash Narendra Borate</b>

## (57) Abstract :

ABSTRACT Our Invention Retro-fitment Kit for Three-Wheeler Auto Rickshaw to Convert IC engine into Electrical Drive Using Gear Box is a development of Retrofitting kit for converting Internal Combustion Engine (ICE) three-wheel auto rickshaw into an Electrical vehicle. The vehicle pollution in the form of tailpipe exhaust on one side and Early Evaporative Emission on the other and also noise pollution due to higher Noise Vibration & Harshness (NVH) level of ICE power train used in existing vehicles have made it obligatory to switch over e-vehicles (EV). Among various carriages viz. Taxis, MUVs, AC taxies, Three-Wheel Auto Rickshaw (TAR), Three-Wheel Scooter Rickshaw (TSR), and Three-Wheel Cycle Rickshaw (TCR) used in IPT, TAR are large with regards to the population. It is essential to replace them with either e-TST or e-TAR to reduce urban pollution. As a new electric rickshaw price is high so this retro fitment kit is midway to auto-rickshaw users as its cost is lesser than a new electric rickshaw. Entire literature related to the activities from many countries was of great help in finalizing the kit design and devising strategy in the implementation of kit on a vehicle.

No. of Pages : 10 No. of Claims : 6

(54) Title of the invention : A CHEMICAL SYNTHESIS PROCESS OF MANGANESE PHOSPHATE THIN FILMS ON CONDUCTING SUBSTRATE THEREOF

(51) International classification	:H01M0004580000, C23C0022180000, H01M0004505000, F16C0033620000, C25B0001040000	(71)Name of Applicant : <b>1)DR. PRANAV KALIDAS KATKAR</b> Address of Applicant :MAHADEV MANDIR PARISAR, A/P - NARAVANE, TAL. MAN (DAHIWADI), DIST : SATARA - 415540, MAHARASHTRA, INDIA. Maharashtra India <b>2)DR. VINAYAK SHIVAJIRAO JAMADADE</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)DR. PRANAV KALIDAS KATKAR</b>
(33) Name of priority country	:NA	<b>2)DR. VINAYAK SHIVAJIRAO JAMADADE</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Abstract: The coating of manganese phosphate thin films on conducting substrate is carried out by using a new chemical [Successive Ionic Layer Adsorption and Reaction (SILAR)] method by optimizing preparative parameters such as concentrations of manganese and phosphate precursors, various adsorption, reaction, rinsing time periods, and deposition temperature. The XRD pattern shows an amorphous coating of manganese phosphate over conducting substrate. Well-covered nanoparticles of manganese phosphate are observed from FE-SEM analysis. Also, the EDS spectrum confirms manganese phosphate consists of Mn, P, and O elements without any other impurity. Further, the application of manganese phosphate coating in electrochemical supercapacitive energy storage is demonstrated.

No. of Pages : 22 No. of Claims : 8

(54) Title of the invention : PEPTONE INDUCED PIGMENT PRODUCTION OF GANODERMA LUCIDUM

<p>(51) International classification :C12N0001380000, C12Q0001040000, A01N0063300000, C12N0001140000, C12P0001020000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Mona Kejariwal</b> Address of Applicant :RD &amp; SH National College, Bandra West , Mumbai-400050, MH, India. Maharashtra India</p> <p><b>2)Eeshrita Jog</b></p> <p><b>3)Sakshi Soni</b></p> <p><b>4)Saloni Koli</b></p> <p><b>5)Kanika Shetty</b></p> <p><b>6)Sayok Ghosh</b></p> <p><b>7)Deepak Singh</b></p> <p><b>8)Surabhi Parker</b></p> <p><b>9)Tanvi Patil</b></p> <p><b>10)Khushboo Chouhan</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Mona Kejariwal</b></p> <p><b>2)Eeshrita Jog</b></p> <p><b>3)Sakshi Soni</b></p> <p><b>4)Saloni Koli</b></p> <p><b>5)Kanika Shetty</b></p> <p><b>6)Sayok Ghosh</b></p> <p><b>7)Deepak Singh</b></p> <p><b>8)Surabhi Parker</b></p> <p><b>9)Tanvi Patil</b></p> <p><b>10)Khushboo Chouhan</b></p>
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(57) Abstract :

ABSTRACT Our Invention Peptone Induced Pigment Production of Ganoderma Lucidum is a Wood-rot fungi are known to be saprophytic, they are grown on most of the organic and decaying matters. These fungi have an ability to produce coloured pigments in in-vitro cultures when they are grown in specific growth media. The pigment producing capacity of such fungi depends on the composition and pH of media. Various coloured compounds can be obtained by changing the concentration of component of growth media for such fungi. The most commonly used growth media for in-vitro culturing of wood-rot fungi are Potato dextrose agar (PDA) and Potato dextrose broth (PDB) and Sabouraud dextrose agar (SDA) and Sabouraud dextrose broth (SDB). Current study conducted of Ganoderma lucidum, a commonly occurring wood-rot fungi, it has been observed that the production of pigment in G. lucidum was dependent on various growth media and their components. The fungus forms white patchy, non-pigmented colonies when cultured on PDA medium whereas it showed pigmented growth on SDA medium. Further, by replacing each nutrient component in the growth medium one by one, it has been determined that the component plays a vital role in pigment production by G. lucidum. It has been remarkably established that pigment production in the fungus is totally dependent on peptone concentration.

No. of Pages : 16 No. of Claims : 6

(54) Title of the invention : HYBRID ELECTRIC VEHICLES: PLUG-IN INTELLIGENT HYBRID ELECTRIC TWO WHEELERS VEHICLES.

(51) International classification	:F02M0021020000, F02D0019060000, C10L0001020000, B60W0020000000, C10L0001198000	(71) <b>Name of Applicant :</b> <b>1)Mr. Anil Vishram Revankar</b> Address of Applicant :Research Scholar, Savitribai Phule Pune University, Sinhgad College of Engineering, Pune, MH, India. Address-2: Guruprasad Plot No 34, Ramnagar Colony, NDA Road Bavdhan Pune 411021. Mail id: anil.revankar@gmail.com Contact no.9823060021 Maharashtra India <b>2)Dr. Sanjay Bhaskar Zope</b> <b>3)Mr. Aveer Revankar</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	(72) <b>Name of Inventor :</b>
(61) Patent of Addition to Application Number	:NA	<b>1)Mr. Anil Vishram Revankar</b>
Filing Date	:NA	<b>2)Dr. Sanjay Bhaskar Zope</b>
(62) Divisional to Application Number	:NA	<b>3)Mr. Aveer Revankar</b>
Filing Date	:NA	

(57) Abstract :

ABSTRACT Patent Title: Hybrid Electric Vehicles: Plug-In Intelligent Hybrid Electric Two Wheelers Vehicles. Our Invention Plug-In Intelligent Hybrid Electric Two Wheelers Vehicles as we all know very well that vehicles run on petrol diesel CNG and LPG and also all fuels are the by-product of fossil fuel. As the number of vehicles increasing the use of fossil fuels are also increasing due to there the shortage of this fuel are seen in market and due to that the cost of that fuel is also increasing. Our Invention is going to develop a hybrid two wheeler vehicle which will work on both LPG, fuel and electric power. The technology to attach motor directly with our designed gear box. The Intelligent electric vehicles (IEVs) signal the beginning of the end for traditional engine vehicles and also the major motivators for shifting to IEVs are the need for reducing Indian very high polluting engine emissions and also reducing dependence on costly LPG, oil fuels. Our invention only two IEV technologies currently remain at the top are the battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEV) and also the invention gives an overview of various IEV technologies, their features, limitations and challenges in their bulk deployment as a replacement to conventional vehicles.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121027193 A

(19) INDIA

(22) Date of filing of Application :18/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS AND METHOD OF ALGORITHM FOR REAL TIME FINANCIAL SIGNAL REPRESENTATION AND TRADING USING NEURAL NETWORK.

(51) International classification	:G06Q0040060000, G06Q0040040000, G06Q0010040000, G06Q0040000000, G05B0019418000	(71)Name of Applicant : <b>1)Rais Allauddin Mulla ,Assistant Professor</b> Address of Applicant :Department of Computer Science and Engineering, VPPCOE, Sion, Mumbai University, Mumbai, Maharashtra-400022, India. Mob: +91 8485863406, mail id:mtechraismulla@gmail.com Maharashtra India <b>2)Dr. Satish Saini, Professor</b> <b>3)Dr. Amit Sehgal, Professor</b> <b>4)Dr. Vikas Maheshwari, Professor</b> <b>5)Mahendra Eknath Pawar, Assistant Professor</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Rais Allauddin Mulla ,Assistant Professor</b> <b>2)Dr. Satish Saini, Professor</b> <b>3)Dr. Amit Sehgal, Professor</b> <b>4)Dr. Vikas Maheshwari, Professor</b> <b>5)Mahendra Eknath Pawar, Assistant Professor</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Our Invention Process and Method of Algorithm for Real Time Financial Signal Representation and Trading using Neural Network is a apparatus and method for a stock investment method with intelligent agents is described and illustrated. The invention is a stock prediction system that through experience learns to make money based on short-term stock predictions and due to inherent flexibility continues to be profitable in virtually all market environments. The performance of these methods is dependent on the validity of the models on different markets. Pattern-Matching • algorithms predict the next market distribution based on a sample of historical data and explicitly optimizes the portfolio based on the sampled distribution. The last class, Meta-Learning • method combine multiple strategies of other categories to attain more consistent performance. The neural network-based stock price prediction and trading system using technical analysis indicators is presented. The model developed first converts the financial time series data into a series of buy-sell-hold trigger signals using the most commonly preferred technical analysis indicators. The results indicate that by choosing the most appropriate technical indicators, the neural network model can achieve comparable results against the Buy and Hold strategy in most of the cases. Furthermore, fine tuning the technical indicators and/or optimization strategy can enhance the overall trading performance.

No. of Pages : 20 No. of Claims : 4

(54) Title of the invention : PROCESS AND METHOD OF SCALABLE FRAMEWORK FOR FINDING COMPETITORS FROM LARGE UNSTRUCTURED E-COMMERCE DATA.

(51) International classification	:G06Q0030020000, G06Q0040000000, G06F0016350000, G06F0016930000, G06Q0010100000	(71)Name of Applicant : <b>1)Mahendra Eknath Pawar ,Assistant Professor</b> Address of Applicant :Department of Computer Science and Engineering, VPPCOE, Sion, Mumbai University, Mumbai, Maharashtra-400022, India. mail id:mahendraepawar@gmail.com Maharashtra India
(31) Priority Document No	:NA	<b>2)Dr. Satish Saini , Professor</b>
(32) Priority Date	:NA	<b>3)Dr. Amit Sehgal, Professor</b>
(33) Name of priority country	:NA	<b>4)Dr. Vikas Maheshwari, Professor</b>
(86) International Application No	:NA	<b>5)Rais Allauddin Mulla ,Assistant Professor</b>
Filing Date	:NA	(72)Name of Inventor :
(87) International Publication No	: NA	<b>1)Mahendra Eknath Pawar ,Assistant Professor</b>
(61) Patent of Addition to Application Number	:NA	<b>2)Dr. Satish Saini , Professor</b>
Filing Date	:NA	<b>3)Dr. Amit Sehgal, Professor</b>
(62) Divisional to Application Number	:NA	<b>4)Dr. Vikas Maheshwari, Professor</b>
Filing Date	:NA	<b>5)Rais Allauddin Mulla ,Assistant Professor</b>

(57) Abstract :

ABSTRACT Our Invention Process and Method of Scalable Framework for Finding Competitors from Large Unstructured E-commerce Data is the strategic importance of detecting and observing business competitors is an inevitable research, which motivated by several business challenges. Monitoring and identifying firm<sup>TM</sup>s competitors have studied in the earlier work. Data mining is the optimal way of handling such huge information<sup>TM</sup>s for mining competitors. Item reviews form online offer rich information about customers' opinions and interest to get a general idea regarding competitors. However, it is generally difficult to understand all reviews in different websites for competitive products and obtain insightful suggestions manually. In the earlier works in the literatures, many authors analyzed such big customer data intelligently and efficiently.

No. of Pages : 16 No. of Claims : 4

(54) Title of the invention : A DEVICE FOR ACCURATE INSERTION OF PEDICLE SCREWS IN PATIENTS WITH NORMAL ANATOMY AND SPINAL DEFORMITY

(51) International classification	:A61B0017700000, A61B0017000000, A61B0017170000, G01N0001000000, A61B0001320000	(71) <b>Name of Applicant :</b> <b>1)Dr. Nirmal Dhnanjay Patil</b> Address of Applicant :Chetna Hospital, MIDC G Block, Plot GP 116, Sambhaji Nagar, Chinchwad, Pune 411019, Maharashtra India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Nirmal Dhnanjay Patil</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Disclosed is a device (50) for accurate insertion of pedicle screws in patients with spinal deformity thereby reducing reliance on imaging and capable of being working in conjunction with an inclinometer device (100). The device (50) comprises a cylindrical rod (2) having a groove (4) configured across the outer periphery. The device (50) further comprises at least two arms (6,8) hinged to the cylindrical rod, wherein the two arms (6,8) includes a means that allows equal opening and closing of the two arms and pointed ends at distal end. The arm (8) an elongated slot (8a) wherein another arm (12) movably fitted therein. The arm (12) includes a knob (12a) configured at proximal end for tightening and loosening the arm (12) for moving the arm (12) within the slot (8a) and a cylindrical rod (12b) configured at distal end. Figure 5A

No. of Pages : 29 No. of Claims : 8

(54) Title of the invention : IOT BASED REAL-TIME AUTOMATED AIR PURIFIER

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No</p> <p>Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application Number</p> <p>Filing Date</p> <p>(62) Divisional to Application Number</p> <p>Filing Date</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. Tasneem Bano Rehman (Associate Professor)</b> Address of Applicant :Sahara bypass road, Katara Extension, Bhopal MP-462022, India. Madhya Pradesh India</p> <p><b>2)Dr. Arun Solanki (Assistant Professor)</b></p> <p><b>3)Dr. Nirbhay Kumar Chaubey (Dean)</b></p> <p><b>4)Dr. Sunita (Assistant Professor)</b></p> <p><b>5)Simar Preet Singh (Assistant Professor)</b></p> <p><b>6)Akash Tayal (Associate Professor)</b></p> <p><b>7)Dr. Chetan Kotwal (Professor )</b></p> <p><b>8)Prof. Tejas Bhatt (Ph.D Research Scholar)</b></p> <p><b>9)Dr. G. Arockia Sahaya Sheela (Assistant Professor)</b></p> <p><b>10)Prof. Ramesh Chandra Panda (Dean)</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. Tasneem Bano Rehman (Associate Professor)</b></p> <p><b>2)Dr. Arun Solanki (Assistant Professor)</b></p> <p><b>3)Dr. Nirbhay Kumar Chaubey (Dean)</b></p> <p><b>4)Dr. Sunita (Assistant Professor)</b></p> <p><b>5)Simar Preet Singh (Assistant Professor)</b></p> <p><b>6)Akash Tayal (Associate Professor)</b></p> <p><b>7)Dr. Chetan Kotwal (Professor )</b></p> <p><b>8)Prof. Tejas Bhatt (Ph.D Research Scholar)</b></p> <p><b>9)Dr. G. Arockia Sahaya Sheela (Assistant Professor)</b></p> <p><b>10)Prof. Ramesh Chandra Panda (Dean)</b></p>
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(57) Abstract :

ABSTRACT The working of the AQI Monitoring system is shown in the figure above. The room to be monitored is setup with an air purifier as per the room volume. The time to purify the room also depends on its volume. The relay module is connected to the air purifier so that the purifier may be turned on/ off using an electrical signal from the microcontroller. The microcontroller (ESP-32s) \_Receives from the sensors and compares the values with the preset values in the program (received from the User) and if the value of the concentration of Particulate Matter (P.M), CO<sub>2</sub>, or other pollutants exceed the harmful level the air purifier is turned on. It remains on for time interval (set by the User as per the room volume and his requirement) and then Sensor data is once again checked-if-AQI is achieved the purifier is turned off else the process is repeated for the same time interval until the AQI is achieved. The data collected by the sensor received at the ESP32 microcontroller is processed for monitoring. The ESP32 Web-Server library allows the user to run an ESP32 as a basic web server and access point. This can process data received from a remote sensor over Wi-Fi connecting the devices to a network or router.

No. of Pages : 11 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028075 A

(19) INDIA

(22) Date of filing of Application :22/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS FOR THE PREPARATION OF QUINAZOLINONES AS DPP-IV INHIBITORS

(51) International classification	:C07D0239910000, C07D0239900000, C07D0239820000, C07D0239950000, A61K0031517000	(71) <b>Name of Applicant :</b> <b>1)Sawant Sanjay Dinkar</b> Address of Applicant :Principal and Professor of Pharmaceutical Chemistry Smt. Kashibai Navale College of Pharmacy Kondhwa (Bk.),Pune 411048, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sawant Sanjay Dinkar</b>
(33) Name of priority country	:NA	<b>2)Patil Rajesh Bhimgonda</b>
(86) International Application No	:NA	<b>3)Nikam Vandana Sandip</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Process for the preparation of quinazolinones as DPP-IV inhibitors The present invention provides a process for the preparation of 8 quinazolinone compounds as DPP-IV inhibitors and have the potential to be used in the treatment of Type-2 diabetes. These 8 quinazolinones are NPA-1, NPA-2, NPA-201, NPA-212, PS-3, PS-6, NPA-107 and PS-46 which can be prepared by a single scheme of synthesis. As these compounds do not contain cyano, nitrile, uracil etc in their structures, they are expected to be devoid of adverse effects like pancreatitis, angio-edema, urinary tract infection, hypersensitivity etc. These quinazolinones show stability and are expected to be completely excreted from the body. Fig. 1

No. of Pages : 49 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028172 A

(19) INDIA

(22) Date of filing of Application :23/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A DEVICE AND METHOD FOR REALTIME COGNITIVE ASSESSMENT OF A USER

(51) International classification	:G06F0011360000, G06Q0010060000, G06Q0010000000, G16H0010600000, A61B0005220000	(71) <b>Name of Applicant :</b> <b>1)LVL ALPHA PRIVATE LIMITED</b> Address of Applicant :A-3/1, Ground Floor, TDS Colony, Pune-411001 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Aditya Mishra</b>
(33) Name of priority country	:NA	<b>2)Vrushali khatpe</b>
(86) International Application No	:NA	<b>3)Pranay Jain</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A DEVICE AND METHOD FOR REALTIME COGNITIVE ASSESSMENT OF A USER A device 100 and method for real time cognitive assessment, is disclosed. The device 100 is configured for receiving health data, inertial motion data, and environmental data. Further, the device 100 is configured for processing the health data, inertial motion data and environmental data to determine occurrence of an event, a type of the event and a severity of the event. Further, the device 100 is configured for triggering one or more tests from a set of tests based on the type of the event and the severity of the event. Further, the device 100 is configured for receiving user inputs from the user on the one or more tests from a set of tests, wherein the user inputs are received in the form of haptic, audio, video, text, or combination thereof and processing the user inputs to generate one or more alerts. [To be published with figure 1]

No. of Pages : 37 No. of Claims : 13

(54) Title of the invention : SYSTEM FOR VEHICLE OCCUPANT PROTECTION DURING COLLISION

(51) International classification	:B60N0002900000, B64D0011060000, E21B0023040000, B60N0002060000, G08B0005360000	(71) <b>Name of Applicant :</b> <b>1)ABHISHEK VISHWAKARMA</b> Address of Applicant :C/O RAJESH KUMAR VISHWAKARMA, HOUSE NUMBER 0, WARD NUMBER 16, NEAR BUS STAND, MANPUR, UMARIA, 484665, MADHYA PRADESH, INDIA Madhya Pradesh India
(31) Priority Document No	:NA	<b>2)ANURAG VISHWAKARMA</b>
(32) Priority Date	:NA	(72) <b>Name of Inventor :</b>
(33) Name of priority country	:NA	<b>1)ABHISHEK VISHWAKARMA</b>
(86) International Application No	:NA	<b>2)ANURAG VISHWAKARMA</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A system for vehicle occupant protection is provided. The system includes a front seat retraction arrangement including a control unit operatively coupled to a plurality of sensors; a piston unit comprising a plunger, wherein a first end of the plunger comprises a hook and a second end comprises one of a seal or a piston; a sliding rail associated to the corresponding at least one seat; a leg restrain attachment operatively coupled to the front seat retraction arrangement, wherein the leg restrain comprises a cable with a leg holder which is wrapped with a power spring; The lock of the cable is configured to be unlocked to retract the cable towards the spring and thereby sticking the at least one leg of the user towards the seat during retraction of the corresponding at least one seat, upon receiving the retraction command from the control unit. FIG. 1

No. of Pages : 27 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028353 A

(19) INDIA

(22) Date of filing of Application :24/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYNTHESIS OF NOVEL QUATERNARY PD/OCNT@CDS@TiO2 NANOCOMPOSITE AND ITS CATALYTIC ACTIVITY

(51) International classification	:B01J0035000000, G11B0033040000, C07C0215660000, C07D0417120000, C12Q0001420000	(71)Name of Applicant : <b>1)DR. SHIVRAM S. GARJE</b> Address of Applicant :DEPARTMENT OF CHMISTRY, UNIVERSITY OF MUMBAI, VIDYANAGARI, SANTACRUZ (EAST), MUMBAI - 400 098, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	<b>2)RASHMI A. BADHE</b>
(32) Priority Date	:NA	<b>3)ALEEM ANSARI</b>
(33) Name of priority country	:NA	(72)Name of Inventor :
(86) International Application No	:NA	<b>1)DR. SHIVRAM S. GARJE</b>
Filing Date	:NA	<b>2)RASHMI A. BADHE</b>
(87) International Publication No	: NA	<b>3)ALEEM ANSARI</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

7. Abstract of the invention: Palladium based novel quaternary (Pd/OCNT@CdS@TiO<sub>2</sub>) nanocomposite has been prepared via facile solvothermal decomposition route using CdCl<sub>2</sub>(4-Chlorobenzaldehyde thiosemicarbazone)<sub>2</sub> and titanium isopropoxide as molecular precursors. The as-synthesized nanocomposite was characterized by various characterization techniques. Further, the as-synthesized quaternary composite was used as a catalyst for reduction of toxic organic pollutants such as Methylene Blue (MB), Methyl Orange (MO) and the mixture of MB/MO dyes. It has been observed that the complete degradation of the organic dyes in presence of Pd/OCNT@CdS@TiO<sub>2</sub> catalyst takes place in a very short span of time. In addition, the as-synthesized quaternary Pd/OCNT@CdS@TiO<sub>2</sub> nanocomposite shows recyclability upto three cycles, showing no significant loss in the efficiency of the catalyst, which is well established by characterizing the recycled catalyst by XRD.

No. of Pages : 14 No. of Claims : 6

(54) Title of the invention : GREEN SYNTHESIS OF SURFACTANT CAPPED PALLADIUM DOPED TiO<sub>2</sub> NANOCOMPOSITES AND THEIR CATALYTIC ACTIVITY

(51) International classification	:B82Y0030000000, C08G0018800000, H01M0004900000, C02F0001700000, B82Y0040000000	(71)Name of Applicant : <b>1)DR. SHIVRAM S. GARJE</b> Address of Applicant :DEPARTMENT OF CHMISTRY, UNIVERSITY OF MUMBAI, VIDYANAGARI, SANTACRUZ (EAST), MUMBAI - 400 098, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	<b>2)ALEEM ANSARI</b>
(32) Priority Date	:NA	<b>3)RASHMI A. BADHE</b>
(33) Name of priority country	:NA	(72)Name of Inventor :
(86) International Application No	:NA	<b>1)DR. SHIVRAM S. GARJE</b>
Filing Date	:NA	<b>2)ALEEM ANSARI</b>
(87) International Publication No	: NA	<b>3)RASHMI A. BADHE</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

7. Abstract of the invention: The synthesis of surfactant capped palladium doped TiO<sub>2</sub>/Pd nanocomposites (NCs) was carried out by a facile and eco-friendly route using solvothermal method. Their physicochemical properties were studied in details. The synthesized surfactant coated TiCVPd nanocomposites were analyzed by various characterization techniques like transmission electron microscopy (TEM), Powder X-ray diffraction (PXRD) etc. Experimentally, it was found that the as-prepared nanocomposites showed excellent catalytic properties for the reduction of nitroarenes to aminoarenes at room temperature in the presence of NaBH<sub>4</sub> as reducing agent. The surfactant capped palladium doped TiO<sub>2</sub>/Pd nanocomposites have improved catalytic activity because of ease of electron transfer rate due to synergistic effects. It is observed that cetyltrimethyl ammonium bromide (CTAB)-assisted TiO<sub>2</sub>/Pd nanocomposite show excellent photocatalytic activity (94.3%) compared to other surfactant-modified i.e. Sodium dodecyl sulfate (SDS) coated TiO<sub>2</sub>/Pd nanocomposite and Tween80 coated TiO<sub>2</sub>/Pd nanocomposite.

No. of Pages : 12 No. of Claims : 5

(54) Title of the invention : AUTOMATIC DIGITAL WIRELESS TEMPERATURE DETECTING SMART DOOR

<p>(51) International classification :G07C0009000000, G01K0001020000, F24F0011560000, G06T0005000000, G01K0011260000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)MR. PERMINDUR SINGH</b> Address of Applicant :GURU GOBIND SINGH FOUNDATION, NASHIK - 422 009, MAHARASHTRA, INDIA. Maharashtra India</p> <p><b>2)MR. SHRIHARI R. UPASANI</b> <b>3)PROF. SUSHMA A. KOLHE</b> <b>4)MR. ANKUSH HEMANT JOSHI</b> <b>5)MR. SOHEL SADIK SHAIKH</b> <b>6)MR. OMKAR VIJAY SONAWANE</b> <b>7)MR. ATHARVA KISHOR KOTHAWADE</b></p> <p>(72)Name of Inventor :</p> <p><b>1)MR. PERMINDUR SINGH</b> <b>2)MR. SHRIHARI R. UPASANI</b> <b>3)PROF. SUSHMA A. KOLHE</b> <b>4)MR. ANKUSH HEMANT JOSHI</b> <b>5)MR. SOHEL SADIK SHAIKH</b> <b>6)MR. OMKAR VIJAY SONAWANE</b> <b>7)MR. ATHARVA KISHOR KOTHAWADE</b></p>
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(57) Abstract :

ABSTRACT : The Automatic Digital Wireless Temperature Detecting Smart Door is Implementing for the Operation for getting Temperature and oxygen level value without touch or in wireless method to find where the suspect should be corona Positive or Negative as per any threshold value set according to requirement. It mainly contains Arduino DIY , Door latch , Temperature sensor , Pulse Oximeter , Power Protection circuit, Ultrasonic sensor , [162] LCD , Buzzer , Two in one colour LED i.e Red & Green colour Both colour is in one LED is used . When the any Person or suspect is come near the Door as detected by Ultrasonic Sensor after that Temperature sensor detects the temperature and Pulse oximeter detects Oxygen Level after detecting both parameters Temperature & Oxygen level shows on [162] LCD respectively in that condition if Temperature value is below the threshold value then Green Led is ON and alongwith displaying Temperature & Oxygen level value with on LCD , Else if Temperature is crossed the threshold value then Red Led is get On with Buzzer Indication and value of temperature and oxygen level value alongwith Display on [162] LCD .

No. of Pages : 10 No. of Claims : 7

(54) Title of the invention : BORDER-LESS TRADING SYSTEM USING BLOCKCHAIN TECHNOLOGY

<p>(51) International classification :G06Q0040040000, G06Q0020380000, G06Q0020060000, G06F0016270000, H04L0009320000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Praful Nandankar</b> Address of Applicant :Assistant Professor Electrical Engineering Dept. Government College of Engineering, Nagpur, Maharashtra. Maharashtra India</p> <p><b>2)Sandhya P</b></p> <p><b>3)Dr J RamaDevi</b></p> <p><b>4)VEMPATY PRASHANTHI</b></p> <p><b>5)Mr. Sankararao Majji</b></p> <p><b>6)Babu Reddy</b></p> <p><b>7)Dr. Swati Gupta</b></p> <p><b>8)Dr K Kiran Kumar</b></p> <p><b>9)Tulasi Radhika Patnala</b></p> <p><b>10)Dr S Ravichandran</b></p> <p><b>11)Kaviyaraj R</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Praful Nandankar</b></p> <p><b>2)Sandhya P</b></p> <p><b>3)Dr J RamaDevi</b></p> <p><b>4)VEMPATY PRASHANTHI</b></p> <p><b>5)Mr. Sankararao Majji</b></p> <p><b>6)Babu Reddy</b></p> <p><b>7)Dr. Swati Gupta</b></p> <p><b>8)Dr K Kiran Kumar</b></p> <p><b>9)Tulasi Radhika Patnala</b></p> <p><b>10)Dr S Ravichandran</b></p> <p><b>11)Kaviyaraj R</b></p>
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## (57) Abstract :

Block chain is the one of the best secured distributed database design, a significant number of cryptocurrencies and financial trading markets using digital assets have also been introduced over time. Despite the fluctuation in the exchange rate, blockchains and its cryptocurrencies have no remarkable change overall. They still follow the old-traditional trading mechanism, which exchanges between cryptocurrencies and at currencies. Although few projects are emerging to enlarge a blockchain's trading usage, i.e., cross-chain liquidity, it still limits itself on swapping one type of cryptocurrency with another type. Beyond supporting swapping coins, the blockchain could be applied and extended to become a trade-payment network that connects multiple solitary blockchain-based platforms. In this work, we propose a heuristic cross-chain trading system that leverages the blockchain technology to build a fair and border-less trading network across multiple decentralized blockchains.

No. of Pages : 7 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028444 A

(19) INDIA

(22) Date of filing of Application :24/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS OF HYDROXYAPATITE COATING ON ORTHOPAEDIC IMPLANT

(51) International classification	:A61L0027320000, A61L0027300000, C25D0013020000, A61K0006750000, A61L0024000000	(71) <b>Name of Applicant :</b> <b>1)Meril Healthcare Pvt. Ltd.</b> Address of Applicant :Bilakhia House, Muktanand Marg, Chala, Vapi-Gujarat 396191, India Gujarat India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MINOCHA, Dr. Pramod Kumar</b>
(33) Name of priority country	:NA	<b>2)KOTHWALA, Deveshkumar Mahendralal</b>
(86) International Application No	:NA	<b>3)DAVE, Arpit Pradipkumar</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT TITLE OF THE INVENTION: PROCESS OF HYDROXYAPATITE COATING ON ORTHOPAEDIC IMPLANT A process of providing a coating (100) of bioactive material on a medical implant (10) is disclosed. The process includes providing a substrate. Etching the substrate to provide a rough substrate. Post etching, the substrate is coated with a first layer (100a) of nano hydroxyapatite particles by a process of electrophoretic deposition. Further, the substrate is subjected to a process of sintering and annealing. Post annealing, the substrate is coated with a second layer (100b) of powdered hydroxyapatite material by a process of plasma spray coating. FIG.2

No. of Pages : 22 No. of Claims : 8

(54) Title of the invention : A METHOD TO ESTIMATE INSULATION RESISTANCE FROM RESIDUAL MOISTURE IN A LOW POWER TRANSFORMER.

<p>(51) International classification :D06F0058300000, D06F0058380000, G01R0027020000, H01L0021670000, G01K0007420000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number:NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)Ashvini Shivaji Undre</b>  Address of Applicant :Director, Frecciarossa Energy Private Limited, H.No. 2050, Shivaji Nagar, Main Road, Washi-413503, Osmanabad, Maharashtra, India Maharashtra India</p> <p>(72)Name of Inventor :  <b>1)Vijay Pandurang Mohale</b>  <b>2)Ramchandra Pandurang Hasabe</b>  <b>3)Priyadarshi Haridas Sawant</b>  <b>4)Ajay Babagounda Patil</b>  <b>5)Tanay Nagendra Kejriwal</b>  <b>6)Prajwal Anil Ahire</b>  <b>7)Chaitanya Mahendrasing Shinde</b>  <b>8)Dhananjay Bharat Patole</b>  <b>9)Siddhant Pandurang Wadkar</b>  <b>10)Sanket Namdeo Rathod</b>  <b>11)Ajaysingh Tuljaram Chandan</b>  <b>12)Sushil Subhash Karvekar</b>  <b>13)Ashvini Shivaji Undre</b></p>
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## (57) Abstract :

A method to estimate insulation resistance from residual moisture in a low power transformer. This invention describes a design of a heating chamber system that consists of a method for the drying of the low power transformer winding by heating and parallelly measuring the extraction rate of moisture removed during the drying process to estimate the time required for the drying of the windings and to calculate the residual moisture after the completion of the drying. It evaluates the residual moisture collected by the system to estimate the process time for the drying of the transformer in a time bound and controlled manner without causing any damage to the insulation paper or the windings due to overheating. The system performs a mathematical evaluation in addition to the physical evaluation to compare and confirm the result obtained before stopping the drying process.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028549 A

(19) INDIA

(22) Date of filing of Application :25/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN APPARATUS CONFIGURING PENTAMEROUS VARIANTS OF HYBRID HYDRO-ENTANGLED NONWOVEN FABRICS AND THEIR METHOD OF MANUFACTURING

(51) International classification	:D04H0001492000, D04H0003110000, D04H0013000000, D04H0001740000, D04H0001587000	(71) <b>Name of Applicant :</b> <b>1)PRANAY BHASKAR SAHU</b> Address of Applicant :197-198, ASPIRE, KALPATARU CREST, LBS MARG, BHANDUP WEST, 400078, MUMBAI, INDIA Maharashtra India <b>2)SHUBHASHREE PRANAY SAHU</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PRANAY BHASKAR SAHU</b>
(33) Name of priority country	:NA	<b>2)SHUBHASHREE PRANAY SAHU</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The use of nonwoven fabrics in medical and health hygiene applications are continuously increasing as they are able to deliver good functional properties at reduced manufacturing costs. Of all nonwoven technologies, hydro-entanglement nonwovens are getting popular due to their wide range of technical, structural and functional capabilities TThe present the invention describes largely to an apparatus configuration and technique for manufacturing five different hybrid nonwoven fabric using hydro-entanglement technology, primarily due to the unique configuration for web formation and the hydro-entanglement unit. Thus the developed cost-effective and high-performance hybrid hydro-entangled nonwoven fabric can cater to the widest range of applications. The resultant hybrid nonwoven fabrics exhibit superior strength, absorbency, thickness and can be tailored for unlimited applications in the medical, hygiene and industrial sector.

No. of Pages : 35 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028583 A

(19) INDIA

(22) Date of filing of Application :25/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BI-DIRECTIONAL BALANCED STOP VALVE

(51) International classification	:F16K0027020000, F16K0001300000, A61M0003020000, F16K0039040000, A62C0035680000	(71) <b>Name of Applicant :</b> <b>1)Quadros Eugene Thomas</b> Address of Applicant :R-639, TTC Indl. Area, MIDC, Rabale, Navi Mumbai. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Quadros Eugene Thomas</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Our invention Titled Bi-Directional Balanced Stop Valve • is a product that controls the flow of high pressure air/gas in both directions of inflow and outflow using the balanced differential pressure to operate with minimal torque (i.e. Under 3 N-m Torque) in opening or closing of the valve. Our invention comprises a Valve Body (100), Cylinder Cartridge (200), Seat (300), Spindle (400), Slider (500), Bonnet (600), and Knob Handle (909). Our invention is a Bi- Directional Balanced Stop Valve which operates in either direction between two fluid lines and can also control forward and backward flow in high pressure using balanced differential pressure to operate with minimal torque (i.e. Under 3 N-m Torque).

No. of Pages : 34 No. of Claims : 7

(54) Title of the invention : SYSTEM AND METHODS FOR ONLINE EBOOK MAKER.

<p>(51) International classification :G06F0021100000, H04L0029060000, G06F0021620000, G06Q0050180000, G06F0021120000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number:NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Prof Ashish Gupta</b> Address of Applicant :Department of CSE, Nagaji Institute of Technology &amp; Management, Gwalior, MP, India Madhya Pradesh India</p> <p><b>2)Prof. Shubhangi. S. Vairagar</b></p> <p><b>3)Prof. Deepali Patil</b></p> <p><b>4)Prof. Prema B. Sahane</b></p> <p><b>5)Prof. Sonali Patil</b></p> <p><b>6)Prof. (Dr.) Shyam S Gupta</b></p> <p><b>7)Prof. (Dr.) Deepak Gupta</b></p> <p><b>8)Prof. (Dr.) Akhilesh Kumar Sharma</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Prof Ashish Gupta</b></p> <p><b>2)Prof. Shubhangi. S. Vairagar</b></p> <p><b>3)Prof. Deepali Patil</b></p> <p><b>4)Prof. Prema B. Sahane</b></p> <p><b>5)Prof. Sonali Patil</b></p> <p><b>6)Prof. (Dr.) Shyam S Gupta</b></p> <p><b>7)Prof. (Dr.) Deepak Gupta</b></p> <p><b>8)Prof. (Dr.) Akhilesh Kumar Sharma</b></p>
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## (57) Abstract :

In this internet and smart-phone era paper books are almost obsolete. Many developers have come up with the eBooks which can be read online on computer or on a smart-phone. Users can now access them offline any time without carrying a bulky pBook (Paper Book). The stable eBook application should restrict and control the use of contents to protect the copyrights. Encryption and enforcement of digital policies are generally managed by Digital Rights Management (DRM). The stable system for online as well as offline readers safeguard the intellectual properties for authors, publishers by providing a protection to their digital content, secure eBook distribution, authentication, authorization, market involvement, and monetary transactions. Content Piracy has always been a prime issue in managing a Library System. To safeguard against piracy, publishers need to control and track whether the user is authorized or not and up to how much extent the privileges should be provided. Publishers, authors are concerned about the revenue lost over unauthorized, unpaid access to their valuable contents and efforts as well. This is an old issue with pBooks that has now come in the forefront with the introduction of online and offline eBook applications. A solution needs to be proposed to provide a good user experience and content security, and integrity for publishers. In this project, we have explore how the user restrictions and access controls can be enforced using a Content Management System (CMS). Drupal, Joomla, and WordPress are few of the powerful CMSs where a developer has to integrate various modules with core modules and configure them as per the need of an organization. We will focus on effective use of Drupal for importing an eBook (e.g. .doc, .docx etc. formats) to Drupal for managing user and administrative policies to develop an eLibrary System for University environment.

No. of Pages : 9 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028590 A

(19) INDIA

(22) Date of filing of Application :25/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : THREE JAW CLAMP APPARATUS AND SYSTEM FOR OCCLUSION AND EVERSION OF BLOOD VESSEL AND METHOD THEREOF

(51) International classification	:A61B0017000000, A61B0017110000, A61B0017120000, B01F0015000000, A61B0017122000	(71) <b>Name of Applicant :</b> <b>1)SHIRA MEDTECH PRIVATE LIMITED</b> Address of Applicant :Plot no. 3, Phase-1, Near Old Nirma, G.I.D.C. Vatva, Ahmedabad-382445 Gujarat, India. Gujarat India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ANAND PARIKH</b>
(33) Name of priority country	:NA	<b>2)PRASANN JAIN</b>
(86) International Application No	:NA	<b>3)AAKASH KOHLI</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Exemplary embodiments of the present disclosure are directed towards a three jaw clamp apparatus and system for occlusion and eversion of blood vessel and method thereof. The present disclosure provides an apparatus for occluding and opening a blood vessel. The apparatus is a three jaw design, for occluding and opening the blood vessel while preventing excessive stretching of adventitia or tearing of the blood vessel/adventitia. The three jaw clamps provide reliable clamps and can be cleaned easily and includes a first member, a second member, and a third member for occluding and opening the blood vessel that can be joined/assembled/welded fast. The system for occlusion, inversion and approximation of two ends of blood vessels while preventing excessive stretching of adventitia or tearing of the blood vessel/adventitia. The system of three jaw clamps can adjust the distance between the two ends to facilitate anastomosis. FIG.1

No. of Pages : 44 No. of Claims : 20

(54) Title of the invention : A MODIFIED RELEASE CAPECITABINE TABLET AND PROCESS TO PREPARE THEREOF

(51) International classification	:A61K0009200000, A61K0031706800, A61K0009280000, A61K0009500000, B30B0011080000	(71) <b>Name of Applicant :</b> <b>1)Mr. Sachin Shivaji Gaikwad</b> Address of Applicant :At/Post- Vinchur, Tal-Niphad, Dist- Nashik, Pin-422305, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Kishor Sahebrao Salunkhe</b>
(33) Name of priority country	:NA	<b>2)Miss. Rohini Dagu Avhad</b>
(86) International Application No	:NA	<b>3)Mr. Sachin Shivaji Gaikwad</b>
Filing Date	:NA	<b>4)Mr. Hemant Uttamrao Chikhale</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to modified release capecitabine tablet preferably consist of effective concentration of hydroxyl propyl cellulose (HPC) range from 15 to 30 % w/w as a extended release matrix polymer and sodium alginate (SA) range from 20 to 30 % w/w as a release modifying polymer accurately weighed and passed through mesh # 60 sieve; mixed uniformly for 30 min further blended with additives; lactose for 10 min, granulated with non aqueous isopropyl alcohol (IPA) and to the end magnesium stearate in a concentration range from 1 to 2% w/w, compressed on a rotary tablet compression machine. Capecitabine, hydroxypropyl cellulose (HPC) and sodium alginate (SA) were assessed through one or more ways to determine melting point, solubility, loss on drying, quantitative analysis by UV spectroscopy, FTIR, DSC, X ray diffractometry, drug excipients compatibility studies and prepared modified release tablets were evaluated for thickness, hardness, friability, weight variation, content uniformity, swelling index and stability study ensures the purity, safety and stability of the preparation while in vitro drug release study reveals higher drug release percentage range from 84 to 99; sustained up to 24 hour and kinetic model study shown sustained release of drug up to 24 hours. The modified release tablet withstands to gastric pH and sustained with effective therapeutic concentration for 24 hours with reduced dose frequency and cost effective treatment in colon cancer.

No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : IOT AND CLOUD BASED VIRAL DETECTOR DEVICE MICROCA • : ADAPTING CORONA VIRUS AND OTHER DEADLY PATHOGENS

<p>(51) International classification</p> <p>:A61L0002000000, G16H0040200000, A41D0031300000, A61B0090400000, G16H0050800000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. ASHOK KUMAR KOSHARIYA</b> Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF PLANT PATHOLOGY, INDIRA GANDHI AGRICULTURE UNIVERSITY, IGKV, RAIPUR, CHHATTISGARH, INDIA. PIN CODE 492012 Chattisgarh India</p> <p><b>2)Dr. SUDHEER HANUMANTHAKARI</b></p> <p><b>3)Dr. MANJUNATH G K</b></p> <p><b>4)Ms. E.SEETHALAKSHMI</b></p> <p><b>5)Dr. TASIR SHARIEF PER</b></p> <p><b>6)Dr. MOHD ASLAM RATHER</b></p> <p><b>7)Mr. YOUNIS RASHID</b></p> <p><b>8)Mr. PRASHANTH KUMAR K</b></p> <p><b>9)Dr. D.RAVINDRAN</b></p> <p><b>10)Mr. HONNAPPA S</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. ASHOK KUMAR KOSHARIYA</b></p> <p><b>2)Dr. SUDHEER HANUMANTHAKARI</b></p> <p><b>3)Dr. MANJUNATH G K</b></p> <p><b>4)Ms. E.SEETHALAKSHMI</b></p> <p><b>5)Dr. TASIR SHARIEF PER</b></p> <p><b>6)Dr. MOHD ASLAM RATHER</b></p> <p><b>7)Mr. YOUNIS RASHID</b></p> <p><b>8)Mr. PRASHANTH KUMAR K</b></p> <p><b>9)Dr. D.RAVINDRAN</b></p> <p><b>10)Mr. HONNAPPA S</b></p>
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## (57) Abstract :

ABSTRACT IOT AND CLOUD BASED VIRAL DETECTOR DEVICE MICROCA • : ADAPTING CORONA VIRUS AND OTHER DEADLY PATHOGENS The invention relates to the field of lateral glide immunoassays. More especially, the discovery pertains to a lateral float immunoassay that hastily detects viral and bacterial infection when the person is subjected to hand scan using microca device which gets the information as a UV scanned image. These images are send to the microcontroller and processed. The results are compared with the database integrated in the cloud to predict the percentage of infection. The infection results are send to the IoT to produce data set of the infected person and saved in the computer. The present COVID-19 pandemic situation has drifting the entire globe and deliver a message to uphold personal hygiene to battle this deadly pathogen and effective survival. Each day masses of public are getting dead due to this CORONA virus, which is uplifting mainly due to dearth of sanitization and exposure to unsanitary localities. In this invention brought up with the novel prototype model of ~Microca • -A germ detector device™. It is perception medical and clinic settings, which has multipotent germ detection landscapes installed like Ultra Violet lights to instantly detect the germs existing on the hands or any other body parts which is targeted under this device. Moreover, ~Microca™ is holding a germ detection cameras; which can capture different parts of the body, for instance like nails and based to its color, it can signifies the persons health condition. In fixing the prototype of ~Microca™, we have dynamically operated and trained the medical database to visualize its actual bid and accuracy percentage. Hence the skilled data can assist in detecting higher accuracy results in the medical prototypes likes ~Microca™. It is a tiny portable instrument like ~Microca™ can aid in upholding sterile and higher hygiene settings in hospitals, and other regions were there is higher exposure of this deadly pathogen. Long running of this device ~Microca™ can aid in combating the CORONA virus and other deadly diseases that are causing diseases through one human to another.

No. of Pages : 28 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028848 A

(19) INDIA

(22) Date of filing of Application :28/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SOLAR POWERED MECHANICAL RESPIRATOR

(51) International classification	:F21S0009030000, A62B0023020000, A61M0016000000, H02J0007350000, C02F0001140000	(71) <b>Name of Applicant :</b> <b>1)VISHVASAMRADNYI RAMARAJE MANE</b> Address of Applicant :A/P- KHANAPUR, TAL- KHANAPUR, DIST.-SANGLI - 415 307, MAHARASHTRA, INDIA. Maharashtra India <b>2)RAMARAJE HANMANTRAO MANE</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)VISHVASAMRADNYI RAMARAJE MANE</b>
(33) Name of priority country	:NA	<b>2)RAMARAJE HANMANTRAO MANE</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

5. ABSTRACT OF THE INVENTION Abstract Ventilators and oxygen cylinder devices are only options for COVID 19 and COPD patients. It helps for respiration. The ventilators machine and oxygen cylinder available in the market is very expensive and Also rate of production is insufficient. There is no option for such patients to respirator. The carbon dioxide exhaled by patient harms other patients, doctors as well as nursing staff. Solar powered Mechanical Respirator made by wooden box , charging battery , ambubag. The mechanism is proper. This device absorb atmosphere air and passes to facial mask and enters in to lungs. The volume and pressure of air is controlled by the knob according to the patient requirement and doctor advice. All exhaled carbon dioxide sterilized by sodium hypochlorite solution and throwing out in the atmosphere. This device can be used during transfer patients form one place to other. It can also be used in the ambulance as well as any transport. It is usable for domestic purpose.

No. of Pages : 6 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202121028862 A

(19) INDIA

(22) Date of filing of Application :28/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM DESIGN FOR INDUCTION HARDENING OF WHEELS USED IN OVERHEAD CRANES

(51) International classification	:C21D0001100000, C21D0001420000, H01Q0003260000, B65G0063000000, C22C0038020000	(71)Name of Applicant : <b>1)SUSHANT SATPUTALEY</b> Address of Applicant :ASSTT. PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, GAVSI MANAPUR, WARDHA ROAD, NAGPUR - 441 108, MAHARAASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	<b>2)SHARDUL WADALKAR</b>
(32) Priority Date	:NA	<b>3)PRACHIT SHRIKHANDE</b>
(33) Name of priority country	:NA	<b>4)RAHUL KAVISHWAR</b>
(86) International Application No	:NA	<b>5)AAMOS SAWALE</b>
Filing Date	:NA	(72)Name of Inventor :
(87) International Publication No	: NA	<b>1)SUSHANT SATPUTALEY</b>
(61) Patent of Addition to Application Number	:NA	<b>2)SHARDUL WADALKAR</b>
Filing Date	:NA	<b>3)PRACHIT SHRIKHANDE</b>
(62) Divisional to Application Number	:NA	<b>4)RAHUL KAVISHWAR</b>
Filing Date	:NA	<b>5)AAMOS SAWALE</b>

(57) Abstract :

7. ABSTRACT TITLE: SYSTEM DESIGN FOR INDUCTION HARDENING OF WHEELS USED IN OVERHEAD CRANES

Overhead crane wheels are small but important part of Overhead crane. The quality of the overhead crane wheels affects the overhead quality and operation. Most common issues with cranes maintenance are caused because of the wear of contact surface of crane wheels during the exploitation. In case of the significant wear or failure, wheels are repaired and reused or replace with new ones. To meet this challenging and catastrophic situation, induction hardening of crane wheel is done on surface which is subjected to deformation and wear. The crane wheels are made of cast steel or alloy steel. Quenching is important part of the overhead crane wheel forging process, preventing the crane wheels from deforming and increasing the local hardness. For induction hardening of overhead crane wheel with varying wheel and bore diameter. We designed fixture setup with vertical wheel orientation with roller drum for easy loading and unloading of wheel, less power consumption and with safety consideration.

No. of Pages : 10 No. of Claims : 5

(54) Title of the invention : SPECIAL MOULD FOR PREPARATION OF ADDITIVES DURING SOIL STABILIZATION

<div>(51) International classification</div> <div>:G06Q0010060000, B09C0001080000, E02D0003000000, A01G0013020000, E01C0021000000</div> <div>(31) Priority Document No</div> <div>:NA</div> <div>(32) Priority Date</div> <div>:NA</div> <div>(33) Name of priority country</div> <div>:NA</div> <div>(86) International Application No</div> <div>:NA</div> <div>Filing Date</div> <div>:NA</div> <div>(87) International Publication No</div> <div>: NA</div> <div>(61) Patent of Addition to Application Number</div> <div>:NA</div> <div>Filing Date</div> <div>:NA</div> <div>(62) Divisional to Application Number</div> <div>:NA</div> <div>Filing Date</div> <div>:NA</div>	<div>(71)Name of Applicant :</div> <div><b>1)Dr. Ganesh S. Ingle</b></div> <div>Address of Applicant :School of Civil Engineering, MIT</div> <div>World Peace University Kothrud Pune -411038 Maharashtra India</div> <div><b>2)Dr. Sudhir P Patil</b></div> <div><b>3)Mr Sairaj Umesh Salunkhe</b></div> <div><b>4)Mr Rohan Suresh Patil</b></div> <div><b>5)Mr Ruturaj Vasant Shedge</b></div> <div><b>6)Mr Prem Gajanan Chadawar</b></div> <div><b>7)Mr Nikhil Uttam Patil</b></div> <div><b>8)Mr Mahesh V Tatikonda</b></div> <div>(72)Name of Inventor :</div> <div><b>1)Dr. Ganesh S. Ingle</b></div> <div><b>2)Dr. Sudhir P Patil</b></div> <div><b>3)Mr Sairaj Umesh Salunkhe</b></div> <div><b>4)Mr Rohan Suresh Patil</b></div> <div><b>5)Mr Ruturaj Vasant Shedge</b></div> <div><b>6)Mr Prem Gajanan Chadawar</b></div> <div><b>7)Mr Nikhil Uttam Patil</b></div> <div><b>8)Mr Mahesh V Tatikonda</b></div>
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## (57) Abstract :

Black cotton soil is typically having a low bearing capacity (Low CBR) due to its swelling and shrinkage characteristics. Due to this characteristic the soil forms a very poor foundation material during construction of road. One of the techniques to improve the CBR of black soil is chemical stabilization using the additives. In the present invention a special mould is designed and fabricated for preparation of additives during stabilization of soil. Using this invention, a combined product of individual additive viz. pulverized PVC and steel wire are prepared. The prepared product is used as an additive during stabilization of black cotton soil. The fabricated mould consists of seven cylindrical extrusions each of 65mm diameter and 45mm depth. The product of combined additives may be prepared in the form of individual cylinder or a group of seven cylinders connected by a cap (similar to numbers of piles enclosed with a pile cap). The individual product/ entire product is added in a soil and the effectiveness of product is observed in the form of increased in CBR of Black cotton soil. The CBR of black cotton soil is increased by 47% as compared to untreated soil. This can lead to reduction in a total pavement thickness and the total cost of the project. Also, the reuse of pulverized PVC as an outlet from an industry can reduce the effort of disposal leading to decrease the land pollution and hence maintain the sustainability.

No. of Pages : 20 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127028975 A

(19) INDIA

(22) Date of filing of Application :28/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BATTERY HEATING SYSTEM

(51) International classification :H01M0010615000,  
H02M0007000000,  
H02M0007515000,  
F01L0001260000,  
H01M0010625000  
(31) Priority Document No :201822274044.X  
(32) Priority Date :29/12/2018  
(33) Name of priority country :China  
(86) International Application No :PCT/CN2019/072663  
Filing Date :22/01/2019  
(87) International Publication No :WO 2020/133615  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED**  
Address of Applicant :No.2, Xingang Road, Zhangwan Town, Jiaocheng District Ningde, Fujian 352100 China  
(72)Name of Inventor :  
**1)ZUO, Xiyang**  
**2)DAN, Zhimin**  
**3)ZHANG, Wei**  
**4)HOU, Yizhen**  
**5)LI, Guowei**  
**6)WU, Xingyuan**  
**7)LI, Yanru**

(57) Abstract :

The present application provides a battery heating system, which relates to the field of battery power. The battery heating system comprises a main positive switch, a main negative switch, an inverter, a motor and a battery management module; the inverter comprises a first phase bridge arm, a second phase bridge arm and a third phase bridge arm which are connected in parallel, each of upper bridge arms and lower bridge arms is provided with a switch module, buffer modules are connected in parallel to the switch modules, the buffer modules are used for protecting the switch modules; a motor controller in the inverter is used for providing a driving signal for a target upper bridge arm switch module and a target lower bridge arm switch module, and for controlling the periodical turning on and turning off of the switch module of the upper bridge arm of any one bridge arm among the three phase bridge arms and the switch module of the lower bridge arm of at least one bridge arm other than the bridge arm where the target upper bridge arm switch module is located.

No. of Pages : 20 No. of Claims : 14

(54) Title of the invention : LASER PRISM

(51) International classification	:G01C0015000000, G01C0009060000, H01S0003080000, G01C0015060000, G01C0005000000	(71) <b>Name of Applicant :</b> <b>1)MARRI MITHILESH</b> Address of Applicant :#403,4th FLOOR, BALAJI TOWERS, BALAJI COLONY, TIRUPATI ,AP,INDIA Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MARRI MITHILESH</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

APPLICANT: MARRI MITHILESH TITLE: LASER PRISM ABSTRACT The present invention discloses a low weight and cost-effective Laser Prism adapted to be tracked by a Total station to calculate Length, Area, Volume, Pythagoras, Path, Reference Point, Real-Time Angular Measurement during land surveying and configured to hold Prism at the particular position without the help of a pole. The Laser Prism of the present invention comprises of a prism, a prism holder, laser light, a laser distance meter equipped with Sensor, OLED Rotary screens, Bubble-tube, Bluetooth, and a camera, and an electronic level inclinometer. The prism is positioned on the Prism holder and characterized in fixing the laser and laser distance meter below the Prism. The Laser is positioned in front, below the Prism, and is pointing towards the ground to locate co-ordinate in place of a pole. The laser distance meter is positioned behind the Laser in the horizontal axis below/left-side/right-side the prism, shows the height of the Prism from the ground and displayed on the screens. The Prism holder having various provisions on the backside is for holding the laser prism in multiple ways. The Electronic level inclinometer positioned above/below the Prism is for observing the electronic level. The Bluetooth is adapted to transfer data to measuring the master app for convenient result documentation and storage. The Camera configured with integrated zoom function enables easy visualization of a target.

No. of Pages : 16 No. of Claims : 10

(54) Title of the invention : BIOENGINEERED ARTIFICIAL LATERAL LIVER (BALL) OR BIOENGINEERED ARTIFICIAL ECTOPIC LIVER (BAEL)

<p>(51) International classification :A61M0001360000, G01N0033500000, H01M0008040820, A61K0035407000, A61M0001340000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)YKRITA LIFESCIENCES PRIVATE LIMITED</b>  Address of Applicant :269, 5th Main, 9th Cross, Tata Nagar, Kogdegehalli,Bangalore, Karnataka, INDIA-560092 Karnataka India</p> <p>(72)<b>Name of Inventor :</b>  <b>1)Dr. Mahesh Srisailappa Gopasetty</b></p>
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(57) Abstract :

TITLE: BIOENGINEERED ARTIFICIAL LATERAL LIVER (BALL) OR BIOENGINEERED ARTIFICIAL ECTOPIC LIVER (BAEL) ABSTRACT The embodiments provide a bioengineered artificial functional liver which is connected to a patient suffering from acute liver failure and would functional like an ectopic liver. The device uses the cells derived from the patient<sup>TM</sup>s own body thereby nullifying the chances of self/non-self-recognition and related immune activation and rejection. The extracted liver cells are grown on a customized 3D matrix called as 3D cell cartridge and these cell cartridges individually function as miniature liver assemblies. Multiple such assemblies when working in parallel would rescue the condition of liver failure. A microfluidic chamber is built with the similar network as found in the liver and the chamber has flow circuits for plasma/de-cellularised blood and the flow circuits are lined by a coculture of hepatocytes, endothelial cells and fibroblasts. The array of cells in the chamber serve as a miniature liver and multiple such arrays will be stacked to achieve a significant hepatic function. FIG.6 is selected. 10 Claims and 6 Drawing Sheets.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041029265 A

(19) INDIA

(22) Date of filing of Application :10/07/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : HERBAL DISINFECTANT FOR PANDEMIC CONDITION (COVID19)

(51) International classification	:A61K0036810000, A61K0036752000, A01N0065000000, A61K0036610000, A61K0008970000	(71)Name of Applicant : <b>1)Prof.(Dr.) SHAMIMUL QAMAR</b> Address of Applicant :PROFESSOR, PROFESSOR OF COMPUTER ENGINEERING, KING KHALID UNIVERSITY ABHA SAUDI ARABIA. E-Mail: drsqamar@rediffmail.com Saudi Arabia
(31) Priority Document No	:NA	<b>2)Dr. TANWEER ALAM</b>
(32) Priority Date	:NA	<b>3)NEERAJ PANWAR</b>
(33) Name of priority country	:NA	<b>4)RAMU DUBEY</b>
(86) International Application No	:NA	<b>5)Dr. MUKESH KUMAR</b>
Filing Date	:NA	<b>6)Dr. CHETAN SWARUP</b>
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	<b>1)Prof.(Dr.) SHAMIMUL QAMAR</b>
Filing Date	:NA	<b>2)Dr. TANWEER ALAM</b>
(62) Divisional to Application Number	:NA	<b>3)NEERAJ PANWAR</b>
Filing Date	:NA	<b>4)RAMU DUBEY</b>
		<b>5)Dr. MUKESH KUMAR (ASSOCIATE PROFESSOR)</b>
		<b>6)Dr. CHETAN SWARUP</b>

(57) Abstract :

ABSTRACT My invention HERBAL DISINFECTANT FOR PANDEMIC CONDITION Covid19 • is a herbal disinfectant composition that destroys harmful microorganisms to maintain hygiene. It containing Giloye Extract, Ashwagandha Extract, Neem Extract, Tulshi Extract, Eucalyptus Extract, Citrus Extract, clove Extract, cinnamon extracts & soapnut etc. in different concentration. The composition may also include one or more of natural fragrance, lubricant, plant-derived phytochemicals, antimicrobial component or plant-derived essential oil. These compositions can be formulated as herbal disinfectant.

No. of Pages : 11 No. of Claims : 8

(54) Title of the invention : EXPERIMENTAL STUDIES ON FLEXIBLE PAVEMENTS BY USING E-WASTE AND GROUND GRANULATED SLAG

(51) International classification	:C04B0028080000, E01C0007180000, C04B0028180000, G01N0033420000, E01C0023060000	(71) <b>Name of Applicant :</b> <b>1)MS.S.USHA</b> Address of Applicant :ASSISTANT PROFESSOR, CIVIL DEPARTMENT, MEPCO SCHLENK ENGINEERING COLLEGE, SIVAKASI. Tamil Nadu India <b>2)MS.P.KISHANTHINI</b> <b>3)MS.S.SUNOWLINSHAINI</b> <b>4)MS.A.YAZHINI</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MS.S.USHA</b>
(33) Name of priority country	:NA	<b>2)MS.P.KISHANTHINI</b>
(86) International Application No	:NA	<b>3)MS.S.SUNOWLINSHAINI</b>
Filing Date	:NA	<b>4)MS.A.YAZHINI</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Nowadays tons of E-Waste generated due to technology advancement and dumped by conventional methods, which releases toxic substances into the atmosphere. To use E-Waste as a partial replacement of conventional material like coarse aggregate in the binder course of Flexible pavement and Ground granulated blast furnace slag (GGBS) as a filler. Ground granulated blast furnace slag is highly resistance to water and has high Calcium silicate content which prevents rutting in flexible pavement. Coarse aggregate and stone dust was partially replaced by various percentage of E-Waste (0%,10%,20%,30%) and Ground granulated blast furnace slag(GGBS) by (0%,10%,20%,30%). Tests conducted on aggregates, E-Waste, GGBS. bitumen and their properties are obtained. Specimens with various proportions of E-Waste and GGBS and a control mix are prepared. Marshall stability test and water absorption test was conducted on-prepared cylindrical specimen and slab respectively and obtained values such as bulk density, percentage air voids, percentage volume of bitumen, voids filled with mineral aggregate, voids filled with bitumen ,stability value, flow value and water absorption value for the slab. From the results it is observed that the replacement of E-Waste and GGBS by 20% and 10% has optimum Marshall Stability value.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041032890 A

(19) INDIA

(22) Date of filing of Application :31/07/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR NUCLEIC ACID EXTRACTION, DETECTING AND ANALYZING AMPLIFIED DEOXYRIBONUCLEIC ACID

(51) International classification	:C12N0015100000, B01L0003000000, C12Q0001680600, C12Q0001680000, C12Q0001686900	(71) <b>Name of Applicant :</b> <b>1)BHAT Shama</b> Address of Applicant :A-126, Smilee Greens Plantation, Huskur Road, Bangalore Karnataka India (72) <b>Name of Inventor :</b> <b>1)BHAT Shama</b> <b>2)GANESH PRASAD UPPUNDA GOPALKRISHNA</b> <b>3)RAJENDRAN Sureshkumar</b> <b>4)Pavan Kumar M</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT AUTOMATED NUCLEIC ACID EXTRACTION, DETECTION AND ANALYZING SYSTEM. The system 100 is molecular diagnostics standalone device. It does rapid and efficient nucleic acid extraction (DNA or RNA), detection and analysis of amplified Deoxyribonucleic Acid (DNA). The system 100 comprises an extraction rack 201 configured to extract the nucleic acid from a sample, an amplification rack 202 configured to receive the extracted nucleic acid from the extraction rack 201, a pipette tip rack 204 configured to receive a pipette tip 520. A pipette head 205 is configured to operably engage with the pipette tips 520. The system 100 further comprises a first mechanism 206 configured to move the pipette head 205 in a lateral direction, a second mechanism 207 configured to move the pipette head 205 in a longitudinal direction, and a third mechanism 208 configured to enable aspiration and dispensing of the sample mixture. Reference figure: FIG. 1

No. of Pages : 41 No. of Claims : 17

(54) Title of the invention : A SYSTEM AND METHOD FOR NON-INVASIVE CALIBRATION-FREE BLOOD PRESSURE (BP) MEASUREMENT

(51) International classification	:A61B0005000000, A61B0005020000, A61B0005021000, A61B0005080000, A61B0005022000	(71)Name of Applicant : <b>1)Healthcare Technology Innovation Centre</b> Address of Applicant :HTIC-IIT Madras, C-Block, 5th Floor, IIT Madras Research Park, Kanagam Road, Taramani, Chennai, Tamil Nadu , 600113, India Tamil Nadu India <b>2)Indian Institute of Technology Madras (IIT Madras)</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Nabeel Pilaparambil Mashood</b>
(32) Priority Date	:NA	<b>2)Jayaraj Joseph</b>
(33) Name of priority country	:NA	<b>3)Rahul Manoj</b>
(86) International Application No	:NA	<b>4)Raj Kiran Vangapandu</b>
Filing Date	:NA	<b>5)Mohanasankar Sivaprakasam</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A SYSTEM FOR NON-INVASIVE CALIBRATION-FREE BLOOD PRESSURE (BP) MEASUREMENT A system for measurement of non-invasive and calibration-free blood pressure (BP) is disclosed. The system comprises a measurement probe (302) which is in contact with a person<sup>TM</sup>s skin. The measurement probe (302) comprises a first array of sensors (302-1) and a second array of sensors (302-2). The first array of sensors (302-1) determines a force exerted on skin (304) and the second array of sensors (302-2) determines a compression-decompression characteristics of the arteries through skin. The force exerted on skin and the compression-decompression characteristics of the arteries are used to determine indices indicative of the material properties of the vessel. Based on the indices indicative of the material properties of the vessel, blood pressure and continuous transmural pressure waveform may be determined.

No. of Pages : 30 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041038163 A

(19) INDIA

(22) Date of filing of Application :04/09/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A TYRE TREAD RUBBER COMPOSITION AND METHOD THEREOF

(51) International classification	:B60C0001000000, C08L0021000000, C08L0009060000, C08K0003013000, C08K0003360000	(71) <b>Name of Applicant :</b> <b>1)TVS SRICHAKRA LIMITED</b> Address of Applicant :Vellarippatti, Melur Taluk, Madurai Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)BRINDHA SENTHILRAJA</b>
(33) Name of priority country	:NA	<b>2)SANKARAN KUMAR</b>
(86) International Application No	:NA	<b>3)KADAMBANATHAN THIAGARAJAN</b>
Filing Date	:NA	<b>4)VISWANATHAN SIVARAMAKRISHNAN</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a high performance motor cycle tyre tread rubber composition, with improved wet and dry traction. The elastomeric composition of tyre tread comprising of blends of natural rubber and non-oil extended solution styrene butadiene rubber; reinforcing fillers including carbon black and silica, a processing aid hydrocarbon resin, having softening point 120 °C to 130 °C containing C-H stretching, methylene (-CH<sub>2</sub>-), methyl (-CH<sub>3</sub>) and phenyl (-C<sub>6</sub>H<sub>5</sub>) groups and its molecular weight lesser than 1000g/mol with a glass transition temperature T<sub>g</sub> lesser than 100°C and other rubber additives also offers superior processability and filler dispersion.

No. of Pages : 25 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041048504 A

(19) INDIA

(22) Date of filing of Application :06/11/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A RUBBER COMPOSITION FOR MOTOR CYCLE TYRE CASING USING MORINGA OLEIFERA GUM AND METHOD THEREOF

(51) International classification	:B60C0001000000, C08K0003040000, C08L0007000000, C08L0021000000, C08C0019220000	(71) <b>Name of Applicant :</b> <b>1)TVS SRICHAKRA LIMITED</b> Address of Applicant :Vellarippatti, Melur Taluk, Madurai Tamil Nadu India (72) <b>Name of Inventor :</b> <b>1)KADAMBANATHAN THIAGARAJAN</b> <b>2)BRINDHA SENTHILRAJA</b> <b>3)SANKARAN KUMAR</b> <b>4)VISWANATHAN SIVARAMAKRISHNAN</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a motor cycle tyre casing composition. Particularly the invention relates to a tyre produced using a rubber composition of the present invention with lower hysteresis and better adhesion properties. The rubber composition of tyre casing comprises natural or synthetic rubber or its blend, with reinforcing filler such as carbon Black, and a naturally occurring Moringa oleifera gum, containing the functional groups OH stretching, C-H stretching, C-O Stretching, C-C deformation and secondary OH.

No. of Pages : 30 No. of Claims : 11

(54) Title of the invention : SYSTEM AND METHOD FOR HVAC DEVICE USING A HYBRID ROTARY DESICCANT WHEEL

(51) International classification	:F24F0003140000, F24F0005000000, F28D0019040000, B01D0053260000, F26B0021080000	(71) <b>Name of Applicant :</b> <b>1)VELLORE INSTITUTE OF TECHNOLOGY</b> Address of Applicant :VELLORE INSTITUTE OF TECHNOLOGY, KATPADI, VELLORE-632014, TAMILNADU, INDIA Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Selvaraji Muthu</b>
(33) Name of priority country	:NA	<b>2)Dr.N.Sekarapandian</b>
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

SYSTEM AND METHOD FOR HVAC DEVICE USING A HYBRID ROTARY DESICCANT WHEEL A system for Heating Ventilation and Air Conditioning (HVAC) device using a hybrid rotary desiccant wheel 102 is provided. The system includes a hybrid rotary desiccant wheel 102, a rotary heat exchanger 104, a first evaporative cooler 106, a second evaporative cooler 110, and a thermoelectric device 112. The hybrid rotary desiccant wheel 102 generates dehumidified dry air by removing moisture content present in process air when the process air passes through an adsorption section of the hybrid rotary desiccant wheel 102. The rotary heat exchanger 104 cools the dehumidified hot air that is received from the hybrid rotary desiccant wheel 102 to generate dehumidified cold air. The first evaporative cooler 106 receives the dehumidified cold air from the rotary heat exchanger 104 and cools the dehumidified cold air further to supply in to an indoor space 108 at a desired relative humidity (RH) level and temperature. FIG. 1

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141002489 A

(19) INDIA

(22) Date of filing of Application :19/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM FOR DETECTING AN ELECTRICAL GROUNDING INTER GRID INTEGRITY

(51) International classification	:H01L0023498000, G01R0031500000, G01R0031520000, G01R0031000000, H01R0004640000	(71) <b>Name of Applicant :</b> <b>1)JEF TECHNO SOLUTIONS PVT LTD</b> Address of Applicant :1073, K R SQUARE (2ND & 3RD FLOOR), 15TH CROSS, 30TH MAIN, BANASHANKARI 2ND STAGE, BENGALURU 560070, INDIA Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Prashanth Belur Gururaja Rao</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

SYSTEM FOR DETECTING AN ELECTRICAL GROUNDING INTER GRID INTEGRITY A system for detecting an electrical grounding inter grid integrity between the earth grids includes a current injection device 108 that provides the low amplitude input current with off-grid frequency to the first earth grid 102 to detect the electrical grounding inter grid integrity between the first earth grid 102 and the second earth grid 104. The system includes a measuring device 106 that is connected to a first reference riser 112A and a second reference riser 112B to measure a drop in voltage or resistance between the first earth grid 102 and the second earth grid 104. The system includes a first bypass conductor 114 that is connected between the first earth grid 102 and the second earth grid 104 to transmit the input current with off-grid frequency to the second earth grid 104 when the electrical grounding inter grid connectivity is damaged. FIG. 1

No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141003141 A

(19) INDIA

(22) Date of filing of Application :22/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESSES FOR PURIFICATION OF BICTEGRAVIR INTERMEDIATES

(51) International classification	:C07D0498140000, A61K0031553000, C07D0498180000, A61K0031537000, A61K0031513000	(71) <b>Name of Applicant :</b> <b>1)LAURUS LABS LIMITED</b> Address of Applicant :DS-1, IKP Knowledge Park, Genome Valley, Turkapally, Shameerpet Mandal, Medchal-Malkajgiri district, Hyderabad Telangana India 500078 Telangana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Raja Babu, BALUSU</b>
(33) Name of priority country	:NA	<b>2)Ram, THAIMATTAM</b>
(86) International Application No	:NA	<b>3)Giri Babu, PEDDINTI</b>
Filing Date	:NA	<b>4)Venkata Lakshmi Narasimha Rao, DAMMALAPATI</b>
(87) International Publication No	: NA	<b>5)Uma Maheswer Rao, VASIREDDI</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT PROCESSES FOR PURIFICATION OF BICTEGRAVIR INTERMEDIATES • The present invention generally relates to a process for purification of (2R,5S,13aR)-8-methoxy-7,9-dioxo-2,3,4,5,7,9,13,13a-octahydro-2,5-methanopyrido[1',2':4,5]pyrazino [2,1-b] [1,3] oxazepine-10-carboxylic acid of Formula I and (2R,5S,13aR)-8-methoxy-7,9-dioxo-N-[(2,4,6-trifluorophenyl)methyl])-2,3,4,5,7,9,13,13a-octahydro-2,5-methano pyrido-[1<sup>TM</sup>,2':4,5] pyrazino[2,1-b][1,3]-oxazepine-10-carboxamide of Formula II, an intermediates for the preparation of bictegravir.

No. of Pages : 54 No. of Claims : 20

(54) Title of the invention : SYSTEM FOR AIR QUALITY MONITORING, ALARMING AND MANAGING USING CLOUD BASED IOT

<p>(51) International classification :G01N0033000000, B01D0053020000, B01D0053860000, G01D0021020000, F24F0110520000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr.N.Thillaiarasu</b> Address of Applicant :Reva University, Rukmini Knowledge Park, Kattigenahalli Karnataka India</p> <p><b>2)Dr. Mallikarjun Kodabagi</b></p> <p><b>3)Ravi Shankar</b></p> <p><b>4)Lithin K</b></p> <p><b>5)Dr. G Parthasarathy</b></p> <p><b>6)Dr.Geeta D</b></p> <p><b>7)Dr. Geeta C Mara</b></p> <p><b>8)Raghavendra Nayaka P</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr.N.Thillaiarasu</b></p> <p><b>2)Dr. Mallikarjun Kodabagi</b></p> <p><b>3)Ravi Shankar</b></p> <p><b>4)Lithin K</b></p> <p><b>5)Dr. G Parthasarathy</b></p> <p><b>6)Dr.Geeta D</b></p> <p><b>7)Dr. Geeta C Mara</b></p> <p><b>8)Raghavendra Nayaka P</b></p> <p><b>9)Dr.N.Thillaiarasu</b></p> <p><b>10)Dr. Mallikarjun Kodabagi</b></p> <p><b>11)Ravi Shankar</b></p> <p><b>12)Lithin K</b></p> <p><b>13)Dr. G Parthasarathy</b></p> <p><b>14)Dr.Geeta D</b></p> <p><b>15)Dr. Geeta C Mara</b></p> <p><b>16)Raghavendra Nayaka P</b></p>
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(57) Abstract :

In this system for air quality monitoring using cloud-based IoT, we will make an IoT Based Air Pollution Monitoring System (Air quality Index) in which we will awning the Air Quality over a cloud-based and will activate an alert when the air quality goes down past a precise level, suggests after there is an adequate the measure of hazardous gases are available noticeable all around like Particulate Matter, Ozone (O3), Nitrogen oxide, Sulfur dioxide, Carbon dioxide, Ammonia all are mixed in natural air, and variation of AQI index to protect the environment along with variation if temperature, pressure, humidity, oxygen and also other sources of pollution increased the environment protects from smokestacks, vehicle engines, construction work, and fire large, airborne pollution due to these reasons climate changes happen frequently. The public people to know in advance about pollution range accordingly they will take safety measures and overcome from the polluted air. In our proposed framework we sending not only AQI level and also which component is more and range of factors to be mentioned effectively via SMS/email. The air quality observing framework is straight forward in design, low in expense, and high in dependability, and local area clients sought after can check the air quality boundaries of networks continuously. For this introduce a framework anyplace and can likewise trigger some gadget when contamination goes past some level like we can turn on the Exhaust fan or can send ready SMS/mail to the pollution control board, Taluk office, and Health Authority.

No. of Pages : 6 No. of Claims : 2

(54) Title of the invention : DEVELOPMENT OF GO-COFE<sub>2</sub>O<sub>4</sub> COMPOSITES WITH DIFFERENT PH CONDITION BY USING PH METER

(51) International classification	:B01J0035000000, G01N0021950000, G01N0027480000, G01N0013000000, G01N0015080000	(71) <b>Name of Applicant :</b> <b>1)Srinivas M</b> Address of Applicant :Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Srinivas M</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

GO-CoFe<sub>2</sub>O<sub>4</sub> composite was prepared by hydrothermal method at three different pH conditions (pH 3, 7 and 11) to study the surface chemistry of the samples. The study of the interface involving a solid and liquid is quite complex and is characteristic of the preparation condition. The extent of adsorption depends on the surface nature of the catalyst which can vary considerably with the preparation conditions. An attempt is made to study the applications of various adsorption isotherms like Langmuir, Freundlich, Temkin and Flory-Huggins models. The best fit for all the three composite catalysts were found by taking the value of regression coefficient (R<sup>2</sup>). Influence of pH on the structure, particle size, surface morphology and adsorption characteristics was studied in detail. Variation of particle size was studied by using Field Emission Scanning Electron Microscopic technique (FESEM). Photoluminescence spectroscopic technique and electrochemical techniques like cyclic voltammetry and electrical impedance measurement studies give an insight into the charge transfer reactions at the interface. Photocatalytic activity of the prepared samples was tested for the degradation of 4-nitrophenol (4-NP). Based on the obtained experimental results suitable model for the adsorption characteristics is proposed for each catalyst

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141017552 A

(19) INDIA

(22) Date of filing of Application :15/04/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : LOW-COST AUTOMATED ANTIMICROBIAL SUSCEPTIBILITY TESTING SYSTEM

(51) International classification	:C12Q0001180000, G01N0035000000, C12M0001340000, C12Q0001040000, G01N0035040000	(71) <b>Name of Applicant :</b> <b>1)B.Keerthi Priya</b> Address of Applicant :D.No.15-11-27, Siva Street, Bheemunipatnam, Visakhapatnam-531163, Andhra Pradesh, India. Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)B.Keerthi Priya</b>
(33) Name of priority country	:NA	<b>2)D.Akhila Reddy</b>
(86) International Application No	:NA	<b>3)A.Daisy Rani</b>
Filing Date	:NA	<b>4)D.V.Rama Koti Reddy</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

7. ABSTRACT: Title: Low-cost Automated Antimicrobial Susceptibility Testing system The present disclosure proposes an automated antimicrobial susceptibility testing system that provides faster and accurate results at low cost for effective medical diagnosis. The automated antimicrobial susceptibility testing system 100 comprises an incubator 101, a detection module 105, a slider 102, a remote server 107 and a remote communication device 105. The proposed system aids to reduce animal deaths and unnecessary antibiotic deposits in animals. The automated antimicrobial susceptibility testing system ensures monitoring to thereby provide safe and effective incubation of test samples. The system eliminates random usage of antibiotics in animals and identifies the right antibiotic and its corresponding dosage within less time.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141017924 A

(19) INDIA

(22) Date of filing of Application :19/04/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD OF PREPERATION OF READY-TO-EAT (RTE) RETORT PROCESSED MUTTON •

(51) International classification	:B65D0081340000, B32B0027080000, B32B0007120000, B32B0027320000, B32B0027360000	(71) <b>Name of Applicant :</b> <b>1)RAMKUMAR.M</b> Address of Applicant :C/o , Madurai Agri-Business Incubation Forum, Intellectual Property Facilitation Centre, Madurai-625104, Tamilnadu, INDIA. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)RAMKUMAR.M</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to A METHOD OF PREPERATION OF READY-TO-EAT (RTE) RETORT PROCESSED MUTTON. The present invention standardizes a shelf-stable ready-to-eat spiced mutton using lamb meat by retort pouch processing. The present invention relates, in general, relates to a method for preparing Mutton chukka (Deep fried meat with some spices is locally called as chukka) by using a retort process, which has excellent taste and flavour even without adding any artificial preservative, is able to be preserved at normal room temperature for a long time. The package which is easily portable and compact. The processed mutton from lamb meat is biochemically and microbiologically safe for the entire storage period.

No. of Pages : 0 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141023698 A

(19) INDIA

(22) Date of filing of Application :27/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SMART ELECTRIC VEHICLE CHARGING STATION

(51) International classification	:B60L0053510000, H02J0003380000, H02M0005458000, B60L0053140000, B60L0053300000	(71) <b>Name of Applicant :</b> <b>1)National Institute of Technology Karnataka</b> Address of Applicant :National Institute of Technology Karnataka Srinivasnagar PO, Surathkal, Mangalore-575025, Karnataka, India Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Bonthapalle Dastagiri Reddy</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Title: Smart Electric Vehicle Charging Station ABSTRACT The smart electric charging station with one or plurality of rectification unit coupled between grid, AC bus to DC bus, plurality of EVSEQ coupled to the DC bus, plurality of renewable energy conversion system coupled to DC bus, centralized control box coupled to rectification unit and EVSEQ controlling the rectification unit and the EVSEQ unit to provide a desired power maintaining the grid code. The rectification unit comprises 3-winding transformer, 12-pulse Thyristor Bridge (set of two 6- pulse thyristor bridges), inductor unit, DC reversal arrangement, and control box. The EVSEQ comprises 3-phase IGBT Bridge, LC unit, and EV plug, to provide either AC or DC charging. The renewable energy conversion system is energy source from wind energy, solar energy or storage energy. The control box controls the rectification unit, renewable energy conversion system and EVSEQ and send signal to centralized control box. The centralized control box provides the information about the mode of operation (inverter/rectifier), and power level. The intertie connects DC bus, first set of rectification unit to second set of rectification units.

No. of Pages : 25 No. of Claims : 10

(54) Title of the invention : A FUNGAL BASED TECHNOLOGY FOR BIOCLAY PRODUCTION FROM LIGNOCELLULOSIC MATERIALS •

<p>(51) International classification :C12N0001140000, C08L0097020000, C12R0001645000, C05D0009000000, C08H0008000000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)S.RAJENDRAN</b>  Address of Applicant :C/o , Madurai Agri-Business Incubation Forum, Intellectual Property Facilitation Centre, Madurai-625104, Tamilnadu, INDIA. Tamil Nadu India</p> <p><b>2)R. DEEPIKA</b>  <b>3)R. MANOJ PRABAKAR</b></p> <p>(72)Name of Inventor :  <b>1)DR. S. RAJENDRAN</b>  <b>2)R. DEEPIKA</b>  <b>3)R. MANOJ PRABAKAR</b></p>
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(57) Abstract :

This invention relates to a FUNGAL BASED TECHNOLOGY FOR BIOCLAY PRODUCTION FROM LIGNOCELLULOSIC MATERIALS •. In order to produce bioclay, lignocellulosic plant material(s) like cereal straws were subjected to double phase decomposition. After, certain physio-chemical treatments the substrates were inoculated with spawn of any one of the litter-decomposing fungi such as Abalone fungus. These fungal seeded substrates were incubated in defined environmental conditions which is favorable for fungal growth, for a period of time. During the incubation the fungal propagule start to grow and colonized on the substrate, subsequently mobilize their nutrient from the substrate by fermenting them in its native state (Phase I). These fungal coated straw substrates are called mycostraw. At this stage, the mycostraw were shifted to another set of environment, which is not favorable to support fungal growth. In this environment, the fungal growth is completely ceased and fungal mycelia of the mycostraw are died. The death and decay of the mycelia transformed into a gummy substance which is further decomposed along with straw substrate. Both, fermentation of straw in the First phase and further decomposition of mycostraw in the second phase (native microflora) resulted a complete transformation of lignocellulosic material into an amorphous dark brown, clay consistence product with high level of plasticity called Bioclay. Further, XRD, EDX and SEM characterization of bioclay confirmed the presence of certain clay minerals like Silica (Si), Calcium (Ca), Potash (K) etc. In this investigation, we can concluded that the bioclay can be used as an alternative to natural clay, wherever it possible. Which will save and conserver rapid exploitation of natural clay and check the environmental deterioration associated with mining of clay resource, in some extent. However, bioclay has been successfully utilized for genesis of soil in laboratory, smokeless briquette, bio coal and bio-charcoal production.

No. of Pages : 15 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141028467 A

(19) INDIA

(22) Date of filing of Application :24/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : LIQUID TOOTHPASTE FORMULATION AND ITS MANUFACTURING METHOD THEREOF •

(51) International classification	:A61Q0011000000, A61K0008978900, A61K0008340000, A61K0008190000, A61K0008730000	(71)Name of Applicant : <b>1)Mr. N. SUGUMAR</b> Address of Applicant :NO 3E/16, LGB COMPOUND, YMR PATTI, DINDIGUL, 624001,TAMILNADU, INDIA Tamil Nadu India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Mr. N. SUGUMAR</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT LIQUID TOOTHPASTE FORMULATION AND ITS MANUFACTURING METHOD THEREOF • , which allows to rinsing the mouth without the help of a tooth brush and with various natural and other refreshing flavours, and also provides better cleansing effect. The method comprising the steps of: a. dissolving abrasives calcium carbonate and sodium meta silicate along with Sodium carboxymethyl cellulose (CMC) Emulsifier in Reverse Osmosis water in main agitator tank; b. adding Sorbitol Liquid and Xanthan gum to the main agitator to form gum mixture; c. Adding D-Sorbitol powder and hydrogen peroxide solution to the main agitator tank; d. dissolving sodium monofluoro phosphate, potassium Nitrate, L-Arginine and potassium sorbate in water in secondary agitator tank to form solution and adding solution into main agitator tank and dissolving solution in gum mixture; e. dissolving sodium saccharin and zinc citrate in water in secondary agitator tank and transferring solution into main agitator tank; f. dissolving tetra sodium pyrophosphate and sodium bicarbonate in hot water (transferred from a water heater) in secondary agitator tank to form solution, agitating solution until temperature of solution reaches to temperature of 40 degree Celsius and transferring solution into main agitator tank; g. adding benzyl alcohol into the main agitator tank and start performing agitation process; h. adding flavors and synthetic colours into the main agitator tank; i. reducing the rotational speed of the agitator and adding sodium lauryl sulphate into main agitator tank; and j. filtering liquid toothpaste and transferring liquid toothpaste to pet bottles. Refer Figure 1

No. of Pages : 15 No. of Claims : 4

(54) Title of the invention : IOT-BASED MOVABLE ROAD DIVIDER AS CONGESTION RELEASE STRATEGY FOR METROPOLITAN CITIES

<p>(51) International classification :H04L 12/80</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Mounika Jammula</b> Address of Applicant :Chaithanya Bharathi Institute of Technology, Osman Sagar Road, Gandipet, Hyderabad, Telangana, India 500075. Telangana India</p> <p><b>2)Dr. D Sujatha</b></p> <p><b>3)Dr. Meka Anuradha</b></p> <p><b>4)K. Mohana Lakshmi</b></p> <p><b>5)Dr.Ganga Rama Koteswara Rao</b></p> <p><b>6)Dr Mohammad Jabirullah</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Mounika Jammula</b></p> <p><b>2)Dr. D Sujatha</b></p> <p><b>3)Dr. Meka Anuradha</b></p> <p><b>4)K. Mohana Lakshmi</b></p> <p><b>5)Dr.Ganga Rama Koteswara Rao</b></p> <p><b>6)Dr Mohammad Jabirullah</b></p>
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## (57) Abstract :

In recent years, with an ever-increasing rate of development in metro cities around the world, there has been proportional increase in numbers of automobiles on the roads. Although the number of vehicles using the roads has increased, the static road infrastructure is almost the same and is unable to cope with changes like congestion, unpredictable travel-time delays and road-accidents that are taking a serious shape. Traffic congestion has been one of the major concerns faced by the metropolitan cities today despite measures being taken to mitigate and reduce it. It has emerged as one of the main challenges for developers in urban areas for planning of sustainable cities. In developing countries, like India, traffic is inherently chaotic and noisy. Identification of magnitude of traffic congestion is an essential requirement for defining the congestion and finding appropriate measures. The focus of this product is aimed at understanding the recurring urban congestion, its measurement, precautionary measure and suggests a remedial measure for the same. The implication of widening existing roads or building new ones will only results in additional traffic that continues to rise until peak congestion returns to the previous level. The total available space within the city for the construction of roads, railways and other transportation is restricted. This project discusses implementation of movable traffic dividers as congestion release strategy for metropolitan areas instead of traditional solution of widening the roads. The moveable traffic divider helps in their configuration of road capacity, to attain optimum benefit from roadway usage on the existing road.

No. of Pages : 9 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141031386 A

(19) INDIA

(22) Date of filing of Application :13/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : USE OF CRUMB RUBBER MODIFIED BITUMEN-55 IN WARM MIX ASPHALT (WMA) IN BITUMINOUS CONCRETE GRADE II SENSORS

(51) International classification	:C04B0026260000, G01N0033420000, C08L0095000000, E01C0007180000, G01R0031120000	(71) <b>Name of Applicant :</b> <b>1)Raveesh J</b> Address of Applicant :Assistant Professor, School of civil engineering, REVA University Karnataka India (72) <b>Name of Inventor :</b> <b>1)Raveesh J</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract A laboratory study was conducted to evaluate the tensile strength ratio on modified binder (CRMB-55) on bituminous concrete pavements layers. The various laboratory tests are to be conducted on this study and considered for bituminous concrete pavement layer grade-II. Moisture sensitivity test were conducted according to Indian road congress (IRC) AND MORTH specifications. In phase of mixing proportion and aggregate gradation were clearly described. Zycotherm were used as an addition of WMA on different grades of bitumen and modified binder. The adopted dosage rate of 0.135% by weight of modified binder. The laboratory study concludes that stability, marshall properties and water sensitivity were improved for the WMA mix by the addition of the additive.

No. of Pages : 6 No. of Claims : 3

(54) Title of the invention : A DEVICE AND METHOD TO IDENTIFY COOKING OILS BY CUVETTE STRUCTURED MICROSTRIP PATCH ANTENNA SENSOR

<p>(51) International classification :H01Q0009040000, C11B0001060000, G01R0027280000, G01R0001040000, H04B0017100000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)ANNA UNIVERSITY</b>  Address of Applicant :The Director, Center for Intellectual Property Rights, CPDE Building, College of Engineering guindy, Anna University, Chennai - 600025. Tamil Nadu India</p> <p>(72)<b>Name of Inventor :</b>  <b>1)M. Ganesh Madhan</b>  <b>2)S. Piramasubramanian</b>  <b>3)K. Jagankumar</b></p>
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## (57) Abstract :

A device and method to identify cooking oils by cuvette structured microstrip patch antenna sensor are disclosed. The device (100) comprises of: a cuvette structured microstrip patch antenna sensor (50) which is connected with a network analyser (20) through a SMA connector /cable (10). A high frequency cable (30) is connected to the single port of said network analyser (20). The sensor (50) comprises of a top substrate (1) which is formed of radiating copper patch, a bottom copper substrate (3) which is grounded and a cavity (2) which is provided between top and bottom substrates (1,3) made of acrylic layers to fill the liquid under test. The cooking oils including gingelly oil, coconut oil and groundnut oil are classified as refined oil and cold pressed oil based on the measured return loss values depending upon the threshold value.

No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : SMART MASK SHAPED MOUTHSET CAPABLE OF ENHANCING AND SYNTHESIZING SPEECH EVEN FROM LIP MOVEMENTS

<p>(51) International classification :A61B0005048800, H04B0001382700, H04B0001387700, A45F0005000000, B60R0011000000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Prof. (Dr.) M. R. Arun</b> Address of Applicant :262-1A, Anna Street Ext, Vivekananda Nagar, Avadi, Chennai, Tamil Nadu, India 600054. Tamil Nadu India</p> <p><b>2)Prof.(Dr.) Bhagirathi Nayak</b></p> <p><b>3)Tejaswini Kar</b></p> <p><b>4)Dr. Patteti Krishna</b></p> <p><b>5)Dr. Pradeep Kumar</b></p> <p><b>6)R. Poonguzhali</b></p> <p><b>7)Kavitha. T</b></p> <p><b>8)Dr. Mauparna Nandan</b></p> <p><b>9)Dr. Pramod V. R.</b></p> <p><b>10)Dr. Munish Jindal</b></p> <p><b>11)Dr. Sangeetha</b></p> <p><b>12)Dr. D. Vanathi</b></p> <p><b>13)F. Shabina Fred Rishma</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Prof. (Dr.) M. R. Arun</b></p> <p><b>2)Prof.(Dr.) Bhagirathi Nayak</b></p> <p><b>3)Tejaswini Kar</b></p> <p><b>4)Dr. Patteti Krishna</b></p> <p><b>5)Dr. Pradeep Kumar</b></p> <p><b>6)R. Poonguzhali</b></p> <p><b>7)Kavitha. T</b></p> <p><b>8)Dr. Mauparna Nandan</b></p> <p><b>9)Dr. Pramod V. R.</b></p> <p><b>10)Dr. Munish Jindal</b></p> <p><b>11)Dr. Sangeetha</b></p> <p><b>12)Dr. D. Vanathi</b></p> <p><b>13)A. Arshath Kumar</b></p>
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## (57) Abstract :

Abstract: - In today's time, it is very hard to find a person who does not own a mobile phone. Mobile phones are one of the most important innovation which is useful for humans in current digital era. Most of them becoming slave to mobile phone due to its functionality. It is the smallest gadget in invention, which is becoming a basic need of life equivalent to the fundamental needs. Saying about mobile phone the basic purpose of its design is different but now we started using in a different and multifunctional approaches. The first and foremost role that mobile phones play in our lives is that they provide us an easy and fast way of communication. They are not just useful for communication but comes handy in other day to day tasks. If you are carrying the latest smartphone, you don't need to have any extra requirements such as camera, calculator, torch, music player, watch or radio. Your smartphone can do all these tasks easily. And if you are getting bored, you can play games on your phone or chat with your friends. Moreover, with millions of apps available for almost anything you can think of, mobile phones are certainly the most useful tool for us today. In such mobile phone to enhance the features of it, this novel design of accessory have been designed. It consist of multiple data acquisition modules such as Mic, Camera setup and Electromyography setup which are controlled and computed using artificial intelligence based functional arrangements. It plays its vital role to help the dumb person to generate speech from their muscle activity and conveys clear speech of communication even at noisy environment. To make commercial this novel design invention has been given a relevant name to introduce which is referred as Mouthset.

No. of Pages : 13 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141031566 A

(19) INDIA

(22) Date of filing of Application :14/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM FOR HUMAN FACE DETECTION AND RECOGNITION USING FEATURE FUSION AND A METHOD THEREOF

(51) International classification	:G06K0009000000, G06K0009620000, G06K0009460000, A61B0005000000, G06N0003040000	(71) <b>Name of Applicant :</b> <b>1)MANJUNATHA HIREMATH</b> Address of Applicant :Department of Computer Science, CHRIST (Deemed to be University), Hosur Road, Bangalore, Karnataka, India 560029. Karnataka India <b>2)JOY PAULOSE</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MANJUNATHA HIREMATH</b>
(33) Name of priority country	:NA	<b>2)JOY PAULOSE</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Biometric systems have become a vital role in the process of authenticating an individual based on physical or behavioral features/ traits of human beings. Biometric systems are categorized into two types namely Physiological and Behavioral systems. Face recognition, Fingerprint, Iris recognition, Hand geometry, and DNA fingerprint traits are considered as physiological biometrics which are essentially fixed and are relatively stable whereas voice recognition, signature and keystroke recognition are considered behavioral biometrics that can vary over a period of time due to some factors like aging, mood and behavior of the person. The present Invention relates to a system for designing and development of Christ University Face detection and recognition system (200). The proposed system is classified into two modules. The first module deals with the detection of faces in an image followed by recognition of face images in the second module (100). The process of recognition involves the exploration of facial features in an image, matching those extracted facial features with at least one of the innumerable faces present in the database (200). Recognition of face is achieved by using a feature fusion recognition module and method (203,204) of operations thereafter using a combined feature fusion module consisting of Principal Component Analysis (PCA), Independent Component Analysis (ICA), Linear Discriminant Analysis (LDA) and Local Binary Pattern Histogram (LBPH). Combined feature fusion module gives remarkable results when compared to state of the art module.

No. of Pages : 19 No. of Claims : 6

(54) Title of the invention : ANTI-COLLISION SYSTEM IN HAIRPIN BENDS

<p>(51) International classification :B60T0007120000, B60K0028060000, G08G0001090000, B60W0030090000, G08G0001040000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)LOKESHWARAN SK</b> Address of Applicant :ECE Dept, Bannari Amman Institute of Technology, Sathyamangalam, TamilNadu, India 538401. Tamil Nadu India</p> <p><b>2)MANOJKUMAR V</b> <b>3)NANDA KUMAR N</b> <b>4)MUNAVVAR HASAN MK</b> <b>5)MADAVAN R</b> <b>6)Dr. SARAVANA KUMAR R</b> <b>7)Mr. RAMKUMAR R</b></p> <p>(72)Name of Inventor :</p> <p><b>1)LOKESHWARAN SK</b> <b>2)MANOJKUMAR V</b> <b>3)NANDA KUMAR N</b> <b>4)MUNAVVAR HASAN MK</b> <b>5)MADAVAN R</b> <b>6)Dr. SARAVANA KUMAR R</b> <b>7)Mr. RAMKUMAR R</b></p>
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(57) Abstract :

ABSTRACT In India, road accidents are increased due to fast driving, drunk driving, weight distribution problems and without following traffic rules. People don't care enough to stay safe while driving on the road. Especially more accidents happen when driving through the ghat areas while turning in the hairpin bends. There are 100 plus hill stations with the number of ghats road in India, in which day today we come across some difficulties while crossing these kinds of routes in higher altitudes. Lots of people prefer hill stations for its climate and peaceful environment. There are 62 such hill stations where the ratio of people settling increases day by day. As the population increases in hill stations, the transportation and traffic also increase, which leads to accidents. The accident in the road curve mainly occurs when the centrifugal force is more than the direction and momentum force, making the vehicle move in a straight line instead of a curved path. The severity of these accidents is non-reparable. So firstly, it is important to control this situation and have some safety measures in hairpin bends. This ' work includes a sensor-based accident prevention system. We keep pressure resistors on either side of the road before the curve and keep a LED light after the bend. This technique improve protection in ghat sections. Accident in road curve mainly occurs when the centrifugal force is more than the direction and momentum force which makes the vehicle to move in a straight line instead of curved path.

No. of Pages : 9 No. of Claims : 4

(54) Title of the invention : GREEN SCORE CALCULATION APPARATUS AND METHODS TOWARDS SMART SUSTAINABLE CITIES

(51) International classification	:G06Q0050060000, G06Q0030020000, G06Q0010000000, A01G0009240000, H02K0053000000	(71) <b>Name of Applicant :</b> <b>1)Dr. K.Manikanda Kumaran</b> Address of Applicant :Assistant Professor, Department of Information Technology, E.G.S. Pillay Engineering College [Autonomous], Nagapattinam, Tamil Nadu, India 611002. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. K.Manikanda Kumaran</b>
(33) Name of priority country	:NA	<b>2)Mr. S.Palani Murugan</b>
(86) International Application No	:NA	<b>3)Dr. M.Chinnadurai</b>
Filing Date	:NA	<b>4)Dr. M.Chinnadurai</b>
(87) International Publication No	: NA	<b>5)Dr. E.Elakiya</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Mr. R.Anandbabu</b>
Filing Date	:NA	<b>7)Dr. A.Sundar Raj</b>
(62) Divisional to Application Number	:NA	<b>8)Mr. R.Dhanasekaran</b>
Filing Date	:NA	

## (57) Abstract :

A method and system for assigning and displaying an optimal green score to a facility or household on monthly and yearly basis by using an apparatus green score meter. For example, assigning a green score rating to a facility which reflects the facility's level of energy self-sustainability, environment friendly and then assigning a green rank to the facility which reflects the optimal green score relative to other like facilities. The green score is a reward point (out of 10) of a facility which can be estimated every month based on pollution cause, renewable energy production and energy utilization during the same month. The green score algorithm gives positive credits for the economic consumption of energy resources and demand level production of renewable energy and also it gives negative credits for pollution caused. The green score meter monitors the day-to-day usage of all resource utilization units and renewable energy plants of the facility using respective sensor nodes through wired or wireless access to calculate the optimal green score on monthly and yearly basis by implying the novel green score algorithm. The system can also assign green rank to the facilities by comparing the assigned green score of the other facilities. The main objective of the system is to make every facility or household energy self-sustainable and environment friendly by reducing the over consumption of nonrenewable energy, generation of renewable energy and preventing the pollution. The green score meter can also process and forward the functional cycle of the resource utilization units and renewable energy plants of every facility to the third party (includes cloud servers) for green rank assessment and virtual display. Figure 3

No. of Pages : 25 No. of Claims : 17

(54) Title of the invention : LIGHTWEIGHT ONTOLOGY-BASED INTRUSION DETECTION AND PREVENTION (IDPS) SYSTEM

<p>(51) International classification :H04W0084180000, H04L0029060000, H04W0004380000, H04W0052020000, G06F0021550000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. R. HAMSAVENI</b></p> <p>Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS, DKM COLLEGE FOR WOMEN, VELLORE, TAMIL NADU, INDIA, 632001 Tamil Nadu India</p> <p><b>2)VASUMATHY M</b></p> <p><b>3)Dr. S. THARANI</b></p> <p><b>4)G. SHOBARANI</b></p> <p><b>5)V. RUCKMANI</b></p> <p><b>6)V.S. SARANYA</b></p> <p><b>7)S. KALAI SELVI</b></p> <p>(72)Name of Inventor :</p> <p><b>1) Dr. R. HAMSAVENI</b></p> <p><b>2)VASUMATHY M</b></p> <p><b>3)Dr. S. THARANI</b></p> <p><b>4)G. SHOBARANI</b></p> <p><b>5)V. RUCKMANI</b></p> <p><b>6)V.S. SARANYA</b></p> <p><b>7)S. KALAI SELVI</b></p>
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## (57) Abstract :

In recent years, a lot of research concerns with the wireless sensor networks (WSN)- With the increasing usages of WSN applications such as health care and disaster reporting, security requirements, wireless communication has become more critical. Researchers of intrusion detection system on WSN have suggested that systems' detecting mechanisms would likely affect their detections effective and lifetime of whole networks. Ontology can collect and organize the attributes of attacks; those methods have empirically documented the link between ontology concept and light-weight Intrusion Detection System (IDS) is scant. The manager constructs relationship of sensor nodes on ontology to detect Sybil attack. Combine light-weight IDS the ranger method to reduce energy consumption and the isolation tables avoid detecting anomaly repeatedly. We proposed a lightweight ontology-based IDS, which improves existence shortcomings of IDS on WSN effectively. Place: Vellore, Tamilnadu

No. of Pages : 10 No. of Claims : 6

(54) Title of the invention : PLANT LEAF DISEASE DETECTION USING CARNIVOROUS PLANT INTELLIGENT BEHAVIOUR FOR SOLVING GLOBAL

(51) International classification	:G06Q0050020000, C12N0015820000, A01G0022000000, C02F0001780000, G06F0016330000	(71)Name of Applicant : <b>1) E. GANGADEVI</b> Address of Applicant :DEPARTMENT OF COMPUTER SCIENCE, DR. MGR EDUCATIONAL AND RESEARCH INSTITUTE, CHENNAI, TAMIL NADU, INDIA - 600095. Tamil Nadu India
(31) Priority Document No	:NA	<b>2)Dr. R. SHOBA RANI</b>
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	<b>1) E. GANGADEVI</b>
(86) International Application No	:NA	<b>2)Dr. R. SHOBA RANI</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Crop diseases are a huge danger to food security, yet due to a lack of infrastructure in many regions of the world, timely detection is challenging. In agriculture, detection of disease in plants is critical because farmers must frequently evaluate whether the crop that are harvesting seems good enough. It is critical to treat this seriously because it can cause major difficulties in plants, affecting product quality, quantity, or productivity. Plant illnesses produce outbreaks of disease on a regular basis, resulting in large-scale death and a severe economic impact. Early and accurate tool for the diagnosis of plant diseases are critical for plant production as well as the reduction from both qualitative and quantitative crop yield losses. Highly advanced and creative data analysis technologies aid in the accurate and reliable detection of diseases. The proposed method is inspired by carnivorous type of plant intelligence, and it was used to detect plant diseases as well as to solve the global optimization problem.

No. of Pages : 11 No. of Claims : 6

(54) Title of the invention : AUTOMATED IRIS RECOGNITION BASED AUTHENTICATION AND GENDER CLASSIFICATION USING NEURAL NETWORK FOR

<p>(51) International classification :H04L0029060000, G06K0009620000, G06K0009000000, H04L0029080000, G06T0007410000</p> <p>(31) Priority Document No :NA (32) Priority Date :NA (33) Name of priority country :NA (86) International Application No :NA Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Dr. C R BHARATHI</b> Address of Applicant :Professor, Department of Electronics &amp; Communication, Vel Tech Rangarajan Dr. Sagunthala R&amp;D Institute of Science and Tecnology, No. 42, Avadi-Vel Tech Road, Vel Nagaer, Avadi, Chennai, Tamil Nadu, India 600062. Tamil Nadu India <b>2)Mr. SIVAKUMAR A</b> <b>3)Ms. IYSWARIYA.A</b> <b>4)Ms. K. JEEVIHTA</b> <b>5)Dr. ARUN.A</b> <b>6)Dr. MAHABOOB BASHA S</b> <b>7)V. MAGESH</b> <b>8)Mrs. BHUVANESWARI V</b> <b>9)Mr. V. RAMKUMAR</b> <b>10)Mr. VIJAYA VARDAN REDDY SP</b></p> <p>(72)Name of Inventor : <b>1)Dr. C R BHARATHI</b> <b>2)Mr. SIVAKUMAR A</b> <b>3)Ms. IYSWARIYA.A</b> <b>4)Ms. K. JEEVIHTA</b> <b>5)Dr. ARUN.A</b> <b>6)Dr. MAHABOOB BASHA S</b> <b>7)V. MAGESH</b> <b>8)Mrs. BHUVANESWARI V</b> <b>9)Mr. V. RAMKUMAR</b> <b>10)Mr. VIJAYA VARDAN REDDY SP</b></p>
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## (57) Abstract :

Abstract A new method for gender classification based on iris statistical and texture information features selected from images captured from iris scanning cameras in fixed location, handheld or portable. To improve gender classification of iris images, both male and female subjects aids the proposed approach for investigation of near-infrared images through extensive examinations performed on public database that helps in authentication and also gender classification. The improved texture features with best features selected independently from the left and right irises based on rank feature selection method for segmentation. The classification of gender task is achieved using Support Vector Machine (SVM) classifier. It is correlated with automated microprocessor for image processing of captured iris images. Then the classified processed image is fed into the computerized Raspberry pi embedded with microchip Wi-Fi that transfers information gathered to Internet of Things (IoT) for authentication and cyber security cloud database for investigation.

No. of Pages : 19 No. of Claims : 6

(54) Title of the invention : FPGA BASED REMOTE SMART SPEAKER FOR AGRICULTURE SYSTEM

<p>(51) International classification :A01G0025160000, A01G0025020000, A01G0009240000, G06Q0050020000, A01C0021000000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. MAHABOOB BASHA S</b> Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, R.M.K. Engineering College, R.S.M. Nagar, Kavaraipeitai, Gummidipoondi Taluk, Thiruvallur District, Chennai, Tamil Nadu, India 601206, Tamil Nadu India</p> <p><b>2)Mr. JAGADEESH BABU S</b></p> <p><b>3)Ms. T.D. SUBHA</b></p> <p><b>4)Ms. ANUSHA P</b></p> <p><b>5)Ms. ROSALINE S</b></p> <p><b>6)Mrs. BHUVANESWARI V</b></p> <p><b>7)Dr. ARUN.A</b></p> <p><b>8)V. MAGESH</b></p> <p><b>9)Mr. VIJAYA VARDAN REDDY SP</b></p> <p><b>10)Mr. V. RAMKUMAR</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. MAHABOOB BASHA S</b></p> <p><b>2)Mr. JAGADEESH BABU S</b></p> <p><b>3)Ms. T.D. SUBHA</b></p> <p><b>4)Ms. ANUSHA P</b></p> <p><b>5)Ms. ROSALINE S</b></p> <p><b>6)Mrs. BHUVANESWARI V</b></p> <p><b>7)Dr. ARUN.A</b></p> <p><b>8)V. MAGESH</b></p> <p><b>9)Mr. VIJAYA VARDAN REDDY SP</b></p> <p><b>10)Mr. V. RAMKUMAR</b></p>
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## (57) Abstract :

Abstract Temperature, humidity, and light are the most essential elements in plant growth quality and output. Continuous. monitoring of these environmental factors allows the producer to have a better understanding of how each element influences crop growth and how to maintain maximum crop productivity. We can boost production and save significant amounts of energy by adjusting the greenhouse climate. The use of a remotely monitored embedded system for irrigation has become a new necessity for farmers to save energy, time, and money, and will only occur when there is a need for water. The soil test for chemical elements, water content, salinity, and fertiliser demand data is gathered wirelessly and analysed for a better drip irrigation plan in this methodology. This paper examines several monitoring methods and offers a wireless sensor network-based autonomous monitoring system concept.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032063 A

(19) INDIA

(22) Date of filing of Application :16/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SMART BODY CAM FOR DOMESTIC VIOLENCE REDUCTION SYSTEM

(51) International classification	:G06Q0050260000, F03D0080000000, H04N0007180000, B60R0025102000, G10L0015260000	(71) <b>Name of Applicant :</b> <b>1)Dr P. KAVITHA</b> Address of Applicant :R.M.K Engineering College, RSM Nagar, Kavaraipettai, Chennai, Tamil Nadu, India 601206. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mr. M. P. KARTHIKEYAN</b>
(33) Name of priority country	:NA	<b>2)Ms. N. BANUPRIYA</b>
(86) International Application No	:NA	<b>3)Ms. A. JASMINE GILDA</b>
Filing Date	:NA	<b>4)Ms. J DIVYA</b>
(87) International Publication No	: NA	<b>5)Ms. T. SUMITHA</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Ms. S. SIVAGAMI</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract Crime rate all over the country is constantly on the rise over the years. In particular, violence against women has become a prominent topic of discussion in recent times. The national crime record bureau reveals that a crime against a woman is committed every 3 minutes and a woman is being raped every 29 minutes. Other forms of domestic violence such as drug trade, arms trafficking, poaching, wildlife trafficking, corruption and police misconduct are also severely disrupts the safety of people and inhibits the development of this nation. With such weak government authorities and law enforcement activities, it is now increasingly important for us, engineers, to come up with new ideas and products that apply the latest advancement in technological developments to bring down this act of violence and crimes in all its forms.

No. of Pages : 15 No. of Claims : 7

(54) Title of the invention : AUTOMATIC SANITIZER DISPENSER AND TEMPERATURE MONITORING SYSTEM BASED ON ARTIFICIAL INTELLIGENCE WITH IOT

(51) International classification	:H04N0005330000, G06Q0050220000, G01J0005000000, G06K0009000000, G08B0013190000	(71) <b>Name of Applicant :</b> <b>1)Dr.P.K.DHAL</b> Address of Applicant :Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No.42, Avadi-Vel Tech Road, Vel Nagar, Avadi, Chennai, Tamil Nadu, India 600 062. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Dr.P.K.DHAL</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Abstract Health and protection are a human necessity in this pandemic age, because vital circumstances exist in the universe. Researchers concentrate on seeking a way to avoid disease transmission. Isolation and sanitization of ill persons are the major means of preventing propagation. The increase in temperature is the main disease symptom, but manual thermal weapons are labor intensive and thus very costly. Thermal vision camera, which can identify persons with elevated temperatures by thermal imaging using Infrared technologies, provides an innovative approach with the help of artificial intelligence (AI). AI serves as a possible instrument in thermal camera integration to detect, with high precision ( $\pm 0.3^{\circ}\text{C}/\pm 0.6^{\circ}\text{F}$ ) high-temperature of a human as seen on a high-resolution monitor, in real time. If an individual is identified, a warning will be issued and sent to authorize officials using the Internet of Things in order to access sensitive information from anywhere. This device is placed in the vicinity of the entry into the integration of an intelligent sanitizer that includes an ultrasonic sensor to sense the presence of the hand and activates the sanitizer within 4 seconds. The next person is ready to be served with 4 seconds wait. This device serves as an important way of avoiding this pandemic condition from human civilization.

No. of Pages : 17 No. of Claims : 5

(54) Title of the invention : PROTECTIVE ROLE OF SILYMARIN AGAINST LINEZOLID AND DIABETIC METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) INFECTION-INDUCED COMPLICATIONS IN INNOVATIVE DIABETIC MRSA INUCED SUBCUTANEOUS ABSCESS MODEL IN WISTAR RATS

(51) International classification	:A61K0031357000, C07D0263200000, G09B0023280000, A61K0031537700, A61K0031122000	(71)Name of Applicant : <b>1)Dr. V. LALITHA</b> Address of Applicant :Associate Professor, Department of Pharmacology, Nandha College of Pharmacy, Erode. Tamil Nadu India
(31) Priority Document No	:NA	<b>2)Dr. S. SENGOTTUVELU</b>
(32) Priority Date	:NA	<b>3)Dr. S. HAJA SHERIEF</b>
(33) Name of priority country	:NA	<b>4)Dr. T. SIVAKUMAR</b>
(86) International Application No	:NA	(72)Name of Inventor :
Filing Date	:NA	<b>1)Dr. V. LALITHA</b>
(87) International Publication No	: NA	<b>2)Dr. S. SENGOTTUVELU</b>
(61) Patent of Addition to Application	:NA	<b>3)Dr. S. HAJA SHERIEF</b>
Number	:NA	<b>4)Dr. T. SIVAKUMAR</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The methicillin-resistant Staphylococcus aureus (MRSA), a gram-positive pathogen predominant in diabetic skin and soft tissue infections (SSTI) such as foot infections, cellulitis, lymphangitis, urinary tract infections, and surgical site infections. Linezolid used for diabetic methicillin-resistant Staphylococcus aureus (MRSA) infections are limited due to anemia, lactic acidosis, intestinal dysbiosis, and oxidative stress induced by diabetes and linezolid therapy. Silymarin is a hepatoprotective, antioxidant, antibacterial, and antidiabetic. The research investigated the role of silymarin in linezolid treatment against MRSA infected diabetic rats. Type 2 diabetes mellitus (T2DM) was induced by a high-fat diet (58% calories fat) for 2 weeks followed by a single intraperitoneal injection of streptozotocin (STZ) 35 mg/kg into Wistar rats. The diabetic rats were rendered neutropenic by intraperitoneal cyclophosphamide injections given at a dose of 150 mg/kg and 100 mg/kg for 4 days and 5th day, respectively. This neutropenia was maintained for 5 days. The neutropenic rats injected subcutaneously with 10<sup>6</sup> CFU/ml of MRSA. Linezolid and silymarin were administered orally at a dose of 50 mg/kg twice daily for 14 days. The bacterial load/abscess, hematological, biochemical, enzymatic parameters, antioxidants, and histopathological studies were performed on the 42nd day. The MRSA was confirmed by PCR assay. The minimum inhibitory concentration of linezolid was found to be 0.5-2 µg/ml. The linezolid treated MRSA infected diabetic rats showed 9.69 x 10<sup>3</sup> CFU / abscess bacterial count, decreased intestinal alkaline phosphatase (IAP), RBC, antioxidants, elevated lactate, and liver markers than diabetic rats. The silymarin treatment showed a decrease in the bacterial count (2.98 x 10<sup>3</sup> CFU / abscess), serum lactate, liver markers, and increased the IAP levels, and antioxidants in linezolid treated diabetic infected rats. The research concluded that silymarin could be a better herbal therapeutic agent which attenuated linezolid and diabetic MRSA induced complications in novel and efficacious diabetic MRSA model.

No. of Pages : 10 No. of Claims : 6

(54) Title of the invention : SMART HEALTH MONITOR

(51) International classification	:A61B0005000000, A61B0005020500, A61B0005080000, A61B0005024000, A61B0005145500	(71) <b>Name of Applicant :</b> <b>1)SUBHA SARMILA. D</b> Address of Applicant :NewGen IEDC Nehru Group of Institutions Coimbatore-641 105, Tamilnadu, India Tamil Nadu India
(31) Priority Document No	:NA	<b>2)JULIE CHRISTIANA</b>
(32) Priority Date	:NA	<b>3)K. AMIRTHA</b>
(33) Name of priority country	:NA	<b>4)D. ANTONY PRADEESH</b>
(86) International Application No	:NA	<b>5)THARANISH S T</b>
Filing Date	:NA	(72) <b>Name of Inventor :</b>
(87) International Publication No	: NA	<b>1)THARANISH S T</b>
(61) Patent of Addition to Application Number	:NA	<b>2)D. ANTONY PRADEESH</b>
Filing Date	:NA	<b>3)SUBHA SARMILA. D</b>
(62) Divisional to Application Number	:NA	<b>4)JULIE CHRISTIANA</b>
Filing Date	:NA	<b>5)K. AMIRTHA</b>

(57) Abstract :

Smart Health Monitor is a standalone device that can measure human vital signs that are useful in medical diagnosis and treatment. It sets a new standard in health solutions with mobility, wireless and wearable capabilities. This device presents a snapshot of the user<sup>TM</sup>s medical condition within his/her environment and opens up medical research possibilities. Smart health monitor measures Electrocardiogram (ECG) data, Blood Pressure, Heart rate, Respiration based on impedance pneumography, Body temperature and Pulse oximetry (SPO2) in real-time and with high accuracy. In this Covid-19 pandemic situation, visiting the hospitals for these vital measurements can be avoided by using this hand held device which measures and produces the accurate values of above mentioned parameters. The device communicates to android app via IoT. The real time vital signs (Blood Pressure, Heart rate, Respiration based on impedance pneumography, Body temperature and Pulse oximetry) along with device battery level can be monitored from the Android mobile application. Additionally, one can also view live streaming of ECG in the android application itself. The webserver mode is also available which displays live monitoring of ECG and physiological data on PC screen.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032324 A

(19) INDIA

(22) Date of filing of Application :19/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : CURVED TIP BLADE FOR WINDTURBINE

(51) International classification	:F03D0001060000, F03D0003060000, F03D0003020000, F01D0005140000, F03D0007020000	(71) <b>Name of Applicant :</b> <b>1)Mr. S K .Shreenivas</b> Address of Applicant :266A, Srisendhur gardens, Phase 1, Kondaiyampalayam, Varadaiyengarpalayam, Coimbatore, Tamilnadu, India 641110. Tamil Nadu India <b>2)Mr.Easwara karthik Krishnan</b> <b>3)B.Gopi</b> <b>4)T.R. Ganesh Babu</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mr. S K .Shreenivas</b>
(33) Name of priority country	:NA	<b>2)Mr.Easwara karthik Krishnan</b>
(86) International Application No	:NA	<b>3)B.Gopi</b>
Filing Date	:NA	<b>4)T.R. Ganesh Babu</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In view to enhance the horizontal axis wind turbine for better performance and less maintenance the rotor blade being the prime converter of the wind force to kinetic energy is developed in an innovative design for better performance. Therefore, the objective of the project is to provide an improved performance blade which can be easily manufactured and to the present wind turbines of various capacity, to provide noise less and erosion free and safe in operation and will overcome the limitations, disadvantages and shortcomings of the prior installed blades. An innovative type of blade is twisted 18 Degrees apart from root end to the tip end. The above is then further tapered 5 deg from the blade center line and at various segments of blade are tapered as per the distance from the root end to the tip end. The above is to avoid the erosion in the leading edges and to reduce the cutting noise of the blade tip cutting the air stream.

No. of Pages : 9 No. of Claims : 6

(54) Title of the invention : DOMESTIC POWER GENERATION IN BYCYCLE EXERCISER

(51) International classification	:H02J0003000000, A63B0024000000, G06F0003020000, H02J0007350000, H02J0003380000	(71)Name of Applicant : <b>1)Mr. S K .Shreenivas</b> Address of Applicant :266A, Srisendhur gardens, Phase 1, Kondaiyampalayam, Varadaiyengarpalayam, Coimbatore, Tamilnadu, India 641110. Tamil Nadu India <b>2)Mr.Easwara karthik Krishnan</b> <b>3)B.Gopi</b> <b>4)T.R. Ganesh Babu</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Mr. S K .Shreenivas</b> <b>2)Mr.Easwara karthik Krishnan</b> <b>3)B.Gopi</b> <b>4)T.R. Ganesh Babu</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In view of the emerging awareness for health and fitness and at the same time demand for energy every day and with inadequate space of r people to do workouts s these type of new innovative PGBE will support the future with these type of decentralized load handling capability which provides a universal and highly versatile system for green energy development and improving our health . Therefore, the objective of the project is to provide an improved and maintenance free equipment which can be easily utilized for health work out and power generation. To provide a stability to the grid during the peak demand time of 6 am to 9 am and 6 pm to 9 pm the above can be operated at homes and power generated will be either utilized or fed to the grid and to provide green energy that is economical and safe in operation and with a safety of children and women not crowding the roads with cycles. An innovative type of specially developed Power generative Bicycle Exerciser incorporated with the unique generator with variable power output adjustment to provide dual advantages of health and green power generation and reducing the risk of accidents of bicycle on the roads and comfort of biking during bad weather of during severe sun.

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032326 A

(19) INDIA

(22) Date of filing of Application :19/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : WIND DRIVEN COMPRESSED AIR STORAGE & UTILIZATION

(51) International classification	:E04H0012100000, F04B0041020000, F03D0009000000, F03D0009280000, F03D0009170000	(71)Name of Applicant : <b>1)Mr. S K .Shreenivas</b> Address of Applicant :266A, Srisendhur gardens, Phase 1, Kondaiyampalayam, Varadaiyengarpalayam, Coimbatore, Tamilnadu, India 641110. Tamil Nadu India <b>2)Mr.Easwara karthik Krishnan</b> <b>3)B.Gopi</b> <b>4)T.R. Ganesh Babu</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Mr. S K .Shreenivas</b> <b>2)Mr.Easwara karthik Krishnan</b> <b>3)B.Gopi</b> <b>4)T.R. Ganesh Babu</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In the proposed system, the rotor of the wind turbine drives the compressor and the energy from the wind turbine is stored locally, as compressed air in a storage tank. Piston displacement air compressor is used to store and extract energy, which operates nearly at isothermal conditions to have maximum efficiency. A 5 HP oil lubricated compressor is mounted in the wind turbine nacelle which is located on the top of a 20 m lattice tower. A rotating union that is located in the nacelle couples the compressor and the storage tank of 10000 liters capacity that is situated at the bottom of the tower. The stored air is regulated by pressure regulators for feeding required loads. The safety of the system is ensured as the tank is full, the pneumatic power generator will start operating and there by the excess pressure will be released as electrical power apart from the normal regulated pressure output [Pneumatic loads, Pneumatic Electrical generator].

No. of Pages : 12 No. of Claims : 8

(54) Title of the invention : LATERAL AXIS WINDTURBINE

(51) International classification	:F03D0013200000, F03D0003000000, H02K0021240000, F03D0009250000, F03D0080700000	(71) <b>Name of Applicant :</b> <b>1)Mr. S K .Shreenivas</b> Address of Applicant :266A, Srisendhur gardens, Phase 1, Kondaiyampalayam, Varadaiyengarpalayam, Coimbatore, Tamilnadu, India 641110. Tamil Nadu India <b>2)Mr.Easwara karthik Krishnan</b> <b>3)B.Gopi</b> <b>4)T.R. Ganesh Babu</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mr. S K .Shreenivas</b>
(33) Name of priority country	:NA	<b>2)Mr.Easwara karthik Krishnan</b>
(86) International Application No	:NA	<b>3)B.Gopi</b>
Filing Date	:NA	<b>4)T.R. Ganesh Babu</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In view of the emerging demand for energy every day , the urban areas are completely covered with concrete structures these type of new innovative wind turbine will support the future with these type of decentralized load handling capability which provides a universal and highly versatile system for green energy development. Therefore, the objective of the project is to provide an improved and maintenance free equipment which can be easily installed to the present buildings in various positions , to provide green energy that is economical and safe in operation to the present installations and will overcome the limitations, disadvantages and shortcomings of the prior art devices. A innovative type of spiral propellers are twisted 144 Degrees apart from one end to the other end .The above is directly connected with a specially designed coreless axial flux generator without starting torque to convert Wind power to Electrical power In the turbulent zones and venture effect available zones .

No. of Pages : 8 No. of Claims : 6

(54) Title of the invention : DESIGN AND DEVELOPMENT OF ANTI PILFERAGE AND ANTI LEAKAGE SYSTEM FOR FUEL TANKERS

(51) International classification	:G07C0009000000, E05B0047000000, B67D0007040000, A01C0023000000, G01N0033280000	(71)Name of Applicant : <b>1)DR K LAKSHMI JOSHITHA</b> Address of Applicant :Associate professor, Department of Electronics and Communication Engineering, Sri Sairam Engineering College, Sai Leo Nagar, West Tambaram, Chennai, Tamil Nadu, India 600132. Tamil Nadu India
(31) Priority Document No	:NA	<b>2)HARESH R</b>
(32) Priority Date	:NA	<b>3)ARUNACHALAM N</b>
(33) Name of priority country	:NA	<b>4)YASHWANTH V U</b>
(86) International Application No	:NA	(72)Name of Inventor :
Filing Date	:NA	<b>1)DR K LAKSHMI JOSHITHA</b>
(87) International Publication No	: NA	<b>2)HARESH R</b>
(61) Patent of Addition to Application Number	:NA	<b>3)ARUNACHALAM N</b>
Filing Date	:NA	<b>4)YASHWANTH V U</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Pilferage and adulteration of products on fuel tankers starts from terminals to retail outlets that create a major problem in petroleum product handling. The tankers provided with fuel filling and drain valves monitored online and an electric lock system which could be opened only with the consent of the owner can be a solution to prevent the pilferage. The driver's mobile phone can be linked with the Wi-Fi module in the hardware setup so that the driver's proximity with the tanker can be known. The Hardware setup comprises of Node MCU, an electric lock system, flow meter on outlet pipes and fuel Sensor. The electric lock can be opened by the consent of the owner and the level sensor is used to identify the leakage of the fuel. An additional mobile app can be provided for the driver for emergency situations such as fire hazard and from the owner's end, tracking the driver's location and providing consent can be done.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032333 A

(19) INDIA

(22) Date of filing of Application :19/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : INTERNAL INOCULUM SUPPLYING APPARATUS IN ANAEROBIC FERMENTER

(51) International classification	:C12M0001320000, C05F0017200000, B32B0005220000, G16B0015000000, G06F0009500000	(71) <b>Name of Applicant :</b> <b>1)R RAVIKUMAR</b> Address of Applicant :BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM, ERODE DISTRICT, TAMILNADU, INDIA 638401. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)R. RAVIKUMAR</b>
(33) Name of priority country	:NA	<b>2)M. KIRUPA SANKAR</b>
(86) International Application No	:NA	<b>3)V.SIVASUBRAMANIAN</b>
Filing Date	:NA	<b>4)K.GURUVAIAH</b>
(87) International Publication No	: NA	<b>5)N.RADHAKRISHNA</b>
(61) Patent of Addition to Application Number	:NA	<b>6)SAYED HABEEB HUSSAIN</b>
Filing Date	:NA	<b>7)A.LOGANATHAN</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In the bio gasification of coal washery reject and other substrates containing macromolecular substances, the substrate of coal washery reject is not readily amenable to digestion by acid formers and methanogens. Acid formers are generally unable to convert the high molecular weight substances of coal. Thus, the development of internal apparatus which has the ability to hold the inoculum required for the process is well designed with all the provisions. The packing method of coal reject along with the inoculum in different layers is prominent factor controlling the inoculum bacterial culture inside the apparatus. The design is made in such a way to maintain the optimized void spacing for holding the inoculum and the creates the growth attached system. Methods were developed for easy transportation and removal of the apparatus. Hence this internal apparatus will enhance the overall system and enhances the biochemical reaction simultaneously leading to maintaining the inoculum concentration

No. of Pages : 8 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032346 A

(19) INDIA

(22) Date of filing of Application :19/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHODS FOR CONTROLLING INSPIRED OXYGEN AND POSITIVE END EXPIRATORY PRESSURE IN VENTILATORS

(51) International classification	:A61M0016000000, A61M0016100000, A61M0016120000, A61M0016200000, A61M0016060000	(71) <b>Name of Applicant :</b> <b>1)Indian Space Research Organisation</b> Address of Applicant :Department of Space, Antariksh Bhavan, New BEL Road, Bangalore - 560094, Karnataka, India.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)ATUL SURESH VIVEK</b>
(32) Priority Date	:NA	<b>2)PRAJWAL THOTTIYIL SUBRAMANIAN</b>
(33) Name of priority country	:NA	<b>3)RAJESH RAJASEKHARAN</b>
(86) International Application No	:NA	<b>4)SUSMITHA SURESH</b>
Filing Date	:NA	<b>5)SACHIN THOMAS</b>
(87) International Publication No	: NA	<b>6)DENIL VALIYAMATTAM ROBINSON</b>
(61) Patent of Addition to Application Number	:NA	<b>7)ANISH GOPINATH</b>
Filing Date	:NA	<b>8)KUMAR SOMAN</b>
(62) Divisional to Application Number	:NA	<b>9)SUNDARAMOORTHY KANNAPPAN</b>
Filing Date	:NA	<b>10)RAGHU NETTEMADATHIL</b>
		<b>11)NARAYANAN NAMBOODIRIPAD</b>
		<b>MANGOTTASSARI</b>
		<b>12)SOMANATH SREEDHARAPANICKER</b>

(57) Abstract :

Disclosed herein is a system (100) and methods for controlling fraction of inspired oxygen (FiO<sub>2</sub>) and positive end expiratory pressure (PEEP) in critical care medical ventilators. The system (100) comprises a first conduit (102) comprising an air pump (110), an oxygen source (108), a variable orifice valve (112), a check valve (114), a flow sensor (116), a pressure sensor (120) and an oxygen sensor (118) ; a second conduit (104) comprising an high flow rate On-Off valve (122) and an low flow rate variable orifice valve (124); a patient interface (106a) which connects the first conduit (102) and second conduit (104) to the airway of the patient; and a controller (126) configured to receive information from the sensors in the system (100).

No. of Pages : 47 No. of Claims : 20

(54) Title of the invention : RAGI MILK FLOUR IDLI BATTER

(51) International classification	:A23L0033165000, A23L0011000000, A23L0005100000, A21D0013440000, A23L0013500000	(71) <b>Name of Applicant :</b> <b>1) A. TAMIL SELVI</b> Address of Applicant :NO.19, THIRD CROSS STREET, SRI VARI COIMBATORE, TAMIL NADU, INDIA, 641107. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1) A. TAMIL SELVI</b>
(33) Name of priority country	:NA	<b>2)R. RAVIKUMAR</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This invention is about the healthy food product .Ragi is considered to be the richest sources of calcium in the entire grain kingdom. This traditional food of our Ancestor is vanished because of modern life style and non awareness. The major problem for the current generation is the mode of consumption and cooking method .Hence technology need to be developed as per the needs of the people in age wise manner. Most of 35+ women group people were subjected to calcium deficiency due to low bone density. After menopause, women lose bone mass due to a decline in estrogen. Our body needs calcium to build and maintain strong bones It's so important that if you don't get the recommended amount in your diet, your body will take it from your skeleton and teeth to use elsewhere, weakening your bones.The invention is about the reparation method for ragi milk flour idli batter.Further this batter can be used for best Indian traditional food of idli and dosa.

No. of Pages : 5 No. of Claims : 9

(54) Title of the invention : UTILISATION OF RED MUD AND EGG SHELL ASH AS POTENTIAL SUBSTITUTE FOR LIME TREATED FLY ASH FOR

(51) International classification	:C09K0017400000, B09C0001080000, B09B0003000000, E01C0007360000, C09K0017020000	(71) <b>Name of Applicant :</b> <b>1)E.BALASUBRAMANIAN</b> Address of Applicant :DEPARTMENT OF CIVIL ENGINEERING, MEPCO SCHLENK ENGINEERING COLLEGE, SIVAKASI, TAMILNADU, INDIA - 626005. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)E.BALASUBRAMANIAN</b>
(33) Name of priority country	:NA	<b>2)M.SARAVANA MEGANATH</b>
(86) International Application No	:NA	<b>3)M.SUNDAR</b>
Filing Date	:NA	<b>4)G.HARIHARAN</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Utilization of land for various construction activities has reached its peak in 21st century. Adopting poor soil for construction activities will create various effects on the structure due to its poor bearing capacity and excessive swelling. Soil stabilization is the process of changing the soils to improve their physical properties, shear strength of soil and thus improving the load bearing capacity of a sub-grade to support pavements and foundation by blending and mixing with other materials. There are different methods for soil stabilization, for example, mechanical stabilization, chemical stabilization and bio-enzymatic soil stabilization. Stabilization utilizing solid waste is one of the various techniques for the treatment of soil to improve its building properties for balancing the swelling behavior and to improve the strength of soil. By adopting chemical stabilization method which can be more appropriate to stabilize the problematic soil by reacting with the clay mineral and suppress its swelling and compressing behavior to an extent and made the soil suitable for various construction activities. Red mud and egg shell ash will alter the characteristics of .poor soil by pozzolanic action and inter molecular behavior when compared to other chemicals and having less impact in environmental degradation compared to lime stabilized fly ash. The results obtained from index and engineering properties test shows expected results with increase in its durability and strength characters when compared to untreated soil. From the design optimum values of RM and ESA were estimated as 35% and 15% to the weight of soil.

No. of Pages : 26 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032354 A

(19) INDIA

(22) Date of filing of Application :19/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A NEW TECHNIQUE AND NOVEL METHOD FOR PAPER PRODUCTION FROM PINEAPPLE LEAVES AND RAMIE FIBER

(51) International classification	:D21H0021100000, D21H0021200000, G01N0021840000, D21H0019820000, A23L0033210000	(71)Name of Applicant : <b>1)Dr.G.Srinivasan</b> Address of Applicant :Professor &.Head, Department of Chemical Engineering, Paavai Engineering College (Autonomous), NH-44, Paavai Nagar, Pachal, Namakkal -637 018, Tamil Nadu. Tamil Nadu India <b>2)Mr.D.Dhanaraja</b> <b>3)Mr.R.Balasubramani</b> <b>4)Mr.M.G.Karthick</b> <b>5)Mr.S.Gowthamaprabhakaran</b> <b>6)Mr.G.S.Jeevanandham</b> <b>7)Mr.A.Mohammed Anash</b> <b>8)Mr.T.Saikumiar</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr.G.Srinivasan</b> <b>2)Mr.D.Dhanaraja</b> <b>3)Mr.R.Balasubramani</b> <b>4)Mr.M.G.Karthick</b> <b>5)Mr.S.Gowthamaprabhakaran</b> <b>6)Mr.G.S.Jeevanandham</b> <b>7)Mr.A.Mohammed Anash</b> <b>8)Mr.T.Saikumiar</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A NEW TECHNIQUE AND NOVEL METHOD FOR PAPER PRODUCTION FROM PINEAPPLE LEAVES AND RAMIE FIBER. The present invention provides a process for preparation of fiber from plant leaves. Specifically, the present invention provides a process for production of paper having high quality and cost-effective. The paper produced according to the present invention meets all the required quality parameters.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032482 A

(19) INDIA

(22) Date of filing of Application :19/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A DATA MINING TOOL FOR MONITORING AND REPORTING FOR A CHANGE IN A REAL-TIME DATA

(51) International classification	:H04L0029080000, H04L0029060000, H04L0012240000, H04L0012260000, H04L0012180000	(71)Name of Applicant : <b>1)Mr.T CH Anil Kumar</b> Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Vignan's Foundation for Science Technology and Research, Vadlamudi, Guntur, Andhra Pradesh, India. Pin Code:522213 Andhra Pradesh India <b>2)Dr.K.Jamberi</b> <b>3)Dr. Ravi Kumar Saidala</b> <b>4)Dr.Jarabala Ranga</b> <b>5)Dr.P.Prabhu</b> <b>6)Dr.Potnuri Suribabu</b> <b>7)Dr.Sushma Jaiswal</b> <b>8)Mr.Tarun Jaiswal</b> <b>9)Dr.Badugu Suresh</b> <b>10)Dr.S.Selvakanmani</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Mr.T CH Anil Kumar</b> <b>2)Dr.K.Jamberi</b> <b>3)Dr. Ravi Kumar Saidala</b> <b>4)Dr.Jarabala Ranga</b> <b>5)Dr.P.Prabhu</b> <b>6)Dr.Potnuri Suribabu</b> <b>7)Dr.Sushma Jaiswal</b> <b>8)Mr.Tarun Jaiswal</b> <b>9)Dr.Badugu Suresh</b> <b>10)Dr.S.Selvakanmani</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

[033] The present invention discloses a data mining system for monitoring and reporting for a change in a real-time data. The system includes, but not limited to, one or more processing unit provided with an attacker detection and data changing module in a data resource in a cloud network by monitoring user searches and updating; a binary tree generation of the entered data through a binary tree generator for detecting any illegitimate change by any node present in the cloud network; and a display unit with a user interface to warn the users and all nodes and terminal on recognizing any wrong or illegitimate data updation and entry. Accompanied Drawing [FIG. 1]

No. of Pages : 21 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032484 A

(19) INDIA

(22) Date of filing of Application :19/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PHYTO-ACTIVE INCORPORATED METALLIC MOLECULES MEDIATED BIOLOGICALLY ACTIVE NATURAL SILK FIBROIN PRODUCTION FOR BIOMEDICAL APPLICATIONS

(51) International classification	:C07K0014435000, A61L0015320000, A61L0027220000, A61K0009000000, A61K0008640000	(71)Name of Applicant : <b>1)Dr. Veena V</b> Address of Applicant :Department of Biotechnology, School of Applied Sciences, REVA University, Bangalore-560064 Karnataka India <b>2)Dr. Harikrishnan A</b> <b>3)Dr. Uma Reddy</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr. Veena V</b> <b>2)Dr. Harikrishnan A</b> <b>3)Dr. Uma Reddy</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This present investigation relates to the feed incorporation of gold and silver biologically synthesized metallic bioactive molecules to silk worm for the efficient control of the microbial infections during rearing conditions. The feed incorporated phyto-active molecules can be utilized by silkworm for synthesise of the silk with bioactive conjugated sericin and fibroin silk. Due to these versatile features of natural incorporated bioactive silk, the sericin and fibroin have enhanced the silk applications by increasing its antimicrobial properties, strength of fibroin and longer durability through enriching the functionality, biocompatibility, non-toxic, ecofriendly and multiple biomedical applications in cosmetics, textiles, natural wound dressing materials and other therapeutic applications.

No. of Pages : 11 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032494 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS FOR ORGAN DONATIONS USING BLOCKCHAIN TECHNOLOGY

(51) International classification	:H04L0009320000, H04L0009060000, G16H0010600000, G06F0021620000, G06Q0020380000	(71) <b>Name of Applicant :</b> <b>1)Nimrita Koul</b> Address of Applicant :201 Faculty Quarters Katteganhalli, Yelhanka Bangalore, Karnataka India, 560064 Karnataka India <b>2)Manvi Sunilkumar</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Nimrita Koul</b>
(33) Name of priority country	:NA	<b>2)Manvi Sunilkumar</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

We have devised a process for facilitating the organ donation process using blockchain technology. This process is currently managed by the transplant authorities at the state or district levels. In the current system, most of the tasks involved in this process, are done manually, there is a small web interface for registering the patient with the transplant authority. With the devised process, using blockchain and smart contracts, the tasks and the data will become immutable, all the stake holders in the system will be made aware of the transactions, changes in the system or data.

No. of Pages : 13 No. of Claims : 3

(54) Title of the invention : A SYSTEM FOR SECURITY OF IOT DEVICES

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No</p> <p>Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application Number</p> <p>Filing Date</p> <p>(62) Divisional to Application Number</p> <p>Filing Date</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. SUMALATHA LINGAMGUNTA</b> Address of Applicant :D/o. L VENKATESWARLU, PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, UNIVERSITY COLLEGE OF ENGINEERING, JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, KAKINADA, EAST GODAVARI - 533003, ANDHRA PRADESH, INDIA Andhra Pradesh India</p> <p><b>2)Dr. K RAJASEKHAR</b> <b>3)TATAPUDI PRABHAKARA RAO</b> <b>4)P B V RAJA RAO</b> <b>5)Dr. M PRASAD</b> <b>6)Dr. A MALLIKARJUNA REDDY</b> <b>7)B SATYANARAYNA MURTHY</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. SUMALATHA LINGAMGUNTA</b> <b>2)Dr. K RAJASEKHAR</b> <b>3)TATAPUDI PRABHAKARA RAO</b> <b>4)P B V RAJA RAO</b> <b>5)Dr. M PRASAD</b> <b>6)Dr. A MALLIKARJUNA REDDY</b> <b>7)B SATYANARAYNA MURTHY</b></p>
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(57) Abstract :

The present invention is the IoT structure pursue to append anyone with anything, anywhere. As against to the fixed Internet, in addition to humans, an IoT fastens a large number of machines, resource-coerced devices and sensors using different wired and wireless networks. An IoT normally has a three imaginary layers consisting of realization, Network, and Application layers. This paper narrates security problems within and across these layers. Many security ideas that should be implemented at each layer are also furnished.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032508 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : RELIABLE BIDIRECTIONAL DC-DC CONVERTER CIRCUIT WITH SINGLE INDUCTOR

(51) International classification	:H02M0003158000, H02M0001000000, H02M0003335000, H02M0001440000, H02M0001320000	(71) <b>Name of Applicant :</b> <b>1)Satya Institute of Technology and Management</b> Address of Applicant :Kondakarakam, Gajularega, Vizianagaram-535001, Andhra Pradesh, India. Andhra Pradesh India
(31) Priority Document No	:NA	<b>2)Agrayana Electric Technologies Pvt. Ltd</b>
(32) Priority Date	:NA	(72) <b>Name of Inventor :</b>
(33) Name of priority country	:NA	<b>1)Dr.Narendra Kumar Yegireddy</b>
(86) International Application No	:NA	<b>2)Gurumurthy Nagiredla</b>
Filing Date	:NA	<b>3)T.Damodara Venkata Appala Naidu</b>
(87) International Publication No	: NA	<b>4)P.Karunakar</b>
(61) Patent of Addition to Application Number	:NA	<b>5)Allu Venkateswararao</b>
Filing Date	:NA	<b>6)Bogurothu Chandini</b>
(62) Divisional to Application Number	:NA	<b>7)Lopinti Vijaya Mary Grace</b>
Filing Date	:NA	<b>8)Kagitha Padma Sri</b>
		<b>9)Kameswarao Boddu</b>

(57) Abstract :

ABSTRACT: Title: Reliable Bidirectional DC-DC Converter Circuit with Single Inductor The present disclosure proposes a bidirectional DC-DC converter circuit with single inductor that aids to reduce the number of individual capacitors for every switch in the clamping circuit. The proposed converter circuit has enhanced reliability and life. Further, the proposed converter minimizes the switch voltage stresses in the converter and thereby improve the performance of the converter. The size, weight and volume of the converter are reduced to thereby reduce the overall cost. The bi-directional DC-DC converter is suitable for high power applications.

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032509 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AYURVEDIC PAIN RELIEVER COMPOSITION AND ITS PREPARATION METHOD THEREOF

(51) International classification	:A61K0009000000, A61K0009060000, A61K0036280000, C08K0003360000, A61K0047260000	(71) <b>Name of Applicant :</b> <b>1)Sattaravu VPN Vayunandana Rao</b> Address of Applicant :D.No. 13-7-126, Nehru Street, Beside Municipal School, Bheemunipatnam, Visakhapatnam-531163, Andhra Pradesh, India. Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sattaravu VPN Vayunandana Rao</b>
(33) Name of priority country	:NA	<b>2)Venkata Lakshmi Konkipudi</b>
(86) International Application No	:NA	<b>3)Roopavathi Chikkala</b>
Filing Date	:NA	<b>4)Sattaravu Bhavani</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT: Title: Ayurvedic Pain Reliever Composition and Its Preparation Method Thereof The present disclosure proposes an ayurvedic pain reliever composition that provides cooling and warming effect and treats all kinds of pains. The ayurvedic pain reliever composition is formulated in the form of an ointment. The proposed composition helps in treating the pain, increases blood flow, and improves mobility. Further, the proposed composition is an antibacterial and antifungal pain relief ointment that helps in curing headache, stress, cough, and haemorrhoids. The proposed composition is low-cost pain relief ointment that is easy to use and has no side effects.

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032538 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DESIGN, SIMULATION AND FABRICATION OF CONVERGENT LPG BURNER WITH DIFFUSER

(51) International classification	:G06F0030230000, G06Q0099000000, G06F0030000000, G06F0111060000, G06F0111200000	(71) <b>Name of Applicant :</b> <b>1)VIT-AP UNIVERSITY</b> Address of Applicant :VIT-AP UNIVERSITY, Beside AP Secretariat, Near Vijayawada, Andhra Pradesh, India 522237. Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Jangala Sai Sri Laxman</b>
(33) Name of priority country	:NA	<b>2)Dr. P.S. Rama Sreekanth</b>
(86) International Application No	:NA	<b>3)Peri Shanmukh Ram</b>
Filing Date	:NA	<b>4)Kakumani Venkata Siva Prasad</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Many LPG burners have been existing in the market and coming up with new designs and different efficiencies. But this is new mode of design where only holes are made convergent and fuel is supplied at the same flow rate and volume. So, this new design is made in SOLTDWORKS and simulated in ANSYS. Many papers taken as a reference and hence simulated with proper conditions which are similar to the surrounding media in a kitchen. A series of simulations was performed and found that many different values were obtained at different angles. A diffuser, which can create a swirling effect to the burner and can create the combustion more effectively, is also implemented to it. To know particularly where the highest efficiency can be achieved a water boiling test has to be performed with fabrication of this prototype with brass metal.

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032539 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SMART WATER BOTTLE WITH EMBEDDED TDS INDICATOR

(51) International classification	:C02F0001000000, C02F0001440000, C02F0001320000, G01N0021310000, C02F0009000000	(71) <b>Name of Applicant :</b> <b>1)VIT-AP UNIVERSITY</b> Address of Applicant :VIT-AP UNIVERSITY, Beside AP Secretariat, Near Vijayawada, Andhra Pradesh, India 522237. Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Purnachand Nalluri</b>
(33) Name of priority country	:NA	<b>2)Mr. Kothala Mohan Kumar</b>
(86) International Application No	:NA	<b>3)Mr. Pulavarthi K.V. Anirudh</b>
Filing Date	:NA	<b>4)Mr. G Saket Kumar</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Smart Water Bottle with Embedded TDS Indicator is a low cost, compact and modular water bottle that checks the water quality level based on TDS (Total Dissolved Solids) value in PPM (Parts per Million) instantaneously. It doesnt require any separate instrument for checking TDS, as the water quality checking module is embedded within the bottle design which makes the bottle more compact and portable. It can be used to judge whether the water in the bottle is drinkable or not, instantaneously using LED indication.

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032542 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : APPARATUS FOR CONTACT BASED DISHWASHING SYSTEM

(51) International classification	:A47L0015420000, A47L0015000000, C11D0001660000, A47L0015160000, C11D0001120000	(71) <b>Name of Applicant :</b> <b>1) VIT-AP UNIVERSITY</b> Address of Applicant : VIT-AP UNIVERSITY, BESIDE AP SECRETARIAT, NEAR VIJAYAWADA, ANDHRA PRADESH-INDIA - 522237. Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1) Dr. PURNACHAND NALLURI</b>
(33) Name of priority country	:NA	<b>2)Mr. KOTHALA MOHAN KUMAR</b>
(86) International Application No	:NA	<b>3)Mr. PULAVARTHI K.V. ANIRUTH</b>
Filing Date	:NA	<b>4)Mr. PARUCHURI DINESH SAI TEJA</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A dishwasher is a machine used to clean the kitchen utensils automatically. The dishwashers available in the present market adapts a non-contact-based cleaning, which sprays hot water with high pressure at regular intervals. Here the efficiency may vary with what type of dishes being used. If ceramic dishes are used, then this technique is more effective. But if the dishes being used are made of steel or .aluminium or iron then the grease or oil present on the dishes is more difficult to remove, than that is present on the ceramics. In order to overcome the above limitation, the proposed idea uses a contact-based dish washing prototype, which includes an auto adjustable cleaning and movement module that can clean and remove the dirt, grease or oil present on most of the commonly used home utensils.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032543 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A NOVEL APPROACH TO DETECT SEXUAL ASSAULT FROM CCTV CAMERAS

(51) International classification	:H04N0007180000, G08B0013196000, G06Q0050260000, G08B0025010000, G07G0003000000	(71) <b>Name of Applicant :</b> <b>1) VIT-AP UNIVERSITY</b> Address of Applicant :VIT-AP UNIVERSITY, BESIDE AP SECRETARIAT NEAR VIJAYAWADA ANDHRA PRADESH - INDIA 522 237 Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1) Ms. UDDAGIRI SIRISHA</b>
(33) Name of priority country	:NA	<b>2)Dr. BKSP KUMAR RAJU ALLURI</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Sexual assault is an act in which a person physically forces a person to engage in a sexual act against their will. According to world population review data, it is estimated that approximately 35% of women worldwide have experienced sexual assault in their life. In India on an average 88 cases were reported daily. According to the latest NCRB report, over 4 lakh in 2019, 3.78 lakh in 2018 and 3.59 lakh cases in 2017 Sexual Assaults cases were reported. Now a days, almost every public activity can be monitored under the surveillance cameras to detect the crimes. But monitoring multiple cameras across different areas, different cities, different countries by humans is a challenging task. Our Proposed idea is to reduce the manual intervention in detecting the sexual Assault from Surveillance cameras. Most of the crimes which are being detected are post-incident and-not preventive in nature. The proposed system automatically detects the target illegal activity (i.e., here Sexual Assault) from thousands of live streamed CCTV footages and thus increase the chances of preventing/avoiding the severity of the illegal activity.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032609 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A GREEN SYNTHESIS OF 2-SUBSTITUTED QUINAZOLIN-4(3H)-ONES

(51) International classification	:B82Y0030000000, C07D0209480000, C07D0487040000, B01J0021080000, B01J0008080000	(71)Name of Applicant : 1)Dr.K.Venkateshwar Reddy, Professor and HOD / Department of H&S, CMR Engineering College. Address of Applicant :CMR Engineering College, Medchal, Hyderabad, Telangana-501401. Telangana India 2)Patlola Madhusudhan, Associate Professor of Chemistry (BS&H), B V Raju Institute of Technology (Autonomous) 3)Dr.Surinderpal Singh, Professor / Department of H&S, CMR Engineering College 4)Yenugudhati Ravindra, Associate Professor/ Department of H&S, CMR Engineering College 5)Panjala Rajesh, Assistant Professor/ Department of H&S, CMR Engineering College. 6)Birudaraju Krishnaveni, Associate Professor/ Department of H&S, CMR Engineering College. 7)More.Ashok, Assistant Professor/ Department of H&S, CVR College of Engineering. 8)Ramakrishna Reddy A, Assistant Professor/ Department of H&S, Maturi Venkata Subba Rao Engineering College.
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Dr.K.Venkateshwar Reddy, Professor and HOD / Department of H&S, CMR Engineering College. 2)Patlola Madhusudhan, Associate Professor of Chemistry (BS&H), B V Raju Institute of Technology (Autonomous) 3)Dr.Surinderpal Singh, Professor / Department of H&S, CMR Engineering College 4)Yenugudhati Ravindra, Associate Professor/ Department of H&S, CMR Engineering College 5)Panjala Rajesh, Assistant Professor/ Department of H&S, CMR Engineering College. 6)Birudaraju Krishnaveni, Associate Professor/ Department of H&S, CMR Engineering College. 7)More.Ashok, Assistant Professor/ Department of H&S, CVR College of Engineering. 8)Ramakrishna Reddy A, Assistant Professor/ Department of H&S, Maturi Venkata Subba Rao Engineering College.
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract Various 2-Substituted Quinazolin-4(3H)-one's derivatives in good to excellent yield have been prepared in one pot reaction by condensation of Isatoic anhydride, an aldehyde, and ammonium acetate using NaOCl as an oxidant in ethanol at 80-85°C, this strategy is simple and catalyst free. The reaction is green and economically viable.

No. of Pages : 11 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032650 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN APPARATUS FOR ATTRACTING AND TRAPPING INSECTS IN DARK CONDITIONS

(51) International classification	:A01M0001020000, E06B0009240000, B01D0053220000, H01R0031060000, A63B0026000000	(71) <b>Name of Applicant :</b> <b>1)NATIONAL ENGINEERING COLLEGE</b> Address of Applicant :K.R.NAGAR, KOVILPATTI - 628503, TAMIL NADU, INDIA Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)M. KATHIRESAN</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An apparatus for attracting and trapping insects in dark conditions is disclosed. The apparatus broadly comprises: an at least a screwing member (160); a first closure member (150); a first receptacle (140); a second closure member (130); a second receptacle (80); a plurality of insect entry members (70); a draft cover (42); a dust collecting member (10) with mesh (20); a mechanical support and electrical connectivity member (82); and an at least a light-dependent resistor. The apparatus is configured to: prevent the leakage of electricity to a human body; and prevent the direct exposure of humans to the light rays from the at least one harmful light illuminating member. The disclosed apparatus offers at least the following advantages: it is portable; it is simple in construction; it is cost-effective; and it is configured to provide both non-harmful illumination and harmful illumination.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032708 A

(19) INDIA

(22) Date of filing of Application :20/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD FOR PREPARATION OF A MICROENCAPSULTAED CURCUMIN REMOVED TURMERIC OLEORESIN (CRTO) AND COMPOSITION THEREOF

(51) International classification	:A61K0031120000, A61K0036906600, A61K0047260000, C09B0061000000, G02B0027090000	(71) <b>Name of Applicant :</b> <b>1)M/S MANIPAL NATURAL PRIVATE LIMITED</b> Address of Applicant :MANIPAL NATURAL PVT LTD, R & D CENTER, PLOT NO:29, AVVERHALLI, INDUSTRIAL AREA, DABASPET, BENGALURU, 562111, KARNATAKA, INDIA Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)H N Shivaprasad</b>
(33) Name of priority country	:NA	<b>2)Divanji Manohar Shriranga</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method for preparation of a microencapsulated curcumin removed turmeric oleoresin (CRTO) is disclosed. The method comprises of mixing of a predetermined amount of curcumin removed oleoresin (CRTO) with a predetermined amount of polysorbate 80 in a homogenizer, mixing a predetermined amount of gum arabica with a predetermined amount of water in a homogenizer and the resultant mixture is stirred well for a predetermined period of time, mixing the curcumin removed oleoresin (CRTO)-polysorbate 80 mixture and the gum arabica-water mixture by a continuous stirring, homogenizing the resultant solution by a homogenizer, spray drying the homogenized solution at a predetermined temperature, passing the spray dried powder through a blender for optimum mixing and obtaining the blended microencapsulated powder of curcumin removed turmeric oleoresin (CRTO). FIG. 1

No. of Pages : 16 No. of Claims : 9

(54) Title of the invention : SYSTEM AND METHOD FOR PERFORMING SECURE TRANSACTIONS OF DIGITAL CRYPTOCURRENCIES USING BLOCKCHAIN TECHNOLOGY

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No</p> <p>Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application Number</p> <p>Filing Date</p> <p>(62) Divisional to Application Number</p> <p>Filing Date</p>	<p>(71)Name of Applicant :</p> <p>1)Dr. Syed Afroz Ahmed</p> <p>Address of Applicant :602- AL MASA, King Fisal street, Umm Al Quwain , United Arab Emirates(UAE) U.A.E.</p> <p>2)Dr. Nisheeth Joshi</p> <p>3)Dr. Pushyamitra Mishra</p> <p>4)Amjad Khan</p> <p>5)Sanjaya Kumar Sarangi</p> <p>6)Ali Akhtar</p> <p>7)Tarun Jaiswal</p> <p>8)Navin Kumar Koodamara</p> <p>9)Mr. Dhiraj Kapila</p> <p>10)Dr.Vijay Dhir</p> <p>11)Dr. Pavithra G</p> <p>12)Dr.S.Balamurugan</p> <p>13)Dr. Anirban Das</p> <p>14)Dr. Goutam Panigrahi</p> <p>(72)Name of Inventor :</p> <p>1)Dr. Syed Afroz Ahmed</p> <p>2)Dr. Nisheeth Joshi</p> <p>3)Dr. Pushyamitra Mishra</p> <p>4)Amjad Khan</p> <p>5)Sanjaya Kumar Sarangi</p> <p>6)Ali Akhtar</p> <p>7)Tarun Jaiswal</p> <p>8)Navin Kumar Koodamara</p> <p>9)Mr. Dhiraj Kapila</p> <p>10)Dr.Vijay Dhir</p> <p>11)Dr. Pavithra G</p> <p>12)Dr.S.Balamurugan</p> <p>13)Dr. Anirban Das</p> <p>14)Dr. Goutam Panigrahi</p>
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## (57) Abstract :

Blockchain Technology provide secure computing environment in a network of systems, without the need for a centralized access authority. Security is established by blockchain by operating on peer-to-peer network which is monitored and maintained by intelligent cryptographic protocols. The Distributed Ledger lists the transaction records as a chain of blocks in a constrained hierarchy. Insertion of new blocks into the chain of blocks is only possible after proper consensus, thereby providing security. The proposed System and Method for performing secure transactions of Digital Cryptocurrencies using Blockchain Technology, comprises of a algorithmic blockchain digital cryptocurrency that is evoked and operated upon permissioned ledger, thereby providing security by blockchain withholding mechanism. Blockchain digital currencies that is generated by centralized authority are governed by intelligent cryptographic instructions fed in memory and mass storage. The sequential fetching and blocking of tokens and checking for validity ensures high level security. The smart contract ensures the security of transactions by sending intelligent cryptographic instructions to blockchain system during the transfer of digital cryptocurrencies.

No. of Pages : 16 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032766 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PROCESS FOR SYNTHESIS OF CHROMIUM DOPED TELLURIUM DIOXIDE NANOSTRUCTURES FOR EGFET PH SENSOR APPLICATION

(51) International classification	:G01N0027414000, C01B0019000000, C30B0029460000, C01B0019020000, G02F0001330000	(71)Name of Applicant : 1)Dr. Vinayak Adimule Address of Applicant :No 50, 5th Cross, Bhagyanagar, Belagavi-590008, Karnataka, India Karnataka India 2)Dr. Basappa C Yallur 3)Dr. Sheetal R Batakurki 4)Dr. Malathi, Challa 5)Dr. Manjunatha D. H 6)Dr. Ravi Sankannavar 7)Dr. Rajeev Joshi 8)Dr. Pallav Gupta 9)Mr. Santosh S Nandi
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Dr. Vinayak Adimule 2)Dr. Basappa C Yallur 3)Dr. Sheetal R Batakurki 4)Dr. Malathi, Challa 5)Dr. Manjunatha D. H 6)Dr. Ravi Sankannavar 7)Dr. Rajeev Joshi 8)Dr. Pallav Gupta 9)Mr. Santosh S Nandi
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to a process for synthesis of chromium doped tellurium dioxide nanostructures for EGFET pH sensor application comprises synthesizing tellurium dioxide (TeO<sub>2</sub>) nanostructures using co precipitation method; and doping 1 wt. %, 6 wt. %, 8 wt. % and 12 wt. % Chromium (III) nitrate nonahydrate in tellurium dioxide (TeO<sub>2</sub>) nanostructures for developing EGFET pH sensor.

No. of Pages : 27 No. of Claims : 7

(54) Title of the invention : FOOT OPERATED HAND SANITIZER DISPENSER

<p>(51) International classification :G05G0001300000, A61C0001000000, D06F0035000000, B65D0083260000, A61Q0017000000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)ANVEKAR, DINESH KASHINATH</b> Address of Applicant :19, HALCYON DEFENCE ENCLAVE, BAGALUR CROSS, SATHNUR, BENGALURU-562149, KARNATAKA, INDIA Karnataka India</p> <p><b>2)RAJUK, VENUGOPAL KUPPANNA</b></p> <p><b>3)DELAMPADY, SURESH</b></p> <p><b>4)BELGAONKAR, SANJAY MOHAN</b></p> <p><b>5)BOLUGALLU, SHANTHI MANDEKOLU</b></p> <p><b>6)YADAHALLI, RAVI MALLESHAPPA</b></p> <p><b>7)KARNA, SUDHAKAR NARAYANA</b></p> <p><b>8)NAGARAJ, SRIDHAR</b></p> <p><b>9)ANAVATTI, SHILPA NAGARAJA</b></p> <p><b>10)KALIYAMOORTHY, EZHILARASAN</b></p> <p><b>11)DANDALLY, ROOPA NANJAPPA</b></p> <p><b>12)CHANDRACHARI, PREMKUMAR BUJUVALI</b></p> <p>(72)Name of Inventor :</p> <p><b>1)ANVEKAR, DINESH KASHINATH</b></p> <p><b>2)RAJUK, VENUGOPAL KUPPANNA</b></p> <p><b>3)DELAMPADY, SURESH</b></p> <p><b>4)BELGAONKAR, SANJAY MOHAN</b></p> <p><b>5)BOLUGALLU, SHANTHI MANDEKOLU</b></p> <p><b>6)YADAHALLI, RAVI MALLESHAPPA</b></p> <p><b>7)KARNA, SUDHAKAR NARAYANA</b></p> <p><b>8)NAGARAJ, SRIDHAR</b></p> <p><b>9)ANAVATTI, SHILPA NAGARAJA</b></p> <p><b>10)KALIYAMOORTHY, EZHILARASAN</b></p> <p><b>11)DANDALLY, ROOPA NANJAPPA</b></p> <p><b>12)CHANDRACHARI, PREMKUMAR BUJUVALI</b></p>
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(57) Abstract :

Abstract FOOT OPERATED HAND SANITIZER DISPENSER The present invention relates to a foot operated hand sanitizer dispenser (300) comprising a slender vertical tube (310), a foot pedal (380), a container (320) containing the sanitizer liquid (345), a DC motor pump (410), a motor driver (450) interfaced with a microcontroller (440), and a battery (420). The foot pedal (380) is pivotally mounted on a fulcrum (475) at the lower end of the vertical tube (310). The lower end of the vertical tube (310) is provided with a non-return valve (315) that is adopted to prevent the sanitizer liquid (345) in the vertical tube (310) from draining back into the container (320). The microcontroller (440) is configured to receive power from the battery (420) by turning on a push-to-close power switch (430) for a predefined duration while the foot pedal (380) is pressed downward by a user. When the user presses down the foot pedal (380), the switch (430) is closed to power the DC motor pump (410) for a short duration, during which the sanitizer liquid (345) is pumped up to push out a small quantity of sanitizer (347) that is already within the slender tube (310) due to earlier pumping action. Fig. 3

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032839 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ULTRA FAST WIRELESS CHARGING SYSTEM FOR ELECTRIC VEHICLE LITHIUM ION BATTERIES

		(71)Name of Applicant :
		1)Dr.JAYARAMA PRADEEP
		Address of Applicant :Professor Department of EEE
		St.Joseph's college of Engineering, OMR, Chennai 600 119 Tamil Nadu India
(51) International classification	:H02J0007020000, H02J0007000000, H02J0050120000, B60L0053120000, B60L0053300000	2)Mr. N.JEYAPRAKASH 3)Mr.V.BALASUBRAMANIAN 4)Dr.A.JAMNA 5)Mr.R.ELANTHIRAYAN 6)Ms.R.G. NIRMALA 7)Ms.S.P.VEDAVALLI 8)Ms.S.GOMATHI 9)Ms.M. NIVETHITHA DEVI 10)Dr.S.MEENA
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	1)Dr.JAYARAMA PRADEEP
(33) Name of priority country	:NA	2)Mr. N.JEYAPRAKASH
(86) International Application No	:NA	3)Mr.V.BALASUBRAMANIAN
Filing Date	:NA	4)Dr.A.JAMNA
(87) International Publication No	: NA	5)Mr.R.ELANTHIRAYAN
(61) Patent of Addition to Application Number	:NA	6)Ms.R.G. NIRMALA
Filing Date	:NA	7)Ms.S.P.VEDAVALLI
(62) Divisional to Application Number	:NA	8)Ms.S.GOMATHI
Filing Date	:NA	9)Ms.M. NIVETHITHA DEVI
		10)Dr.S.MEENA

(57) Abstract :

ABSTRACT The recent advancement in simulation speed and magnetic field capacity, and power electronics has significantly boosted the field of wireless power transfer. Electric vehicles are expected to replace internal combustion engine-driven vehicles in the transport sector due to their lower carbon emissions and greater use of alternative energy. However, in terms of weight, bulk, and driving distance, electric vehicles have several issues to contend with. This invention introduces the dynamic on-road wireless charging system, known as OLEV, for electric vehicles. Conductive, stationary, dynamic, and slow are terms that describe electric vehicle charging technology. This is a description of a system in which a range of 100 kW of power capacity and wireless dynamic, fast charging are all implemented simultaneously. Other areas mentioned in this new invention include the design concept, system architecture, and development process of optimizing the magnetic flux field for increased power transfer efficiency. Regarding their development concept and practical feasibility, the dynamic charging technology is also compared to the stationary conductive charging technology for electric vehicles. The movable arm attached to the bottom of a vehicle transfers energy from two rails of rail in the road via a moving arm. Similar to a Scalextric track. However, the arm will disengage if the vehicle passes.

No. of Pages : 24 No. of Claims : 5

(54) Title of the invention : AUTOMATIC WATER CONTROLLING SYSTEM FOR HOME GARDENING

<p>(51) International classification :A01G0025160000, A01G0027000000, H04L0029060000, A01G0025020000, G05B0019042000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :PCT//</p> <p>Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr.M.Narayanan</b> Address of Applicant :Department of Computer Science and Engineering St. Martin<sup>TM</sup>s Engineering College Dhullapally, Secunderabad 500100 Telangana India Telangana India</p> <p><b>2)Dr.P.Santhosh Kumar Patra</b></p> <p><b>3)Dr.Regonda Nagaraju</b></p> <p><b>4)Dr Sasikala Dhamodaran</b></p> <p><b>5)Babu Rao Dharavath</b></p> <p><b>6)Dr.B.Rajalingam</b></p> <p><b>7)Dr. R. Santhoshkumar</b></p> <p><b>8)Mr. N. Nithiyanandam</b></p> <p><b>9)Dr. R. Vasanthselvakumar</b></p> <p><b>10)Dr. T. Poongothai</b></p> <p><b>11)Mr J. Sudhakar</b></p> <p><b>12)Dr. Govinda Rajulu.G</b></p> <p><b>13)Dr. G. Jawaharlalnehru</b></p> <p><b>14)Dr.Korra Srinivas</b></p> <p><b>15)E Lingappa</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr.M.Narayanan</b></p> <p><b>2)Dr.P.Santhosh Kumar Patra</b></p> <p><b>3)Dr.Regonda Nagaraju</b></p> <p><b>4)Dr Sasikala Dhamodaran</b></p> <p><b>5)Babu Rao Dharavath</b></p> <p><b>6)Dr.B.Rajalingam</b></p> <p><b>7)Dr. R. Santhoshkumar</b></p> <p><b>8)Mr. N. Nithiyanandam</b></p> <p><b>9)Dr. R. Vasanthselvakumar</b></p> <p><b>10)Dr. T. Poongothai</b></p> <p><b>11)Mr J. Sudhakar</b></p> <p><b>12)Dr. Govinda Rajulu.G</b></p> <p><b>13)Dr. G. Jawaharlalnehru</b></p> <p><b>14)Dr.Korra Srinivas</b></p> <p><b>15)E Lingappa</b></p>
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(57) Abstract :

7. ABSTRACT An automatic irrigation system, wherein the system comprises of wireless nodes at each of an agricultural or home garden site, a cloud server computer system which communicationally coupled to the wireless nodes over a communications network for receiving data from and controlling operation of the wireless nodes at each of the said sites. The system comprises of a micro controller (106), a battery (110) and a relay module (108) integrated in a box separately for each of the said site. Sensor (104) sub modules and a switch coupled to the micro controller (106) of each site. Each of the said sensor (104) sub module provides a signal corresponding to a moisture level of the soil surrounding the plant and/or the pot to the micro controller (106). The system includes a relay module (108) having a single transistor, resistors, diodes and a relay, and it is controlled digitally by the said micro controller (106). The mobile application configured for sharing data related to the moisture level of plant and amount of water supplied to the plant the said end users and the switch carries an activating power signal from the micro controller (106) to the relay module (108) for supplying water to those plants. Figure related to the abstract is FIG. 1.

No. of Pages : 19 No. of Claims : 10

(54) Title of the invention : METHOD FOR REMOVING DYE POLLUTANTS AND BACTERIAL PATHOGENS USING QUATERNARY ZnO-PbO-CdO-CuO NANOCOMPOSITE

(51) International classification	:B01J0035000000, C02F0001300000, C02F0101300000, B01J0021060000, A61K0049000000	(71)Name of Applicant : <b>1)DR. G. MURUGADOSS</b> Address of Applicant :Scientist-E, Centre for Nanoscience and Nanotechnology, International Research Centre (IRC), Sathyabama Institute of Science and Technology, Chennai-600119, TamilNadu, India. Tamil Nadu India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)DR. G. MURUGADOSS</b>
(33) Name of priority country	:NA	<b>2)Dr.RAJESH KUMAR MANAVALAN</b>
(86) International Application No	:PCT//	<b>3)Dr.K.THIRUPPATHI</b>
Filing Date	:01/01/1900	<b>4)P.JAYANTHI</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

METHOD OF PREPARATION QUATERNARY ZnO-PbO-CdO-CuO NANOCOMPOSITE AND INVESTIGATION ON REMOVING DYE POLLUTANTS AND BACTERIAL PATHOGENS Accordingly, embodiments herein disclose a method for removing dye pollutants and bacterial pathogens using quaternary ZnO-PbO-CdO-CuO nanocomposite. The quaternary based ZnO-PbO-CdO-CuO nanostructure has been demonstrated superior activity in both decolourization of textile dyes and antibacterial activities due to synergistic effect of the constituent metal oxides. The photocatalytic dye degradation activity of ZnO-PbO-CdO-CuO and the binary nanocomposites are evaluated by employing two model dyes namely, Fast green (FG) and Rose bengal (RB) under sunlight irradiation. Highest degradation efficiency of 92.7 % and 94.1% are achieved for FG and RB respectively with the time interval of 120 min for the ZnO-PbO-CdO-CuO nanocomposite. The quaternary nanocomposites demonstrated significantly higher photocatalytic activity than that of binary composites. Further, the toxicity of photo-catalytically degraded aqueous FG and RB dyes are accessed using an in vivo model, Caenorhabditis elegans, by measuring their effect on survival, phenotype, neuronal functions, and stress-protective gene expression.

No. of Pages : 37 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032888 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PULSED CURRENT ACTIVATED TIG WELDING - A NEW VARIANT OF TIG WELDING

(51) International classification	:B23K0009167000, B23K0103080000, B23K0103100000, B23K0009090000, C21D0009500000	(71)Name of Applicant : <b>1)Mr.P. Sivachidambaram</b> Address of Applicant :Manager,Corporate Technology Centre, TI Corporate, Tube Investments of india ltd, Avadi,Chennai- 600054. Tamil Nadu India
(31) Priority Document No	:NA	<b>2)Dr. S. Raghuraman</b>
(32) Priority Date	:NA	<b>3)Dr. R. Venkatraman</b>
(33) Name of priority country	:NA	<b>4)Kaviyaraj R</b>
(86) International Application No	:NA	(72)Name of Inventor :
Filing Date	:NA	<b>1)Mr.P. Sivachidambaram</b>
(87) International Publication No	: NA	<b>2)Dr. S. Raghuraman</b>
(61) Patent of Addition to Application	:NA	<b>3)Dr. R. Venkatraman</b>
Number	:NA	<b>4)Kaviyaraj R</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is a novel process as Pulsed Current Activated TIG (PCTIG) welding. In particular Combining the pulsed current TIG and activated TIG welding (PC-A-TIG) to get have higher chance getting superior weld properties with improved weld depth. Reduced heat input during the TIG welding have chance to achieve fine grain size in weld zone, reduced the residual stress in heat affected zone, restricting the Al4C3 intermetallic phase formation in weld zone can improve the quality of the weld. Pulsed Current Activated TIG welding (PCATIG) variant is used to overcome the problems of TIG welding.

No. of Pages : 6 No. of Claims : 5

(54) Title of the invention : CONFLICT AND EXILE OF SRI LANKAN TAMIL REFUGEE WOMEN: RESILIENCE AND REBUILDING FUTURE IN THE HOST

(51) International classification	:G06Q0050260000, E04H0001020000, G06Q0010060000, E04H0001120000, E04B0001343000	(71) <b>Name of Applicant :</b> <b>1)Ms.L.Jenila</b> Address of Applicant :No.16, Kalyani Complex, Anna Street, TMP Nagar, Padi, Chennai Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Dr.D.Paul Dhinakaran</b>
(32) Priority Date	:NA	<b>2)Dr.C.Vilvijayan</b>
(33) Name of priority country	:NA	<b>3)Dr.S.Malathi</b>
(86) International Application No	:NA	<b>4)Dr. N. Lalitha</b>
Filing Date	:NA	<b>5)Maneesh P</b>
(87) International Publication No	: NA	<b>6)Dr.B.Subatra</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The ethnic clash in Sri Lanka has extremely influenced the Tamil community in Sri Lanka. The women are the most affected party and their life was largely influenced by the conflict. The conflict in its initial stage has imposed heavy pressure on Tamil community especially women who are living under the threat to life. In 1983, conflict reached its peak; mass killing and violence have staged on the island. The Tamil community has left the island to keep their life safe and sought asylum in the South Indian state of Tamil Nadu. The government of Tamil Nadu has extended welcome to the refugees and provided basic facilities. The women refugees are mentally and psychically injured. The settlement in the camp has initially cured the wounds. But the camp life was like a confinement and their socio-economic and living condition is dilapidated. Women deals with the problem of ill health, lack of privacy, sexual exploitation and mental stress. The atmosphere is not conducive to develop the socio-economic status. The assassination of Rajiv Gandhi by the LTTE and the fear of terrorism among refugees in India have resulted in the imposition of strict restriction especially in freedom of movement, education and other human rights. Later, the situation has been changed and the degree of restriction has slowly removed. The women are permitted to work and provide education free of cost by the government. The access to job nearby camp is very difficult for women. The poor economic status has induced many women to seek employment away from the camp. The healthcare requirements of the women are not met properly. Pregnant and aged women faced difficulty in accessing health care due to the remote location of the camp. On the course of time, the government has introduced numerous policies for the welfare of the refugees which facilitate the socio-economic development of refugee women. The schemes for education, marriage, healthcare, skill training and employment are very relevant in contributing the upliftment women refugees. Importantly, the implementation of SHGs in the camps has empowered sections of women by providing facilities for cottage industries, marketing business and agriculture activities. Women have achieved socio-economic development and find a source of livelihood. The integration with local people has accelerated the process of empowerment. The study attempts to analyse the status of Sri Lankan Tamil refugee<sup>TM</sup>s women in Tamil Nadu and their living condition and the process of integration and empowerment. The study based on observation and interview of refugee women living in various camps in Tamil Nadu. Moreover, the secondary data also used in the study which was collected from the Commissionerate of Rehabilitation and Welfare of Non-Resident Tamils, Government of Tamil Nadu and Of ERR (Organization for Eelam Refugees Rehabilitation). The study revealed that the women in the refugee camps have achieved similar status to men through their effort in vanishing the gap prevailed in the socio-economic front. The socio-economic status has achieved through education and engagement in employment like tailoring, petty shop, manual labour and so on. The study emphasised that the conflict and migration have changed the livelihood and standard of living and the settlement in a new country results in material scarcity to achieve the past living condition. Therefore, a community level approach is the necessity of the hour to bring the refugees to the path of development. EFFECT: Increased saving of human life. Refugee Women, Conflict, Displacement, Resilience, Resistance, Empowerment.

No. of Pages : 14 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032904 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BACKLIGHT PREVENTION IN PHOTOGRAPHY AND VIDEOGRAPHY WITHOUT USING POST-PROCESSING COMPENSATION TECHNIQUES

(51) International classification	:G03B 21/20	(71)Name of Applicant : <b>1)Dharsan. K</b> Address of Applicant :I70, Guruswamy Nagar, Thaneer Pandhal, Peelamedu, Coimbatore (DT) 641004, Tamilnadu. Tamil Nadu India <b>2)Dr. S. Sundararaj</b> <b>3)Dr. S. Julyes Jaisingh</b> <b>4)Dr. M. Narendra Kumar</b> <b>5)Dr. G C Vijayakumar</b> <b>6)Mr. T Srinath</b> <b>7)Mr. Tejesh S</b> <b>8)Dr. Rajesh M</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dharsan. K</b> <b>2)Dr. S. Sundararaj</b> <b>3)Dr. S. Julyes Jaisingh</b> <b>4)Dr. M. Narendra Kumar</b> <b>5)Dr. G C Vijayakumar</b> <b>6)Mr. T Srinath</b> <b>7)Mr. Tejesh S</b> <b>8)Dr. Rajesh M</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT When shooting photos with a strong backlight behind the subject, causes a significant darkening of the subject. This is compensated by either compromising for the overall background by increasing the exposure of the images or by compromising the subjects exposure. To tackle this problem, usage of a small mechanically operated probe, positioned between the lens and the outermost casing of the camera that will block the highly bright source of light falling on the image sensor. The mechanical probe will be able to move in two dimensions across the plane of the lens. The coordinates for positioning the probe will be obtained from an image processing algorithm that will use data from the image sensor to identify the position (coordinates) of the bright source and use that coordinate to position the probe between the light source and the image sensor. This will have a very vast application in industrial cameras as capturing the subject is more important in these cameras than presenting a photogenic picture.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032907 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ENHANCING THE EFFICIENCY OF OPTICAL FILTERING FOR VISIBLE LIGHT COMMUNICATIONS

(51) International classification	:H04B0010116000, H04B0010114000, H04B0010500000, H05B0047190000, C07D0405140000	(71)Name of Applicant : <b>1)Dr. Baswaraj Gadgay (Regional Director)</b> Address of Applicant :Visvesvaraya Technological University (VTU), Regional Campus, Kalaburagi-585105, Karnataka, India. mail id 1: b_gadgay@rediffmail.com mail id 2: baswaraj.gadgay@vtu.ac.in Karnataka India
(31) Priority Document No	:NA	<b>2)Mr. Sharanbasappa Shetkar (Assistant Professor)</b>
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	<b>1)Dr. Baswaraj Gadgay (Regional Director)</b>
(86) International Application No	:NA	<b>2)Mr. Sharanbasappa Shetkar (Assistant Professor)</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Our invention Enhancing the Efficiency Of Optical Filtering For Visible Light Communications is a Visible Light Communication (VLC) has gained great interest in the last decade due to the rapid developments in Light Emitting Diodes (LEDs) fabrication. All mapped Efficiency, durability and long life span of LEDs make them a promising residential lighting equipment as well as an alternative cheap and fast data transfer equipment. Appliance of visual light in data communication by means of LEDs has been densely searched in academia. In this invention we explore the fundamentals and challenges of indoor VLC systems. Basics of optical transmission such as transmitter, receiver, and links are investigated. The characteristics of channel models in indoor VLC-systems are identified and theoretical details about channel modelling are presented in detail.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032918 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DESIGN OF SMART HEALTHCARE MODEL FOR MEDICAL IMAGE ANALYZING USING DEEP LEARNING

(51) International classification	:G06K0009620000, G06T0007000000, G06T0007110000, G06N0003040000, G06N0003080000	(71) <b>Name of Applicant :</b> <b>1)Dr.Mahalakshmi</b> Address of Applicant :Assistant Professor Department of Mathematics School of Applied Sciences REVA University Bengaluru-560064 Karnataka India <b>2)Dr.Rose Bindu Joseph</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr.Mahalakshmi</b>
(33) Name of priority country	:NA	<b>2)Dr.Rose Bindu Joseph</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Deep learning is becoming increasingly important in medical picture analysis. In medical imaging, many machine learning techniques have been used to handle classification, detection, and segmentation challenges. The performance of medical image analysis has increased dramatically because of the common use of deep learning algorithms. Deep learning algorithms are investigated for two fundamental challenges in medical picture analysis: The first is image segmentation in medicine. The second is learning in the setting of medical imaging with insufficient supervision. First major contribution is a set of unique image segmentation algorithms. We offer a framework for segmenting (CT) images based on multi-scale image patches and random forests. This methodology was tested against human experts in terms of geographic similarity, estimated lesion volumes, and visual score evaluations. The findings revealed that the proposed framework outperforms human experts. Second, we propose multi-class segmentation on brain magnetic resonance (MR) pictures, as well as a generic deep reinforcement learning architecture segmentation on brain CT images, multi-organ segmentation on abdomen CT images, and multi-class segmentation on brain CT image. On diffusion weighted (DW)-MR images, we offer a deep reinforcement learning framework for segmenting, which are extremely changeable in terms of position, shape, and size. On a large clinical dataset, promising outcomes were obtained. Second major contribution is two unique ways for learning with little supervision. To begin, we suggest a novel technique for using photos without annotations termed context restoration. The context restoration technique is based on a deep reinforcement learning process that recovers semantic features from images without the use of annotations. It was found to be superior to existing solutions in classification, localization, and segmentation challenges. Second, we suggest employing multi-instance learning and deep reinforcement learning to distinguish between normal and pathological SVD on CT images where only coarse-grained labels are given. Our paradigm was found to be more effective than traditional methodologies and clinical practice.

No. of Pages : 5 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141032932 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BILAYER TABLET FORMULATION OF SITAGLIPTIN PHOSPHATE AND GLICLAZIDE FOR ANTI-DIABETIC DRUG THERAPY

(51) International classification	:A61K0009200000, A61K0009240000, A61K0045060000, A61K0031640000, C07D0487040000	(71) <b>Name of Applicant :</b> <b>1)DR. C. RUBINA REICHAL</b> Address of Applicant :PROFESSOR & HEAD, DEPARTMENT OF PHARMACEUTICS, CHERRAAN <sup>TMS</sup> COLLEGE OF PHARMACY, COIMBATORE, TAMILNADU, INDIA 641039 Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DR. C. RUBINA REICHAL</b>
(33) Name of priority country	:NA	<b>2)DR. M. GOPAL RAO</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An anti-diabetic pharmaceutical formulation is provided, especially adapted for treating Type 2 Diabetic Mellitus. Designed the bilayer tablets suitable for delivering two drugs with different release pattern, one layer as immediate release to get instant action and the next layer as modified release for prolonged time to reduce the dosing frequency. Fixed Dose combination includes a combination of Sitagliptin Phosphate and Gliclazide. A method for treating diabetes is also provided employing the above formulation. The optimized Sitagliptin Phosphate and Gliclazide bilayer formulation could be a potential dosage form. The combination of two drugs in a single tablet provides synergistic effect, therapeutic justification, reduces dosing frequency. This can be recommended to improve the patient compliance and provide better disease management. It is commercially feasible and cost effective.

No. of Pages : 24 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141033037 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : WEARABLE MULTI-SENSORY PERSONAL SAFETY AND TRACKING GADGET

(51) International classification	:C12Q0001688300, G08B0025010000, A61B0005110000, G08B0015020000, G06N0020000000	(71)Name of Applicant : <b>1)Dr. Sindhu P Menon</b> Address of Applicant :HOD, Associate Professor, No 44, 2nd Main, Ramakrishnanagar , Gokul Road, Hubli 580030 Jain College of Engineering and Technology, Hubballi Karnataka India <b>2)Dr.Rashmi L Malghan</b> <b>3)Dr. Srividya R</b> <b>4)Dr. Kiran.G</b> <b>5)Dr.Piyush Kumar Pareek</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Dr. Sindhu P Menon</b>
(33) Name of priority country	:NA	<b>2)Dr.Rashmi L Malghan</b>
(86) International Application No	:NA	<b>3)Dr. Srividya R</b>
Filing Date	:NA	<b>4)Dr. Kiran.G</b>
(87) International Publication No	: NA	<b>5)Dr.Piyush Kumar Pareek</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is a wearable, multi-sensory, personal safety and tracking device which predicts danger by measuring changes in voice, pulse, emotions, impact, movements of the wearer and the device status. The Inventions uses Artificial Intelligence to learn the safety of Individual and alerts caretakers in case of discrepancy being measured. The Invention addresses the security and safety of individual without much human intervention with reliable monitoring.

No. of Pages : 11 No. of Claims : 2

(54) Title of the invention : MACHINE LEARNING BASED PREDICTIVE METHOD FOR EARLY FAULT DETECTION IN BLDC MOTOR DRIVES

(51) International classification	:G06N0020000000, F02D0041200000, G06F0011000000, G01R0031500000, G06K0009620000	(71) <b>Name of Applicant :</b> <b>1)Kaligotla.V.S.H.Gayatri Sarman</b> Address of Applicant :Gayatri Mandir, West Godavari- 534198, Andhra Pradesh, India Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Kaligotla.V.S.H.Gayatri Sarman</b>
(33) Name of priority country	:NA	<b>2)Dr.Tenneti Madhu</b>
(86) International Application No	:NA	<b>3)Dr.A.Mallikharjuna Prasad</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT: Title: Machine Learning Based Predictive Method for Early Fault Detection in BLDC Motor Drives The present disclosure proposes a machine learning based predictive method for early fault detection in BLDC motor drives that aids in the prognosis of the drive and avoids catastrophic failure of BLDC motors by predicting and detecting faults. The proposed method continuously monitors the signals from the motor and predict the open circuit and short circuit faults. The method utilizes two parameters such as motor speed (RPM), and current value to identify faults of the BLDC drive. Further, the method utilizes KNN (K-Nearest Neighbours) machine-learning algorithm to predict the faults that occur in BLDC Drive. The proposed method provides indications for open circuits, short circuits and low torque faults. The proposed method further identifies classification and regression problems of the BLDC drive.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141033052 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AUTOMATED AND PORTABLE VERTICAL SOLAR STACKER (APVSS)

(51) International classification	:H02S0020300000, H02S0010000000, F24S0023740000, F24S0040200000, H01L0031042000	(71)Name of Applicant : <b>1)ANAS MOHAMMED ALI</b> Address of Applicant :NGI- NewGen IEDC Dr. A P J ABDUL KALAM BLOCK, , NEHRU GARDENS, THIRUMALAYAMPALAYAM, COIMBATORE Tamil Nadu India
(31) Priority Document No	:NA	<b>2)MOHAMMED ASARUDHEEN S</b>
(32) Priority Date	:NA	<b>3)MRUDUL MOHANDAS A</b>
(33) Name of priority country	:NA	<b>4)RAHUL K R</b>
(86) International Application No	:NA	<b>5)RAJKUMAR G</b>
Filing Date	:NA	(72)Name of Inventor :
(87) International Publication No	: NA	<b>1)ANAS MOHAMMED ALI</b>
(61) Patent of Addition to Application Number:	NA	<b>2)MOHAMMED ASARUDHEEN S</b>
Filing Date	:NA	<b>3)MRUDUL MOHANDAS A</b>
(62) Divisional to Application Number	:NA	<b>4)RAHUL K R</b>
Filing Date	:NA	<b>5)RAJKUMAR G</b>

(57) Abstract :

AUTOMATED AND PORTABLE VERTICAL SOLAR STACKER (APVSS) is a mechatronic design used to reduce area consumption while installing solar panels. Solar energy has grown in importance as a renewable energy source in today's globe. Even though a large area of land is utilized for installing the solar panels for high scale energy production. For example, CIAL (Cochin International Airport Limited) is an airport that works entirely on Solar Panels but an area of 45 acres is used for Solar panels. This is a huge area. In this developing world, organization is an important factor. APVSS does the job. APVSS is a vertical and parallel stacker. Here the solar panels do not have any type of motion. The main idea behind the functioning of APVSS is the reflection and Total internal reflection. APVSS is autonomous. Therefore, an intelligent microcontroller is necessary to automatically align the Mirrors/Optical Fibre Elements (OFE). Here we use a microcontroller. With the help of LDR (Light Dependent Resistor), the amount of sunlight (in luminosity) is measured in analogue terms, and the mirrors are automatically oriented for accepting the maximum amount of sunlight to the lower levels of the stacker. In Innovation terms, as mentioned earlier, the space efficiency is enhanced. For people who have less amount of space or lack open terraces in their respective homes, this innovation can change the way people think and see about solar panels. This product can hit the market and is necessary. The need for finding a perfect place for installing solar panels will be reduced.

No. of Pages : 17 No. of Claims : 7

(54) Title of the invention : VOICE AND HAND GESTURE CONTROLLED ROBOTIC VEHICLE

<p>(51) International classification :G06F0003010000, B25J0009160000, G06K0009200000, B25J0011000000, G05D0001000000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :PCT//</p> <p>Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number:NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Himabindu N</b></p> <p>Address of Applicant :Assistant Professor, School of Electrical and Electronics Engineering, REVA University, Rukmini Knowledge Park, Kattigenahalli, Yelahanka, Bengaluru, Karnataka 560064, India Karnataka India</p> <p><b>2)Dr. Santoshkumar Hampannavar</b></p> <p><b>3)Sailaja Thota</b></p> <p><b>4)Nethra K</b></p> <p><b>5)Burri Ankaiah</b></p> <p><b>6)Dr. Bansilal Bairwa</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Himabindu N</b></p> <p><b>2)Dr. Santoshkumar Hampannavar</b></p> <p><b>3)Sailaja Thota</b></p> <p><b>4)Nethra K</b></p> <p><b>5)Burri Ankaiah</b></p> <p><b>6)Dr. Bansilal Bairwa</b></p>
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(57) Abstract :

ABSTRACT VOICE AND HAND GESTURE CONTROLLED ROBOTIC VEHICLE Adaptable human vehicle interface is the interaction between human and robot. Nowadays the use of robots is gaining popularity in commercial and residential use. The main objective of our project is to make the robotic vehicle which can be controlled by our voice and hand gestures. Usually we interact with computers or any electronic gadgets with our hand. So, we need to visit the place where computers or gadgets are placed and we have to use our hands to control and operate the computer or any gadgets which obviously consumes more time as well as energy. So if we use our voice and hand gesture to operate and control the computers or electronic gadgets then we can easily operate them from a far distance efficiently, faster which will finally reduce time and energy loss. Also, the classical method of controlling robot requires long and bulky wires which are very much complicated and cumbersome process. By using voice and hand gesture recognition technology, we can reduce the use of long wires up to some extent which can provide comfort to the users to interact with the computers and robots easily and effectively. In this project we are using voice and hand gesture to control the robotic vehicle using the Arduino interface

No. of Pages : 10 No. of Claims : 4

(54) Title of the invention : Low Cost Box Type Solar Cooker for Hill Area People

<p>(51) International classification :F24S0020300000, F24S0023700000, G02B0019000000, A61K0009060000, B29K0709080000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :PCT//</p> <p>Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. T. Vinoth Kumar</b> Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, RVS College of Engineering and Technology, Kumaran kottam campus, Trichy Road, Coimbatore-641402. Tamil Nadu India</p> <p><b>2)Dr. K. Geetha</b> <b>3)E. Vetrmani</b> <b>4)T. Sowdaiya Prabu</b> <b>5)B. Mohana</b> <b>6)B.Suresh</b> <b>7)L. Senthil Murugan</b> <b>8)Ramesh Balu Ranpise</b> <b>9)K. Thangarajan</b> <b>10)R. Prakash</b> <b>11)K. Saravanan</b> <b>12)Dr. P. Monica</b> <b>13)F. Vijay Amirtha Raj</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. T. Vinoth Kumar</b> <b>2)Dr. K. Geetha</b> <b>3)E. Vetrmani</b> <b>4)T. Sowdaiya Prabu</b> <b>5)B. Mohana</b> <b>6)B.Suresh</b> <b>7)L. Senthil Murugan</b> <b>8)Ramesh Balu Ranpise</b> <b>9)K. Thangarajan</b> <b>10)R. Prakash</b> <b>11)K. Saravanan</b> <b>12)Dr. P. Monica</b> <b>13)F. Vijay Amirtha Raj</b></p>
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(57) Abstract :

Low-cost manufacturing Concentrated solar cooker utilizing Compound Parabolic Concentrator type Optics, including a box containing all its accessories and cooking utensils; this box is constructed primarily of plastic that is compatible with complex curves, typical of the referenced optics. The current innovation has a version of electricity as a backup for sun-free days. Its use covers areas beyond food preparation, particularly water, milk, and other goods pasteurization and the use it makes as a drying system for the inhabitants of the hills.

No. of Pages : 22 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141033092 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ENGLISH LANGUAGE GAMES RO SUPPLEMENT THE OCCUPATIONAL SKILLS IN INBORN HIV CHILDREN

(51) International classification	:G09B0019060000, G09B0007020000, G10L0015187000, G09B0005060000, G06Q0090000000	(71) <b>Name of Applicant :</b> <b>1) Ms. SHARON SAMSON</b> Address of Applicant :13, JOTHI NAGAR, T.V.S. NAGAR ROAD, KAVUNDAMPALAYAM, COIMBATORE, TAMILNADU - 641019. Tamil Nadu India <b>2)Dr. S. V. KARTHIGA</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1) Ms. SHARON SAMSON</b>
(33) Name of priority country	:NA	<b>2)Dr. S. V. KARTHIGA</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In the course of the most recent thirty years, 35 million individuals have passed on of AIDS. Accordingly, HIV/AIDS has achieved a huge decrease in human resources. A few examinations have inspected the impacts of HIV/AIDS on human resources, specifically instructive achievement. These examinations have analysed various nations, datasets, and instructive results. This orderly writing survey gives a thorough cutting-edge outline of friend investigated papers distributed in English by zeroing in on the fundamental components that impact the impacts of HIV/AIDS on instructive results. These are affliction of the youngster, vagrant hood, and disorder of guardians. The outcomes show that instructive results of HIV-contaminated youngsters, AIDS vagrants, and kids with HIV-tainted guardians are influenced in an unexpected way. Word games are an inventive learning medium since the greater part of them are intuitive, which permits individuals to focus closer on the substance, bringing about a more grounded comprehension of the ideas. This technique permits understudies to rehearse their language abilities, learn new words, and partake in discussions. They altogether affect language learning, particularly in the space of jargon and articulation. Learning an unknown dialect through word search games establishes a helpful and self-spurring climate for youngsters. The specialists reached the resolution that word search games majorly affect language learning. Jargon and syntax were the most helpful fields. Word search games, as a kind of profoundly helpful amusement, give a steady, rousing climate that is ideal for learning an unknown dialect and furthermore for offering them work chances.

No. of Pages : 12 No. of Claims : 6

(54) Title of the invention : A METHOD FOR DYNAMIC POWER MANAGEMENT IN MOBILE AD-HOC NETWORKS

<p>(51) International classification :H04L0001000000, H04W0084180000, H04L0001180000, H04W0040240000, H04W0088160000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1) SUHAAS K P</b> Address of Applicant : #268/A, 18TH MAIN, D-BLOCK J P NAGAR, MYSORE, KARNATAKA, INDIA - 570008. Karnataka India</p> <p><b>2)Dr. S. SENTHIL</b> <b>3)Dr. ROBERT L</b> <b>4)DEEPA B G</b> <b>5)LOKESH C K</b> <b>6)B. AYSHWARYA</b> <b>7)S. DEEPIKA</b> <b>8)SREEJITH R</b> <b>9)MANU G THOMAS</b></p> <p>(72)Name of Inventor :</p> <p><b>1) SUHAAS K P</b> <b>2)Dr. S. SENTHIL</b> <b>3)Dr. ROBERT L</b> <b>4)DEEPA B G</b> <b>5)LOKESH C K</b> <b>6)B. AYSHWARYA</b> <b>7)S. DEEPIKA</b> <b>8)SREEJITH R</b> <b>9)MANU G THOMAS</b></p>
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(57) Abstract :

The present invention uses a reinforcement learning assisted dynamic power management for Zone-based routing protocol in Mobile Ad-Hoc networks. Said dynamic power management (41) utilizes a wireless device (51) integrated with plurality of nodes (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O). Said wireless device (51) consists of a transmission buffer (52), adaptive modulation and coding unit (53) and transceiver (55).

No. of Pages : 22 No. of Claims : 5

(54) Title of the invention : A smart application for Multi-Food Recognition using Machine learning

(51) International classification	:G06K0009620000, G06K0009000000, G06N0003040000, G06K0009660000, G06K0009340000	(71) <b>Name of Applicant :</b> <b>1)Dr.D. ARIVUDAINAMBI</b> Address of Applicant :Professor, Department of Mathematics, CEG Campus, Anna University, Chennai 600025. Tamil Nadu India
(31) Priority Document No	:NA	<b>2)Dr.K.A.VARUN KUMAR</b>
(32) Priority Date	:NA	<b>3)Dr.JEEVAA KATIRAVAN</b>
(33) Name of priority country	:NA	<b>4)Dr.P.VISU</b>
(86) International Application No	:PCT//	<b>5)Mr.N.Rajendran</b>
Filing Date	:01/01/1900	(72) <b>Name of Inventor :</b>
(87) International Publication No	: NA	<b>1)Dr.D. ARIVUDAINAMBI</b>
(61) Patent of Addition to Application Number	:NA	<b>2)Dr.K.A.VARUN KUMAR</b>
Filing Date	:NA	<b>3)Dr.JEEVAA KATIRAVAN</b>
(62) Divisional to Application Number	:NA	<b>4)Dr.P.VISU</b>
Filing Date	:NA	<b>5)Mr.N.Rajendran</b>

## (57) Abstract :

Nowadays smart phone has become the part and parcel of life, it has revolutionized the way we communicate and function in our lives. We propose food recognition systems that assess the calorie and nutrient content of foods as well as displaying the item's recipe. The recognition and processing of the image is done on a smartphone application rather than sending image to a server for processing which may be to less efficient because of the network issues. Food recognition based on a single image is a difficult problem in and of itself. In the past, traditional picture analysis processing algorithms had low classification accuracy, however deep learning approaches permitted food item image recognition. To detect food items, a user should first draw bounding boxes on the screen by touching it, and then the application system starts recognizing food items within those bounding boxes. To improve the efficiency of the recognition, machine learning based CNN- Convolutional Neural network algorithm is used to recognize the user input food item image. Once the processing is completed, the application renders the reliable information on to the screen. This project began with the excellent goal of assisting people with health nutrition concerns as well as those who are health conscious. This platform will serve as a one-stop shop for numerous information that a user may require. Thus, with only one application, a user can quickly access a variety of useful facts. Furthermore, the system is intended to acquire the direction of food regions with a higher CNN and SVM (Support Vector System) output score, display it as an arrow on the screen, and ask a user to move a smart phone camera. This process of recognition is repeated around once every second. The proposed approach can be implemented using android SDK tools and API™s , that can allow us to take advantage of several CPU cores for real-time recognition.

No. of Pages : 6 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141033346 A

(19) INDIA

(22) Date of filing of Application :24/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM FOR DEVELOPMENT OF NON-INVASIVE PRENATAL TESTING (NIPT) MODEL OF HUMAN FOETUS USING AI & MACHINE LEARNING

(51) International classification	:C12Q0001688300, C12Q0001687900, G06N0003120000, G06N0020000000, H04N0019184000	(71)Name of Applicant : <b>1)Dr Amit Swamy</b> Address of Applicant :Assistant Professor, Department of Mechanical and Industrial engineering, Emirates College of Technology, UAE U.A.E. <b>2)Dr. J.Frank Vijay</b> <b>3)Dr. S Cloudin</b> <b>4)Ms. Rupinder Deol</b> <b>5)Mrs. Ashwini M V</b> <b>6)Mr. CHANDRASHEKAR S</b> <b>7)Dr.Jyoti Dange</b> <b>8)Dr. Shivappa H.A</b> <b>9)Dr. Pavithra G</b> <b>10)Mr. Rajesh A S</b> <b>11)Mr. Mahesh Kumar A S</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Dr Amit Swamy</b> <b>2)Dr. J.Frank Vijay</b> <b>3)Dr. S Cloudin</b> <b>4)Ms. Rupinder Deol</b> <b>5)Mrs. Ashwini M V</b> <b>6)Mr. CHANDRASHEKAR S</b> <b>7)Dr.Jyoti Dange</b> <b>8)Dr. Shivappa H.A</b> <b>9)Dr. Pavithra G</b> <b>10)Mr. Rajesh A S</b> <b>11)Mr. Mahesh Kumar A S</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A SYSTEM FOR DEVELOPMENT OF NON-INVASIVE PRENATAL TESTING (NIPT) MODEL OF HUMAN FOETUS USING AI & MACHINE LEARNING [034] The present invention discloses a system for development of Non-Invasive Prenatal Testing (NIPT) model of Human Foetus using AI & Machine Learning and method thereof. The method and system includes, but not limited to, a cfDNA count initiator for creating a plurality of results for the biological samples by using the statistical processes and AI and ML techniques, in which biological samples are monitored and analyze with its inputs parameters and outputs characteristics, and a processing unit is recognized the results, if the inputs parameters and their outputs characteristics is out of control limits on finding any chromosomal disorder which is by the presence of an extra or missing copy (aneuploidy) of a chromosome. NIPT primarily looks for Down syndrome (trisomy 21, caused by an extra chromosome 21), trisomy 18 (caused by an extra chromosome 18), trisomy 13 (caused by an extra chromosome 13), and extra or missing copies of the X chromosome and Y chromosome (the sex chromosomes). Accompanied Drawing [FIG. 1]

No. of Pages : 22 No. of Claims : 9

(54) Title of the invention : A SYSTEM TO ENHANCE SECURITY AND PREVENT LOSS OF DATA WHILE ROUTING IN FSO MANET

(51) International classification	:H04W0084180000, H04B0010112000, H04L0029060000, H04W0012100000, H04B0010110000	(71) <b>Name of Applicant :</b> <b>1)Dr. VUPPANAPALLI SHANMUKHA RAO</b> Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF INFORMATION TECHNOLOGY, ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY, LOYOLA CAMPUS, ITI ROAD, VIJAYAWADA, ANDHRA PRADESH- 520008, INDIA Andhra Pradesh India
(31) Priority Document No	:NA	<b>2)Dr. A. SRINIVASA RAO</b>
(32) Priority Date	:NA	<b>3)KOSURU SIVRAMA KRISHNA</b>
(33) Name of priority country	:NA	(72) <b>Name of Inventor :</b>
(86) International Application No	:PCT// /	<b>1)KOSURU SIVRAMA KRISHNA</b>
Filing Date	:01/01/1900	<b>2)Dr. A. SRINIVASA RAO</b>
(87) International Publication No	: NA	<b>3)Dr. VUPPANAPALLI SHANMUKHA RAO</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A system to enhance security and prevent loss of data while routing in FSO MANET ABSTARCT OF THE INVENTION The present invention is aimed to design a system to enhance the security and prevent the loss of data while routing in FSO MANET. The said system comprising a first processor configured to form clusters; a second processor configured to establishing network routing; a third processor configured to secure communication; a fourth processor configured to encapsulate the configuration of the first, second and third processors to form a secure aware routing protocol; and a communication module enabling the communication among the first, second and third processors. The present invention work result will propose the least possible methods to achieve secure aware free space optical mobile adhoc network by considering an eminent quality of service. Fig. 1

No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : BIOFORMULATION OF BACILLUS SUBTILIS FOR MANAGEMENT OF BACTERIAL BLIGHT IN POMEGRANATE

(51) International classification	:C12R0001125000, A61K0036185000, A01N0063000000, C12N0015750000, A01N0025000000	(71)Name of Applicant : <b>1)PAVAN KUMAR</b> Address of Applicant :DEPARTMENT OF BIOTECHNOLOGY, BASAVESHWAR ENGINEERING COLLEGE, BAGALKOT-587103, KARNATAKA, INDIA. Karnataka India
(31) Priority Document No	:NA	<b>2)BHARATI S METI</b>
(32) Priority Date	:NA	<b>3)MANJUNATH GIRIGOWDA</b>
(33) Name of priority country	:NA	(72)Name of Inventor :
(86) International Application No	:PCT// /	<b>1)BHARATI S METI</b>
Filing Date	:01/01/1900	<b>2)PAVAN KUMAR</b>
(87) International Publication No	: NA	<b>3)MANJUNATH GIRIGOWDA</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to the Bioformulation of Bacillus subtilis for management of Bacterial Blight disease. It particularly relates to the Bioformulation of Bacillus subtilis for management of Bacterial Blight disease in Pomegranate plant. It specifically relates to the liquid Bioformulation of Bacillus subtilis with Pongamia oil and chitosan as a foliar spray for the management of Bacterial Blight disease in Pomegranate and when applied to pomegranate plant as a foliar spray makes the plant less susceptible against Xanthomonas axonopodis pv. punicae by inducing systemic resistance against this pathogen. The invention also relates to the process for preparation of the Bioformulation of Bacillus subtilis for management of Bacterial Blight disease in Pomegranate plant. The invention further relates to the method for management of Bacterial Blight disease in Pomegranate plant by using Bioformulation of Bacillus subtilis.

No. of Pages : 26 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141033370 A

(19) INDIA

(22) Date of filing of Application :25/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A Novel Robust Method for Pattern Recognition System with Enhanced Micro Structure Descriptors based Classification

		(71)Name of Applicant :
		<b>1)Dr.Satish Kumar Maragani</b>
		Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, Sri Vasavi Engineering College, Pedatadepalli, Tadepalligudam, Andhra Pradesh, India. Pin Code:534450 Andhra Pradesh India
		<b>2)Mrs.Udayini Chandana</b>
		<b>3)Dr.Kezia Joseph Mosiganti</b>
		<b>4)Dr.Chidananda.H</b>
		<b>5)Mr.Naraiah R</b>
		<b>6)Ms.Bejjanki Pooja Sree Prasanna</b>
		<b>7)Dr.Sushma Jaiswal</b>
		<b>8)Mr.Tarun Jaiswal</b>
		<b>9)Dr.Badugu Suresh</b>
		<b>10)Dr.S.Selvakanmani</b>
		(72)Name of Inventor :
		<b>1)Dr.Satish Kumar Maragani</b>
		<b>2)Mrs.Udayini Chandana</b>
		<b>3)Dr.Kezia Joseph Mosiganti</b>
		<b>4)Dr.Chidananda.H</b>
		<b>5)Mr.Naraiah R</b>
		<b>6)Ms.Bejjanki Pooja Sree Prasanna</b>
		<b>7)Dr.Sushma Jaiswal</b>
		<b>8)Mr.Tarun Jaiswal</b>
		<b>9)Dr.Badugu Suresh</b>
		<b>10)Dr.S.Selvakanmani</b>
(51) International classification	:G06K0009620000, A61B0005000000, G06T0007000000, G06T0007110000, G06K0009000000	
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The Tumor texture grading and classification is critical for diagnosing brain cancers since image texture can provide vital information on tissue abnormalities. For effective brain Tumor classification, a Pattern Recognition System is necessary to evaluate routinely obtained T1 post-contrast MRI images in order to detect brain Tumors. The structural analysis of both Tumors and normal tissues is required for effectively classifying the brain Tumors. The present invention disclosed herein is a Novel Robust Method for Pattern Recognition System with Enhanced Micro Structure Descriptors based Classification comprising of: MR Image Acquisition (201); Pre-Processing (202); Segmentation (203); Features Extraction (204); Classification (205); and Performance (206); used to evaluate routinely obtained T1 post-contrast MRI images in order to detect brain Tumors. The present invention disclosed herein uses Enhanced Micro Structure Descriptor to extract the features, further it uses VGG-16 with transfer learning approach to classify the brain Tumors. Furthermore, the present invention uses an Anisotropic Filter to remove the unwanted noise components present in the MR images acquired, Region Splitting and Merging in segmentation. The present invention disclosed herein shows better performance with structural analysis of both Tumors and normal tissues classification with classification accuracy of 98.69%.

No. of Pages : 14 No. of Claims : 9

(54) Title of the invention : Virtual reality based skill development system for construction workers

<p>(51) International classification :G02B0027010000, G06F0003010000, G09B0005060000, G06Q0010100000, G06Q0010060000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :PCT//</p> <p>Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. B. Sudharshan Reddy</b> Address of Applicant :Professor, Department of Civil Engineering Malla Reddy Engineering College Maisammaguda, Medchal- Malkajgiri, Secunderabad, Telangana, India, Pincode: 500100 Telangana India</p> <p><b>2)DR. Mohd Moin Ul Haq</b> <b>3)Mr. Shubham Srivastava</b> <b>4)Dr. Bollini Prasad</b> <b>5)Mr. Prabhdeep Singh</b> <b>6)Mrs. Neha Khare</b> <b>7)Dr. Nupur Soni</b> <b>8)Mr. Shashi Kant Gupta</b> <b>9)Mr. Asit Kumar Gahalaut</b> <b>10)Amit Kumar Jaiswal</b> <b>11)Mr. D Saravanan</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. B. Sudharshan Reddy</b> <b>2)DR. Mohd Moin Ul Haq</b> <b>3)Mr. Shubham Srivastava</b> <b>4)Dr. Bollini Prasad</b> <b>5)Mr. Prabhdeep Singh</b> <b>6)Mrs. Neha Khare</b> <b>7)Dr. Nupur Soni</b> <b>8)Mr. Shashi Kant Gupta</b> <b>9)Mr. Asit Kumar Gahalaut</b> <b>10)Amit Kumar Jaiswal</b> <b>11)Mr. D Saravanan</b></p>
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(57) Abstract :

The building workforce is in decrease with a well-trained staff. To address this shortfall, we have created a simulated education environment using a new method for the training of rookie construction workers on virtual reality (VR). First, an exhaustive job analysis was performed to determine the need for training. Then, the VR head-mounted display built a virtual construction site, and a 3D video instruction was installed with Head Mounted Device (HMD). To assess the efficacy of this technology, individuals who learned through the VR training tool were compared to those who received basic 2-D video training. VR training has led to higher retention, task performance, speed of learning, and commitment than the equivalent in video formation and the usability of the technology.

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202131020255 A

(19) INDIA

(22) Date of filing of Application :03/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND SYSTEM TO PRODUCE A CONCRETE MATERIAL HAVING OPTIMIZED STRENGTH AND PARTICLE PACKING PROPERTIES

(51) International classification	:C04B0028040000, B28B0013020000, C04B0007520000, C04B0028180000, C04B0018140000	(71) <b>Name of Applicant :</b> <b>1)Sarod Green Back LLP</b> Address of Applicant :7th Floor, 3A Ecospace Plot No. 2F/11, New Town, Rajarhat Kolkata West Bengal INDIA 700156
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)BAWRI, Binod Kumar</b>
(33) Name of priority country	:NA	<b>2)BAWRI, Saroj</b>
(86) International Application No	:NA	<b>3)BAWRI, Mala</b>
Filing Date	:NA	<b>4)KADABA, Raghunandan</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a method and system to produce a concrete material having optimized strength and particle packing properties. The method and system includes a micro characterization step of a plurality of starting cementitious materials and at least one starting pozzolanic material to get respectively at least one cementitious material having uniform strength and at least one pozzolanic material having uniform blain fineness. Then grinding the said at least one cementitious material having uniform strength and the said at least one pozzolanic material having uniform blain fineness to get at least one cementitious material having a required Blaine fineness and at least one pozzolanic material having a required Blaine fineness. Finally preparing the said concrete material by mixing the said micro characterized cementitious materials and/or pozzolanic materials with at least one aggregate material, at least one additive material or a mixture thereof.

No. of Pages : 32 No. of Claims : 27

## **Publication After 18 Months:**

The following Patent Applications have been published under Section 11A (3) of The Patents (Amendment) Act, 2005. Any Person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act, 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201911043917 A

(19) INDIA

(22) Date of filing of Application :30/10/2019

(43) Publication Date : 30/07/2021

(54) Title of the invention : NOVEL INALAS/INGAAS/GAASSBTTYPE-II NANO- HETEROSTRUCTURE FOR OPTICAL FIBER COMMUNICATION AND A DESIGN FOR PREPARATION THEREOF

(51) International classification	:B82Y0020000000, H01S0005400000, H01S0005200000, C03B0037014000, H01L0031035200	(71) <b>Name of Applicant :</b> <b>1)Dr. Garima Bhardwaj</b> Address of Applicant :IIMT Engineering College, Mawana Road, O Pocket, Ganga Nagar Meerut Uttar Pradesh India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Garima Bhardwaj</b>
(33) Name of priority country	:NA	<b>2)Dr. Parvez Ahmad Alvi</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to the novel type-II W • shaped heterostructure used for optical fiber communication system and more particularly relates to type-II W • shaped InAlAs/InGaAs/GaAsSb nanoscale heterostructure simulated successfully with the help k.p method, wherein the nanoscale heterostructure emits the radiations of the wavelength 1.55 μm. The present heterostructure has lowest loss and has high optical gain. This novel heterostructure exhibits its utility in the optical fiber based communication system due to its low attenuation and lowest loss.

No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : 4-HYDROXYISOLUCINE (4-HIL) ENRICHED FRACTION FROM TRIGONELLA FOENUM-GRÆCUM (FENUGREEK) SEEDS FOR THE MANAGEMENT OF POLYCYSTIC OVARY SYNDROME (PCOS) AND ITS PROCESS OF PREPARATION THEREOF

<p>(51) International classification :A61K0036480000, A61Q0001000000, A61B0090000000, A61B0018000000, A23L0033120000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH</b></p> <p>Address of Applicant :ANUSANDHAN BHAWAN, 2 RAFI MARG NEW DELHI-110001, INDIA Delhi India</p> <p><b>2)DEPARTMENT OF BIOTECHNOLOGY, GOVT OF INDIA, MINISTRY OF SCIENCE &amp; TECHNOLOGY, DELHI</b></p> <p>(72)Name of Inventor :</p> <p><b>1)NARENDER TADIGOPPULA</b></p> <p><b>2)RAJESH KUMAR JHA</b></p> <p><b>3)RABI SHANKAR BHATTA</b></p> <p><b>4)SRIKANTA KUMAR RATH</b></p> <p><b>5)PRABHAT RANJAN MISHRA</b></p> <p><b>6)BRIJESH KUMAR</b></p> <p><b>7)VAIBAHVE UBBA</b></p> <p><b>8)ASHOK KUMAR</b></p> <p><b>9)RAMANAND PRAJAPATI</b></p> <p><b>10)PRATIBHA SINGH</b></p> <p><b>11)VIKASH KUMAR GOND</b></p> <p><b>12)VIKAS BAJPAI</b></p> <p><b>13)SONAM KANCHAN</b></p> <p><b>14)NIKHIL RAI</b></p> <p><b>15)ARUN AGARWAL</b></p> <p><b>16)SRISTI AGRAWAL</b></p> <p><b>17)ANJALI MISHRA</b></p> <p><b>18)SWATI RAJPOOT</b></p> <p><b>19)WAHAJUDDIN</b></p>
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## (57) Abstract :

ABSTRACT 4-Hydroxyisolucine (4-HIL) enriched fraction from Trigonella foenum-graecum (fenugreek) seeds for the management of Polycystic Ovary Syndrome (PCOS) and its process of preparation thereof The present invention relates to the preparation and beneficial effect of phytopharmaceutical composition consisting of 4-Hydroxyisoleucine (4-HIL:12-13%), Trigonelline (7-8%) along with Pinitol and Raffinose and its formulation isolated/prepared from the seeds of Trigonella feonum graecum (Fenugreek) for the management of Polycystic Ovary Syndrome (PCOS) respectively. Further, it relates to a novel, convenient and economically viable method for the isolation of >95% pure 4-Hydroxyisoleucine (4-HIL) and preparation of 12-13% of 4-HIL and 7-8% of Trigonelline along with Pinitol and Raffinose containing phytopharmaceutical composition from the seeds of T. feonum graecum without using any expensive and tedious chromatographic techniques such as HPLC, column chromatography, ion exchange resins etc.

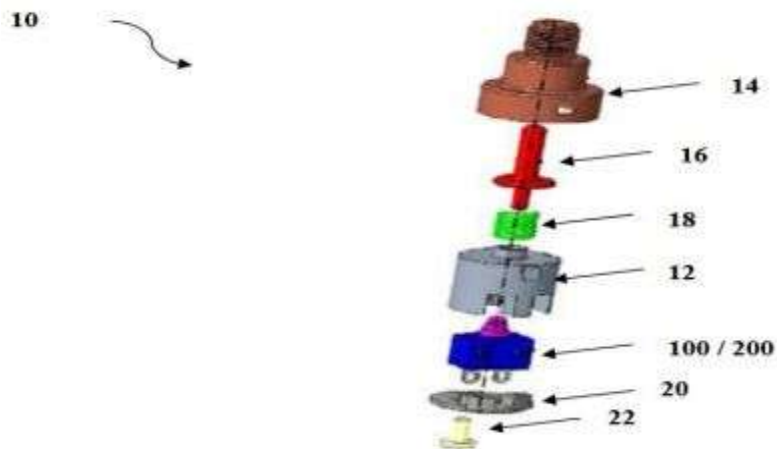
No. of Pages : 46 No. of Claims : 12

(54) Title of the invention : A LOW CURRENT SWITCH

(51) International classification	:H01H0009520000, B65D0051280000, H01H0013705000, H01H0013180000, H01H0013040000	(71) <b>Name of Applicant :</b> <b>1)Napino Auto &amp; Electronics Ltd.</b> Address of Applicant :Sec-3, Plot No. 7, Sector 3, IMT Manesar, Distt-Gurgaon 122050, Haryana Haryana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dinesh Singh</b>
(33) Name of priority country	:NA	<b>2)Rakesh Ranjan</b>
(86) International Application No	:NA	<b>3)Pradeep Kashyap</b>
Filing Date	:NA	<b>4)Kamal Dutt</b>
(87) International Publication No	: NA	<b>5)Gaurav Rana</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a low current switch which comprises a casing with an aperture. The casing defines a first storage space. The switch comprises a push button switch being accommodated in the first storage space. The push button switch comprises an operating member. Further, the switch comprises a top cover which includes an aperture. The top cover envelops the casing to define a second storage space. Furthermore, a plunger is located at least partly in the second storage space. The plunger comprises a first end and a second end. The first end is adapted to traverse via the aperture in the top cover to receive an actuating force, and a second end adapted to cooperate with the operating member of the push button switch to transfer said actuating force to the operating member of the push button switch.



No. of Pages : 24 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003038 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ASSISTIVE MECHANISM FOR ADAPTABLE RIDING POSITIONS

(51) International classification	:H04R0025000000, B62D0005040000, A61H0001020000, A41D0001086000, G06F0003048800	(71) <b>Name of Applicant :</b> <b>1)AMITY UNIVERSITY</b> Address of Applicant :AMITY UNIVERSITY CAMPUS, SECTOR-125 NOIDA UTTAR PRADESH-201313, INDIA Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ROHIT SHARMA</b>
(33) Name of priority country	:NA	<b>2)SHASHANK BHARDWAJ</b>
(86) International Application No	:NA	<b>3)JASPREET HIRA</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT AN ASSISTIVE MECHANISM FOR ADAPTABLE RIDING POSITIONS The present invention relates to an assistive mechanism for adaptable riding positions. The assembly is comprised of a stepper motor as driver, one helical gear fixed to a handle stem and coupled with a stepper motor for power transmission, two helical gears fixed on fork stem and meshed with the helical gear of handle stem. The usage of a gear arrangement with the stepper motor for the mechanism. The threading the fork stems for the mechanism; and the incorporation of the Fork threads, Gears and the stepper motor for achieving the working of the mechanism. The rider can then have three different modes which will adjust height and sitting accordingly. Accompanied drawing [FIG. 1] Dated this

No. of Pages : 25 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003039 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SMART EXERCISER CYCLER

(51) International classification	:B01L0007000000, A63B0021000000, A61M0001160000, A61M0001280000, A61K0031700400	(71) <b>Name of Applicant :</b> <b>1)AMITY UNIVERSITY</b> Address of Applicant :AMITY UNIVERSITY CAMPUS, SECTOR-125 NOIDA UTTAR PRADESH-201313, INDIA Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)VIKAS KUMAR</b>
(33) Name of priority country	:NA	<b>2)NEERAJ GUPTA</b>
(86) International Application No	:NA	<b>3)AMBRISH MAURYA</b>
Filing Date	:NA	<b>4)ROHIT SHARMA</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT A SMART EXERCISER CYCLER** The present invention relates to a smart system and method for exerciser cyclers. The exerciser cyclers which take the input of individual like BMI index, blood pressure, health status, muscle stress, medical conditions and fix the resistance as per the health conditions of an individual and stops giving the signal as the person reaches the permissible limit of his workout. A map or a screen attached to the smart cyclers will display the map along with the screen which show the original roads and terrains virtually and a result the resistance level of the cyclers altered as per the terrain to give the feeling originally.

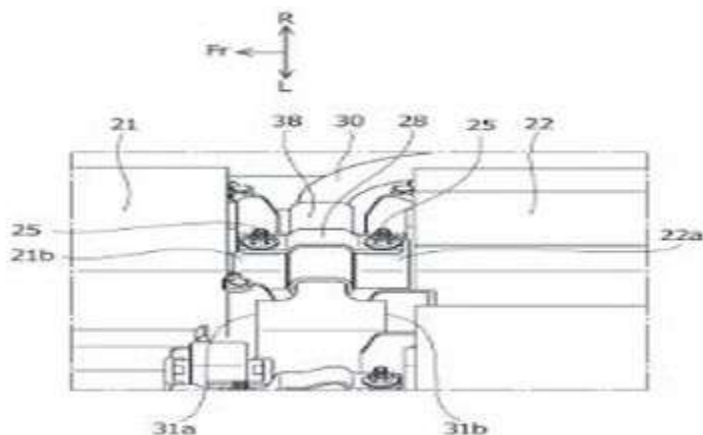
No. of Pages : 20 No. of Claims : 6

(54) Title of the invention : COOLING DUCT RESTRAINING STRUCTURE

(51) International classification	:H01M0010613000, H01M0010625000, H01M0002100000, H01M0010655100, H01M0010656300	(71) <b>Name of Applicant :</b> <b>1)SUZUKI MOTOR CORPORATION</b> Address of Applicant :300 Takatsuka-cho, Minami-ku, Hamamatsu-shi, Shizuoka 432-8611, Japan Japan
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Koichiro WATANABE</b>
(33) Name of priority country	:NA	<b>2)Masaki MIZUTORI</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A cooling duct restraining structure includes a plurality of battery cells (21, 22) provided in an interior of a battery pack (1) and a cooling duct (30) through which a refrigerant for cooling the battery cells (21, 22) flows. A negative electrode (21b) of the first battery cell (21) and a positive electrode (22a) of the second battery cell (22) are disposed in such a manner as to face each other while being space apart from each other, and the cooling duct (30) is disposed between the negative electrode (21b) and the positive electrode (22a). The cooling duct (30) is restrained from moving by a bus-bar (28) which links the negative electrode (21b) with the positive electrode (22a).



No. of Pages : 20 No. of Claims : 3

(54) Title of the invention : INSERTABLE THERMAL INSOLE FOR EXTREMELY COLD CLIMATE

(51) International classification	:G02B0005080000, B29C0044140000, A43B0017020000, B60R0013080000, A47C0007020000	(71) <b>Name of Applicant :</b> <b>1)Vikas Chawla</b> Address of Applicant :F 601, Ranjit Vihar-2,Sector-23, Dwarka, New Delhi Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Vikas Chawla</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

1.The proposed insole is developed for use in extreme cold climate as an insert for shoe of any type and of any size. The insole is intended to provide comfort up to a temperature of minus 50°C as experienced in high altitude areas of India. The user of this insole will be able to carry out all daily activities like walking, climbing, mountaineering, skiing etc without any discomfort. The insole is molded to have the shape of a shoe and does not fold back/cause bunching while removing the shoe or during walking and does not have any wrinkle or folds. 2. The proposed insole will have 05 (five) layer composition consisting of cushion, insulation, spacing and heat shield which are bounded together by a fifth layer with process of heat or other means of moulding. Broad functionalities of layers are (a) Layer 1 - To provide comfort, warmth and having anti perspiration properties. (b) Layer 2 - To provide cushion and increase comfort. (c) Layer 3 - To provide additional warmth and comfort. (d) Layer 4- Heat Shield consisting of a reflective film to trap heat within upper 3 layers. (e) Layer 5 - To provide a medium to join these layers together by process of lamination with water resistance properties. 3. The details of material used in layers are as under: - (a) Layer 1 - Blend of Polyester and Acrylic with Wool with wool making minimum 50% Percentage of composition for warmth. The thickness of layer will be 1.5 mm. (b) Layer 2 - Consist of Polyurethane Foam of density 60 to 80 kg/m<sup>3</sup> to provide cushion. The thickness of this layer would be 1.5 to 4 mm. (c) Layer 3 - Blend of Polyester and Acrylic with wool with making minimum 50% of composition for warmth. The thickness of layer will be 1.5 mm. (d) Layer 4 - Heat Shield consisting of a reflective film preferably Aluminum to trap heat within upper 3 layers. The preferred density is 9 Micron. (e) Layer 5 - This layer will consist of a blend of EVA & PE. The EVA will have a PHR of 5 and more with hardness of 40 to 50 Shores. The thickness of this layer will be 3-10 mm. This layer will be a medium to join upper layers together by process of lamination and will also make product water resistance.



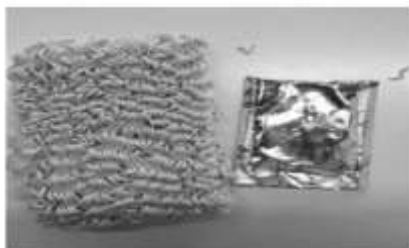
No. of Pages : 5 No. of Claims : 1

(54) Title of the invention : A KIT OF PARTS FOR A PACKED NOODLE PRODUCT

(51) International classification	:G06Q0030020000, C11D0017040000, A61B0017880000, A63H0033100000, A21C0009020000	(71) <b>Name of Applicant :</b> <b>1)SOCIETE DES PRODUITS NESTLE S.A.</b> Address of Applicant :Entre-deux-Villes, 1800 Vevey, Switzerland Switzerland
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Toh Tian seng</b>
(33) Name of priority country	:NA	<b>2)Chattopadhyay Ayan</b>
(86) International Application No	:NA	<b>3)Kaur Jasleen</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a kit of parts for a packed noodle product comprising a) a dried noodle cake and b) a tastemaker tablet, characterized in that the dried noodle cake comprises a formed hollow three-dimensional space and wherein the tastemaker tablet is embedded in that formed hollow three-dimensional space.



No. of Pages : 25 No. of Claims : 14

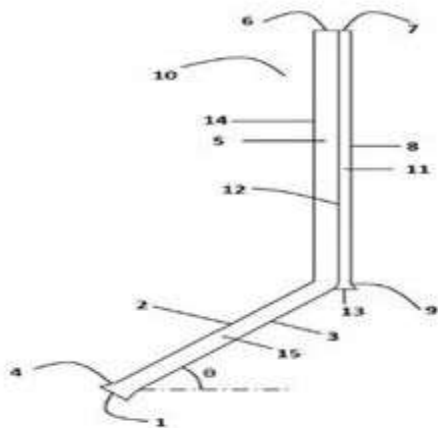
(54) Title of the invention : SOLAR AIR HEATER WITH TROMBE WALL

(51) International classification	:F24S0010500000, F24D0011000000, F03G0006040000, F24S0010400000, F24H0003040000	(71) <b>Name of Applicant :</b> <b>1)INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY), VARANASI</b> Address of Applicant :Varanasi-221005, Uttar Pradesh, India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)AJEET PRATAP SINGH</b>
(33) Name of priority country	:NA	<b>2)OM PRAKASH SINGH</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

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(57) Abstract :

The present invention relates to a high flow rate solar air heating device. The invention relates to an improved hydraulic performance of natural convection solar air heater integrated with bell mouth shape inlet with chimney and Trombe wall in order to increase mass flow rate of heated air.



No. of Pages : 23 No. of Claims : 9

(54) Title of the invention : METHOD AND SYSTEM FOR COMPARING AND DIFFERENTIATING DIGITAL IMAGES OF DRAWINGS

(51) International classification	:G06T0007000000, H04R0029000000, G06T0011000000, G06T0007300000, G06T0007120000	(71) <b>Name of Applicant :</b> <b>1)CATERPILLAR INC.</b> Address of Applicant :100 N.E. ADAMS STREET, PEORIA, ILLINOIS 61629-9510, UNITED STATES OF AMERICA U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)BALAGAM, JEEVAN SHANKAR</b>
(33) Name of priority country	:NA	<b>2)JAYAPALAN, BASKAR</b>
(86) International Application No	:NA	<b>3)PYDI, DURGA PRASAD</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method and a system for comparing and differentiating digital images of drawings is disclosed. The method includes a step of receiving a digital reference image and a modified digital reference image having a first set of contours and a second set of contours respectively. The method includes a step of assigning a first color and a second color to the first set of contours and the second set of contours respectively. Further, the method includes comparing the digital reference image and the modified digital reference image. In addition, the method includes a step of generating a digital output image having an overlapping set of contours in a third color and a non-overlapping set of contours in the first color and the second color respectively based on the comparison. The system includes a communication bus, a memory, and a processor capable of performing the steps of the method described herein.



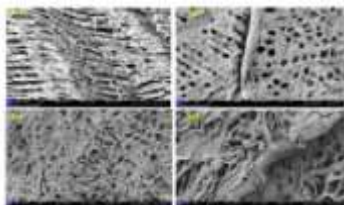
No. of Pages : 44 No. of Claims : 10

(54) Title of the invention : 3-D POROUS SCAFFOLDS FOR BONE TISSUE ENGINEERING

(51) International classification	:A61L0027180000, A61L0027560000, A61L0027460000, A61L0027220000, A61L0027580000	(71) <b>Name of Applicant :</b> <b>1)INDIAN INSTITUTE OF TECHNOLOGY ROORKEE</b> Address of Applicant :Roorkee, Haridwar Highway, Roorkee, Uttarakhand 247667, India Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PACKIRISAMY, Gopinath</b>
(33) Name of priority country	:NA	<b>2)KHAN, Sarim</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention provides a synthesis process for 3-D porous scaffolds of SF/n-HAP/PCL with enhanced mechanical and biological properties which could serve as a template in clinical settings for bone tissue regeneration. The composite scaffold is blended with surface treated Sisal Fibers to increase the interfacial adhesion with the Polycaprolactone polymer matrix. The addition of 5 % (w/w) sisal fiber to n-HAP/PCL scaffold increased the compressive modulus of the scaffold from 2.23 MPa to 5.33 MPa. The porosity of the scaffolds increased with increase in the SF concentration in the scaffold. The scaffolds with SF blended in them proved to be innocuous to the MG-63 cell attachment and their proliferation on the surface. The scaffold with 5 % SF and 30 % HAP had the highest cell proliferation both at Day 3 and Day 7. From the FESEM images, it was observed that the cell attachment at Day 3 was in the advance stage. The scaffolds are synthesized using freeze drying techniques. The scaffold employs eco-friendly SF which are cheap and abundant in nature. The overall cost of the scaffolds produced from the process is very less in comparison to the industry standards in the orthopaedics industry.



No. of Pages : 26 No. of Claims : 7

(54) Title of the invention : SILVER NANOPARTICLES AND A METHOD FOR SYNTHESIS THEREOF

(51) International classification	:A61K0036906600, A61K0033380000, B82Y0040000000, A61K0009510000, A01N0059160000	(71) <b>Name of Applicant :</b> <b>1)Shoolini University of Biotechnology and Management Sciences</b> Address of Applicant :Village-Bhajol, P.O. Sultanpur, Solan, 173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sharma, Mamta</b>
(33) Name of priority country	:NA	<b>2)Thakur, Pankaj</b>
(86) International Application No	:NA	<b>3)Saini, Reena V.</b>
Filing Date	:NA	<b>4)Monika</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to a silver nanoparticle synthesized by using rhizome extract of *Curcuma longa*, a method for synthesis of said silver nanoparticles. The synthesized silver nanoparticles are found to be used as anti-bacterial and anti-cancer agent or for the preparation of anti-bacterial and anti-cancer medicaments. The antibacterial activity of synthesized silver nanoparticles was tested with both gram positive (*Bacillus subtilis*) and gram negative (*Escherichia coli*) bacterium. The results have revealed that silver nanoparticles have a great potential to inhibit the growth of bacteria. In order to evaluate the anticancer activity, A549 and PC3 cell lines were treated with silver nanoparticles synthesized from *Curcuma longa* rhizomes. The silver nanoparticles (AgNPs) synthesized from *Curcuma longa* obtained from Shimla showed activity of 40.16% and 36.21% against A549 and PC3 cell lines respectively.



No. of Pages : 30 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003475 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYNERGISTIC HERBAL EXTRACT FOR THE MANAGEMENT OF DIABETES MELLITUS AND DETOXIFICATION OF HUMAN BODY

(51) International classification	:A61K0036746000, A61K0036484000, A61K0036185000, A61K0036470000, A61K0036906600	(71) <b>Name of Applicant :</b> <b>1)NAGA PRASHANT KOPPURAVURI</b> Address of Applicant :TEERTHANKER MAHAVEER COLLEGE OF PHARMACY, NH-24, DELHI ROAD, MORADABAD, UTTAR PRADESH-244001, INDIA Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)NAGA PRASHANT KOPPURAVURI</b>
(33) Name of priority country	:NA	<b>2)A. ELPHINE PRABAHAR</b>
(86) International Application No	:NA	<b>3)YENDURI SUVARNA</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Synergistic herbal formulation for the management of Diabetes Mellitus and detoxification of human body with dried, powdered, water extract of selected herbs, wherein the said selected herbs are Pithecellobium dulce, Morinda citrifolia, Phyllanthus emblica, and Glycyrrhiza glabra. The herbal extract of the present invention is prepared in atleast in one of the form such as non-capsulated powdered form, atleast in capsulated form or atleast in tablet form. The said herbal extract is administered orally along with water. The herbal composition of the present invention has anti-diabetic and anti-oxidant activity.

No. of Pages : 15 No. of Claims : 8

(54) Title of the invention : ELECTRICAL PROTECTION CIRCUIT FOR PROTECTING A REVERSE CURRENT PROTECTION CIRCUIT OF AN ELECTRONIC CIRCUIT

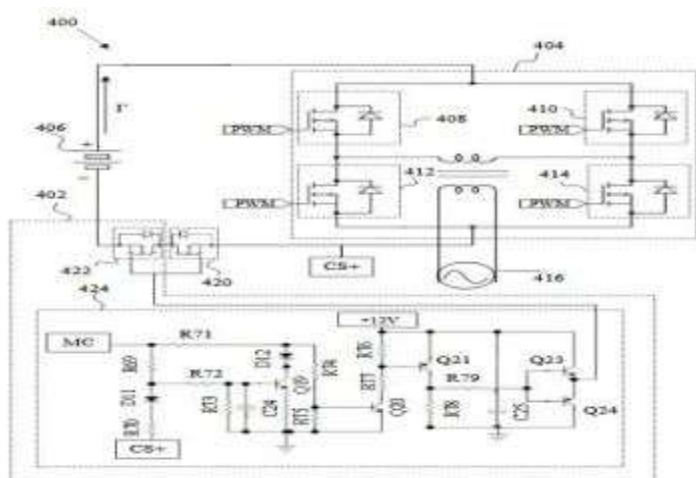
(51) International classification :H04L0029080000,  
C07D0417140000,  
C07D0417060000,  
C07D0263320000,  
G03G0015000000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)LUMINOUS POWER TECHNOLOGIES PVT. LTD.**  
Address of Applicant :Plot No. 150, Sector 44, Gurugram,  
Haryana 122003, India, Haryana India  
(72)Name of Inventor :  
**1)Kumar, Sanjeev**  
**2)Bhatnagar, Atul**

(57) Abstract :

An electrical protection circuit 402 for protecting a reverse current protection circuit of an electronic circuit 404 from adverse currents is disclosed. The electrical protection circuit 402 comprises a second MOSFET 422 connected in series and in an opposite direction with a first MOSFET 420 of the reverse current protection circuit. A controlling circuitry 424 is also used to control operation of the electrical protection circuit 402.



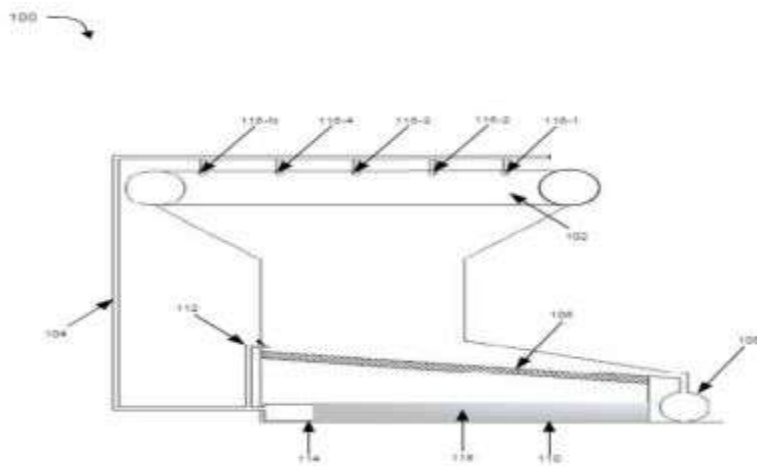
No. of Pages : 17 No. of Claims : 7

(54) Title of the invention : WASTE RECYCLING APPARATUS

(51) International classification	:A61F0013150000, B09B0003000000, B09B0001000000, C10B0007100000, C04B0018040000	(71)Name of Applicant : <b>1)Chitkara Innovation Incubator Foundation</b> Address of Applicant :SCO: 160-161, Sector -9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)GUPTA, Sheifali</b>
(33) Name of priority country	:NA	<b>2)GUPTA, Deepali</b>
(86) International Application No	:NA	<b>3)VERMA, Vishal</b>
Filing Date	:NA	<b>4)CHAUHAN, Harsha</b>
(87) International Publication No	: NA	<b>5)JINDAL, Udit</b>
(61) Patent of Addition to Application Number:	NA	<b>6)GUPTA, Rupesh</b>
Filing Date	:NA	<b>7)SINGLA, Kamali</b>
(62) Divisional to Application Number	:NA	<b>8)AHUJA, Sachin</b>
Filing Date	:NA	

(57) Abstract :

The present disclosure provides a waste recycling apparatus 100 that includes an inlet conduit 102 perforated on at least one of the sides, and accommodates plant waste materials 120. A first pipe 104 carries purges a fluid 118 at the plant waste materials 120 to facilitate settling down of the plant waste materials 120, and hence, restricting spreading and mixing of the plant waste materials 120 in nearby surroundings and air. The plant waste materials 120 move from the inlet conduit 102 to the perforated sheet 106, where at least a portion of the fluid 118 flows back to a fluid source 110. A second pipe 112 purges the fluid 118 to facilitate motion of the plant waste materials 120 from the perforated sheet 106 to a grinder 108. The grinder 108 grinds the plant waste materials 120, which is further utilized in manufacturing disposable items.



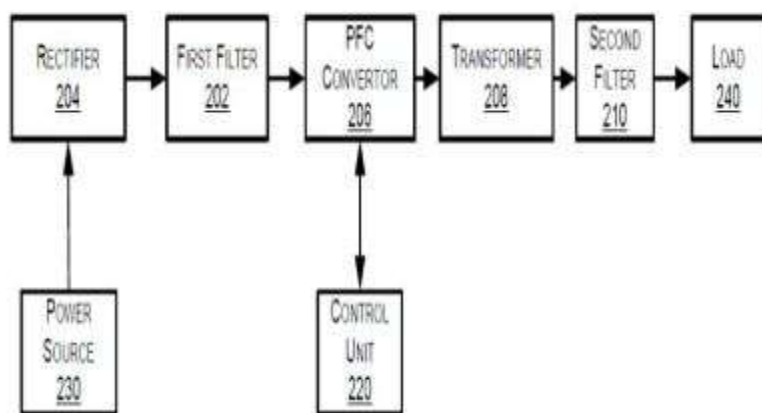
No. of Pages : 18 No. of Claims : 10

(54) Title of the invention : POWER FACTOR CORRECTION CONVERTER BASED CHARGER

(51) International classification	:H02M0001420000, H02J0007020000, H02M0001340000, G05F0001700000, H04B0001040000	(71)Name of Applicant : <b>1)Indian Institute of Technology Delhi</b> Address of Applicant :Hauz Khas, New Delhi-110016, India. Delhi India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)SINGH, Bhim</b>
(33) Name of priority country	:NA	<b>2)KUSHWAHA, Radha</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A power factor correction (PFC) converter based electrical power transmission device 200 is disclosed, the device includes: the PFC converter 206 comprising: a first diode configured between a first node and a second node such that anode of the first diode is connected to the second node and cathode of the first diode is connected to the first node; a second diode configured between a third node and a fourth node such that anode of the second diode is connected to the third node and cathode of the second diode is connected to the fourth node; a first switch configured between the third node and the second node; and a second switch configured between the fourth node and the first node; wherein the PFC converter is electrically coupled to a power source 230 through the first node and the third node, and wherein the PFC converter 206 is electrically coupled to a load 240 through the fourth node and the second node; and a control unit operatively coupled to the first switch and the second switch and adapted to operate any or a combination of the first switch and the second switch to enable the PFC converter 206 to convert a first set of electrical signals received from the power source into a second set of electrical signals having pre-defined electrical attributes and transmit the second set of electrical signals to the load.



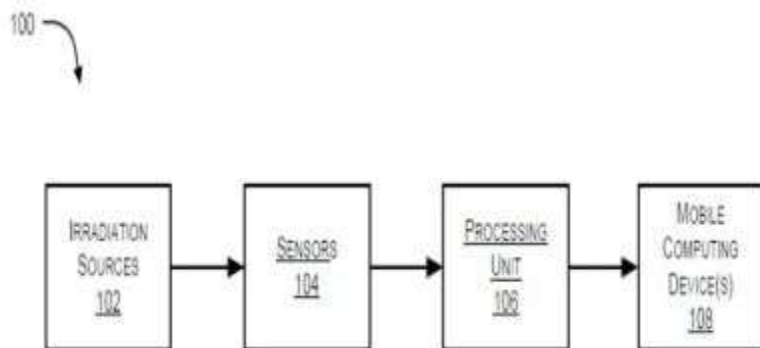
No. of Pages : 43 No. of Claims : 10

(54) Title of the invention : AN EYE-WARE TO ASSIST IN OCULAR COMMUNICATION

(51) International classification	:A61B0005110000, A61B0005000000, G06F0003042000, A61B0005010000, A61M0021000000	(71) <b>Name of Applicant :</b> <b>1)Chitkara Innovation Incubator Foundation</b> Address of Applicant :SCO: 160-161, Sector -9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)GUPTA, Deepali</b>
(33) Name of priority country	:NA	<b>2)GUPTA, Sheifali</b>
(86) International Application No	:NA	<b>3)VERMA, Vishal</b>
Filing Date	:NA	<b>4)HARSHA</b>
(87) International Publication No	: NA	<b>5)JINDAL, Udit</b>
(61) Patent of Addition to Application Number	:NA	<b>6)SINGLA, Kamali</b>
Filing Date	:NA	<b>7)GUPTA, Rupesh</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure provides an eye-ware 100 that includes a wearable frame 302 that can be adapted to be worn by a user, two frame inserts 304-1 and 304-2 that are attached to the frame 302, sensors 104 that are positioned at a first pre-determined position on the frame 302, and irradiating sources 102, where the irradiating sources 102 and the sensors 104 are positioned such that the irradiation emitted through the irradiating sources 102 passes through at least one optical axis associated with at least a part of an eye of the user before being sensed by the sensors 104. The processing unit 106 of the eye-ware 100 generates set of data packets corresponding to the irradiation sensed by the sensors 104, and the set of data packets are transmitted to mobile computing devices 108, which enables the eye-ware 100 to assist in ocular communication.



No. of Pages : 23 No. of Claims : 10

(54) Title of the invention : LOW COST, AUTOCLAVABLE AND MULTIFUNCTIONAL BIOMATERIAL BASED NANOFIBROUS PERMEABLE HANGING CELL CULTURE INSERT AND FABRICATION THEREOF

(51) International classification	:C12M0001420000, C12N0005000000, C12M0001000000, G01N0033500000, C12M0001340000	(71)Name of Applicant : <b>1)INDIAN INSTITUTE OF TECHNOLOGY ROORKEE</b> Address of Applicant :Roorkee, Haridwar Highway, Roorkee, Uttarakhand 247667, India Uttarakhand India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)PACKIRISAMY, Gopinath</b>
(33) Name of priority country	:NA	<b>2)KUMAR, Vinay</b>
(86) International Application No	:NA	<b>3)BASAK, Soumyadeep</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to an autoclavable, reusable, low-cost multifunctional biomaterial-based nanofibrous hanging permeable cell culture insert and fabrication thereof. It also relates to a process of fabrication of the biomaterial-based nanofibrous hanging permeable cell culture insert. The hanging cell culture insert of the present invention which employs a nanofibrous biomaterial-based membrane is low-cost, varying pore sizes and is easy to manufacture by a simple process involving few steps and using low-priced starting materials. The insert can be utilized in a wide variety of applications such as co-culture studies, tri-culture studies, cell migration and adhesion, toxicity testing, in-vitro model of angiogenesis, cell invasion assay and tissue engineering applications.

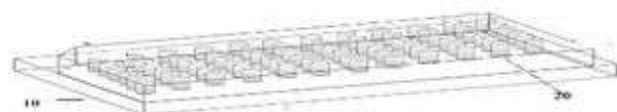


Figure-1a



Figure-1b



Figure-1c

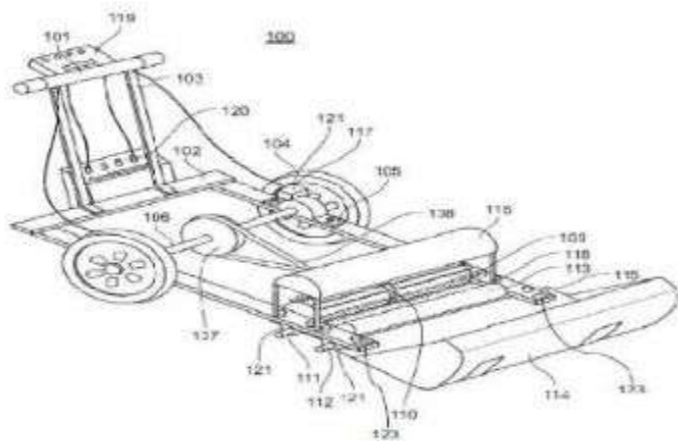
No. of Pages : 29 No. of Claims : 17

(54) Title of the invention : WASTE DEBRIS COLLECTION APPARATUS

(51) International classification	:A01G0020430000, B65F0001140000, B26D0007180000, A46B0013000000, A47L0011282000	(71) <b>Name of Applicant :</b> <b>1)INDIAN INSTITUTE OF TECHNOLOGY, DELHI</b> Address of Applicant :Indian Institute of Technology, Hauz Khas, New Delhi- 110016 Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KANT, Nilay</b>
(33) Name of priority country	:NA	<b>2)Agarwal Arjun</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The various embodiments of the present invention provide an apparatus for collecting waste debris. According to the embodiment when the user pushes the apparatus which in turn moves the wheel shaft moves the pulley connected to the wheel shaft with it. The waste debris such as leaves, plates, cups, etc. are first flattened or squeezed by the cylindrical roller and then lifted by the cylindrical brush. The waste debris is forced upwards and falls on the cylindrical roller then the cylindrical roller guides the waste debris into the waste debris collection bin. Further, weight sensors are used to weigh an amount of the collected waste debris. Also, a camera is attached to a shade to periodically capture images of cylindrical brushes to monitor their attributes, such as, length of fibres. In addition, alerts related to the bin, brushes, charging level of power supply, are displayed on a control panel.



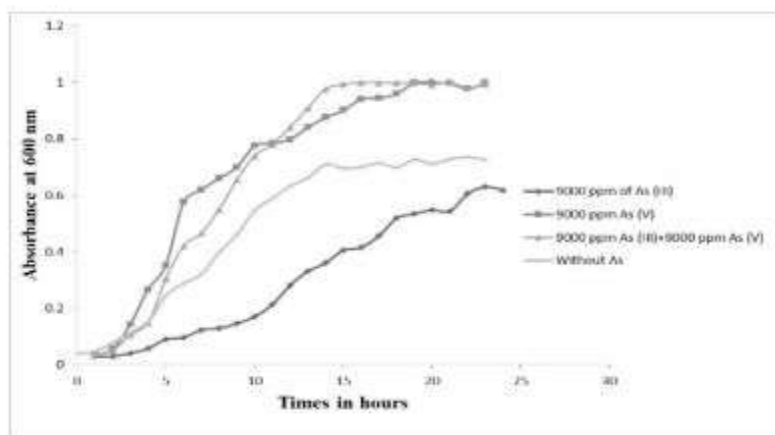
No. of Pages : 23 No. of Claims : 12

(54) Title of the invention : AN ARSENIC RESISTANT BACTERIUM STRAIN

(51) International classification	:A61K0009200000, C12N0015740000, C12N0001200000, C12R0001010000, C12R0001150000	(71) <b>Name of Applicant :</b> <b>1)INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY), VARANASI</b> Address of Applicant :Varanasi-221005, Uttar Pradesh, India Uttar Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)VISHAL MISHRA</b>
(33) Name of priority country	:NA	<b>2)VIPUL KUMAR YADAV</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides an arsenic resistant bacterium. More preferably, the present invention provides a bacterium strain having resistance to arsenic and high reduction capacity.



No. of Pages : 19 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003658 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

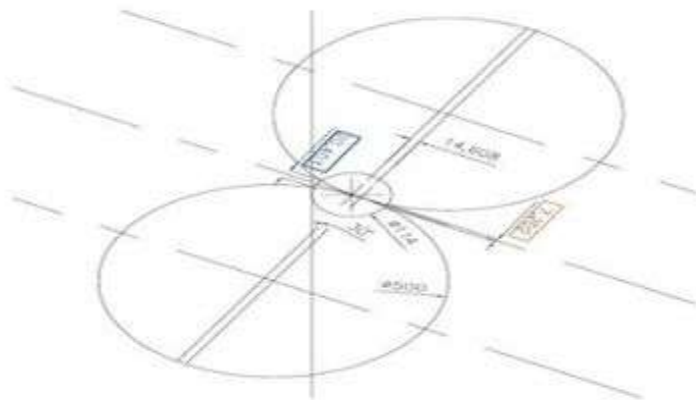
(43) Publication Date : 30/07/2021

(54) Title of the invention : PIPE PROCESSING DEVICE AND PROCESS FOR CUTTING OF TUBES AND PIPES OF UNIFORM CROSS SECTION

(51) International classification	:B26D0003160000, C21D0009000000, B23D0045120000, B01F0015060000, F16L0009020000	(71) <b>Name of Applicant :</b> <b>1)Rollform Equipment Pvt. Ltd.</b> Address of Applicant :113, New Rajdhani Enclave, Vikas Marg, Delhi - 110092 Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Aloke K Choudhury</b>
(33) Name of priority country	:NA	<b>2)S K Jain</b>
(86) International Application No	:NA	<b>3)K K Goel</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a pipe processing device for cutting of tubes and pipes of uniform cross section and a process having two blades to cut the tubes or pipes wherein one is approaching the tube/pipe from the top and the other from the bottom. Further, the invention pertains to a device with 2 blades to cut tubes of high OD and thickness increasing productivity of the production line by 50 %.



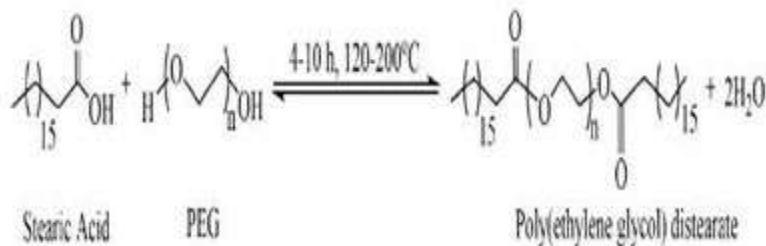
No. of Pages : 30 No. of Claims : 4

(54) Title of the invention : NANO ENCAPSULATED PHASE CHANGE MATERIALS FOR THERMAL REGULATION AND ENERGY STORAGE

(51) International classification	:A23L0027000000, B01J0020100000, C08F0290060000, C08G0077500000, F28D0020020000	(71)Name of Applicant : <b>1)INDIAN INSTITUTE OF TECHNOLOGY DELHI</b> Address of Applicant :Hauz Khas, New Delhi - 110016 Delhi India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)TRIPATHI, Bijay Prakash</b>
(33) Name of priority country	:NA	<b>2)KUMAR, Anubhav</b>
(86) International Application No	:NA	<b>3)JAIN, Harshit</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a novel method to produce low to medium molecular weight PEG-distearates based PCMs using a catalyst free esterification reaction followed by its encapsulation in nano size silica layer. The method involves esterification of PEGs having molecular weight in the range of 1000-6000 g mol<sup>-1</sup> and stearic acid. The encapsulation of PEG-distearates is carried out by mini sol-gel emulsion method. The nano encapsulated PEG-distearates exhibits improved latent heat properties.



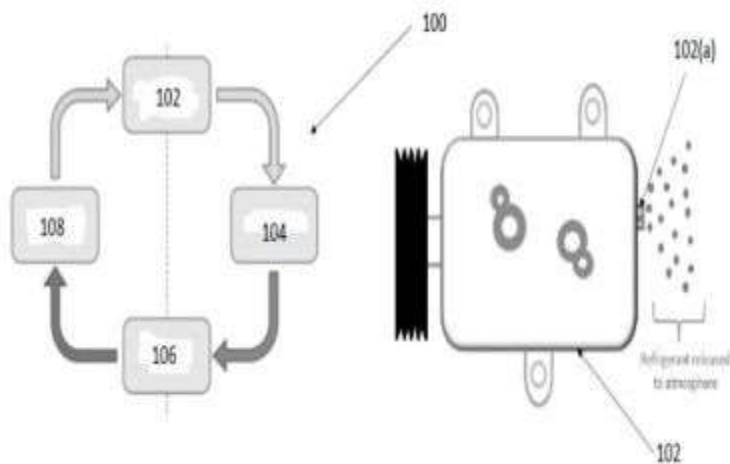
No. of Pages : 33 No. of Claims : 9

(54) Title of the invention : HVAC SYSTEM FOR PREVENTING LEAKAGE OF REFRIGERANT FROM A COMPRESSOR

(51) International classification	:F04B0039120000, B65D0090340000, A61F0002000000, F16K0015020000, F16K0017120000	(71) <b>Name of Applicant :</b> <b>1)MARUTI SUZUKI INDIA LIMITED</b> Address of Applicant :1, Nelson Mandela Road, Vasant Kunj, New Delhi, Delhi -110070, India Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SHRIGANESH UMBARKAR</b>
(33) Name of priority country	:NA	<b>2)MUKESH KUMAR</b>
(86) International Application No	:NA	<b>3)RAJA PRASAD LINGAMPELLY</b>
Filing Date	:NA	<b>4)SAHIL GAKHAR</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present disclosure relates to an HVAC system for preventing leakage of refrigerant from a compressor to the atmosphere. The HVAC system comprises the compressor (200), a storage tank (202), a pressure relief valve (204) on the compressor (200), two conduits (206 and 210), and a one-way check valve (208). The storage tank (202) is integrally formed or detachably coupled with the compressor (200). The refrigerant directly discharges from the compressor (200) to the storage tank (202) on opening of the pressure relief valve (204) mounted on the compressor (200) or with the help of the conduit (206) provided between the pressure relief valve (204) and the storage tank (202). The one-way check valve (208) mounted on the storage tank (202) discharges the refrigerant for further purposes or directs it to a suction pipe (110) of the compressor (200) through the conduit (210) provided between the suction pipe (110) and the one-way check valve (208).



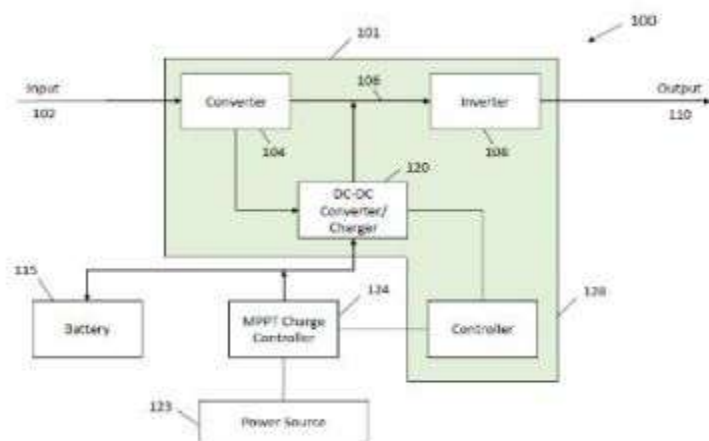
No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : LOAD DISTRIBUTION FOR A HYBRID UPS SYSTEM

(51) International classification	:C07D0403120000, H04W0036220000, C07D0403140000, C07D0417060000, C07D0413040000	(71) <b>Name of Applicant :</b> <b>1)Schneider Electric IT Corporation</b> Address of Applicant :70 Mechanic Street, Foxboro, MA 02035, United States of America U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)DAS, Rana</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Embodiments herein provide a UPS system comprising an input, a converter configured to convert input AC power into DC power, a DC bus configured to receive DC power from the converter, an inverter configured to convert DC power from the DC bus into output AC power, a Maximum Power Point Tracking (MPPT) controller configured to receive DC power from a power source and to identify a maximum power point of the power source, a DC-DC converter configured to regulate DC power provided from the MPPT controller to the DC bus, and a controller configured to determine whether the maximum power point of the power source is greater than or equal to at least one threshold level, and in response to determining that the maximum power point is greater than or equal to the at least one threshold level, operate the DC-DC converter to draw DC power from the MPPT controller at the maximum power point of the power source.



No. of Pages : 23 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003831 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD, KIT AND A LAB-ON-A-CHIP FOR DIAGNOSIS, DETECTION, MONITORING AND TREATMENT OF CARIOVASCLUR DISEASE

(51) International classification	:C12Q0001688600, G01N0033574000, G01N0033680000, G01N0033564000, B01L0003000000	(71) <b>Name of Applicant :</b> <b>1)RAI BALWANT</b> Address of Applicant :Vill-Bhangu, P.O.-Sahuwala 1, District- Sirsa, (Haryana), INDIA Haryana India <b>2)KAUR JASDEEP</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)RAI BALWANT</b>
(33) Name of priority country	:NA	<b>2)KAUR JASDEEP</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Provided herein are methods, devices, compositions, and kits for diagnosis, prognosis and treatment & management of cardiovascular disease by using novel saliva biomarkers. Means and methods for evaluating data generated using one or multiple salivary biomarkers in order to validate findings and further the use of kits, point of care, lab-on-a-chip in clinical, diagnostic and therapeutic uses is also included.

No. of Pages : 46 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003839 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : IMPEDIMETRIC SENSORS FOR CYTOTOXICITY ANALYSIS

(51) International classification	:G01N0027327000, C12Q0001000000, G01N0027020000, G01N0027404000, G01N0033483000	(71) <b>Name of Applicant :</b> <b>1)INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE</b> Address of Applicant :ROORKEE UTTARAKHAND- 247667, INDIA Uttarakhand India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DR. RANGADHAR PRADHAN</b>
(33) Name of priority country	:NA	<b>2)DR. SANJEEV MANHAS</b>
(86) International Application No	:NA	<b>3)DR. GOPINTH PACKIRISAMY</b>
Filing Date	:NA	<b>4)MR. ASHISH KALKAL</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an electric cell-substrate impedance sensing-based biosensor to evaluate cytotoxicity of anti-cancerous drugs. The biosensor comprises working electrode (WE), sensing electrode (SE), reference electrode (RE), and counter electrode (CE) wherein sensing electrode(SE), reference electrode (RE), and counter electrode (CE) are placed at a minimum distance of 100 (im from the working electrode (WE) to avoid cross-contamination. Large contact pads are utilized to connect the sensor areas by interconnections followed by coating of SU8 having thickness of 50 im to elude noises in the final impedance data.

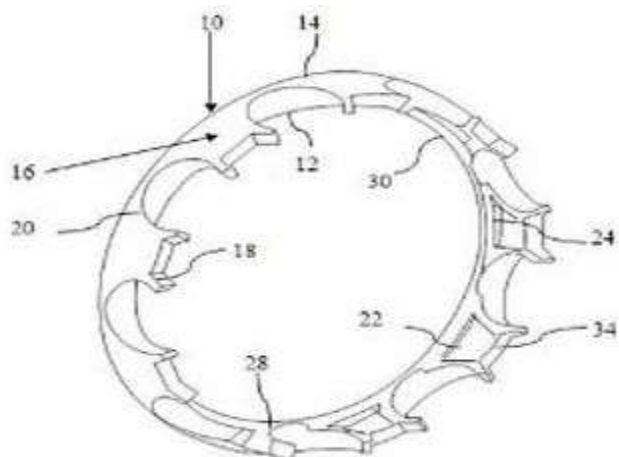
No. of Pages : 29 No. of Claims : 4

(54) Title of the invention : A RETAINER CAGE FOR ROLLING ELEMENTS OF A BEARING ASSEMBLY

(51) International classification	:F16C0033380000, F16C0033460000, F16C0033660000, F16C0033410000, F16C0019540000	(71) <b>Name of Applicant :</b> <b>1)NATIONAL ENGINEERING INDUSTRIES LTD.</b> Address of Applicant :Khatipura Road, Jaipur-302 006, Rajasthan, India Rajasthan India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)BORSE, Deepak Ravindra</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present disclosure relates to a retainer cage (100) for rolling elements (50) of a bearing assembly. The retainer cage (100) comprises an annular ring (10), a plurality of projections (16), and a pocket (22). The ring (10) is defined by an inner circumferential surface (12) and an outer circumferential surface (14), a top axial surface, and a bottom axial surface (30). The plurality of projections (16) has pair of arms (18) defining a space (20) for receiving the rolling element (50) therein. The projections (16) extend axially over the ring (10) such that, the pocket (22) is defined in an inner surface of the projections (16) to facilitate lubrication of the rolling elements (50). The cage (100) reduces deflection and deformation of the bearing assemblies at higher rotational speeds.



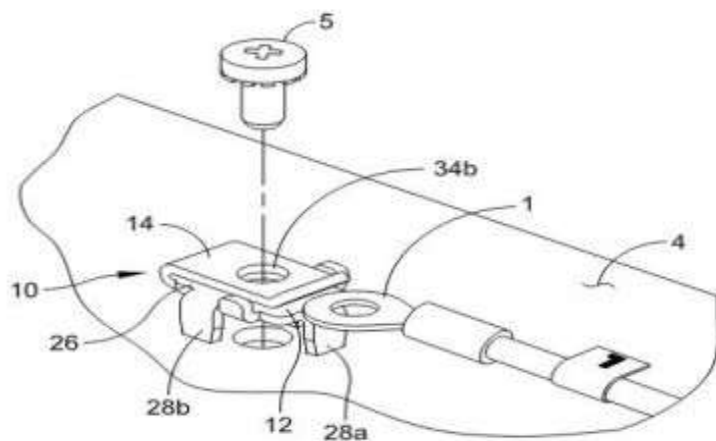
No. of Pages : 18 No. of Claims : 7

(54) Title of the invention : PRINTED CIRCUIT BOARD CONNECTOR

(51) International classification	:C07D0403120000, H04W0036220000, C07D0403140000, C07D0417060000, C07D0413040000	(71) <b>Name of Applicant :</b> <b>1)Schneider Electric IT Corporation</b> Address of Applicant :132 Fairgrounds Road, West Kingston, RI 02892, United States of America U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KUMARSWAMY, Chandan Kumar Hosapete</b>
(33) Name of priority country	:NA	<b>2)KUMAR G., Santhosh</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A printed circuit board connector is configured to secure a terminal of a cable to a printed circuit board. The connector includes a body having a lower body portion and an upper body portion spaced from the lower body portion. The lower body portion has an upwardly facing surface and the upper body portion has a downwardly facing surface that faces the upwardly facing surface of the lower body portion. A space is provided between the lower body portion and the upper body portion to define a cavity configured to receive a terminal of a cable. The upwardly facing surface of the lower body portion and the downwardly facing surface of the upper body portion, when engaged by a fastener, are configured to engage the terminal to secure the terminal.



No. of Pages : 22 No. of Claims : 20

(54) Title of the invention : ELECTRICALLY CONDUCTIVE AERATED CONCRETE (ECAC) BLOCKS

(51) International classification	:H05B0003340000, C04B0038020000, B60N0002000000, E01C0009000000, B28B0001500000	(71) <b>Name of Applicant :</b> <b>1)INDIAN INSTITUTE OF TECHNOLOGY DELHI</b> Address of Applicant :Hauz Khas, New Delhi - 110016 Delhi India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)BHASKARWAR, Ashok Niwritti</b>
(33) Name of priority country	:NA	<b>2)SHUKLA, Arunima</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to the preparation of an aerated concrete blocks with electrically conductive and thermally insulating property comprising incorporation of steel wires into the colloidal gas aphrons (CAGs). The light weight aerated concrete block of the present invention will not only help to generate the heat but also keep the area warm for a longer time. These blocks have an application in the cold terrains/countries, de-icing of roads/airports, and electrical grounding.



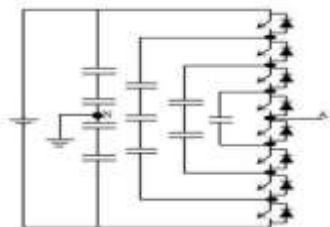
No. of Pages : 29 No. of Claims : 19

(54) Title of the invention : MULTILEVEL INVERTER

(51) International classification	:H02M0007487000, H02M0007483000, H02M0007538700, G01R0033385000, H02J0003380000	(71) <b>Name of Applicant :</b> <b>1)NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH</b> Address of Applicant :Sector 26, Chandigarh -160019, INDIA Punjab India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ROHIT KUMAR</b>
(33) Name of priority country	:NA	<b>2)Dr. SHIMI SUDHA LETHA</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a Multilevel inverter designed by interconnection of six unidirectional power switches, two bidirectional power switches and three dc voltage sources comprising, a H-bridge, wherein, the H-bridge comprises plurality of combinational power switches and positive (P) and negative (N) terminals of the dc link voltage which synthesize an ac voltage by utilizing almost all possible additive and subtractive cases of the voltage sources with its combinational plurality of power switches.



No. of Pages : 36 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003984 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : ACCIDENT AVOIDING SYSTEM USING MAGNETIC REPULSION (AASUMR)

(51) International classification	:G08G0001160000, G08B0025000000, G08B0025010000, G01S0017930000, B66F0003460000	(71) <b>Name of Applicant :</b> <b>1)JEEVESH ATTRI</b> Address of Applicant :JEEVESH ATTRI S/O SHRI BALWAN SINGH FLAT NO. 208, ROYAL FAME, SECTOR- 117, MOHALI, PUNJAB, INDIA-160055 Punjab India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)JEEVESH ATTRI</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An Accident Avoiding System Using Magnetic Repulsion (AASUMR) involving installation of Electromagnets on all four sides of the cars and controller is configured to controlling current magnitude/battery pack for in response to the detection of Standard safety distance module (SSD) or as per presetting by the operator in Minimum Distance Module (MMD) creating the sufficient repulsive force by electromagnet to the approaching vehicle/ nearing the road edges configured with corresponding AASUMR system and is in integration of EMS (Emergency Messaging Service) wherein the system encompassing the capability to raise SOS in case of activation of AASUMR or collision/derailing of vehicle, accidental halt, the first message is sent to a registered user/ operator input of the system, and the second message may be sent to an alarm center. It will also avoid accidents that may occur in hilly areas due to the slipping of vehicles like buses, trucks and cars off the road.

No. of Pages : 13 No. of Claims : 5

(54) Title of the invention : METHOD AND SYSTEM TO CONTROL MULTIPLE SOURCES OF ENERGY USING AN UNINTERRUPTIBLE POWER SUPPLY

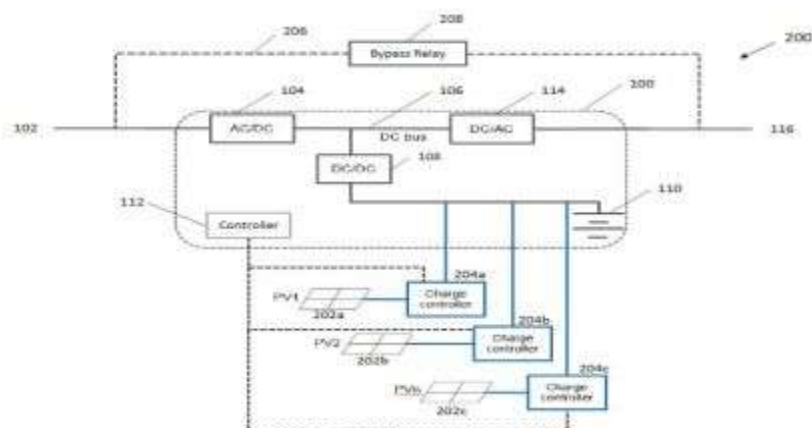
(51) International classification :G01N0033533000,  
H05B0031000000,  
B01J0020286000,  
C02F0003280000,  
B63C0007260000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Schneider Electric IT Corporation**  
Address of Applicant :132 Fairgrounds Road West Kingston  
RI 02892, United States of America U.S.A.  
(72)Name of Inventor :  
**1)GHODKE, Ajit Ashok**  
**2)MHASKAR, Uday Prakashrao**

(57) Abstract :

A power supply system including an uninterruptible power supply (UPS) comprising an input coupled to an AC source and configured to receive input AC power from the AC source and an output configured to provide AC output power to a load, the UPS including a converter coupled to the input, an inverter coupled to the output, and a DC bus coupled between the converter and the inverter, a renewable power source configured to provide DC power derived from a renewable energy source, a first DC/DC converter coupled between the renewable power source and the DC bus and configured to provide DC power derived from the renewable power source to the DC bus, and a controller in communication with the first DC/DC converter and configured to monitor an output power capability of the renewable power source, and to operate the first DC/DC converter to provide DC power derived from the renewable power source to the DC bus based on the output power capability of the renewable power source.



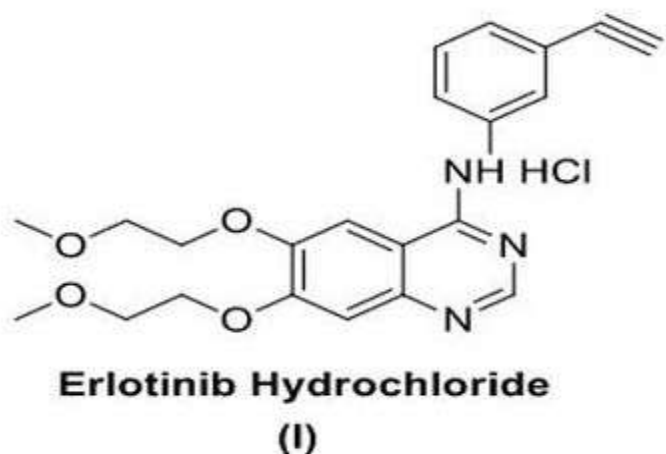
No. of Pages : 32 No. of Claims : 30

(54) Title of the invention : IMPROVED PROCESS FOR THE PREPARATION OF HIGHLY PURE ERLOTINIB HYDROCHLORIDE

(51) International classification	:C07D0239940000, A61K0031517000, A61K0008978900, A61K0008979400, B01D0015380000	(71)Name of Applicant : <b>1)SHIVALIK RASAYAN LIMITED</b> Address of Applicant :Pharma R&D Centre-Bhiwadi (Medicamen Biotech Campus) SP 1192 A & B, Phase IV, RIICO Industrial Area Bhiwadi (Distt. Alwar) Rajasthan Rajasthan India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)AKSHAY KANT CHATURVEDI</b>
(33) Name of priority country	:NA	<b>2)SATYENDRA SINGH</b>
(86) International Application No	:NA	<b>3)BIJAN PANDA</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides to an improved process for the preparation of highly pure Erlotinib hydrochloride of formula (I) The substantially pure Erlotinib hydrochloride (I) obtained by improved process of the present invention is having purity of greater than 99.8% (by HPLC). Erlotinib hydrochloride is useful in the treatment of cancer more particularly in the treatment of lung cancer and pancreatic cancer.



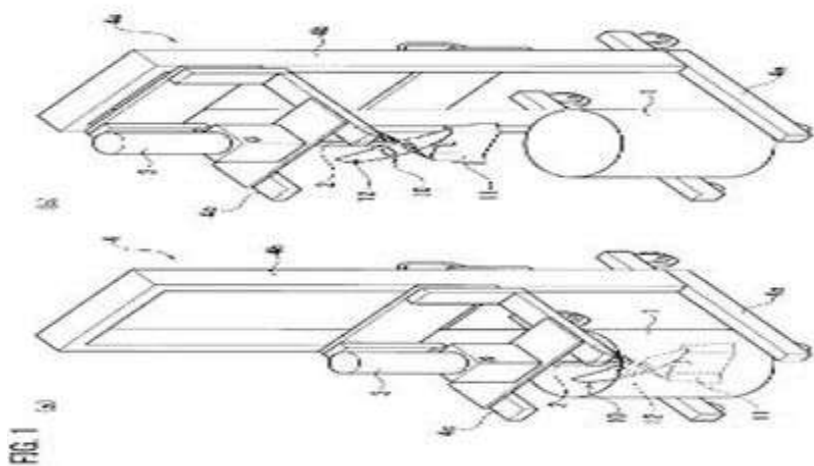
No. of Pages : 0 No. of Claims : 0

(54) Title of the invention : STIRRING DEVICE, PREPARATION METHOD AND ADHESIVE

(51) International classification	:G01N0033533000, H05B0031000000, B01J0020286000, C02F0003280000, B63C0007260000	(71) <b>Name of Applicant :</b> <b>1)TOYO INK SC HOLDINGS CO., LTD.</b> Address of Applicant :2-1, Kyobashi 2-chome, Chuo-ku, Tokyo 104-8377, Japan Japan <b>2)TOYO CHEM CO., LTD.</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)HINO, Mitsuharu</b>
(33) Name of priority country	:NA	<b>2)NAKAMURA, Naotoshi</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Provided is a stirring device that stirs a main agent and a curing agent to prepare an adhesive. The stirring device includes: a stirring vessel 1 configured to store provided main agent and curing agent; a rotating shaft 2 rotatably supported in an inside of the stirring vessel 1; and a stirring impeller 10 attached to the rotating shaft 2 and rotationally driven in the inside of the stirring vessel 1, and configured to stir the main agent and the curing agent that are stored in the stirring vessel 1, wherein, with regard to the adhesive prepared by being stirred by the stirring impeller 10, a rise of a temperature from a temperature of the provided main agent and curing agent is suppressed to 10°C or less.



No. of Pages : 42 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202014048977 A

(19) INDIA

(22) Date of filing of Application :10/11/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DETECTION AND CHARACTERIZATION OF DEFECTS IN PHARMACEUTICAL CYLINDRICAL CONTAINERS

(51) International classification	:G01N0021900000, A61J0001000000, A61K0008240000, A61L0027440000, H03H0009100000	(71) <b>Name of Applicant :</b> <b>1)SCHOTT Schweiz AG</b> Address of Applicant :St. Josefen-Str. 20, 9001 St. Gallen (CH) Switzerland
(31) Priority Document No	:20 153 400.5	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2020	<b>1)PFISTER, Andreas</b>
(33) Name of priority country	:EPO	<b>2)WEDLICH, Melchior</b>
(86) International Application No	:NA	<b>3)KL,,GER, Christian</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an apparatus for inspecting a pharmaceutical cylindrical container (1) made of glass or of a polymer, to a corresponding method for inspecting the pharmaceutical cylindrical container (1) made of glass or of a polymer and to a bundle of pharmaceutical cylindrical containers (1) made of glass or of a polymer inspected by the apparatus or the method.

No. of Pages : 45 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202014049658 A

(19) INDIA

(22) Date of filing of Application :13/11/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DETECTION AND CHARACTERIZATION OF DEFECTS IN PHARMACEUTICAL CYLINDRICAL CONTAINERS

(51) International classification	:H01M0010340000, B82Y0030000000, C03B0019120000, G06F0016230000, B01D0053780000	(71) <b>Name of Applicant :</b> <b>1)SCHOTT Schweiz AG</b> Address of Applicant :St. Josefen-Str. 20, 9001 St. Gallen (CH) Switzerland (72) <b>Name of Inventor :</b> <b>1)WILLMES, Daniel</b> <b>2)SOSMAN, Igor</b>
(31) Priority Document No	:20 153 308.0	
(32) Priority Date	:23/01/2020	
(33) Name of priority country	:EPO	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Herein described is a specific apparatus for inspecting a pharmaceutical cylindrical container, an improved method for inspecting a pharmaceutical cylindrical container and a specific bundle of pharmaceutical cylindrical container.

No. of Pages : 38 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202014050359 A

(19) INDIA

(22) Date of filing of Application :19/11/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : ELEVATOR CARS WITH CAMERA MOUNT

(51) International classification	:G03B0017560000, B66B0011020000, B66B0013120000, F16M0013040000, F16M0011200000	(71) <b>Name of Applicant :</b> <b>1)OTIS ELEVATOR COMPANY</b> Address of Applicant :One Carrier Place, Farmington, Connecticut 06032, United States of America U.S.A.
(31) Priority Document No	:20305058.8	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2020	<b>1)FAUCONNET, Aurlien</b>
(33) Name of priority country	:EPO	<b>2)MONTIGNY, Guillaume</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An elevator car (42; 103) for carrying a load in a vertical direction. The elevator car comprises at least one elevator car door (38) carrying a door coupling (20) and a camera mount (40) comprising a mounting location (46) for a camera (44). The camera mount (40) is located at the top of the elevator car (42) with the mounting location (46) positioned for a camera (44) to monitor the door coupling (20). The camera mount is deformable at least in the vertical direction, when acted on by a downwards force, such as to protect the door coupling (20) from being impacted by the camera mount (40).

No. of Pages : 23 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202014053198 A

(19) INDIA

(22) Date of filing of Application :07/12/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : VEHICLE POWER TRANSMISSION MECHANISM

(51) International classification	:F16H0063420000, B60K0006547000, B60L0009180000, F04B0035010000, B60K0006260000	(71) <b>Name of Applicant :</b> <b>1)TOYOTA JIDOSHA KABUSHIKI KAISHA</b> Address of Applicant :1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571, JAPAN Japan
(31) Priority Document No	:2020-009597	(72) <b>Name of Inventor :</b> <b>1)Kazuyoshi MANABE</b>
(32) Priority Date	:24/01/2020	
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT VEHICLE POWER TRANSMISSION MECHANISM** The present disclosure provides a vehicle power transmission mechanism including a drive source, a drive wheel, and a drive system that transmits power generated by the drive source to the drive wheel. The vehicle power transmission mechanism includes at least one coating portion (111) provided on at least one region selected from a contact portion between components constituting the vehicle power transmission mechanism and a periphery of the contact portion. The coating portion (111) contains at least a binder resin and a thermoplastic elastomer. Selected Drawing: FIG. 3A

No. of Pages : 26 No. of Claims : 12

(54) Title of the invention : SYSTEM AND METHOD FOR APPLYING A PITCH MOTOR BRAKING TORQUE TO A WIND TURBINE ROTOR BLADE •

(51) International classification	:F03D0007020000, F03D0001060000, F03D0015000000, H02P0021360000, B29L0031080000	(71) <b>Name of Applicant :</b> <b>1)GENERAL ELECTRIC COMPANY</b> Address of Applicant :1 River Road, Schenectady, New York 12345 USA U.S.A.
(31) Priority Document No	:16/750,572	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2020	<b>1)Jeffrey Alan Melius</b>
(33) Name of priority country	:U.S.A.	<b>2)Michael Lawton Rodin</b>
(86) International Application No	:NA	<b>3)Fernando Arturo Ramirez Sanchez</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A system and method are provided for applying a pitch motor braking torque to a rotor blade. Accordingly, of the pitch control system from a 1st operational mode to an emergency operational mode is initiated. The pitch motor of the pitch control system having an absence of supply current during the transition. A short-circuit is established across the Armature of the pitch motor so as to establish a current flow. The current is generated by the pitch motor in response to rotation of the rotor blade about the pitch axis when the pitch motor has the absence of supply current. In response to the current flow being generated, generating a braking torque in a single direction with the pitch motor so as to allow the rotor blade to move freely to a lesser loaded orientation relative to an original orientation to protect the wind turbine from damage. [Fig. 3]

No. of Pages : 28 No. of Claims : 15

(54) Title of the invention : CANNULA, IN PARTICULAR FOR LUMBAR PUNCTURE AND LUMBAR INJECTION, AS WELL AS METHOD OF PRODUCTION OF SAME

(51) International classification	:A61B0017340000, C12N0015110000, B29C0045730000, A61B0001320000, A61M0005310000	(71) <b>Name of Applicant :</b> <b>1)PAJUNK GMBH MEDIZINTECHNOLOGIE</b> Address of Applicant :Karl-Hall-Str. 1 78187 Geisingen, Germany Germany
(31) Priority Document No	:10 2020 102 119.4	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2020	<b>1)PAJUNK-SCHELLING Simone</b>
(33) Name of priority country	:Germany	<b>2)HAUGER Martin</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to a cannula (1, 1<sup>TM</sup>), in particular for lumbar puncture and lumbar injection, with a proximal end (4) and a distal end (5), comprising a cannula tube (10) with an inner side (11), and outer side (12), a first end region and a second end region, which forms a cannula canal (15), wherein the cannula tube (10) comprises at the second end region a tip (14) which forms the distal end (5) of the cannula (1), wherein the cannula tube (10) comprises an opening (20) of the cannula canal (15), and wherein in the cannula canal (15) on the inner side (11) a coating (18) is provided at least about the opening (20). [Figure 1b]

No. of Pages : 21 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202014055894 A

(19) INDIA

(22) Date of filing of Application :22/12/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AGENT SYSTEM, AGENT SERVER, AND COMPUTER READABLE RECORDING MEDIUM

(51) International classification	:H04W0052020000, G06F0011340000, G06F0016248000, G06Q0050160000, G07C0015000000	(71) <b>Name of Applicant :</b> <b>1)TOYOTA JIDOSHA KABUSHIKI KAISHA</b> Address of Applicant :1, Toyota-cho, Toyota-shi, Aichi-ken 471-8571, Japan Japan
(31) Priority Document No	:2020-009344	(72) <b>Name of Inventor :</b> <b>1)TAKESHITA, Kohki</b>
(32) Priority Date	:23/01/2020	
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An agent system includes: a terminal device including a first processor including hardware, the first processor being configured to transfer user's uttered voice to a server configured to actualize a function of one voice interaction agent out of a plurality of the voice interaction agents; and a server including a second processor including hardware, the second processor being configured to recognize the user's uttered voice transferred from the terminal device, and determine to which voice interaction agent out of the plurality of voice interaction agents an instruction included in the user's uttered voice is directed.

No. of Pages : 40 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202014056969 A

(19) INDIA

(22) Date of filing of Application :29/12/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DETECTION AND CHARACTERIZATION OF DEFECTS IN PHARMACEUTICAL CYLINDRICAL CONTAINERS

(51) International classification	:C09K0019560000, C08G0063672000, G01N0021900000, B01D0053780000, F28F0021060000	(71) <b>Name of Applicant :</b> <b>1)SCHOTT Schweiz AG</b> Address of Applicant :St. Josefen-Str. 20, 9001 St. Gallen (CH) Switzerland
(31) Priority Document No	:20 153 330.4	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2020	<b>1)WILLMES, Daniel</b>
(33) Name of priority country	:EPO	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Herein described is a specific apparatus for inspecting a pharmaceutical cylindrical container made of a polymer, a specific method for inspecting a pharmaceutical cylindrical container made of a polymer and a specific bundle of pharmaceutical cylindrical containers made of a polymer

No. of Pages : 32 No. of Claims : 15

(54) Title of the invention : FLEXIBLE CIRCUIT BOARD, MANUFACTURING METHOD, ELECTRONIC DEVICE MODULE, AND ELECTRONIC DEVICE

(51) International classification	:H05K0001020000, H05K0001110000, H01L0023310000, G09G0005000000, H05K0001160000	(71)Name of Applicant : <b>1)BOE TECHNOLOGY GROUP CO., LTD.</b> Address of Applicant :No.10 Jiuxianqiao Rd., Chaoyang District Beijing 100015 China <b>2)CHENGDU BOE OPTOELECTRONICS TECHNOLOGY CO., LTD.</b>
(31) Priority Document No	:201910093341.0	(72)Name of Inventor :
(32) Priority Date	:30/01/2019	<b>1)XIONG, Ren</b>
(33) Name of priority country	:China	<b>2)TANG, Qiang</b>
(86) International Application No	:PCT/CN2020/073940	
Filing Date	:23/01/2020	
(87) International Publication No	:WO 2020/156475	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A flexible circuit board, a manufacturing method, an electronic device module, and an electronic device. The flexible circuit board (10) comprises a main sub-circuit board (100) and a bridging sub-circuit board (200). The main sub-circuit board (100) comprises a first substrate (1001), and a first bridging end (101), a second bridging end (102), a first trace portion (103), and a second trace portion (104) disposed on the first substrate (1001). The first trace portion (103) and the second trace portion (104) are spaced apart, and are electrically connected to the first bridging end (101) and the second bridging end, respectively. The bridging sub-circuit board (200) comprises a second substrate (2001), and a third bridging end (201), a fourth bridging end (202), and a third trace portion (203) disposed on the second substrate (2001), the third trace portion is used for first functional traces, and the third bridging end (201) and the fourth bridging end (202) are electrically connected via the third trace portion (203). The first substrate (1001) and the second substrate (2001) are not in direct contact. The bridging sub-circuit board (200) is configured to be electrically connected to the first bridging end (101) and the second bridging end (102) respectively via the third bridging end (201) and the fourth bridging end (202), and is thus installed on the main sub-circuit board (100). The flexible circuit board (10) has a simple trace layout, and is easy to manufacture.

No. of Pages : 38 No. of Claims : 26

(54) Title of the invention : SENSING SYSTEMS

(51) International classification	:C12Q0001686900, G06F0001160000, C09K0008620000, H01L0029205000, A61B0005148600	(71) <b>Name of Applicant :</b> <b>1)ILLUMINA, INC.</b> Address of Applicant :5200 Illumina Way San Diego, California 92122 U.S.A.
(31) Priority Document No	:62/806545	(72) <b>Name of Inventor :</b>
(32) Priority Date	:15/02/2019	<b>1)FISHER, Jeffrey S.</b>
(33) Name of priority country	:U.S.A.	<b>2)MATHER, Brian D.</b>
(86) International Application No	:PCT/US2020/014942	<b>3)PUGLIESE, Kaitlin M.</b>
Filing Date	:24/01/2020	<b>4)MANDELL, Jeffrey G.</b>
(87) International Publication No	:WO 2020/167447	<b>5)ROGERT BACIGALUPO, Maria Candelaria</b>
(61) Patent of Addition to Application Number	:NA	<b>6)BOYANOV, Boyan</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In an example, a sensing system includes a pH sensor. The pH sensor includes two electrodes and a conductive channel operatively connected to the two electrodes. A complex is attached to the conductive channel of the pH sensor. The complex includes a polymerase linked to at least one pH altering moiety that is to participate in generating a pH change within proximity of the conductive channel from consumption of a secondary substrate in a fluid that is exposed to the pH sensor. The at least one pH altering moiety is selected from the group consisting of an enzyme, a metal coordination complex, a co-factor, and an activator.

No. of Pages : 67 No. of Claims : 43

(54) Title of the invention : PRESSURE REGULATOR

(51) International classification	:F16K0015020000, G01D0011240000, F02M0037000000, G01D0005040000, H01Q0001240000	(71) <b>Name of Applicant :</b> <b>1)AISAN KOGYO KABUSHIKI KAISHA</b> Address of Applicant :1-1, Kyowa-cho 1-chome, Obu-shi, Aichi-ken, Japan Japan
(31) Priority Document No	:2020-010737	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Takehiro SHIMIZU</b>
(33) Name of priority country	:Japan	<b>2)Hiroshi MAGOCHI</b>
(86) International Application No	:NA	<b>3)Takashi YOKOO</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT PRESSURE REGULATOR A pressure regulator (50) includes a housing (60) having a valve seat (62) and a flow inlet (64). A ball (54) opens and closes the flow inlet (64) in cooperation with the valve seat (62). A coil spring (56) is configured to bias the ball (54) toward the valve seat (62). The cover member (70) retains the coil spring (56) in cooperation with the housing (60). The housing (60) and the cover member (70) include first plane portions (60b, 70b) having a straight cross section, bent portions (60a, 70a) having a curved cross-section, and second plane portions (60b, 70b) having a straight cross section. The bent portions (60a, 70a) extend radially outward from the first plane portions (60b, 70b). The bent portions (60a, 70a) are connected to the second plane portions (60b, 70b). The second plane portions (60b, 70b) are located radially outside of the first plane portions (60b, 70b). The second plane portions (60b, 70b) have a thickness different from that of the first plane portion (60b, 70b).

No. of Pages : 25 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114000846 A

(19) INDIA

(22) Date of filing of Application :08/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR DYNAMICALLY ALLOCATING RADIO RESOURCES IN A WIRELESS COMMUNICATION SYSTEM

(51) International classification	:H04W0072040000, H04W0072120000, H04L0005000000, H04W0028080000, H04L0029080000	(71) <b>Name of Applicant :</b> <b>1)STERLITE TECHNOLOGIES LIMITED</b> Address of Applicant :STERLITE TECHNOLOGIES LIMITED IFFCO Tower, 3rd Floor, Plot No.3, Sector 29, Gurgaon 122002, Haryana, India Haryana India
(31) Priority Document No	:62/966,126	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Shyam Parekh</b>
(33) Name of priority country	:U.S.A.	<b>2)Ravishankar Ravindran</b>
(86) International Application No	:NA	<b>3)Kevin Tang</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT METHOD AND APPARATUS FOR DYNAMICALLY ALLOCATING RADIO RESOURCES IN A WIRELESS COMMUNICATION SYSTEM A method and apparatus for providing dynamic allocation of radio resources in a wireless communication system (1000) is disclosed. The method includes receiving, by a first controller (300) from a second controller (200), a dynamic spectrums sharing (DSS) policy configuration message, wherein the DSS policy configuration message comprising a resource allocation proportion between a type one network scheduler (600) and a type two network scheduler (700). The method further includes receiving, by the first controller from the type one network scheduler and the type two network scheduler, a plurality of report messages and a plurality of key performance indicators (KPIs). The method further includes assigning, by the first controller (300) to the type one network scheduler (600) and the type two network scheduler (700), a plurality of physical resource blocks (PRBs) based on the DSS policy configuration message, the plurality of report messages and the plurality of KPIs. FIG. 5

No. of Pages : 48 No. of Claims : 29

(54) Title of the invention : VEHICLE REAR STRUCTURE

(51) International classification	:B62D0025080000, B60Q0001300000, H04R0001020000, B62D0037020000, H04R0007040000	(71) <b>Name of Applicant :</b> <b>1)SUZUKI MOTOR CORPORATION</b> Address of Applicant :300 Takatsuka-cho, Minami-ku, Hamamatsu-shi, Shizuoka 432-8611, Japan Japan
(31) Priority Document No	:2020-012518	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2020	<b>1)Shinei MOCHIZUKI</b>
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

To suppress transmission of vibration to a floor panel from a differential device. 5 [Solution] In a vehicle rear structure, a differential device is mounted to a mounting portion 20 provided on a lower surface 12 of a rear cross member 10. The mounting portion 20 has a support member 21 supporting the differential device, and a bracket 23 to which the support member 21 is fixed and which is mounted to the lower surface 12 of the rear cross member 10. A step portion 14 is provided on the lower surface 12 of the cross member 10, and the upper 10 portion of the support member 21 faces the step portion 14, and is arranged at an interval on the lower side. The step portion 14 extends in the front-rear direction, and is formed so as to be continuous with a front wall 11A and a rear wall 11B of the cross member 10.

No. of Pages : 32 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114001433 A

(19) INDIA

(22) Date of filing of Application :12/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR ALLOCATING BANDWIDTH IN A WIRELESS COMMUNICATION SYSTEM BASED ON UTILIZATION

(51) International classification	:H04W0072040000, H04L0005000000, H04W0072120000, H04W0016100000, H04W0084120000	(71) <b>Name of Applicant :</b> <b>1)STERLITE TECHNOLOGIES LIMITED,</b> Address of Applicant :STERLITE TECHNOLOGIES LIMITED, IFFCO Tower, 3rd Floor, Plot No.3, Sector 29, Gurgaon 122002, Haryana, India Haryana India
(31) Priority Document No	:62/966,126	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Ravishankar Ravindran</b>
(33) Name of priority country	:U.S.A.	<b>2)Shyam Parekh</b>
(86) International Application No	:NA	<b>3)Kevin Tang</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT METHOD AND APPARATUS FOR ALLOCATING BANDWIDTH IN A WIRELESS COMMUNICATION SYSTEM BASED ON UTILIZATION A method and apparatus for dynamic allocation of radio resources in a wireless communication system (1000) is provided. The method includes receiving a plurality of traffic arrival information for a first time interval. The plurality of traffic arrival information includes a one or more traffic buffer demand, a one or more traffic arrival information for the first-time interval and a one or more average deficit value for the first-time interval. Further, the method includes, estimating a next average deficit for a second time interval based on the one or more average deficit value for the first-time interval. Furthermore, computing a forecast allocation based on the one or more traffic buffer demand, the one or more average deficit value for the first-time interval and the estimated next average deficit for the second time interval and allocating at least one physical resource block (PRB) based on the computed forecast allocation. FIG. 4

No. of Pages : 41 No. of Claims : 32

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114001751 A

(19) INDIA

(22) Date of filing of Application :14/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : APPARATUS AND METHOD FOR SUPPLYING COOLANT TO A MEDICAL INSTRUMENT

(51) International classification	:A61B0018020000, F17C0007000000, C08K0009060000, B01L0003000000, B29C0070500000	(71) <b>Name of Applicant :</b> <b>1)ERBE ELEKTROMEDIZIN GMBH</b> Address of Applicant :Waldhoernlestrasse 17, 72072 Tuebingen, Germany Germany
(31) Priority Document No	:EP 20153421.1	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2020	<b>1)MAYER Volker</b>
(33) Name of priority country	:EUROPEAN UNION	<b>2)FRITZ Martin Georg</b>
(86) International Application No	:NA	<b>3)STRAUB Frank</b>
Filing Date	:NA	<b>4)WANDEL Waldemar</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The apparatus (10) for supply of coolant, particularly CO<sub>2</sub> that is preferably provided in bottles, to cryosurgical instruments can comprise a mechanical or thermal compression device. For this a pump (17) can be provided in order to supply the CO<sub>2</sub> taken from the bottle in a buffer container (19) with a desired operation pressure, wherein the pressure in the gas bottle can be less than the desired operation pressure. The apparatus (10) comprises a tempering device (27) that is configured to bring the coolant to a desired temperature, particularly a temperature that is higher than the temperature in the gas bottle or in another storage container (15). In so doing, a safe supply of a cryosurgical instrument with coolant having the desired pressure and sufficient temperature is ensured. Particularly, undesired droplet creation in the instrument or supplying pipes is avoided. (Figure 1)

No. of Pages : 36 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114001791 A

(19) INDIA

(22) Date of filing of Application :14/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : POWER STORAGE DEVICE

(51) International classification	:H01L0023310000, H01L0023000000, H01M0002020000, H01L0023495000, H01M0010613000	(71)Name of Applicant : <b>1)KABUSHIKI KAISHA TOYOTA JIDOSHOKKI</b> Address of Applicant :2-1, Toyoda-cho, Kariya-shi, Aichi 448-8671, Japan Japan <b>2)TOYOTA JIDOSHA KABUSHIKI KAISHA</b>
(31) Priority Document No	:2020-009789	(72)Name of Inventor :
(32) Priority Date	:24/01/2020	<b>1)Satoshi HAMAOKA</b>
(33) Name of priority country	:Japan	<b>2)Taku INOUE</b>
(86) International Application No	:NA	<b>3)Shimpei MUNE</b>
Filing Date	:NA	<b>4)Hiromi UEDA</b>
(87) International Publication No	: NA	<b>5)Junichi IIDA</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Satoshi MORIOKA</b>
Filing Date	:NA	<b>7)Motoyoshi OKUMURA</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT POWER STORAGE DEVICE** A power storage device includes a power storage module, a conductive plate, and a sealing member. The power storage module includes an electrode laminate and a sealing body. The sealing body includes a plurality of resin portions. Metal plates at laminate ends of the electrode laminate each have an exposed surface exposed from the resin portion. The exposed surface includes a contact region and a non-contact region. The sealing member includes a first sealing portion. The first sealing portion is provided along an inner edge of the resin portion to be in contact with the resin portion. The first sealing portion adheres to the conductive plate and the non-contact region and fills a portion between the conductive plate and the non-contact region. The first sealing portion seals a portion between the conductive plate and the exposed surface.

No. of Pages : 56 No. of Claims : 7

(54) Title of the invention : METHOD AND APPARATUS FOR ALLOCATING BANDWIDTH IN A WIRELESS COMMUNICATION SYSTEM BASED ON DEMAND •

(51) International classification	:H04W0072040000, H04L0005000000, H04W0072120000, H04L0012927000, H04W0088080000	(71) <b>Name of Applicant :</b> <b>1)STERLITE TECHNOLOGIES LIMITED,</b> Address of Applicant :STERLITE TECHNOLOGIES LIMITED, IFFCO Tower, 3rd Floor, Plot No.3, Sector 29, Gurgaon 122002, Haryana, India Haryana India
(31) Priority Document No	:62/966,126	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Shyam Parekh</b>
(33) Name of priority country	:U.S.A.	<b>2)Ravishankar Ravindran</b>
(86) International Application No	:NA	<b>3)Kevin Tang</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT METHOD AND APPARATUS FOR ALLOCATING BANDWIDTH IN A WIRELESS COMMUNICATION SYSTEM BASED ON DEMAND • A method and apparatus for dynamic allocation of radio resources in a wireless communication system (1000) is provided. The method includes receiving a plurality of traffic parameters for a first time interval. The plurality of traffic parameters comprises at least one traffic arrival information for the first time interval. Further, the method includes estimating the at least one traffic arrival information for a second time interval based on the received at least one traffic arrival information for the first time interval. Furthermore, the method includes determining a bandwidth demand for the second time interval based on the estimated at least one traffic arrival information for the second time interval and the plurality of traffic parameters for the first time interval and allocating at least one resource block during the second time interval based on the determined bandwidth demand for the second time interval. FIG. 5

No. of Pages : 38 No. of Claims : 26

(54) Title of the invention : METHOD AND APPARATUS FOR ORTHOGONAL RESOURCE ALLOCATION IN A WIRELESS COMMUNICATION SYSTEM •

(51) International classification	:H04W0072040000, H04L0005000000, H04W0072120000, H04W0016140000, H04W0016040000	(71) <b>Name of Applicant :</b> <b>1)STERLITE TECHNOLOGIES LIMITED,</b> Address of Applicant :STERLITE TECHNOLOGIES LIMITED, IFFCO Tower, 3rd Floor, Plot No.3, Sector 29, Gurgaon 122002, Haryana, India Haryana India
(31) Priority Document No	:62/966,126	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Shyam Parekh</b>
(33) Name of priority country	:U.S.A.	<b>2)Ravishankar Ravindran</b>
(86) International Application No	:NA	<b>3)Kevin Tang</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT METHOD AND APPARATUS FOR ORTHOGONAL RESOURCE ALLOCATION IN A WIRELESS COMMUNICATION SYSTEM A method and an apparatus for providing dynamic orthogonal assignment of radio resources in a wireless communication system (1000) is disclosed. The method includes receiving a dynamic spectrum sharing (DSS) policy configuration message from a second controller (200) and receiving a physical resource block (PRB) assignment bitmap proposal and a protected bitmap indication data from a type one network scheduler (600) and a type two network scheduler (700). The method includes computing an available bandwidth based on the PRB assignment bitmap proposal and the protected bitmap indication data and further computing a bandwidth allocation for the type one network scheduler and the type two network scheduler based on the computed available bandwidth and the DSS policy configuration message from the type one network scheduler and the type two network scheduler. Lastly, the method includes allocating the computed bandwidth to the type one network scheduler and the type two network scheduler. FIG. 4

No. of Pages : 44 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114002111 A

(19) INDIA

(22) Date of filing of Application :16/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : POWER STORAGE DEVICE

(51) International classification	:H01M0010040000, H01M0002260000, H01M0010052500, H01M0002200000, H01M0002080000	(71)Name of Applicant : <b>1)KABUSHIKI KAISHA TOYOTA JIDOSHOKKI</b> Address of Applicant :2-1, Toyoda-cho, Kariya-shi, Aichi 448-8671, Japan Japan <b>2)TOYOTA JIDOSHA KABUSHIKI KAISHA</b>
(31) Priority Document No	:2020-009772	(72)Name of Inventor :
(32) Priority Date	:24/01/2020	<b>1)Satoshi HAMAOKA</b>
(33) Name of priority country	:Japan	<b>2)Taku INOUE</b>
(86) International Application No	:NA	<b>3)Hiromi UEDA</b>
Filing Date	:NA	<b>4)Kojiro TAMARU</b>
(87) International Publication No	: NA	<b>5)Satoshi MORIOKA</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Motoyoshi OKUMURA</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT POWER STORAGE DEVICE** A power storage device includes a plurality of power storage modules laminated, a conductive plate and a sealing member. The conductive plate and the sealing member are provided between the power storage modules adjacent to each other in a laminating direction of the power storage modules. The plurality of power storage modules each have an electrode laminate, an electrolytic solution, and a sealing body. The electrode laminate has electrode exposed portions exposed from the sealing body at one end and the other end in the laminating direction. Between the power storage modules adjacent to each other in the laminating direction, the conductive plate is disposed between the electrode exposed portions opposing each other to be in contact with the electrode exposed portions, and at least a portion between the sealing bodies opposing each other is filled with the sealing member.

No. of Pages : 43 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114002318 A

(19) INDIA

(22) Date of filing of Application :18/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, AND NON-TRANSITORY STORAGE MEDIUM STORING PROGRAM

(51) International classification	:H04W0004400000, G06F0016410000, B24B0037300000, G06F0001320900, H01L0021027000	(71) <b>Name of Applicant :</b> <b>1)TOYOTA JIDOSHA KABUSHIKI KAISHA</b> Address of Applicant :1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571, Japan Japan
(31) Priority Document No	:2020-011916	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/01/2020	<b>1)YAMANE, Josuke</b>
(33) Name of priority country	:Japan	<b>2)OKA, Naoya</b>
(86) International Application No	:NA	<b>3)YAMAMOTO, Ryosuke</b>
Filing Date	:NA	<b>4)OKUDA, Kaori</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An information processing device includes a storage unit configured to store first information, the first information indicating a behavior history of a user during driving of a vehicle (20) in a first period and a control unit configured to perform a driving evaluation of the user based on the first information for the first period and configured to acquire a degree of credence based on a result of the driving 10 evaluation of the user, the degree of credence indicating a degree of credit of the user in a predetermined service. Selected drawing: FIG. 1

No. of Pages : 43 No. of Claims : 20

(54) Title of the invention : METHOD AND APPARATUS FOR DISTRIBUTION AND SYNCHRONIZATION OF RADIO RESOURCE ASSIGNMENTS IN A WIRELESS COMMUNICATION SYSTEM •

(51) International classification	:H04W0072040000, H04L0005000000, H04W0028080000, H04W0056000000, H04W0072120000	(71) <b>Name of Applicant :</b> <b>1)STERLITE TECHNOLOGIES LIMITED</b> Address of Applicant :STERLITE TECHNOLOGIES LIMITED, IFFCO Tower, 3rd Floor, Plot No.3, Sector 29, Gurgaon 122002, Haryana, India Haryana India
(31) Priority Document No	:62/966,126	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Shyam Parekh</b>
(33) Name of priority country	:U.S.A.	<b>2)Kevin Tang</b>
(86) International Application No	:NA	<b>3)Ravishankar Ravindran</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

ABSTRACT Method and apparatus for distribution and synchronization of radio resource assignments in a wireless communication system A method and an apparatus for providing dynamic synchronization of radio resources in a radio access network (RAN) (500) in a wireless communication system (1000). The RAN has a type one network scheduler (600) and a type two network scheduler (700). The method includes receiving a first physical resource block (PRB) assignment configuration from the type one network scheduler (600) and the type two network scheduler (700), wherein the first physical resource block (PRB) assignment configuration is received by a first controller (300). Further, the method includes determining a second PRB assignment configuration using the first PRB assignment configuration, wherein the second PRB assignment configuration is determined by the first controller (300). Furthermore, the method includes allocating the second PRB assignment configuration at the synchronization time (s) to the type one network scheduler and the type two network scheduler by the first controller (300). FIG. 6

No. of Pages : 44 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114002621 A

(19) INDIA

(22) Date of filing of Application :20/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : MOTOR TORQUE CONTROL DEVICE FOR HYBRID VEHICLE •

(51) International classification	:B60W0010080000, B60W0020000000, B60W0010060000, B60K0006480000, B60K0006365000	(71) <b>Name of Applicant :</b> <b>1)SUZUKI MOTOR CORPORATION</b> Address of Applicant :300 Takatsuka-cho, Minami-ku, Hamamatsu-shi, Shizuoka 432-8611, Japan Japan
(31) Priority Document No	:2020-011876	(72) <b>Name of Inventor :</b> <b>1)Yoshiki ITO</b>
(32) Priority Date	:28/01/2020	
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

MOTOR TORQUE CONTROL DEVICE FOR HYBRID VEHICLE • An ECU 10 is mounted on a hybrid vehicle 1 in which an engine 2 and a motor 5 generator 3 are connected with each other via an automatic clutch 7 and in which the motor generator and a manual transmission 4 are connected with each other via a manual clutch 8. The ECU is configured to switch between an EV mode and an HEV mode based on a driver request torque calculated based on at least an accelerator opening degree, and to correct a torque of the motor generator such that a change rate of a rotational speed of the 10 motor generator in the EV mode is substantially equal to a change rate of a rotational speed of the motor generator in the HEV mode. [Selected Figure] Figure 1

No. of Pages : 38 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114002755 A

(19) INDIA

(22) Date of filing of Application :20/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD FOR CONTROLLING VEHICLE, CONTROLLER OF VEHICLE, AND SERVER

(51) International classification	:G06F0003060000, F02D0041000000, F02D0041020000, G06F0016290000, B60W0010080000	(71) <b>Name of Applicant :</b> <b>1)TOYOTA JIDOSHA KABUSHIKI KAISHA</b> Address of Applicant :1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571, Japan Japan
(31) Priority Document No	:2020-012547	(72) <b>Name of Inventor :</b> <b>1)Yohsuke HASHIMOTO</b>
(32) Priority Date	:29/01/2020	<b>2)Akihiro KATAYAMA</b>
(33) Name of priority country	:Japan	<b>3)Yuta OSHIRO</b>
(86) International Application No	:NA	<b>4)Kazuki SUGIE</b>
Filing Date	:NA	<b>5)Naoya OKA</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT METHOD FOR CONTROLLING VEHICLE, CONTROLLER OF VEHICLE, AND SERVER A memory (136) stores a plurality of pieces of map data (DM). A memory (76) of a controller (70) stores map data (DM). The controller (70) executes an operation process for operating an electronic device of an internal combustion engine using the map data (DM) in the memory (76), and an acquisition process for acquiring a condition of a vehicle. The controller (70) and a server (130) execute a data changing process for selecting one of the pieces of map data (DM) stored in the memory (136) based on the condition of the vehicle, and storing the selected map data (DM) in the memory (76). Selected Drawing: FIG. 2

No. of Pages : 53 No. of Claims : 8

(54) Title of the invention : PRESSURE REGULATOR

(51) International classification	:F02M0069540000, G05D0016100000, B41J0002175000, G05D0016060000, F16K0015020000	(71) <b>Name of Applicant :</b> <b>1)AISAN KOGYO KABUSHIKI KAISHA</b> Address of Applicant :1-1, Kyowa-cho 1-chome, Obu-shi, Aichi-ken, Japan Japan
(31) Priority Document No	:2020-010738	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Takehiro SHIMIZU</b>
(33) Name of priority country	:Japan	<b>2)Hiroshi MAGOCHI</b>
(86) International Application No	:NA	<b>3)Tomonori NAGASE</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT PRESSURE REGULATOR A pressure regulator (50) includes a pressure regulating valve (52) and a passage defining portion (28) into which the pressure regulating valve (52) is inserted and arranged. The pressure regulating valve (52) includes a housing (60) having a valve seat (62) and a flow inlet (64). A ball (54) opens/closes the flow inlet (64) in cooperation with the valve seat (62). A coil spring (56) biases the ball (54) toward the valve seat (62). A cover member (70) retains the coil spring (56) in the housing (60). The housing (60) includes a flange (66) for restricting an insertion amount of the housing (60) into the passage defining portion (28). The flange (66) and the valve seat (62) are disposed on an identical member.

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114002805 A

(19) INDIA

(22) Date of filing of Application :20/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR TRANSMITTING PACKET MESSAGES BASED ON PRIORITY IN A WIRELESS COMMUNICATION SYSTEM

(51) International classification	:H04W0072120000, H04W0072100000, H04W0068020000, H04W0080040000, H04L0012865000	(71) <b>Name of Applicant :</b> <b>1)STERLITE TECHNOLOGIES LIMITED</b> Address of Applicant :STERLITE TECHNOLOGIES LIMITED, IFFCO Tower, 3rd Floor, Plot No.3, Sector 29, Gurgaon 122002, Haryana, India Haryana India
(31) Priority Document No	:62/966,126	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Shyam Parekh</b>
(33) Name of priority country	:U.S.A.	<b>2)Ravishankar Ravindran</b>
(86) International Application No	:NA	<b>3)Kevin Tang</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Method and apparatus for transmitting packet messages based on priority in a wireless communication system A method and apparatus for transmitting a plurality of packet messages based on priority in a wireless communication system (100) is disclosed. The method includes assigning, by at least one controller and at least one network node, a priority number to each of the plurality of packet messages based on requirement of each of an application associated with each of the packet messages and providing, by the at least one controller and the at least one network node, the priority number assigned to each of the plurality of packet messages, to a socket (222/214a/214b/214c) in the wireless communication system. Further, the method includes transmitting, by at least one interface, the plurality of packet messages based on the priority number provided to the socket (222/214a/214b/214c) of each of a plurality of components in the wireless communication system, thereby providing a uniform method for priority assignment and transmission to the at least one interface. FIGS. 3a-3b

No. of Pages : 36 No. of Claims : 20

(54) Title of the invention : ELECTRONIC DEVICE FOR PROCESSING RADIO SIGNAL AND OPERATING METHOD THEREOF

(51) International classification	:H05K0001160000, A63B0024000000, H01P0005020000, G06N0003040000, H05K0001020000	(71) <b>Name of Applicant :</b> <b>1)SAMSUNG ELECTRONICS CO., LTD.</b> Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677 Republic of Korea Republic of Korea
(31) Priority Document No	:10-2020-0009123	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2020	<b>1)Hyosung LEE</b>
(33) Name of priority country	:Republic of Korea	<b>2)Namjun CHO</b>
(86) International Application No	:NA	<b>3)Hyoseok NA</b>
Filing Date	:NA	<b>4)Hanyeop LEE</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ELECTRONIC DEVICE FOR PROCESSING RADIO SIGNAL AND OPERATING ABSTRACT METHOD THEREOF Various embodiments relate to an apparatus and a method for processing a radio signal in an electronic device. The electronic device may include: a communication processor; and a power amplifier electrically connected to the communication processor, the power amplifier including a first switch, an input port, a first output port, and a second output port, the power amplifier further including a first amplification circuit disposed on a first electrical path between the input port and the first switch, a second amplification circuit disposed on a second electrical path between the first switch and the first output port, and a third amplification circuit disposed on a third electrical path between the first switch and the second output port.

No. of Pages : 109 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114002996 A

(19) INDIA

(22) Date of filing of Application :21/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SUPERSTRUCTURE

(51) International classification	:A61C0008000000, B60S0001380000, E04H0009020000, G06T0007130000, C25C0003100000	(71) <b>Name of Applicant :</b> <b>1)J.C. BAMFORD EXCAVATORS LIMITED</b> Address of Applicant :Lakeside Works, Rocester, Uttoxeter, Staffordshire, ST14 5JP, United Kingdom U.K.
(31) Priority Document No	:2001015.3	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2020	<b>1)PARRY-JONES, Ian Mark</b>
(33) Name of priority country	:U.K.	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

There is provided a superstructure for mounting upon a ground engaging structure of a working machine. The superstructure comprises: a cab structure 5 for housing a human operator of the working machine; a chassis structure providing a base for the cab structure; and a frame comprising a tubular body, the tubular body comprising two legs and a cross member interposed between the legs, wherein the cross member is at a non-zero angle to both legs. The frame is connected to the cab structure proximate an upper extent of the frame 10 and the chassis structure proximate a lower extent the frame so as to support a portion of the cab structure.

No. of Pages : 26 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114003121 A

(19) INDIA

(22) Date of filing of Application :22/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DUAL WIRE WELDING OR ADDITIVE MANUFACTURING SYSTEM AND METHOD

(51) International classification	:B33Y0010000000, B33Y0030000000, B33Y0050020000, B33Y0040000000, B23K0026342000	(71) <b>Name of Applicant :</b> <b>1)Lincoln Global, Inc.</b> Address of Applicant :9160 Norwalk Boulevard, Santa Fe Springs, California 90670, United States of America U.S.A.
(31) Priority Document No	:16/773,074	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Matthew A. Albright</b>
(33) Name of priority country	:U.S.A.	<b>2)Matthew A. Weeks</b>
(86) International Application No	:NA	<b>3)Steven R. Peters</b>
Filing Date	:NA	<b>4)Andrew R. Peters</b>
(87) International Publication No	: NA	<b>5)Bruce J. Chantry</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

DUAL WIRE WELDING OR ADDITIVE MANUFACTURING SYSTEM AND METHOD A welding or additive manufacturing system includes a power supply having a controller which controls operation of the power supply. The power supply provides a current waveform to a contact tip assembly having a first bore terminating at a first exit orifice and a second bore terminating at a second exit orifice. The first exit orifice is configured to deliver a first wire electrode and said second exit orifice is configured to deliver a second wire electrode. The exit orifices are separated from each other by a distance configured to facilitate formation of a bridge droplet between the wire electrodes while preventing solid portions of the first wire electrode delivered through the first bore from contacting solid portions of the second wire electrode delivered through the second bore, during a deposition operation in which the current waveform is conducted to both of the wire electrodes simultaneously through the contact tip assembly.

No. of Pages : 61 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114003243 A

(19) INDIA

(22) Date of filing of Application :23/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SINK SYSTEMS

(51) International classification	:B29C0033120000, B29C0045440000, B29C0033760000, B29C0065000000, H01R0043200000	(71) <b>Name of Applicant :</b> <b>1)Kohler Co.</b> Address of Applicant :444 Highland Drive, Kohler, WI 53044 U.S.A.
(31) Priority Document No	:62/965,534	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2020	<b>1)Steven F. Ellingsen</b>
(33) Name of priority country	:U.S.A.	<b>2)Jason R. Miller</b>
(86) International Application No	:NA	<b>3)Paul A. Bonack</b>
Filing Date	:NA	<b>4)Evan M. Grybush</b>
(87) International Publication No	: NA	<b>5)Timothy R. Schultz</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Jared B. Dulaney</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

SINK SYSTEMS An assembly process for assembling a basin using a molding tool operable between an open position and a closed position, the molding tool having a female molding insert, a male molding insert, and an insert jig, the female molding insert and the male molding insert cooperating to define a mold cavity when the molding tool is in the closed position, the female molding insert having an aperture, the insert jig having a sleeve and a cylinder, the cylinder repositionable within the sleeve and having an end with an end face and a pin protruding from the end face, includes applying adhesive to the pin. The assembly process also includes aligning the pin with an aperture of a basin rim insert. The assembly process also includes pressing the basin rim insert towards the end face such that the pin is received within the aperture of the basin rim insert.

No. of Pages : 65 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114003244 A

(19) INDIA

(22) Date of filing of Application :23/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SINK SYSTEMS

(51) International classification	:E03C0001180000, E03C0001330000, A41D0013040000, A47K0003160000, A61B0017000000	(71) <b>Name of Applicant :</b> <b>1)Kohler Co.</b> Address of Applicant :444 Highland Drive, Kohler, WI 53044 U.S.A.
(31) Priority Document No	:62/965,530	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2020	<b>1)Evan M. Grybush</b>
(33) Name of priority country	:U.S.A.	<b>2)Steven F. Ellingsen</b>
(86) International Application No	:NA	<b>3)Niels J. Eilmus</b>
Filing Date	:NA	<b>4)Terrence K. Mahon</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT SINK SYSTEMS A sink system includes a basin and an apron. The basin includes a floor, a front wall, and a basin rim. The front wall is contiguous with the floor. The basin rim has a rim front side that is contiguous with the front wall. The rim front side includes an aperture. The apron includes an apron coupling wall. The apron coupling wall is configured to be coupled to the rim front side. The apron coupling wall includes an apron slot that is configured to be aligned with the aperture when the apron is coupled to the basin rim.

No. of Pages : 70 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114003758 A

(19) INDIA

(22) Date of filing of Application :28/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : KNITTING NEEDLE •

(51) International classification	:D04B0003020000, D04B0035020000, D04B0001280000, D04B0003000000, D04B0035040000	(71) <b>Name of Applicant :</b> <b>1)GROZ-BECKERT KG</b> Address of Applicant :Parkweg 2, 72458 Albstadt, Germany Germany
(31) Priority Document No	:20 154 212.3	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/01/2020	<b>1)MILICEVIC, Ante</b>
(33) Name of priority country	:EPO	<b>2)SCHICK, Juergen</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Knitting needle (100) comprising a hook point (102) comprising an upper face (114), lateral portions (116, 118), and a rear portion (120), the knitting needle (100) having an at least approximately oval cross section, at least in portions, at the hook point (102), in order to improve the knitting needle (100) in terms of structure and/or function.

No. of Pages : 21 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202114003837 A

(19) INDIA

(22) Date of filing of Application :28/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ANTENNA COMPONENT

(51) International classification	:H01Q0001380000, H01Q0001220000, H01Q0001240000, H04W0088080000, H01Q0001320000	(71) <b>Name of Applicant :</b> <b>1)Nokia Shanghai Bell Co., Ltd</b> Address of Applicant :388 Ningqiao Road, PuDong Jinqiao, 201206 Shanghai, CHINA China
(31) Priority Document No	:20154396.4	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2020	<b>1)CHARAABI Zied</b>
(33) Name of priority country	:EPO	<b>2)NAGHAR Azzeddin</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An apparatus is disclosed comprising first printed circuit board -PCB- and second PCB structure each having a first surface and a second surface and a layer of electrically conductive material on the first surface thereof and being attached to 5 each other in a substantially parallel configuration. A stripline is positioned between the two PCBs. Each one of the first PCB and the second PCB has a plurality of viaholes that are electrically conductive and are connected at one end to the layer of electrically conductive material on the first surface and to an electrically conductive pad on the second surface of the PCB. At least a first electrically conductive pad 10 associated with the first PCB is located in proximity with a first electrically conductive pad associated with the second PCB thereby forming a capacitive configuration

No. of Pages : 25 No. of Claims : 15

(54) Title of the invention : INSOLUBLE DIETARY FIBER-CONTAINING SOLID COMPOSITION AND METHOD FOR MANUFACTURING SAME

(51) International classification	:A23L0007100000, A23B0007022000, A23L0019000000, A21D0002360000, A23B0007020000	(71) <b>Name of Applicant :</b> <b>1)MIZKAN HOLDINGS CO., LTD.</b> Address of Applicant :6, Nakamura-cho 2-chome, Handa-shi, Aichi 4758585 Japan
(31) Priority Document No	:2019-095751	(72) <b>Name of Inventor :</b>
(32) Priority Date	:22/05/2019	<b>1)TOMITA, Takahiko</b>
(33) Name of priority country	:Japan	<b>2)NISHIOKA, Daisuke</b>
(86) International Application No	:PCT/JP2020/002511	
Filing Date	:24/01/2020	
(87) International Publication No	:WO 2020/235138	
(61) Patent of Addition to Application	:NA	
Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Provided is a solid composition having a pleasing dry crunchy texture and a preferable ingredient-derived flavor, without being too hard and despite containing a large amount of insoluble dietary fiber. The solid composition contains powder having at least one edible part and/or site, where insoluble dietary fiber is present, selected from dried vegetables, dried grains, dried beans, and dried fruits satisfying the following (1) to (5). (1) contains at least 3 wt. % of protein (2) contains at least 3 wt. % of insoluble dietary fiber (3) web basis moisture is no more than 11 wt. % (4) drying speed (105°C, 5 min) is at least 0.02 g/s·m<sup>2</sup> (5) 50% cumulative diameter of particles in a solid composition aqueous dispersion under ultrasound treatment is more than 5 μm and 600 μm or less

No. of Pages : 62 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202117014841 A

(19) INDIA

(22) Date of filing of Application :31/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DEVICE FOR CARRYING LOADS

(51) International classification	:B60P0007080000, A63B0069000000, G01V0001200000, F16L0003160000, A45F0005100000	(71) <b>Name of Applicant :</b> <b>1)VALENCOV, Mikhail Jur'evich</b> Address of Applicant :3-y Likhachevskiy per., 7, korp. 2, kv. 273 Moscow, 125438 Russia
(31) Priority Document No	:2019107589	(72) <b>Name of Inventor :</b> <b>1)VALENCOV, Mikhail Jur'evich</b>
(32) Priority Date	:18/03/2019	
(33) Name of priority country	:Russia	
(86) International Application No	:PCT/RU2020/000033	
Filing Date	:27/01/2020	
(87) International Publication No	:WO 2020/190170	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to appliances for carrying different-sized loads by hand. The technical result of the invention is the speed and ease with which a load is tightly secured on four sides without the need for special skills in order to master the process of tightly securing a load. The invention also allows a load to be carried by a single person. This technical result is achieved in that the claimed device for carrying loads, comprising a support and, fastened thereto, a carrying handle, as well as a fastening member for restraining a load, and a locking member for locking the fastening member on the support, is characterized in that the fastening member is configured in the form of a strap or a rope or a cable and passes in at least three directions, wherein in one direction, one of the ends of the fastening member is fastened to the support, and in the other two directions, the fastening member is movable and capable of being passed freely through an element of the support so as to turn 90 degrees, and a locking member is mounted on one side of the support of the device in order to restrain the fastening member on said support.

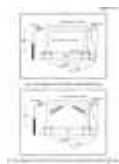
No. of Pages : 7 No. of Claims : 9

(54) Title of the invention : ULTIMATE STRENGTH AND BEHAVIOUR OF INFILLED BRACED R.C.C. FRAMES

(51) International classification	:E04H0009020000, E04B0001260000, E01B0002000000, E04G0023020000, E06B0009580000	(71) <b>Name of Applicant :</b> <b>1)GIRISHCHANDRA JAGDISHCHANDRA KHAIRNAR</b> Address of Applicant :30, JAWAHAR NAGAR, SAKRI ROAD, DHULE-424001, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	<b>2)DR. SHAILENDRA KUMAR DUBEY</b>
(32) Priority Date	:NA	(72) <b>Name of Inventor :</b>
(33) Name of priority country	:NA	<b>1)GIRISHCHANDRA JAGDISHCHANDRA KHAIRNAR</b>
(86) International Application No	:NA	<b>2)DR. SHAILENDRA KUMAR DUBEY</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The investigation was planned and conducted for R.C.C. frames to increase the stability of the frame structure against lateral forces, brace the frame with steel bar and the bracings can be partially infilled by the cement concrete. Due to that the capacity to bear the lateral forces is increases. Two frames with different bracing condition were tested and the same braced frames were infilled with concrete and frames were tested. In comparison to bare R.C.C. frames, braced R.C.C. frames, infilled braced R.C.C. frames. Finally the infill braced frames showed quite higher lateral load bearing capacity as compared to braced frame without infill.



No. of Pages : 18 No. of Claims : 1

(54) Title of the invention : A PROCESS FOR SELECTIVE REDUCTION OF AL<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Na<sub>2</sub>O AND CaO IN RED MUD FOR ENRICHMENT OF Fe<sub>2</sub>O<sub>3</sub>

(51) International classification	:B09B0003000000, C22B0026100000, C01F0007060000, C01F0007380000, C04B0018040000	(71)Name of Applicant : <b>1)JAWHARLAL NEHRU ALUMINIUM RESEARCH DEVELOPMENT AND DESIGN CENTRE</b> Address of Applicant :AMRAVATI ROAD, WADI, NAGPUR, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Palamoottil Assan Mohammad Mohamed Najar</b>
(33) Name of priority country	:NA	<b>2)Ansari Mohamed Shoeb</b>
(86) International Application No	:NA	<b>3)Wadsariya Shama Madatali</b>
Filing Date	:NA	<b>4)Janbandhu Kiran</b>
(87) International Publication No	: NA	<b>5)Kurudi Rajashekhar Rao</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Puttewar Suresh Pundalikrao</b>
Filing Date	:NA	<b>7)Agnihotri Anupam</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Title: A Process for selective reduction of Na<sub>2</sub>O, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub> and CaO in red mud for Enrichment of Fe<sub>2</sub>O<sub>3</sub> A chemical process has been developed for selective reduction of four critical constituents in bauxite residue (red mud) for enriching iron oxide. The self sustained autogenous dissolution of Na<sub>2</sub>O, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub> and CaO in red mud is performed at ambient temperature (25-45 °C). Physical state of red mud, size fraction, concentration reagents, mixing ratio and reaction time are optimized. The heat energy released during the dilution of diprotonic acid viz. sulphuric acid in presence and absence of an oxidizing agents and the presence of hydrofluoric acid in the reaction mixture promote dissolution of soda (Na<sub>2</sub>O), silica (SiO<sub>2</sub>), calcium oxide (CaO) and alumina (Al<sub>2</sub>O<sub>3</sub>).

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201721027204 A

(19) INDIA

(22) Date of filing of Application :31/07/2017

(43) Publication Date : 30/07/2021

(54) Title of the invention : WATER PURIFICATION & COOLING BY USING SOLAR EARTHEN POT

(51) International classification	:C02F0001140000, H04L0027340000, H04L0027260000, C02F0001000000, H04L0025020000	(71) <b>Name of Applicant :</b> <b>1)AJINKYA VIKAS DHARIYA</b> Address of Applicant :Ajinkya niwas shiv mandir road Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)AJINKYA VIKAS DHARIYA</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Embodiments herein provide an apparatus and a method for Solar Earthen Pot system, which operate on principle solar evaporation and natural filtration. The apparatus includes a spherical glass, water filter and earthen pot. In proposed solution, we are using solar distillation process for making pure water. The model is a spherical shaped container designed so that solar radiation will strike from any direction. This spherical globe may be attached to the earthen pot or any place. The water coming after distillation will pass through stages of natural filtration of charcoal, sand and gravels and then will be stored into copper container which will be then stored in earthen pots for use.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201821024433 A

(19) INDIA

(22) Date of filing of Application :30/08/2018

(43) Publication Date : 30/07/2021

(54) Title of the invention : A COMPOSITION FOR FRAGRANT CEMENT AND A METHOD THEREOF.

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)Aditya Birla Science and Technology Company Private Limited</b> Address of Applicant :Aditya Birla Centre, 2nd Floor, ~C™ wing, S.K. Ahire Marg, Worli, Mumbai 400030, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mathur, Prakash Chandra</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a fragrant cement composition comprising a mixture of cement and camphor, mixed in water, wherein said camphor is added to cement in the range of 5% to 55%, by weight of the cement. The present invention also relates to a method of preparing a fragrant cement composition comprising extrusion of a first layer of cement paste, adding camphor on top of the first layer of cement paste in a pre-determined quantity and extruding a second layer of said cement paste on top of the first layer.

No. of Pages : 7 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201821028875 A

(19) INDIA

(22) Date of filing of Application :01/08/2018

(43) Publication Date : 30/07/2021

(54) Title of the invention : RECLINER HEART FOR SEAT ASSEMBLY

(51) International classification	:B60N0002235000, B25B0013460000, E06C0007440000, E05B0013000000, B29C0033300000	(71) <b>Name of Applicant :</b> <b>1)Fisher &amp; Company, Incorporated</b> Address of Applicant :33300 Fisher Drive, St. Clair Shores, Michigan 48082, USA U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ROBINSON, David L.</b>
(33) Name of priority country	:NA	<b>2)ANSARI, Anwer Ashab</b>
(86) International Application No	:NA	<b>3)RAMAMURTHY, Apoorva</b>
Filing Date	:NA	<b>4)KALIDINDI, Raju</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A recliner heart includes a housing member, a locking plate, a first pawl and a slider. The housing member includes plate surface having first recesses and second recesses. The locking plate includes a surface having teeth formed thereon. The first pawl is slidably mounted in a corresponding first recess between a secure position in which the first pawl is engaged with the teeth of the locking plate and a release position in which the first pawl is disengaged from the teeth of the locking plate. The slider is slidably disposed in a corresponding second recess and abuts against the first pawl.



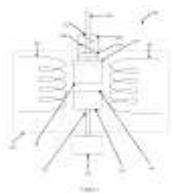
No. of Pages : 39 No. of Claims : 20

(54) Title of the invention : AN APPARATUS FOR INDICATING ACTUATION OF A MAGNETICALLY ACTUATED DEVICE

(51) International classification	:G01D0005140000, F16B0001000000, F16K0031080000, A61B0003000000, A63H0033260000	(71) <b>Name of Applicant :</b> <b>1)ASCO CONTROLS BV</b> Address of Applicant :Neonstraat 3, 6718 WX Ede, Nederland, KvK nr. 09031437, The Netherlands Netherlands
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)CHOPADE, Manoj Baliram</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present disclosure relates to the field of indicating apparatuses for magnetically actuated valves. An apparatus (100), disclosed in the present disclosure, provides an indication when a magnetically actuated device is actuated without affecting the device performance. The apparatus (100) comprises a magnet (110, 150), a guiding arrangement (120), and an indication unit (130, 155). The magnet (110, 150) is disposed on a plugnut (55) of an actuation unit (50) which actuates the device (52). A side (112, 152) of the magnet (110, 150) facing a side (57) of the plugnut (55) has same polarity as that of the side (57) of the plugnut (55). Due to same polarities, when the plugnut (55) is energized, the magnet (110, 150) is repelled by the plugnut (55). The indication unit (130, 155) identifies the displacement of the magnet (110, 150), and provides a visual indication to indicate actuation of the device (52).



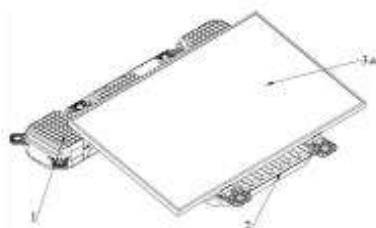
No. of Pages : 28 No. of Claims : 15

(54) Title of the invention : TRINITY COUPLING PLUGGABLE WATER SURFACE PHOTOVOLTAIC POWER GENERATION UNIT AND POWER GENERATION SYSTEM THEREOF

(51) International classification	:H02S0020000000, B63B0035440000, F24S0020700000, B63B0003080000, H01L0027108000	(71)Name of Applicant : <b>1)CHANGJIANG SURVEY PLANNING DESIGN AND RESEARCH CO., LTD.</b> Address of Applicant :No.1863, Jiefang Avenue, Jiangnan District, Wuhan, Hubei, China 430010 China
(31) Priority Document No	:201710693334.5	(72)Name of Inventor :
(32) Priority Date	:14/08/2017	<b>1)CHENG, Weimin</b>
(33) Name of priority country	:China	<b>2)SU, Yi</b>
(86) International Application No	:NA	<b>3)ZHANG, Tao</b>
Filing Date	:NA	<b>4)JIN, Qian</b>
(87) International Publication No	: NA	<b>5)LIU, Shuang</b>
(61) Patent of Addition to Application Number:	NA	<b>6)ZAHNG, Shun</b>
Filing Date	:NA	<b>7)ZHAO, Xin</b>
(62) Divisional to Application Number	:NA	<b>8)YUAN, Bo</b>
Filing Date	:NA	<b>9)LIU, Haibo</b>
		<b>10)YU, Fei</b>

## (57) Abstract :

This invention discloses a trinity coupling pluggable water surface photovoltaic power generation unit and a power generation system thereof. The photovoltaic power generation unit comprises a walkway floating body and a connection floating body provided on a side wall of the walkway floating body. A power generation component is provided on the connection floating body. The system is assembled by the trinity coupling pluggable water surface photovoltaic power generation unit along a lateral direction and a longitudinal direction. In a lateral direction, the walkway floating body is assembled with the walkway floating body of another trinity coupling pluggable water surface photovoltaic power generation unit, and repeats the operation until the installation is finished. In a longitudinal direction, the walkway floating body is assembled with the walkway floating body of another trinity coupling pluggable water surface photovoltaic power generation unit, and repeats the operation until the installation is finished. In the last row, the connection floating body of the trinity coupling pluggable water surface photovoltaic power generation unit is fixed to the separate walkway floating body, so that the whole power generation unit is finished. The unit and the system have a simple structure and convenient installation.



No. of Pages : 36 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201921008361 A

(19) INDIA

(22) Date of filing of Application :04/03/2019

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PROCESS FOR REMOVAL OF IRON OXIDE, SILICA AND ENRICHMENT OF ALUMINA IN FERRUGINOUS, SILICEOUS AND ALUMINOUS LATERITE BY PHYSICAL SEPARATION PROCESS

(51) International classification	:B01J0021120000, B03B0009000000, B08B0003100000, C01F0011460000, B03B0007000000	(71)Name of Applicant : <b>1)JAWAHARLAL NEHRU ALUMINIUM RESEARCH DEVELOPMENT AND DESIGN CENTRE</b> Address of Applicant :AMRAVATI ROAD, NAGPUR 440023, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)PRAVIN G BHUKTE</b>
(33) Name of priority country	:NA	<b>2)SURESH P PUTTEWAR</b>
(86) International Application No	:NA	<b>3)ANUPAM AGNIHOTRI</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A PROCESS FOR REMOVAL OF IRON OXIDE, SILICA AND ENRICHMENT OF ALUMINA IN FERRUGINOUS, SILICEOUS AND ALUMINOUS LATERITE BY PHYSICAL SEPARATION PROCESS The present invention provides a process for removal of iron oxide, silica and enrichment of alumina in the laterite sample; said process comprises obtaining the laterite sample; preparing the fractions of the laterite sample using mesh having a size ranging from -50 to +250 mesh; making an aqueous slurry of each fraction; subjecting the slurry to hydrocyclone separation at predetermined pressure using a hydrocyclone separation having a pre-determined configuration to obtain an overflow discharge slurry and an underflow discharge slurry; and analyzing the overflow discharge slurry and underflow discharge slurry, wherein said process characterized in that the overflow slurry contains enriched alumina and decreased iron oxide; and the underfloor slurry contains enriched iron and reduced silica and alumina.

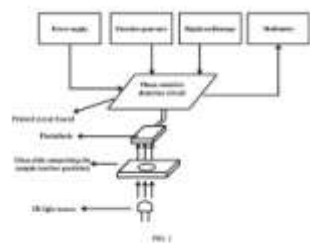
No. of Pages : 21 No. of Claims : 9

(54) Title of the invention : Method and optical sensing system for optical detection of early-stage biomarker

(51) International classification	:H01L0051000000, G01N0021552000, G01N0021770000, G01N0031220000, G01N0021590000	(71) <b>Name of Applicant :</b> <b>1)Indian Institute of Technology Bombay</b> Address of Applicant :IIT Bombay, Powai Mumbai Maharashtra India 400076 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Siddharth Tallur</b>
(33) Name of priority country	:NA	<b>2)Nidhi Maheshwari</b>
(86) International Application No	:NA	<b>3)NANDESHWAR RUCHIRA HEMANTKUMAR</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Method and optical sensing system for optical detection of early-stage biomarker • Embodiments herein provide a method for optical detection of early-stage biomarker using an optical sensing system (100). The method includes introducing, by the optical sensing system (100), a biological sample comprising the early-stage biomarker into a single-wall carbon nanotubes (SWCNT) solution in a transparent sample holder, where the early-stage biomarker is myeloperoxidase (MPO). Further, the method includes determining, by the optical sensing system (100), a degradation of carbon nano-particles from the SWCNT solution due to the presence of the early-stage biomarker in the biological sample; and detecting, by the optical sensing system (100), a concentration of the early-stage biomarker by measuring a change in at least one optical feature of the degraded carbon nano-particles in the SWCNT solution. FIG.1



No. of Pages : 30 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201921028880 A

(19) INDIA

(22) Date of filing of Application :18/07/2019

(43) Publication Date : 30/07/2021

(54) Title of the invention : OIL-IN-WATER EMULSION BASED COOLANT FOR TESTING OF ENGINES

(51) International classification	:C09K0005100000, C09K0005200000, A61Q0019000000, C23F0011080000, A61K0008420000	(71) <b>Name of Applicant :</b> <b>1)Ameeth Kkaulgud</b> Address of Applicant :125/13 Vrindavan Bunglow • LIC Colony, Bedekar Ganapati Mandir Road, Off MIT College, Paud Road, Kothrud 411038 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Ameeth Kkaulgud</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an oil-in-water emulsion-based coolant composition for testing of engines. The coolant composition is anti-corrosive, anti-bacterial and prevents rusting of the internal parts of an engine. The coolant provides cooling effects and is low cost. The coolant composition comprises atleast ten ingredients combined in a unique amount to give the desired results.

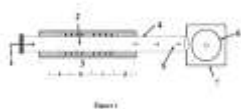
No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : A PROCESS FOR THE SYNTHESIS OF SUPERHYDROPHOBIC POLYOLEFIN SURFACES

(51) International classification	:B82Y0030000000, B82Y0040000000, C08J0007040000, B01J0021180000, C08J0007180000	(71)Name of Applicant : <b>1)RELIANCE INDUSTRIES LIMITED</b> Address of Applicant :3RD FLOOR, MAKER CHAMBER- IV, 222, NARIMAN POINT, MUMBAI-400021, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)TRIPATHI, Sandeep Nath</b>
(33) Name of priority country	:NA	<b>2)GANDHAM Satya Srinivasa Rao</b>
(86) International Application No	:NA	<b>3)PATIL, Swanand Dilip</b>
Filing Date	:NA	<b>4)SHUKLA, Devesh, Kumar</b>
(87) International Publication No	: NA	<b>5)GOSWAMI Gopal Krishna</b>
(61) Patent of Addition to Application Number	:NA	<b>6)PATADE, Abhishek Prakash</b>
Filing Date	:NA	<b>7)MATHUR Ajit Behari</b>
(62) Divisional to Application Number	:NA	<b>8)JASRA, Raksh Vir</b>
Filing Date	:NA	<b>9)PATIL YOGESH POPATRAO</b>
		<b>10)BAGUI, Mahuya</b>

## (57) Abstract :

The present disclosure relates to a process for the synthesis of superhydrophobic polyolefin surface. The process comprises mixing at least one catalyst and at least one carbon source to obtain a mixture. The mixture is atomized in a nebulizer to obtain an atomized mixture. The atomized mixture is charged in a reactor with the help of a carrier gas, wherein it is decomposed at a temperature in the range of 800 to 1200 °C to produce multi-walled carbon nanotubes (MWCNT). The multi-walled carbon nanotubes (MWCNT) are allowed to deposit on the polyolefin substrate. The MWCNT coated polyolefin is removed from the reactor and treated with a mineral acid to obtain the superhydrophobic polyolefin surface.



No. of Pages : 21 No. of Claims : 12

(54) Title of the invention : AUTONOMOUS MOBILE ROBOT WITH A SINGLE MODULAR PLATFORM

(51) International classification	:G05D0001020000, G06K0019077000, B60K0017040000, B65G0001040000, H05K0007140000	(71)Name of Applicant : <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai - 400021, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)BANGALORE SRINIVAS, Venkatesh Prasad</b>
(33) Name of priority country	:NA	<b>2)CHINTALAPALLI PATTA, Venkat Raju</b>
(86) International Application No	:NA	<b>3)KUMAR, Swagat</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**AUTONOMOUS MOBILE ROBOT WITH A SINGLE MODULAR PLATFORM** 5 An autonomous mobile robot (AMR) with a single modular platform to mount plurality of material handling units is provided. The AMR includes a monolithic chassis; a top plate includes plurality of standoffs to mount at least one material handling units; the plurality of standoffs are integrated on top of the top plate; drive wheels are coupled to a wheel mount as a single unit to form a drive wheel 10 assembly; a suspension unit is coupled symmetrically in between two main bodies which corresponds to the monolithic chassis and the drive wheel assembly with spring enclosures, suspension shafts, and coil springs; a set of side plates connect the monolithic chassis on the AMR. The top plate is sandwiched between the plurality of standoffs and the monolithic chassis. A load is transferred from the 15 plurality of material handling units through the plurality of standoffs and the top plate to the monolithic chassis. [To be published with FIG. 1A]

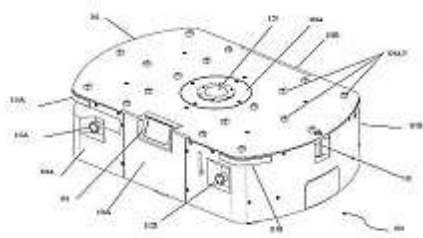


Figure 1A

No. of Pages : 53 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201921031568 A

(19) INDIA

(22) Date of filing of Application :05/08/2019

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PERSONAL CARE COMPOSITION.

(51) International classification	:A61Q0019000000, A61Q0005020000, A61Q0005120000, A61K0008020000, A61Q0005000000	(71) <b>Name of Applicant :</b> <b>1)FINE ORGANIC INDUSTRIES LIMITED</b> Address of Applicant :PLOT A 28, MILLENIUM BUSINESS PARK, MAHAPE MIDC, NAVI MUMBAI-400 710, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MR. JAYEN SHAH</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A personal care composition comprising (a) polyglycerol ester product of 5 weight parts of lactic acid, 5 weight parts of lauric acid and 90 weight parts of polyglycerol; (b) one or more ingredients and (c) water; wherein the polyglycerol is with an average polymeric degree of 2-5.

No. of Pages : 12 No. of Claims : 11

(54) Title of the invention : METHOD AND SYSTEM FOR GENERATING SYNTHETIC MULTI-CONDITIONED DATA SETS FOR ROBUST AUTOMATIC SPEECH RECOGNITION

(51) International classification	:G10L0015200000, G10L0021021600, H04L0025020000, G10L0015060000, G10L0019005000	(71)Name of Applicant : <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)SONI, Meetkumar Hemakshu</b>
(32) Priority Date	:NA	<b>2)JOSHI, Sonal</b>
(33) Name of priority country	:NA	<b>3)PANDA, Ashish</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT METHOD AND SYSTEM FOR GENERATING SYNTHETIC MULTI-CONDITIONED DATA SETS FOR ROBUST AUTOMATIC SPEECH RECOGNITION** Performance of Automatic Speech Recognition (ASR) for robustness against real world noises and channel distortions is critical. Embodiments herein provide method and system for generating synthetic multi-conditioned data sets for additive noise and channel distortion for training multi-conditioned acoustic models for robust ASR. The method provides a generative noise model generating plurality of types of noise signals for additive noise based on weighted linear combination of plurality of noise basis signals and channel distortion based on estimated channel responses. The generative noise model is a parametric model, wherein basis function selection, number of basis functions to be combined linearly and weightages to be applied to the combinations is tunable, thereby enabling generation of wide variety of noise signals. Further, the noise signals are added to set of training speech utterances under set of constraints providing the multi-conditioned data sets, imitating real world effects. [To be published with FIG. 2A and 2B]

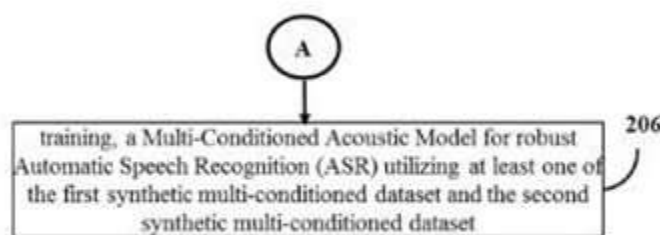


FIG. 2B

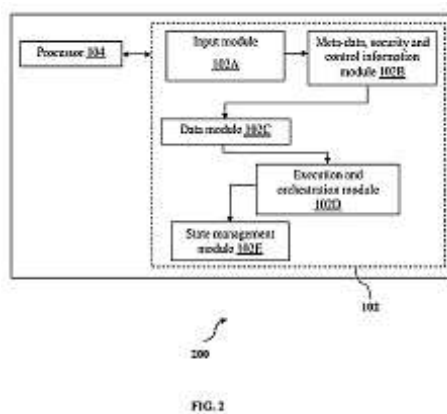
No. of Pages : 36 No. of Claims : 10

(54) Title of the invention : SYSTEM AND METHOD OF DECLARATIVE MODELING OF A PROCESS FOR AUTOMATION

(51) International classification	:G06Q0010060000, G06F0009448000, G06F0008100000, G06T0013800000, G05B0019042000	(71)Name of Applicant : <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)MEHROTRA, Prakash</b>
(33) Name of priority country	:NA	<b>2)MANSHANI, Kapil</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT SYSTEM AND METHOD OF DECLARATIVE MODELING OF A PROCESS FOR AUTOMATION** In the field of process automation there exists one or more custom solutions which are not scalable and missing essential needs to automate a process. This disclosure addresses the problem of codifying a process to automate by a declarative approach. A method for declarative modeling of process for automation is provided. The method includes receiving, request for automating the process; extracting, at least one feature associated with the process to obtain a declarative model; validating, the declarative model of the process with a process automation code to obtain a process automation package; provisioning, the declarative model to access and obtain specific roles associated with the process; executing, the process automation package in a process automation platform based on the specific roles to obtain a plurality of states; and monitoring, the plurality of states and triggers at least one action associated with the plurality of states in the process automation platform. [To be published with FIG. 2]



No. of Pages : 32 No. of Claims : 20

(54) Title of the invention : MODEL-BASED TRAVEL TIME PREDICTION

<p>(51) International classification :G01N0033533000, H05B0031000000, B01J0020286000, C02F0003280000, B63C0007260000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :  <b>1)TATA CONSULTANCY SERVICES</b>  Address of Applicant :Nirmal Building, 9th Floor, Nariman Point, Mumbai 400021, India Maharashtra India  <b>2)INDIAN INSTITUTE OF TECHNOLOGY, MADRAS</b></p> <p>(72)Name of Inventor :  <b>1)ACHAR, Avinash</b>  <b>2)REGIKUMAR, Rohith</b>  <b>3)B, Anil Kumar</b>  <b>4)VANAJAKSHI, Lelitha</b>  <b>5)JAYAPRAKASH, Rajesh</b></p>
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(57) Abstract :

Methods and systems for model-based prediction of travel time of vehicles are described. A prediction model is formulated that can be used for predicting travel times of a vehicle at a section on a route. The prediction model indicates dependence of travel time of a vehicle at a section in a first trip on travel time of the vehicle in the first trip in a first number of sections immediately before the section on the route and on entry time of the vehicle at the section in the first trip. [[To be published with Fig. 3]]

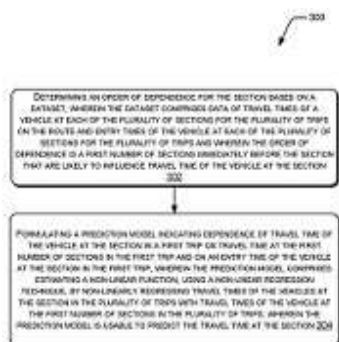


Fig. 3

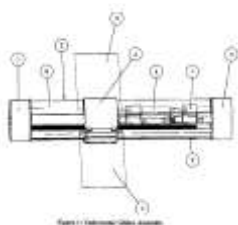
No. of Pages : 52 No. of Claims : 17

(54) Title of the invention : LOW COST UNDERWATER GLIDER FOR SCIENTIFIC DATA ACQUISITION

(51) International classification	:A63H0027000000, B63C0011520000, H04B0013020000, B63G0008000000, B64C0031020000	(71)Name of Applicant : <b>1)SOHEL A. SHAIKH</b> Address of Applicant :DEPT. OF E & TC, VPKBIET, VIDYANAGARI, BARAMATI, MAHARASHTRA, INDIA-413 133. Maharashtra India <b>2)SHUBHAM D. KUMBHAR</b> <b>3)BHUPALI V. NAGANE</b> <b>4)JYOTI S. RANGOLE</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)SOHEL A. SHAIKH</b> <b>2)SHUBHAM D. KUMBHAR</b> <b>3)BHUPALI V. NAGANE</b> <b>4)JYOTI S. RANGOLE</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Underwater data acquisition is an important aspect for the government organizations involved in water resource management and many researchers working in the field of SONAR design and deployment. The data acquisition systems available commercially are survey oriented which involves heavy use of resources like manpower, data collection, and data analytics tools with limited automation applied. Problems like limitations in coverage of all underwater data acquisition in an area, manual calculations of material required to collect underwater data. The present market shows strong competition owing to the presence of established as well as small players offering different types of autonomous underwater glider. The need of innovation in underwater vehicles along with cost optimization plays a crucial role. This proved to be a source of motivation behind the design of low cost autonomous underwater glider. The proposed system is aimed to acquire the water parameters including conductivity, temperature, turbidity, depth, salinity and pH which are essential in analysis of acoustic propagation underwater. The system can be deployed in the tanks or reservoirs for collection of the data and transmit it to a remote station in real time. The proposed system showcases an example of a typical IOT based system targeted for acquisition, storage and processing of aforesaid scientific data. The glider movement is based on buoyancy principle. The inlet and outlet motor are turned on/off during diving and surfacing. The gliding assembly is designed for gliding angle approximately 45°. An electronic system is designed for adjustment of the gliding angle as per user requirement. The designed electronic system will acquire and communicate aforesaid parameters along with date, time and location of glider to the remote station. The real time data will be transmitted to the remote base station using wireless communication when the glider is at surface.



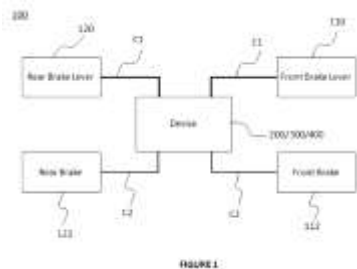
No. of Pages : 7 No. of Claims : 4

(54) Title of the invention : A DEVICE FOR SIMULTANEOUSLY ACTUATING A FRONT BRAKE AND A REAR BRAKE OF A VEHICLE

(51) International classification	:B62L0003080000, B62K0023060000, B62L0003020000, B60T0008260000, B60J0007043000	(71) <b>Name of Applicant :</b> <b>1)MAHINDRA SUSTEN PVT. LTD.</b> Address of Applicant :6th Floor, AFL house, Lok Bharti Complex, Marol Maroshi Road, Andheri (East), Mumbai 400059, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Richu Gheevarghese Samuel</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A device for simultaneously actuating a front brake and a rear brake of a vehicle is provided. The device comprises a movable member pivotally mounted on the vehicle. The movable member coupled with a first pair of cables received from a front brake lever and a rear brake lever, and a second pair of cables extending to the front brake and the rear brake whereby upon actuating any one of the front brake lever or the rear brake lever both the front brake and the rear brake are actuated in unison. Reference Figure 1



No. of Pages : 18 No. of Claims : 6

(54) Title of the invention : ADAPTOR ASSEMBLY FOR A FUEL RECEPTACLE

(51) International classification	:G01N0033533000, H05B0031000000, B01J0020286000, C02F0003280000, B63C0007260000	(71) <b>Name of Applicant :</b> <b>1)ILLINOIS TOOL WORKS INC.</b> Address of Applicant :155 Harlem Avenue, Glenview, Illinois 60025, United States of America U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)NETKE, Nagesh</b>
(33) Name of priority country	:NA	<b>2)BIJAPUR, Bheemappa</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT ADAPTOR ASSEMBLY FOR A FUEL RECEPTACLE** The present subject matter relates to an adaptor assembly (100) that may include a first adaptor (112) that has a body portion (202) and a first lip portion (114) at one end of the body portion (202). Further, the adaptor assembly (100) may include a second adaptor (118) that may be mounted on the body portion (202) of the first adaptor (112). In the illustrated example, the first lip portion (114) and the second portion may sandwich the edges of opening (102) when the adaptor assembly (100) is mounted in the opening (102). The adaptor assembly (100) also include a locking member (208, 302) that secures the second adaptor (118) to the body portion (202) when the second adaptor (118) is mounted on the body portion (202). < >

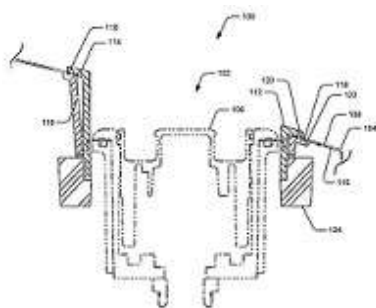


Fig. 1A

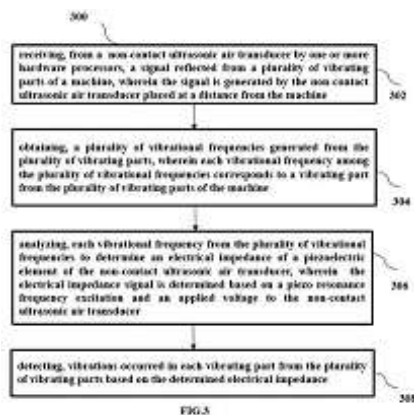
No. of Pages : 15 No. of Claims : 10

(54) Title of the invention : METHOD AND SYSTEM FOR NON-CONTACT ULTRASOUND BASED VIBRATION DETECTION

(51) International classification	:G01N0029220000, G01H0001000000, A61H0023020000, G01H0003000000, G01N0029340000	(71) <b>Name of Applicant :</b> <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)RAKSHIT, Raj</b>
(33) Name of priority country	:NA	<b>2)KHASNOBISH, Anwasha</b>
(86) International Application No	:NA	<b>3)SINHARAY, Arijit</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This disclosure relates generally to method and system for non-contact ultrasound based vibration detection. Here, non-contact vibration detection plays crucial role in industries for monitoring and analyzing machine vibrations to predict early warnings of the potential failures. The method includes receiving, from a non-contact ultrasonic air transducer a signal reflected from a plurality of vibrating parts of a machine, wherein the signal is generated by the non-contact ultrasonic air transducer placed at a distance from the machine. The non-contact ultrasound obtains vibrational frequencies corresponding to the vibrating part of the machine which are further analyzed to determine an electrical impedance of a piezoelectric element. Further, based on the electrical impedance occurred vibrations are detected in each vibrating part from the plurality of vibrating parts of the machine. The measured impedance signal utilizes continuous sinusoidal excitation which enables narrow band filtering to increase signal to noise ratio. The proposed disclosure provides a low cost simple solution thereby reducing design complexity of the non-contact ultrasonic transducer circuit. [To be published with FIG. 3]



No. of Pages : 32 No. of Claims : 10

(54) Title of the invention : METHOD AND SYSTEM FOR DETECTION AND VALIDATION OF NOCTURIA IN A PERSON

(51) International classification	:G06N0020000000, G16H0050200000, G16H0050700000, H04L0012120000, C07D0405120000	(71)Name of Applicant : <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)KRISHNAN, Balasubramaniam</b>
(32) Priority Date	:NA	<b>2)BALAJI, Ramesh</b>
(33) Name of priority country	:NA	<b>3)VENKATACHARI, Srinivasa Raghavan</b>
(86) International Application No	:NA	<b>4)VIJAYAKUMAR, Arun</b>
Filing Date	:NA	<b>5)DHANASEKARAN, Harish Kumar</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Nocturia has been defined as the need for an individual to wake up one or more times during the night to void. Further, Nocturia detection also requires analysis of sleeping pattern of the person. In such cases a lot of assumptions are made when the person is not in bedroom during nights. A method and system for detection and validation of Nocturia in the person has been provided. The system is utilizing a statistical based analysis, a rule based analysis, a machine learning based analysis and analysis of sleeping pattern of the person to detect and validate Nocturia. The system ensures that the person is not disturbed in his/her daily activities. Further, the processes deployed in the system are completely un-supervisory in nature meaning it does not have the dependency of needing to have trained machine learning dataset. To be published with FIG.1

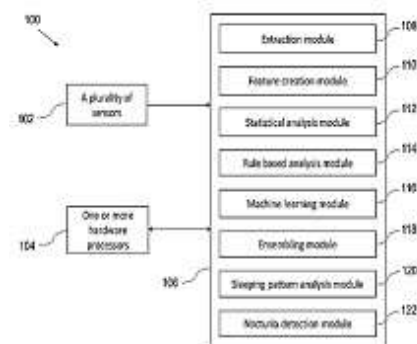


FIG. 1

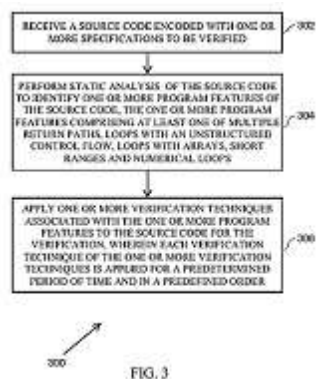
No. of Pages : 27 No. of Claims : 10

(54) Title of the invention : PRE-PARTITIONING AND FUSING OF NEURAL NETWORK LAYERS FOR EXECUTION IN, AND OPTIMIZING RESOURCE CONSTRAINED SYSTEMS

(51) International classification	:G06N0003080000, G06N0003040000, H04L0029080000, G06N0007000000, G06F0009500000	(71) <b>Name of Applicant :</b> <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)DEY, Swarnava</b>
(32) Priority Date	:NA	<b>2)MONDAL, Jayeeta</b>
(33) Name of priority country	:NA	<b>3)MUKHERJEE, Arijit</b>
(86) International Application No	:NA	<b>4)DUTTA, Jeet</b>
Filing Date	:NA	<b>5)PAL, Arpan</b>
(87) International Publication No	: NA	<b>6)PURUSHOTHAMAN, Balamuralidhar</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Embedded systems such as drones employing deep learning models are often resource constrained. Traditional approaches have utilized input buffering and network offloading partitioning techniques to overcome various limitations but have failed to handle scenarios where arrival data and input data volume increase over time, thus affecting storage and network usage. Embodiments of the present disclosure provide systems and methods that implement layer wise partitioning of neural networks and fusion thereof on a resource constrained system where such a model cannot be loaded at a time. Best set of layers are determined for processing at a time in-order to have the best inference latency. Lightweight optimisation model is derived for online fusion of the layers of already partitioned device based on its memory and dynamic system load. [To be published with FIG. 3]



No. of Pages : 49 No. of Claims : 10

(54) Title of the invention : A SYSTEM TO CLEAN THE DEBRIS AND IDENTIFY THE TYPE OF DEBRIS ALONGWITH PRECIOUS METAL

(51) International classification	:A47L0011400000, G05D0001020000, A47L0009280000, G03F0007200000, F28G0015000000	(71)Name of Applicant : <b>1)DR. ANURAG SHARMA</b> Address of Applicant :ASHWANI NAGAR, BEHIND DEEPAK KIRAYA BHANDAR, RAIPUR, CHHATTISGARH- 492013, INDIA. Chattisgarh India <b>2)SATYA VERMA</b> <b>3)ABHISHEK SHRIVASTAVA</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)DR. ANURAG SHARMA</b> <b>2)SATYA VERMA</b> <b>3)ABHISHEK SHRIVASTAVA</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

This invention is built to safely clean the debris after proper understanding of the condition and the efforts that needs to be put in the cleaning. The system is made responsive to debris on a floor or other surface to be cleaned, with reduced sensitivity to variations in airflow, instantaneous power, or other operational conditions of the cleaning device. The cleaning apparatus includes a drive system operable to enable movement of the cleaning apparatus; the controller including a processor operable to control the movement of the cleaning apparatus; and a debris sensor for generating a debris signal indicating that the cleaning apparatus has encountered debris. Here the device can move autonomously reducing the danger of life as traditionally man power is used to do the process. The system can detect the depth of the debris and the type so that its movement can be coordinated well while cleaning. It is also made capable to identify precious metals which can be reused for multi-purposes.

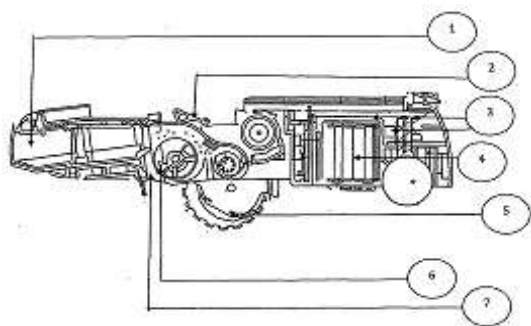


FIGURE - 1 : Side View Of The Robotic Debris Cleaning Device

No. of Pages : 22 No. of Claims : 5

(54) Title of the invention : AN INTEGRATED KEYPAD WITH MOUSE FOR COMPUTER.

(51) International classification	:H04N0005440000, G06F0003039000, G06T0017100000, G01D0004000000, G06F0003035400	(71)Name of Applicant : <b>1)HARISH UMASHANKAR TIWARI</b> Address of Applicant :PIMPRI CHINCHWAD COLLEGE OF ENGINEERING & RESEARCH, PLOT B, SURVEY NO.110 (P), LAXMINAGAR, RAVET, PUNE-412 101, MAHARASHTRA, INDIA. Maharashtra India <b>2)AMRUTA HARISH TIWARI</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)HARISH UMASHANKAR TIWARI</b>
(33) Name of priority country	:NA	<b>2)AMRUTA HARISH TIWARI</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT The system of the present subject matter is an integrated model of Computer keypad and mouse. The mouse of the present subject matter is designed as a combined unit of mouse and keypad with features of both. The problems associated with the operation of keypad as compared to operation with mouse are minimized. The features of the keypad are not compromised but the utility of the system increases.

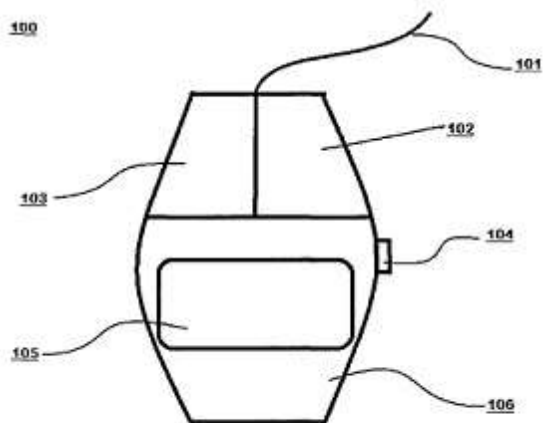


FIGURE 1

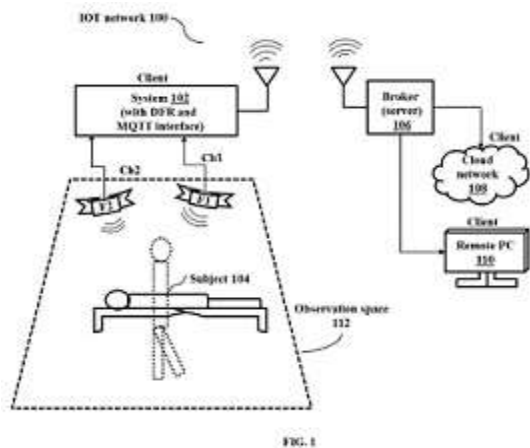
No. of Pages : 13 No. of Claims : 10

(54) Title of the invention : METHOD AND SYSTEM FOR UNOBTRUSIVE LIVELINESS DETECTION AND MONITORING USING DFR IN AN IOT NETWORK

(51) International classification	:H04L0029080000, H04N0021274300, B64G0001360000, H04N0001000000, C07D0263320000	(71)Name of Applicant : <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)KHASNOBISH, Anwesha</b>
(32) Priority Date	:NA	<b>2)RAY, Arindam</b>
(33) Name of priority country	:NA	<b>3)RANI, Smriti</b>
(86) International Application No	:NA	<b>4)SWAIN, Amit</b>
Filing Date	:NA	<b>5)BHAUMIK, Chirabrata</b>
(87) International Publication No	: NA	<b>6)CHAKRAVARTY, Tapas</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT METHOD AND SYSTEM FOR UNOBTRUSIVE LIVELINESS DETECTION AND MONITORING USING DFR IN AN IOT NETWORK** Radar based HR and BR measurements by simultaneous decoding is a technical problem due to presence of intermodulation of BR and HR harmonics, which degrades simultaneous decoding. Embodiments herein provide a method and system for unobtrusive liveliness detection and monitoring of a subject using a Dual Frequency Radar (DFR) in an IOT network. The system has the capability to completely process the captured raw signals onboard to by applying required signal conditioning and extraction of relevant information using unique signal processing techniques for determining the HR and the BR of the subject accurately. The intermodulation of BR and HR harmonics is eliminated by the system by performing frequency spectrum averaging of both radars signals, which improves the accuracy. Further, the system is configured with a light MQTT protocol and encoding modules for any data to be shared for off board processing, ensuring data security and privacy compliance. [To be published with FIG. 1]



No. of Pages : 52 No. of Claims : 14

(54) Title of the invention : DEVICE TO CINCH SUTURE TIE WITH REVERSIBLE DEPLOYMENT AND QUICK RELEASE MECHANISM

(51) International classification	:A61B0017040000, A61M0025020000, A61F0013000000, A61B0017060000, A61B0017000000	(71)Name of Applicant : <b>1)Manisha Kiran Mehta</b> Address of Applicant :#208 Jewellers Apartment, 56 Paddar Road, Mumbai, Maharastra-400026, India. Maharashtra India (72)Name of Inventor : <b>1)Manish Kiran Mehta</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT:** Title: Device to Cinch Suture Tie with Reversible Deployment and Quick Release Mechanism The present disclosure discloses a flat or rounded or ellipsoid or cylindrical or a smooth form with no sharp edges for the cinch suture knotting device to secure sutures to thereby eliminate the need for manual knots. The suture knotting device further comprises male and female separable parts to secure a catheter or any device to the skin or any body tissue. The separable parts can be gently pulled or twisted apart to adjust or remove the suture depending on the clinical condition to thereby avoid pinching or cut of skin and trauma to tissue while removing the knot. The suture knotting device helps to reverse deploy and remove sutures without requiring any sharp objects or suture removal kit. It allows a wide range of dexterity and maneuvering for physicians or nurses with ease and less pressure.

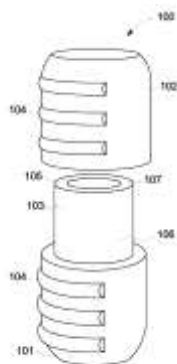


FIG. 1

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201921050381 A

(19) INDIA

(22) Date of filing of Application :06/12/2019

(43) Publication Date : 30/07/2021

(54) Title of the invention : FORMULATION CONTAINING BUPROPION LOADED NANOPARTICLES FOR INTRANASAL ADMINISTRATION

(51) International classification	:A61K0009000000, A61K0009160000, A61K0031137000, A61K0009107000, A61K0031706800	(71) <b>Name of Applicant :</b> <b>1)SMT. KISHORITAI BHOYAR COLLEGE OF PHARMACY</b> Address of Applicant :SMT. KISHORITAI BHOYAR COLLEGE OF PHARMACY, BEHIND RAILWAY STATION, NEW KAMPTEE, KAMPTEE, NAGPUR, PIN- 441002,MAHARASHTRA,INDIA Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MAHAJAN TEJASHRI</b>
(33) Name of priority country	:NA	<b>2)DR. TAKSANDE JAYSHREE</b>
(86) International Application No	:NA	<b>3)DR. UMEKAR MILIND J.</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to drug loaded nanoparticles, their preparation and use in pharmaceutical active formulation. More specifically, the invention provides bupropion loaded nanoparticles, their preparation and use in pharmaceutical active formulation for intranasal administration.

No. of Pages : 15 No. of Claims : 4

(54) Title of the invention : SYSTEM FOR SENDING GIFT CARDS USING BLOCKCHAIN TECHNOLOGY •

(51) International classification	:G06Q0020400000, H04L0009320000, G06Q0020380000, G06Q0020340000, G06Q0020020000	(71) <b>Name of Applicant :</b> <b>1)MESBRO TECHNOLOGIES PRIVATE LIMITED</b> Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mr. Bhaskar Vijay Ajgaonkar</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Accordingly, an efficient system for issuing, sending e-gift cards using blockchain technology in order to maintain safety is disclosed. A system for sending e-gift cards using blockchain technology comprising of; sending a request to the database of the website using mobile application or web server; gathering customer information such as full name, user name, password and storing it in the database; customer care unit for accepting a customer request for issuing gift card for a minimal currency; payment unit for processing the payment for the requested value or gift card using external payment processor; confirming the transaction using blockchain ;and preparing image of the gift card and sending it to the customer.



FIG 1

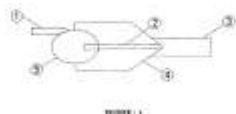
No. of Pages : 10 No. of Claims : 5

(54) Title of the invention : CHOPPING GUARD TO AVOID INJURY OF HUMAN FINGERS

(51) International classification	:A23L0019000000, B26D0003260000, A47J0043250000, A23B0007154000, A61B0017000000	(71)Name of Applicant : <b>1)JAYASHRI VITTHAL CHOPADE</b> Address of Applicant :PIMPRI CHINCHWAD COLLEGE OF ENGINEERING & RESEARCH, PLOT B, SURVEY NO. 110 (P), LAXMINAGAR, RAVET, PUNE-412 101, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	<b>2)SNEHA VILASRAO PAWADE</b>
(32) Priority Date	:NA	<b>3)RUPALI MANOJ PATIL</b>
(33) Name of priority country	:NA	<b>4)TEJAL SWAPNIL PATIL</b>
(86) International Application No	:NA	<b>5)PRIYANKA RAMDAS CHAVAN</b>
Filing Date	:NA	(72)Name of Inventor :
(87) International Publication No	: NA	<b>1)JAYASHRI VITTHAL CHOPADE</b>
(61) Patent of Addition to Application Number	:NA	<b>2)SNEHA VILASRAO PAWADE</b>
Filing Date	:NA	<b>3)RUPALI MANOJ PATIL</b>
(62) Divisional to Application Number	:NA	<b>4)TEJAL SWANIL PATIL</b>
Filing Date	:NA	<b>5)PRIYANKA RAMDAS CHAVAN</b>

(57) Abstract :

This innovation is based on providing a holder to the fruit to hold it properly while cutting the fruit and vegetable, in this case when fruit or vegetable is cut by knife, it hold it properly with the help of holder and fruit is cut by knife properly without injury, the pusher is provided to the holder is used to push the fruit in forward direction and whole fruit is cut, the holder is easy to handle while cutting vegetables and fruit at kitchen.



No. of Pages : 7 No. of Claims : 2

(54) Title of the invention : ORGANOMETALLIC COMPOUND IN SOLID FORM, PROCESS FOR PREPARING THE SAME AND USE THEREOF

(51) International classification	:G01N0033533000, H05B0031000000, B01J0020286000, C02F0003280000, B63C0007260000	(71)Name of Applicant : <b>1)Indian Oil Corporation Limited</b> Address of Applicant :G-9, Ali Yavar Jung Road, Bandra (East), Mumbai-400 051, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)KAUR, Sukhdeep</b>
(32) Priority Date	:NA	<b>2)SINGH, Gurmeet</b>
(33) Name of priority country	:NA	<b>3)BANTU, Bhasker</b>
(86) International Application No	:NA	<b>4)KUMAR, Naresh</b>
Filing Date	:NA	<b>5)KAPUR, Gurpreet Singh</b>
(87) International Publication No	: NA	<b>6)Shashikant</b>
(61) Patent of Addition to Application Number	:NA	<b>7)BASU, Biswajit</b>
Filing Date	:NA	<b>8)MALHOTRA, Ravinder Kumar</b>
(62) Divisional to Application Number	:2765/MUM/2012	
Filed on	:24/09/2012	

## (57) Abstract :

The present invention provides a solid organomagnesium precursor having formula  $\{Mg(OR^{TM})X\}.a\{MgX_2\}.b\{Mg(OR^{TM})_2\}.c\{R^{TM}OH\}$ , wherein  $R^{TM}$  is selected from a hydrocarbon group, X is selected from a halide group, and a:b:c is in range of 0.01-0.5 : 0.01 : 0.01 -5 and process for preparing the same, said process comprising contacting a magnesium source with a solvating agent, an organohalide and an alcohol to obtain the solid organomagnesium precursor. The present invention also provides a process for preparing a catalyst system using the organomagnesium precursor and its use thereof for polymerization of olefins.

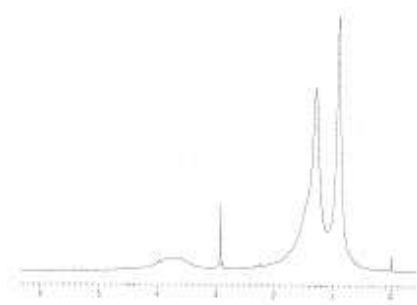


Figure 1

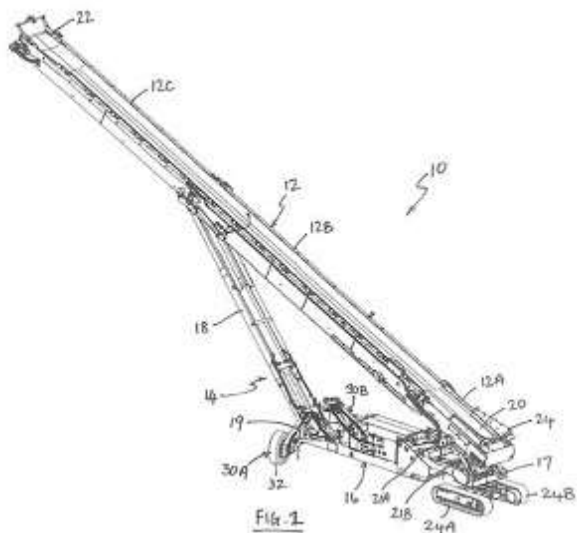
No. of Pages : 37 No. of Claims : 10

(54) Title of the invention : MACHINE AND METHOD TO DISPENSE FLUID PRODUCTS, IN PARTICULAR COLORING LIQUIDS

(51) International classification	:B01F0013100000, B01F0015000000, B01F0015040000, B67D0007320000, B01F0015020000	(71) <b>Name of Applicant :</b> <b>1)COROB S.P.A.</b> Address of Applicant :Via dell <sup>TM</sup> Agricoltura, 103 41038 San Felice Sul Panaro, Italy Italy
(31) Priority Document No	:102018000006192	(72) <b>Name of Inventor :</b> <b>1)HANUMANTAPPA, Naik Ramesh</b>
(32) Priority Date	:11/06/2018	
(33) Name of priority country	:Italy	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Machine (10) and method to dispense fluid products, in particular coloring liquids, comprising a plurality of tanks (16), in each of which a specific fluid product having determinate characteristics is contained, a dispensing unit (26) configured to dispense a selected fluid product contained in a corresponding tank (16), a plurality of pumps (18) each associated with one of the tanks (16) and configured to transfer a determinate quantity of fluid product from one of the tanks (16) to the dispensing unit (26), and a valve unit (23) interposed between the pumps (18) and the dispensing unit (26) to selectively pass, or interrupt, the flow of the fluid products between the plurality of pumps (18) and dispensing unit (26).



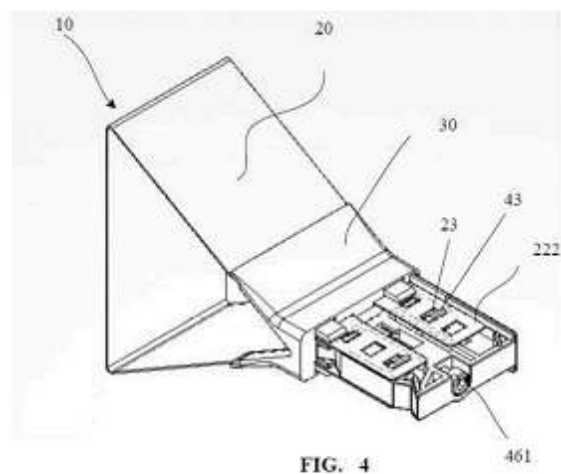
No. of Pages : 20 No. of Claims : 11

(54) Title of the invention : A FASTENING MECHANISM AND A FURNITURE ASSEMBLY

(51) International classification	:B65D0043020000, F16B0005000000, F16B0021020000, F16B0012320000, B63B0035340000	(71)Name of Applicant : <b>1)Zhejiang Xinyi Shengao Mechanical Transmission Co., Ltd.</b>
(31) Priority Document No	:201810680701.2	Address of Applicant :No. 909 Xinsongjiang Road, 13Ath Floor Fengyuan building, Songjiang 201620, Shanghai, China
(32) Priority Date	:27/06/2018	(72)Name of Inventor :
(33) Name of priority country	:China	<b>1)GOETTLER, Jacob</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Provided is a fastening mechanism configured to connect a first member to a second member, the fastening mechanism comprising: a clamp member having an enclosure for enclosing the first member, and engagement sheets extending from two side edges of the enclosure, the engagement sheet being provided with a first engagement portion; a locking member having slots, the engagement sheets of the clamp member being configured to be able to be inserted through the slots; and an actuating and tensioning means, wherein the actuating and tensioning means comprises: a main body portion provided with second engagement portions engaged with the first engagement portions of the engagement sheets, and a force application mechanism affixed to the main body portion for applying a force on the locking member to shift the relative position between the locking member and the clamp member. In addition, the present invention also relates to a furniture assembly using the fastening mechanism.



No. of Pages : 22 No. of Claims : 10

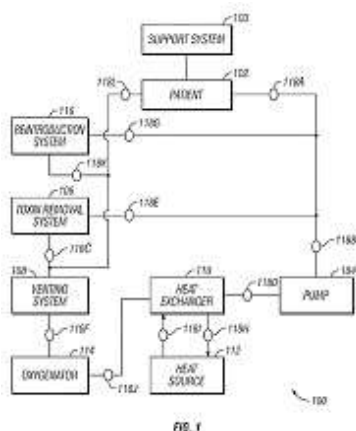
(54) Title of the invention : SYSTEMS AND METHODS FOR TREATING BLOOD

(51) International classification	:A61M0001160000, A61M0001360000, A61M0001140000, A61M0001340000, A61M0005440000	(71) <b>Name of Applicant :</b> <b>1)Humanity Life Extension, LLC</b> Address of Applicant :Saint Paul, Minnesota, US 55103 U.S.A.
(31) Priority Document No	:16/214,840	(72) <b>Name of Inventor :</b>
(32) Priority Date	:10/12/2018	<b>1)Spearman Patrick Richard</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

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(57) Abstract :

**ABSTRACT OF THE DISCLOSURE** According to some embodiments, a system may treat blood outside the body of a patient. The system may include one or more pumps configured to pump blood in a fluid flow path at a collective rate over 4 liters per minute. The system may include one or more heat exchangers operable to heat at least a portion of the blood to a temperature of at least 42 degrees Celsius and to allow the blood to cool one or more degrees following heating. The system may include one or more albumin dialysis modules configured to perform albumin dialysis on at least a portion of the blood at least after the one or more heat exchangers allow the blood to cool one or more degrees.



No. of Pages : 257 No. of Claims : 74

(54) Title of the invention : SYSTEMS AND METHODS FOR AUTOMATICALLY CONTROLLING A FAUCET

(51) International classification	:G06K0009000000, G06K0009620000, E03C0001040000, H04N0005232000, G06F0016583000	(71)Name of Applicant : <b>1)Kohler Co.</b> Address of Applicant :444 Highland Drive, Kohler, WI 53044, U.S.A. U.S.A.
(31) Priority Document No	:62/786,902	(72)Name of Inventor :
(32) Priority Date	:31/12/2018	<b>1)SMITH, Joel T.</b>
(33) Name of priority country	:U.S.A.	<b>2)SWARTE, Gregory de</b>
(86) International Application No	:NA	<b>3)ESTIBAN, Marwan E.</b>
Filing Date	:NA	<b>4)PODURU, Krishna C.</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A faucet includes a spout configured to direct fluid into a sink, a camera arranged to capture images of the sink, and a processing circuit. The processing circuit may receive an image from the camera. The image may include an object positioned beneath the spout. The processing circuit may analyze the image received from the camera to assign a classification to the object included in the image. The processing circuit may cause the spout to direct fluid into the sink with fluid flow characteristics that correspond to the classification of the object in the image.

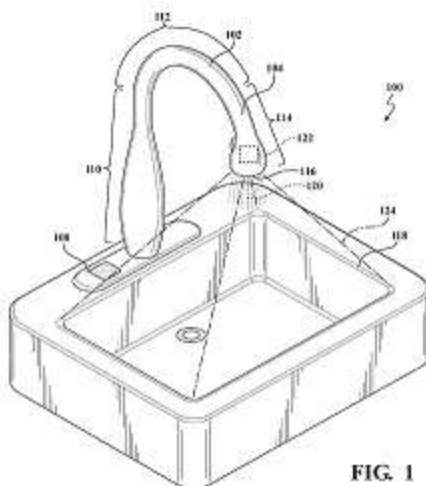


FIG. 1

No. of Pages : 33 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021000274 A

(19) INDIA

(22) Date of filing of Application :03/01/2020

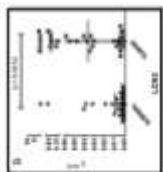
(43) Publication Date : 30/07/2021

(54) Title of the invention : ANTIBODIES AGAINST LIPOCALIN-2 AND USES THEREOF

		(71)Name of Applicant : <b>1)Advanced Centre for Treatment Research and Education in Cancer, Tata Memorial Centre</b> Address of Applicant :ACTREC, Tata Memorial Centre, Kharghar Node, Navi Mumbai 410210, Maharashtra, India Maharashtra India <b>2)Mazumdar Shaw Medical Foundation</b> <b>3)Beyond Antibody LLP</b> <b>4)Department of Biotechnology</b>
(51) International classification	:A61K0039000000, C07K0016240000, A61K0049000000, A61K0051100000, A61K0038000000	(72)Name of Inventor : <b>1)Sorab N Dalal</b> <b>2)Manjula Das</b> <b>3)Sujan K. Dhar</b> <b>4)Smitha P K</b> <b>5)Nazia Chaudhary</b> <b>6)Nehanjali Dwivedi</b> <b>7)Sanjay Gupta</b> <b>8)Sanket Shah</b> <b>9)Bhagya Shree Choudhary</b> <b>10)Rahul Thorat</b> <b>11)Nileema Khapare</b> <b>12)Vishnupriyan K</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides antibodies against Lipocalin-2 (LCN2) and uses of the antibodies. the invention represents an advancement in the field of monoclonal antibodies for targeting cells overexpressing Lipocalin-2 (LCN2). The monoclonal antibodies disclosed in this invention has the capability to target LCN2 and inhibit LCN2-mediated tumour progression in a number of pathological conditions, including various forms of cancer.



No. of Pages : 95 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021002974 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS FOR THE PREPARATION OF 3-CHLORO-2-HYDRAZINOPYRIDINE

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)GHARDA CHEMICALS LIMITED</b> Address of Applicant :R & D CENTER, B-27, MIDC PHASE-I, DOMBIVILI (E), DIST.THANE-421203, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MATHUR, Suchet Saran</b>
(33) Name of priority country	:NA	<b>2)MHATRE, Hridaynath Vishwanath</b>
(86) International Application No	:NA	<b>3)PEDHAVI, Vishal Parshuram</b>
Filing Date	:NA	<b>4)KOLI, Uday Tukaram</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT PROCESS FOR THE PREPARATION OF 3-CHLORO-2-HYDRAZINOPYRIDINE The present disclosure relates to a process for preparing 3-chloro-2-hydrazinopyridine. The process of the present disclosure obtains 3-chloro-2-hydrazinopyridine having a purity greater than 95% and a yield = 85%. The process of the present disclosure for the preparation of 3-chloro-2-hydrazinopyridine is simple, efficient, environmental friendly and economical.

No. of Pages : 16 No. of Claims : 9

(54) Title of the invention : DUAL LOCKING MECHANISM FOR INTERIOR TRIM ASSEMBLY

(51) International classification	:B60R0013020000, B60R0013040000, B60R0021216500, B60Q0003640000, B60R0022240000	(71) <b>Name of Applicant :</b> <b>1)TATA MOTORS LIMITED</b> Address of Applicant :Bombay House, 24 Homi Mody Street, Hutatma Chowk, Mumbai - 400 001, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Prashant Devidas Umale</b>
(33) Name of priority country	:NA	<b>2)Girish Vasant Dharmatti</b>
(86) International Application No	:NA	<b>3)Sumit Appasaheb Shivale</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Embodiment herein provide an interior trim assembly (20) of an automobile. The interior trim assembly (20) comprising a first trim member (21) comprising guiding lug (22) and auxiliary rib (23) protruding from one end of the first trim member (21); a second trim member (24) comprising holes (25) at one end to insert the guiding lug (22) and the auxiliary rib (23) of the first trim member (21); and a rib-lock clip (26) to lock the auxiliary rib (23). When the first trim member (21) is mated with the second trim member (24), the first trim member (21) is locked with the second trim member (24) at a first position (27) using the guiding lug (22) and at a second position (28) using the rib-lock clip (26). FIG. 2C

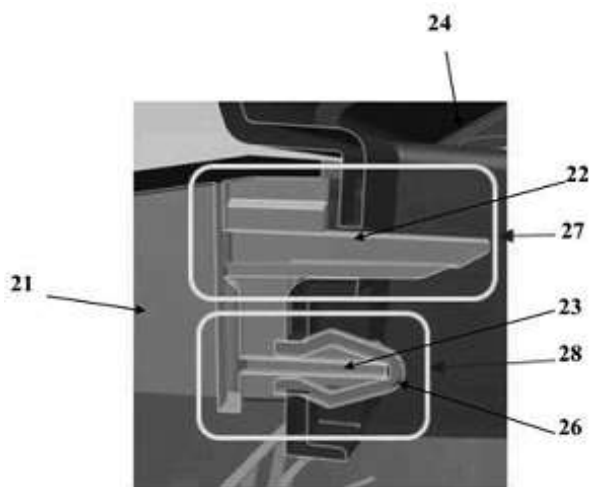


FIG. 2c

No. of Pages : 13 No. of Claims : 4

(54) Title of the invention : A TAILGATE TRIM FIXING MECHANISM TO ARREST RATTLE NOISE FOR A VEHICLE

(51) International classification	:B60J0005100000, B60R0013020000, B62D0025100000, B65D0005500000, A01K0001060000	(71) <b>Name of Applicant :</b> <b>1)Prashant Devidas Umale</b> Address of Applicant :Tata Motors Limited , Bombay House, 24 Homi Mody Street, Hutatma Chowk, Mumbai-400 001, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Prashant Devidas Umale</b>
(33) Name of priority country	:NA	<b>2)Abhay Tukaram Wayal</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Embodiment herein provide tailgate trim assembly of an automobile. The tailgate trim assembly comprising a tailgate trim member (3) and a tailgate inner panel (7). The tailgate trim member (3) comprising a plurality of buckle holders (4) at an edge portion, wherein each of the buckle holder (4) comprises a top holder (5) and a bottom holder (6). The tailgate inner panel (7) comprising a plurality of crush ribs (8) at an edge portion. When the tailgate inner panel (7) is assembled with the tailgate trim member (3), each of the buckle holders (4) of tailgate trim contacts with each of the crush ribs (8) of the tailgate inner panel (7). FIGS. 4a and 4b

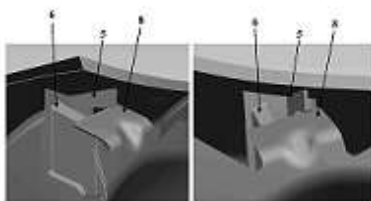


FIG. 4a

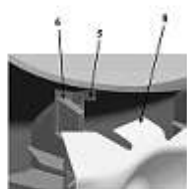


FIG. 4b

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003085 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PHARMACEUTICAL COMPOSITIONS OF RALTEGRAVIR

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)LUPIN LIMITED</b> Address of Applicant :Kalpataru Inspire, 3rd Floor, Off Western Express Highway, Santacruz (East), Mumbai 400 055, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KARNE, Vikram K.</b>
(33) Name of priority country	:NA	<b>2)VELHAL, Avinash K.</b>
(86) International Application No	:NA	<b>3)WAGH, Sanjay C.</b>
Filing Date	:NA	<b>4)AVACHAT, Makarand K.</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

PHARMACEUTICAL COMPOSITIONS OF RALTEGRAVIR A solid pharmaceutical composition for oral administration comprising raltegravir or its pharmaceutical acceptable salts and pH modifying agent.

No. of Pages : 27 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003086 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS FOR PREPARATION OF ELAGOLIX

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)LUPIN LIMITED</b> Address of Applicant :Kalpataru Inspire, 3rd Floor, Off Western Express Highway, Santacruz (East), Mumbai 400 055, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SULAKE, Rohidas Shivaji</b>
(33) Name of priority country	:NA	<b>2)AHER, Yogesh Subhash</b>
(86) International Application No	:NA	<b>3)VARMA, Devendrakumar</b>
Filing Date	:NA	<b>4)SMART, Anurag Anil</b>
(87) International Publication No	: NA	<b>5)GOHEL, Sunilkumar Venubhai</b>
(61) Patent of Addition to Application Number	:NA	<b>6)VYAS, Rajesh Harishankar</b>
Filing Date	:NA	<b>7)BHISE, Nandu Baban</b>
(62) Divisional to Application Number	:NA	<b>8)SINGH, Girij Pal</b>
Filing Date	:NA	

(57) Abstract :

The present invention provides novel intermediates for elagolix, process for preparation of these intermediates and process for preparation of elagolix and its pharmaceutically acceptable salts thereof.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003087 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SOLID FORMS OF BALOXAVIR MARBOXIL

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)LUPIN LIMITED</b> Address of Applicant :Kalpataru Inspire, 3rd Floor, Off Western Express Highway, Santacruz (East), Mumbai 400 055, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)RAJPUT, Lalitkumar Dilipsing</b>
(33) Name of priority country	:NA	<b>2)PAWAR, Pratim Shivaji</b>
(86) International Application No	:NA	<b>3)MADIREDDY, Narotham</b>
Filing Date	:NA	<b>4)GORANTLA, Srikanth</b>
(87) International Publication No	: NA	<b>5)SHIVDAVKAR, Radhakrishna Bhikaji</b>
(61) Patent of Addition to Application Number	:NA	<b>6)SINGH, Girij Pal</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

SOLID FORMS OF BALOXAVIR MARBOXIL The present invention relates to crystalline Baloxavir marboxil form-L, crystalline Baloxavir marboxil form-M, an amorphous Baloxavir marboxil and processes for their preparation thereof.

No. of Pages : 23 No. of Claims : 14

(54) Title of the invention : ARTIFICIAL INTELLIGENCE BASED PERCEPTUAL VIDEO QUALITY ASSESSMENT SYSTEM

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)Modaviti Emarketing Pvt Ltd.</b> Address of Applicant :206, Jai Antariksh, Makwana Road, Andheri East, Mumbai, Maharashtra 400059, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Manoj Shinde</b>
(33) Name of priority country	:NA	<b>2)Danish Jamil</b>
(86) International Application No	:NA	<b>3)Abhit Sinha</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A video quality evaluation system comprises a training module, a calculation module, an analytical module, a designing module, an optimization module, and an estimation module. The training module collects training videos and trains labels of perceptual quality generation that is associated with the collected videos. The calculation module determines objective metrics based on the trained labels that are associated with the collected videos. The analytical module analyses scenes of the training video, and correlates objective metrics associated with the analysed scenes using perceptual parameters. The designing module designs a Convolutional Neural Network (CNN) Architecture based on data associated with the objective metrics and trains a model generated based on the designed CNN architecture. The optimization module optimizes the model and optimizes power after the model optimization. The estimation module estimates perceptual quality scores for incoming video data after the power optimization.

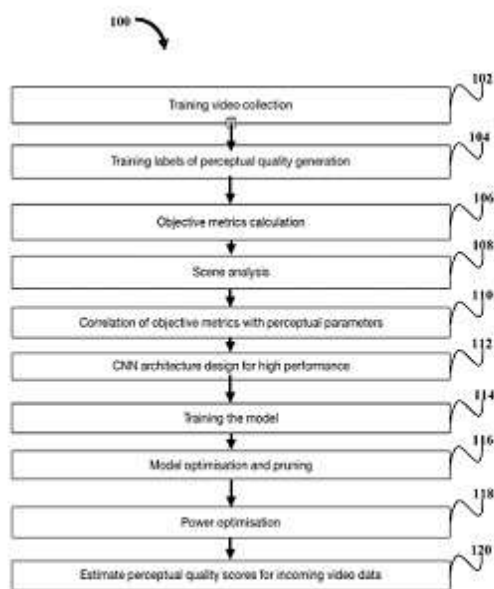


FIGURE 1A

(54) Title of the invention : A SYSTEM AND A METHOD FOR FACILITATING MESSAGING SERVICE

(51) International classification :H04W0004060000,  
H04L0029080000,  
H04W0004120000,  
H04H0060330000,  
G06Q0030020000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Zensar Technologies Limited**

Address of Applicant :Plot #4, Zensar Knowledge Park,  
MIDC, Kharadi, Off Nagar Road, Pune, Maharashtra 411014,  
India Maharashtra India

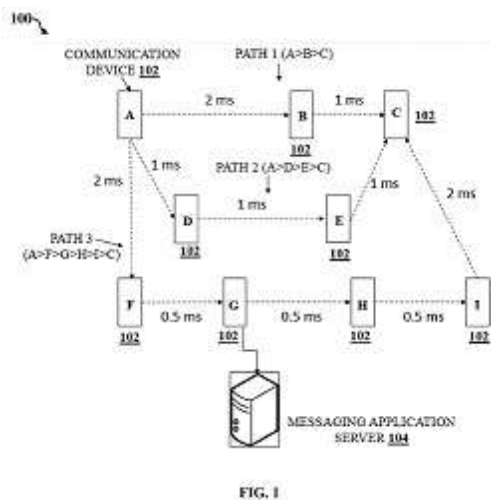
(72)Name of Inventor :

**1)NILESH PRAKASH PARAKH****2)SHRUTI DIXIT****3)SUMAN KUMAR DAS****4)SUDEEP, CHOUDHARI**

(57) Abstract :

Systems and methods for facilitating messaging service in offline mode is disclosed. The system comprises network of plurality of communication devices (102) present in an offline mode. Each communication device is capable to operate in one or more communication modes and to communicate with each other using at least one messaging application provided therewithin. Each communication device (102) captures ping times (212) taken for communicating with adjacent communication devices (102) and broadcast the same with the other communication devices (102) present in the offline mode. Based on the ping times (212), the communication device (102) determines a path having a shortest path time and a least count of the intermediary communication devices to transmit the message from the transmitting communication device (102) to the receiving communication device (102). FIG.

1



No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : CONTROLLING OPERATION OF DEVICES IN AN ENVIRONMENT

(51) International classification	:H04N0005268000, H04L0029080000, H04W0004200000, H04W0004700000, H02J0003000000	(71)Name of Applicant : <b>1)Panasonic Life Solutions India Private Limited</b> Address of Applicant :3rd Floor, B wing I- Think Techno Campus Pokhran, Road No 2 Thane (West), Thane, Maharashtra 400607, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)SUKHDEVE, Vaibhav</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A system comprises devices, and electrical operators (104) and an electrical power supply. The system further comprises a storage (108) comprising IoT profiles. Each IoT profile comprises a set of devices from the devices (106), a user-defined operation state corresponding to each device, and a user input corresponding to the IoT profile. The system further comprises a central node (102) coupled to the electrical operators (104) and the storage (108). The central node (102) may receive a user input from a first electrical operator. The central node (102) may further identify an IoT profile based on the user input. Furthermore, the central node (102) may be configured to ascertain the set of devices corresponding to the identified IoT profile. Furthermore, the central node (102) may be configured to transmit an operation message to a set of electrical operators (104) to control switching ON/OFF of the set of devices.

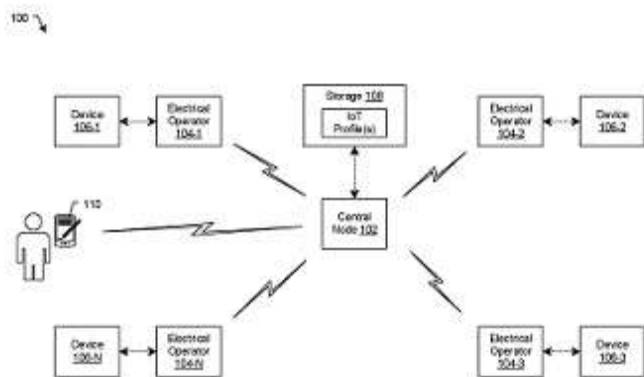


Fig. 1

No. of Pages : 24 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003169 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : FACILE IN SITU FABRICATION OF GRAPHENE METAL NANOCOMPOSITE USING BACTERIA

(51) International classification	:C01B0032186000, C01B0032194000, H01M0010052500, C12Q0001684100, H01M0004485000	(71) <b>Name of Applicant :</b> <b>1)PATIL ASHWINI GHANASHYAM</b> Address of Applicant :59-B, PITRESHWAR COLONY,NEAR BANSILAL NAGAR, SHIRPUR, DIST DHULE - 425405, MAHARASHTRA, INDIA. Maharashtra India <b>2)PATIL PRAVIN ONKAR</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PATIL ASHWINI GHANASHYAM</b>
(33) Name of priority country	:NA	<b>2)PATIL PRAVIN ONKAR</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present research deals with the development of a novel bioinspired in situ fabrication of graphene oxide-silver nanocomposite (rGO@AgNCs) with unique physiochemical properties using microbes (*Pseudomonas aeruginosa* and *Staphylococcus aureus*). The research findings of the proposed study demonstrate the simultaneous reduction of graphene oxide (GO) as well as silver into rGO@AgNCs in the presence of microbes.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003172 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PK PAIN KILLER AYURVEDIC MASSAGE OIL

(51) International classification	:A61K0036530000, A61K0036610000, A01N0065000000, A61K0009000000, A61K0047260000	(71) <b>Name of Applicant :</b> <b>1)BHAVSAR CHETAN JAYAVANT</b> Address of Applicant :12, RASIKALAL PATEL NAGAR, SHIRPUR, DIST-DHULE,MAHARASHTRA,INDIA. PIN CODE: 425405 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)BHAVSAR CHETAN JAYAVANT</b>
(33) Name of priority country	:NA	<b>2)BARI SANJAYKUMAR BABURAO</b>
(86) International Application No	:NA	<b>3)SHARMA MEENAKSHI RAMNIVAS</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates the topical massage oil used for the management of pain with its preparation and application method. It comprises essential oil which acts as counter-irritant, such as eucalyptus oil, lavender oil, lemongrass oil, anise oil, basil oil, bergamot oil, buchu oil, menthol oil, cedar oil, chamomile oil, coconut oil, clove oil, rosemary oil, sandalwood oil, thyme oil, vetiver oil, wintergreen oil, yarrow oil, tea tree oil. It gives immediate effect in minutes as well as when applied in an indicated frequency by physician, gives pain relief in hours and last for days. The ratio of active ingredients are: Lavamga 5% -20%, Dhupanga 20%-50%, Tailapatra 4%-15%, Karpurathrina 3%-25%, Til taila 60%-100% in every 10ml formulation. According to present invention is dedicated to acute and chronic type of pain, back pain, lower back pain, stiff neck, frozen shoulder, knee pain, any joint pain, nociceptive pain, arthritis.

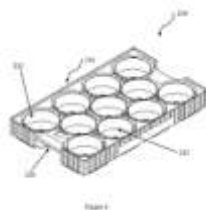
No. of Pages : 10 No. of Claims : 9

(54) Title of the invention : MODULAR AND ADAPTABLE CARRIER CRATES FOR HANDLING GEARS

(51) International classification	:A01G0024000000, C09K0011660000, H01Q0013080000, B22C0009220000, G01N0033960000	(71)Name of Applicant : <b>1)Pravin Upale</b> Address of Applicant :Sanco Tulip Society , Flat A14, Sector 6,Moshi Pradhikaran, PCNDTA,Pune Maharashtra Maharashtra India
(31) Priority Document No	:NA	<b>2)Shynu Mathew</b>
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	<b>1)Pravin Upale</b>
(86) International Application No	:NA	<b>2)Shynu Mathew</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

MODULAR AND ADAPTABLE CARRIER CRATES FOR HANDLING GEARS The present invention relates to the field of crates for handling gears. The Modular & adaptable crate assembly (200) improves the safety, reduces rejections, improves labor ergonomics, improves inventory management, and facilitates smooth supply chain of metal machining gears. The Modular & adaptable crate assembly (200) comprises a crate (210) and a plurality of gear carriers (225). The crate (210) has a storage space (215) defined therein. Each gear carrier (225) is removably fitted on the crate (210) in the storage space (215) of the crate (210), and is configured to receive at least one gear (300) horizontally.



No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : LUMINAIRE AS AN INTRINSICALLY SAFE POWER SOURCE

(51) International classification	:H05B0033080000, G01S0013880000, G05B0019042000, G06F0001260000, H04B0010116000	(71)Name of Applicant : <b>1)APPLETON GRP LLC</b> Address of Applicant :9377, Higgins Road, Rosemount, IL, 60018, USA U.S.A.
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)GURJAR, Ravindra Viraj</b>
(32) Priority Date	:NA	<b>2)GRAFF, Timothy Eugene</b>
(33) Name of priority country	:NA	<b>3)PAN, Peter Yicheng</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An intrinsically safe (IS) luminaire disposed in a hazardous environment provides visible light and serves as a primary, auxiliary, back-up, and/or charging source of IS DC power for external devices disposed in the hazardous environment, such as process control devices and equipment. The luminaire includes a power converter that converts received power into DC power, an IS barrier that converts the DC power into IS DC power native to or utilized by a recipient external device, and a power distribution port via which IS DC power is delivered to the external device. In some configurations, the luminaire monitors communicates statuses, alerts, and/or other information corresponding to delivering IS DC power to one or more external devices to a host and/or portable communication device. The luminaire may include multiple IS barriers of same and/or different IS ratings, and may dynamically control activation/deactivation of the IS barriers and/or usages thereof.

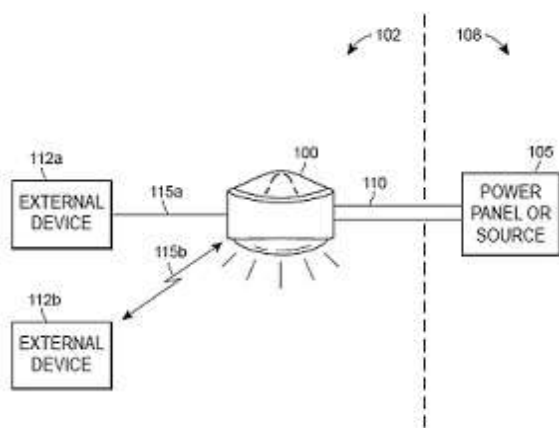


FIG. 1

No. of Pages : 45 No. of Claims : 70

(54) Title of the invention : A PROCESS FOR WATERLESS STANDALONE POWER GENERATION

(51) International classification	:F01D0015100000, F01K0025080000, F01K0025100000, F28B0009080000, H02N0011000000	(71)Name of Applicant : <b>1)ASSURE THERMAL ENERGY SOLUTIONS LLP</b> Address of Applicant :C/O SAFE AIR HOUSE,2ND FLOOR, PLOT NO:118/119, RAMTEKDI INDUSTRIAL AREA, HADAPSAR, PUNE-411013 Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Mr Kailas Nimbalkar</b>
(33) Name of priority country	:NA	<b>2)Mr. Nilesh Kawoor</b>
(86) International Application No	:NA	<b>3)Mr. Ajay Telang</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT A PROCESS FOR WATERLESS STANDALONE POWER GENERATION** A process for waterless standalone power generation is disclosed that generates electricity efficiently using an ORC fluid which reduces emissions and water usage as compared to conventional power generation process. The waterless standalone power generation plant 100 includes a stabilizer 115, a condensing evaporator 120, a preheater 125, a recuperator 135, an integral chilling unit 140, a pair of condensers 145 and 175, an accumulator 160, a turbine 165, a generator 170. The condensing stabilizer 115 and evaporator 120 reduce the temperature of the flue gases to maintain it below working temperature of ORC fluid and trap the latent heat and the sensible heat which increases the efficiency of the waterless standalone power generation plant 100. FIG. 1 (For Publication)

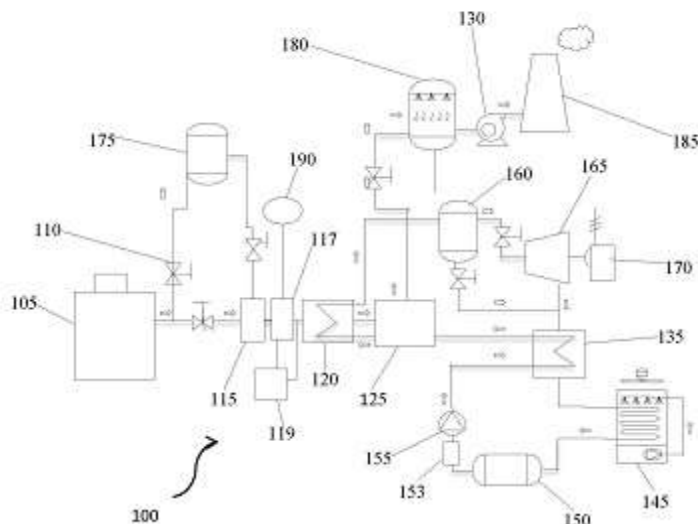


FIG.1

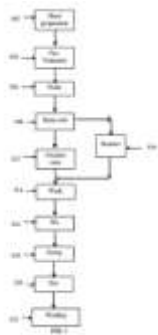
No. of Pages : 25 No. of Claims : 12

(54) Title of the invention : A PROCESS AND SYSTEM FOR COLORATION OF YARN/FABRIC AND GARMENT THEREFROM

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)Arvind Limited</b> Address of Applicant :Naroda Road, Ahmedabad- 380025, Gujarat, India Gujarat India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Punit Lalbhai</b>
(33) Name of priority country	:NA	<b>2)Rahul DattaRoy</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT A PROCESS AND SYSTEM FOR COLORATION OF YARN/FABRIC AND GARMENT THEREFROM** The present invention relates to a system and a process for coloration of yarn or a fabric. The system and the process facilitates coloration of the yarn or the fabric in non-reactive atmosphere thereby eliminating nozzle chocking. In the process, the colour/ dye is uniformly distributed on the yarn or the fabric. FIG. 1 for publication.



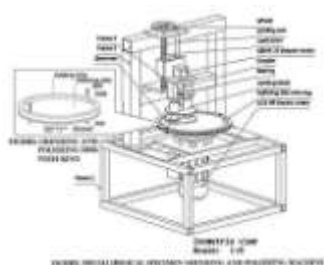
No. of Pages : 14 No. of Claims : 10

(54) Title of the invention : A LOW-COST SEMI-AUTOMATIC METALLURGICAL SPECIMEN GRINDING AND POLISHING MACHINE TO DEVELOP SPECIMEN FOR MICROSCOPIC ANALYSIS

(51) International classification	:G01N0001280000, G01N0001320000, G01N0033200000, G01N0001360000, B24B0007180000	(71) <b>Name of Applicant :</b> <b>1)Sachin Mahadev Khomane</b> Address of Applicant :SVERI™s College of Engineering, Pandharpur P.B. No. 54, Gopalpur -Ranjani Road, Gopalpur Rd, Pandharpur, Solapur Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sachin Mahadev Khomane</b>
(33) Name of priority country	:NA	<b>2)Ranjit Ramkrishna Gidde</b>
(86) International Application No	:NA	<b>3)Pradeep Vitthal Jadhav</b>
Filing Date	:NA	<b>4)Akash Bharat Rakate</b>
(87) International Publication No	: NA	<b>5)Indrajit Somnath Wadgave</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Sachin Suresh Ingle</b>
Filing Date	:NA	<b>7)Nitin Shankar Tele</b>
(62) Divisional to Application Number	:NA	<b>8)Pranav Hiralal Ippanpalli</b>
Filing Date	:NA	

## (57) Abstract :

This is about an apparatus for grinding and polishing of metallurgical specimens. The metallurgical specimen polishing gives a specific pattern on the surface of the specimen, which helps to examine the microstructure of metals. This project gives efficient semi-automatic specimen polishing machine to get accuracy in grinding and polishing for microscopic analysis of the metallurgical specimens. In many industries generally, the manual polishing method is used to prepare the metallurgical specimen for examining the microstructure of metal samples. The manual polishing method requires more skill, practice, time, efforts to get accurate structure over the metal sample for a microscopic view. The automatic polishing machine is afforded by only some of the laboratories so manufacturing semiautomatic polishing machines at an affordable price for laboratories is essential. In this project, the focus is given on the grinding and polishing disk, equipment used to apply the force on the specimen and frame structure of the machine. The polishing disk is manufactured by considering mounting of the nonsticky grinding and polishing paper, sticky grinding and polishing paper and mounting of polishing cloth. The nonsticky paper is attached to polishing disk by using ring, nut, and bolt. The machine has been designed by using a licensed copy of CATIA V5.



No. of Pages : 4 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003382 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD OF INCREASING THE HUNTER WHITENESS OF WHITE CEMENT.

(51) International classification	:C04B0007480000, C22B0003440000, D21H0021300000, C22B0003000000, C07F0015020000	(71)Name of Applicant : <b>1)Aditya Birla Science and Technology Company Private Limited</b> Address of Applicant :Aditya Birla Centre, 2nd Floor, ~C™ wing, S.K. Ahire Marg, Worli, Mumbai 400030, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Dr. Subrata Roy</b>
(33) Name of priority country	:NA	<b>2)Soumalya Barari</b>
(86) International Application No	:NA	<b>3)Dr. Rajesh Singh</b>
Filing Date	:NA	<b>4)Mr. Pujari Aditya Rajendra</b>
(87) International Publication No	: NA	<b>5)Mr. Bhupendra Magare</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a method of increasing the Hunter Whiteness of white cement by 1-10%. The whiteness is increased by changing the valency of iron present in the clinker from ferric to ferrous. Reference (Figure 1)

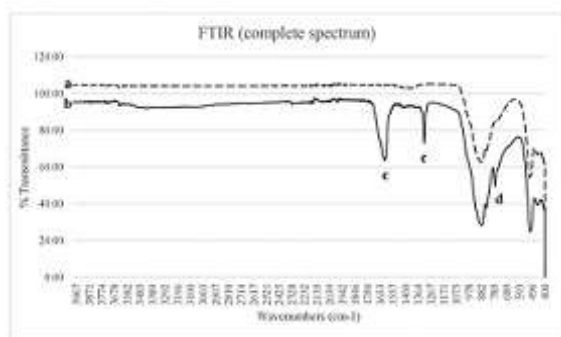


Fig. 1

No. of Pages : 14 No. of Claims : 5

(54) Title of the invention : A CRATE WITH FOLDABLE SIDE WALLS

(51) International classification	:B65D0019120000, B65D0025000000, B65D0006180000, B65D0019180000, E04H0001120000	(71)Name of Applicant : <b>1)PAREKH, NAYAN SHARADBHAI</b> Address of Applicant :Plot 77/78, Street number 14, M.I.D.C. Andheri East, Mumbai 400093, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)PAREKH, NAYAN SHARADBHAI</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to the field of crates and the present disclosure envisages a crate (100) with foldable side walls. The crate (100) comprises a base (102), four walls (104A to 104D), a plurality of hinges (106) and a locking mechanism (114). Each of the four walls (104A to 104D) is configured to be displaced from a secured operative configuration with respect to the base (102) to an in-operative folded configuration. Each of the four walls (104A to 104D) is roughly parallel to the base (102) and is foldable thereon. The locking mechanism (114) is configured for securely locking the four walls (104A to 104D) with respect to each other in an operative vertical configuration of the four walls (104A to 104D). The crate (100) occupies less space during empty logistics.

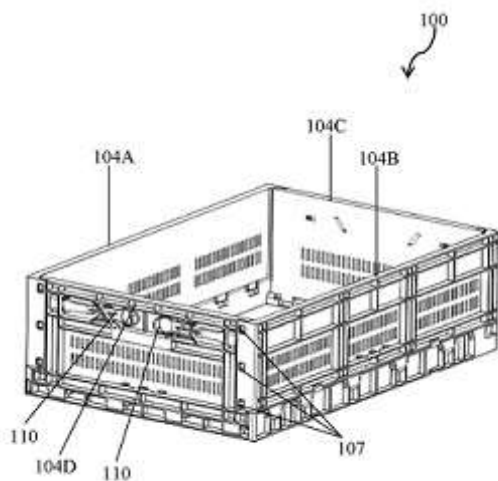


FIGURE 1

No. of Pages : 24 No. of Claims : 15

(54) Title of the invention : NON REVERSIBLE VALVE ASSEMBLY

(51) International classification	:H01L0023130000, B65D0051160000, F16D0065560000, H01L0023500000, H02K0003280000	(71) <b>Name of Applicant :</b> <b>1)PRASHANT NISHIKANT JOSHI</b> Address of Applicant :FLAT NO.3505, TOWER 4 CEDER, RUNWAL GREENS, MULUND GOREGAON LINK ROAD, NEAR FORTIS HOSPITAL, NAHUR (WEST), MUMBAI- 400078, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PRASHANT NISHIKANT JOSHI</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses a non-reversible valve for a container that is tamper proof and non-refillable, such that it prevent outside material to flow into the container so as to restrict contamination of the inside liquid by an outside liquid thereby preventing adulteration of any kind. The non-reversible valve comprises, the following components, bottom part, that has plurality of small teeth arranged at least on one sides of its surface, and a central hole at the centre of its body; glass ball; middle part that has plurality of small flexible teeth arranged on the bottom side of the middle part and the top part, that has a wide central gap, in a circular manner and collars on the top, with specific passage designed on the periphery of the top part for dispensing/discharging of liquid in a controlled manner. [ Fig. 1 ]



No. of Pages : 16 No. of Claims : 12

(54) Title of the invention : DOUGH TESTING EQUIPMENTS &amp; METHODS

(51) International classification	:A21D0002360000, A21D0002160000, A21D0006000000, A23L0007109000, A23L0007130000	(71) <b>Name of Applicant :</b> <b>1)SUSHIL MANOHAR SAMVATSAR</b> Address of Applicant :PLOT NO 40 , C/3,TOWN CENTRE CIDCO, AURANGABAD, MAHARASHTRA 431003 Maharashtra India <b>2)MANDAR SUSHIL SAMVATSAR</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SUSHIL MANOHAR SAMVATSAR</b>
(33) Name of priority country	:NA	<b>2)MANDAR SUSHIL SAMVATSAR</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Wheat and other grain flour, and textural properties of dough are currently evaluated for performance using complex and sophisticated equipments which have to be located in laboratory. In food manufacturing process flour is kneaded to make dough. The functionality and workability properties are subjectively assessed by expert chef on production spot. The present innovation reveals equipments and methods to measure textural properties at work spot. The figure for abstract shows cross-section view of DOUGH TEST FINGER PROBE with rounded endcap. and handle . It consists of test finger [2] fixed with round endcap [1] and handle [5]. Test finger has rib [3] and is attached to force sensor [4] fixed in handle. Data acquisition electronics , processing , wireless communication etc. functions are located in the handle. When finger probe is pressed into dough it faces resistance force which is communicated to ~external dedicated console™ or ~smart phone™ with dedicated software application for processing and display result immediately. Different types of endcaps and methods and other embodiments bring out various textural properties of dough e.g. firmness, stickiness, extensibility, extrudability etc. Different food products have different textural requirements. Blending of flours is done to achieve the same. Quantitative assessment by equipments explained in embodiments improves process control on the production floor . The innovated equipments are simple and easy to use by shop floor person.

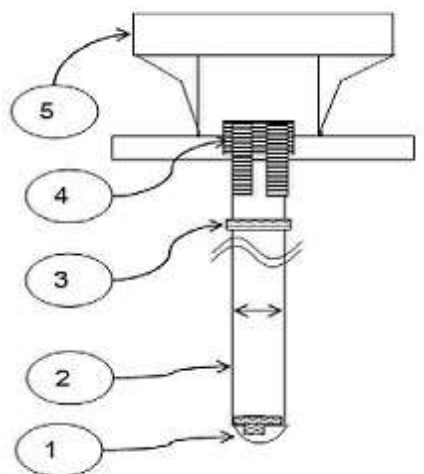


FIGURE FOR ABSTRACT

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003454 A

(19) INDIA

(22) Date of filing of Application :26/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : ELEMENT AND PEN FOR WRITING AND TREATMENT OF SUBJECTS AND METHODS THEREOF

(51) International classification	:A61K0045060000, A61B0005000000, A61K0031519000, A61F0005580000, A61K0033260000	(71) <b>Name of Applicant :</b> <b>1)GIRI, Yogendra Batuk</b> Address of Applicant :805, BHIVAJEWADI, MANDHARDEV, VAI, SATARA, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)GIRI, Yogendra Batuk</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention in a preferred embodiment provides element and pen for writing and treatment of subjects and methods thereof, wherein the pen and the element comprise of a. a metallic body made up of an alloy of metals including mercury, copper, gall, zinc and iron; and b. the pen or the element when brought in contact of the subject is capable of treating stuttering, low heartbeat, blood pressure, heart disease, breathing, discomfort, fatigue, weakness, diabetes, joint pain and muscle pain.

No. of Pages : 6 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003467 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : POLLEN BASED BIOADSORBENT PREPERATION AND REMOVAL OF HEAVY METALS FROM WATER

(51) International classification	:C02F0001280000, C02F0101220000, B01J0020040000, C01G0051000000, B01J0020280000	(71) <b>Name of Applicant :</b> <b>1)GIRISH KOREKAR</b> Address of Applicant :CHETNAGIRI BIOTECH LLP, 64, NEAR SAMAJ BHAWAN, KHAIRLANGI POST-PINDKEPAR, BHANDARA - 441802, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	<b>2)CHETNA UGALE</b>
(32) Priority Date	:NA	<b>3)ANUPAMA KUMAR</b>
(33) Name of priority country	:NA	(72) <b>Name of Inventor :</b>
(86) International Application No	:NA	<b>1)GIRISH KOREKAR</b>
Filing Date	:NA	<b>2)CHETNA UGALE</b>
(87) International Publication No	: NA	<b>3)ANUPAMA KUMAR</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to removal of heavy metals from water and preparation method thereof, in particular to pollen based bioadsorbent. The bioadsorbent takes pollen, chitosan and ferric hydroxyapatite as raw materials, prepared by using sol-gel method. Pollen surface with ridges and furrows having large availability of functional groups created a larger specific surface area and which is in high adsorption rate and capacity, low cost and environment-friendly. This can be used for removal of heavy metal ion pollutants, like lead, cobalt, manganese, cadmium, arsenic, chromium, copper, nickel from the various kinds of water such as underground water, surface water and the lake.

No. of Pages : 5 No. of Claims : 3

(54) Title of the invention : MODIFIED PADDY STRAW BIOCOMPOSITE PREPERATION AND REMOVAL OF HEAVY METALS FROM WATER

(51) International classification	:C02F0001280000, B01J0020240000, B01J0020280000, B01J0020040000, C02F0101220000	(71) <b>Name of Applicant :</b> <b>1)GIRISH KOREKAR</b> Address of Applicant :CHETNAGIRI BIOTECH LLP, 64, NEAR SAMAJ BHAWAN, KHAIRLANGI POST-PINDKEPAR, BHANDARA - 441802, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	<b>2)CHETNA UGALE</b>
(32) Priority Date	:NA	(72) <b>Name of Inventor :</b>
(33) Name of priority country	:NA	<b>1)GIRISH KOREKAR</b>
(86) International Application No	:NA	<b>2)CHETNA UGALE</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention relates to removal of heavy metals from water and preparation method thereof, in particular to modified paddy straw based bio composite bio sorbent. The present bio sorbent takes modified paddy straw, chitosan and ferric hydroxyapatite as raw materials, prepared by using sol-gel method. The saponification of paddy straw lead to produce carboxylate site for binding heavy metals and further phosphorylation by using phosphoric acid help to increase adsorption capacity of paddy straw. The modified paddy straw based bio composite bio sorbent is in high adsorption rate and capacity, low cost and environment-friendly. This can be used for removal of heavy metal ion pollutants, like lead, cobalt, manganese, cadmium, arsenic, chromium, copper, nickel from the various kinds of water such as underground water, surface water and the like.

No. of Pages : 6 No. of Claims : 3

(54) Title of the invention : AN APPARATUS AND METHOD FOR VIBRATION, NOISE, AND TEMPERATURE BASED CONDITION MONITORING OF A MACHINE

(51) International classification	:G06F0001320600, G01K0001020000, G01H0001000000, H04M0001725000, G01N0019020000	(71)Name of Applicant : <b>1)COLLEGE OF ENGINEERING, PUNE</b> Address of Applicant :WELLESLEY RD., SHIVAJINAGAR, PUNE 411005, MAHARASHTRA, INDIA Maharashtra India (72)Name of Inventor : <b>1)JAYANT SHANKAR KARAJAGIKAR</b> <b>2)BHAGWAN UTTAMRAO SONAWANE</b> <b>3)BHARATKUMAR BHAGATRAJ AHUJA</b> <b>4)ABHIJEET VILASRAO BHAGAT</b> <b>5)KAUSTUBH DIVAKARRAO ISADKAR</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

An apparatus for a vibration, noise, and temperature based condition monitoring of a machine, said apparatus comprising: a vibration sensor (VS) to provide a ~sensed vibration value<sup>TM</sup>; a noise sensor (NS) to provide a ~sensed noise value<sup>TM</sup>; a temperature sensor (TS) to provide a ~sensed temperature value; a first computation mechanism (CM1) to compute a real-time ~vibration score<sup>TM</sup>; a first comparator (CR1) to determine a first breach signal; a counter (C) to increment a count on detecting breaches to obtain a set of ~first derived parameters<sup>TM</sup> of said machine, said ~first derived parameters<sup>TM</sup> being a ~count<sup>TM</sup> of severity (S), a ~count<sup>TM</sup> of occurrence (O), and a ~count<sup>TM</sup> of detection; a second computation mechanism (CM2) to compute a risk priority score (RPS); a second comparator (CR1) to determine a second breach signal; and a notification mechanism (NM) to provide notifications relating to said first breach signal or said second breach signal.

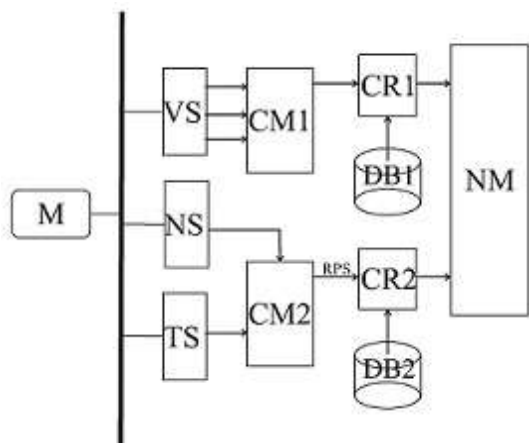


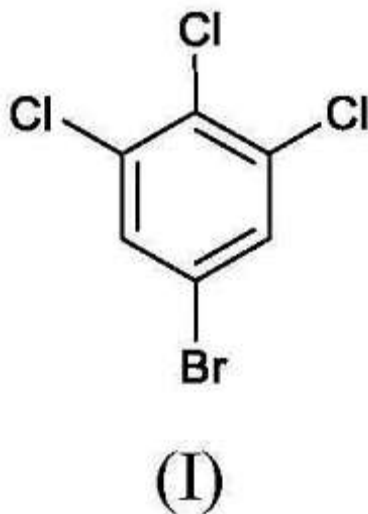
FIGURE 1

(54) Title of the invention : PROCESS FOR PREPARATION OF 5-BROMO-1,2,3-TRICHLOROBENZENE

(51) International classification	:A01N0043800000, C07C0025100000, C07C0017120000, C07D0261040000, C07C0213020000	(71) <b>Name of Applicant :</b> <b>1)Hikal Limited</b> Address of Applicant :3A & 3B, International Biotech Park Hinjewadi, Pune Maharashtra India 411 057 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Rakesh Ramesh Ganorkar</b>
(33) Name of priority country	:NA	<b>2)Narayan Subhash Chakor</b>
(86) International Application No	:NA	<b>3)Mahadev Babasaheb Kandekar</b>
Filing Date	:NA	<b>4)Mahavir Somnath Naykode</b>
(87) International Publication No	: NA	<b>5)Hanumant Mahadev Nanaware</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Sudhir Nambiar</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT PROCESS FOR PREPARATION OF 5-BROMO-1,2,3-TRICHLOROBENZENE The present invention relates to a process for preparation of 5-bromo-1,2,3-trichlorobenzene of formula (I) in simple, economical manner with high yield. The 5-bromo-1,2,3-trichlorobenzene of formula (I) is used in preparation of 1-(3,4,5-trichloro-phenyl)-2,2,2-trifluoro-ethanone which is a key intermediate of isoxazoline derivatives. (I)



(54) Title of the invention : SYSTEM AND METHOD FOR UNSUPERVISED ANOMALY DETECTION

(51) International classification	:H04L0029080000, G06N0003080000, H04L0029060000, G06N0003040000, H04W0004700000	(71)Name of Applicant : <b>1)Fractal Analytics Private Limited</b> Address of Applicant :Level 7, Commerz II, International Business Park, Oberoi Garden City, Off Western Express Highway, Goregaon (East), Mumbai 400063, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Shivam Bhardwaj</b>
(33) Name of priority country	:NA	<b>2)Nitish Pant</b>
(86) International Application No	:NA	<b>3)Nikhil Fernandes</b>
Filing Date	:NA	<b>4)Soudip Roy Chowdhury</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present embodiments related systems and methods for deep learning unsupervised anomaly detection (UAD) in Internet of Things (IoT) networks. The system comprises a server configured to receive real-time data from a plurality of the IoT sensors or manufacturing execution systems in an IoT network and convert real-time data to a data stream; a processor configured to receive the data stream from the server and process the data stream using a UAD artificial intelligent (AI) core to generate an anomaly score, wherein the UAD AI core comprises an ensemble of a plurality of generative adversarial network (GAN) models; and a web dashboard configured to present all telemetry real-time data to a user and deliver the anomaly score alerting about any potential operational anomaly in the IoT network.

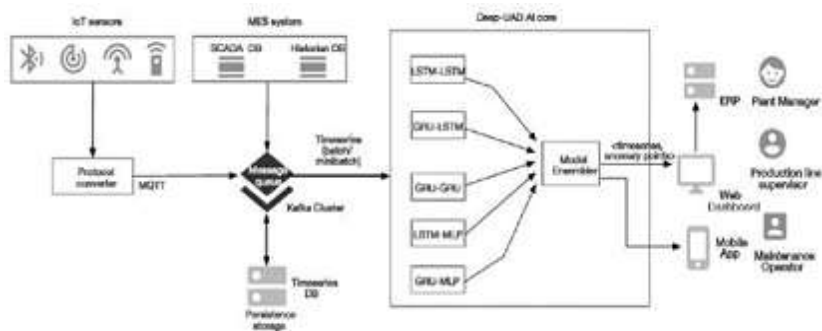


FIG. 1

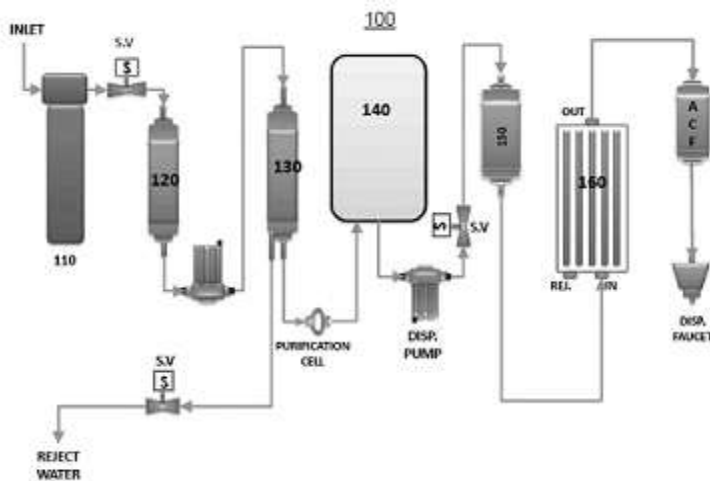
No. of Pages : 51 No. of Claims : 21

(54) Title of the invention : A MINERALIZER MEDIA FOR PRODUCING ALKALINE WATER AND HYDROGEN WATER

<p>(51) International classification :C02F0001461000, C07J0075000000, C02F0001680000, C09K0011770000, C04B0035634000</p> <p>(31) Priority Document No :NA (32) Priority Date :NA (33) Name of priority country :NA (86) International Application No :NA Filing Date :NA (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : <b>1)Ion Exchange India Ltd</b> Address of Applicant :Ion House, Dr E Moses Rd, Mahalakshmi, Mumbai 400011, Maharashtra, India Maharashtra India (72)Name of Inventor : <b>1)Rupa Avinnash Laghate</b> <b>2)Clifford Fredrick Dsouza</b></p>
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(57) Abstract :

A mineralizer media for producing alkaline water and hydrogen water comprising alkaline earth metal and binder, wherein the alkaline earth metal and the binder are sintered together and a process and system, comprising the mineralizer media, for producing alkaline and hydrogen water.



No. of Pages : 15 No. of Claims : 11

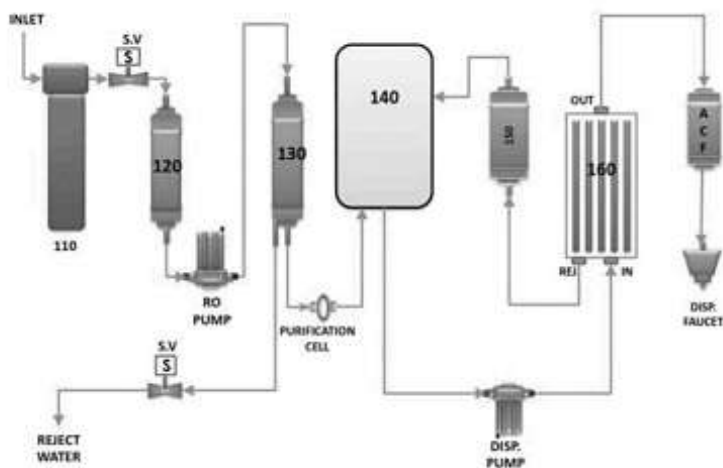
(54) Title of the invention : ZERO WASTAGE PROCESS FOR PRODUCTION OF ALKALINE WATER

(51) International classification	:H04L0029080000, H04N0021274300, B64G0001360000, H04N0001000000, C07D0263320000	(71)Name of Applicant : <b>1)Ion Exchange India Ltd</b> Address of Applicant :Ion House, Dr E Moses Rd, Mahalakshmi, Mumbai, Maharashtra India 400011 Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Clifford Fredrick Dsouza</b>
(33) Name of priority country	:NA	<b>2)Rupa Avinnash Laghate</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a method for producing alkaline water from potable water, more particularly to a process with zero water wastage and the system for production thereof. Figure 1

Figure 1



No. of Pages : 12 No. of Claims : 9

(54) Title of the invention : PHARMACEUTICAL COMPOSITION FOR REDUCING PROTEIN BOUND UREMIC TOXINS

(51) International classification :A61K0009000000,  
A61K0047360000,  
A61K0009500000,  
A61K0009160000,  
A61M0001340000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Frimline Private Limited**  
Address of Applicant :5th Floor-511, Iscon Elegance, Nr.  
Circle P, Nr. Jain Temple, Prahlad Nagar Cross Rd, Ahmedabad  
380015, Gujarat, India Gujarat India  
(72)Name of Inventor :  
**1)SHYAM, Ankit**  
**2)CHHUNCHHA, Alpesh**

(57) Abstract :

The present invention relates to a composition/formulation for reducing uremic toxins, particularly protein bound uremic toxins in chronic kidney disease (CKD). More particularly, the pharmaceutical composition/formulation comprises a synergistic combination of Inulin and Betaine or their pharmaceutically acceptable salts for reducing protein bound uremic toxins. The present application also provides various compositions/formulations and process of preparing the same.

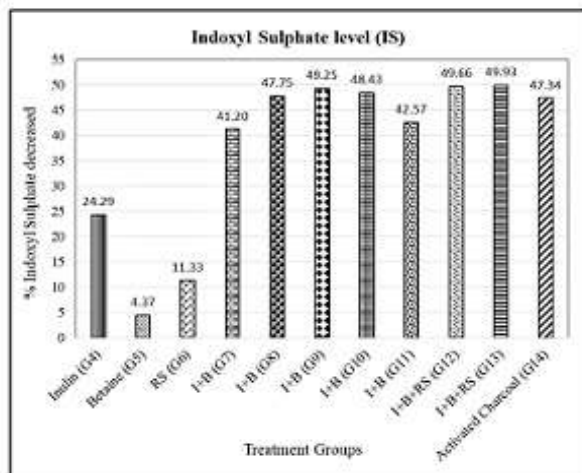


Fig 1

No. of Pages : 41 No. of Claims : 11

(54) Title of the invention : FASTENING CLIP

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)ILLINOIS TOOL WORKS INC.</b> Address of Applicant :155 Harlem Avenue, Glenview, Illinois 60025, United States of America U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KUMAR, Ganesh</b>
(33) Name of priority country	:NA	<b>2)GOKAVI, Mahantesh S</b>
(86) International Application No	:NA	<b>3)JOHNSON, Allande</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A fastening clip (100), for securing a first component (200) and a second component (300), includes a body portion (102) and a collar (104) formed at an edge of the body portion (102). The body portion (102) includes a flat surface (106) having a first face and a second face, a locking element (110) extending from the first face of the flat surface (106) and adapted to detachably couple to the first component (200), and a plurality of engagement portions (108) extending from the first face of the flat surface (106) and adapted to detachably couple to the second component (300). The collar (104) includes a first flange (112) extending from the second face in an opposite direction from the plurality of engagement portions. The first flange (112) is flexible and is adapted to abut against the first component (200). <>

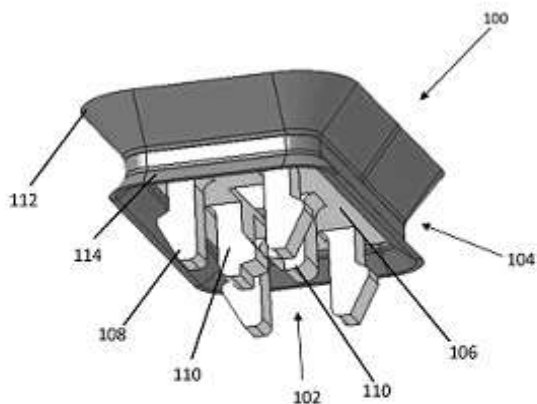


FIG. 1A

No. of Pages : 29 No. of Claims : 8

(54) Title of the invention : Method to Extract Bio-polymers from Cashew Nut Shell Oil

(51) International classification	:C08G0063910000, H01B0001120000, C08G0018650000, C08G0073160000, C08L0099000000	(71) <b>Name of Applicant :</b> <b>1)Gaurish Mahabaleshwar Samant</b> Address of Applicant :H No71Sudha Smruti Near Datta Mandir Tambosem Goa India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Gaurish Mahabaleshwar Samant</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT// /	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The use of materials from renewable resources is becoming increasingly important as the world™s leading industries and manufacturers seek to replace dwindling petrochemical-based feed stocks with agricultural-based materials. The quest for materials from renewable resources supports global sustainability and comes at a time when there is an excess capacity in the agricultural industry. Thus, the diversification of utilization of renewable resources into non-food uses, addresses both an important global environmental issue and lends stability for an important segment of our economy. The material utilization of agricultural products has to overcome many technical barriers that often resulted in products, which were either non-competitive in price or properties compared to petroleum-based products. In this respect, cashew nut shell liquid (CNSL) represents a renewable, widely available and relatively low cost organic natural raw material. The main objective of the present research is to synthesize difunctional condensation monomers for high performance polymers starting from CNSL. Another objective was to utilize these di-functional monomers to obtain high performance polymers with improved solubility / process ability. Thus, our synthetic research efforts were directed towards design and synthesis of di-functional monomers with features that disturb chain packing and structural regularity in the polymer backbone. The approach involved making use of 3-pentadecyl phenol as a starting material which in turn is obtained from cashew nut shell liquid (CNSL)- a renewable resource material. The monomers were designed with a view to incorporate structural features such as: i) the presence of meta-linkages in the polymer structure to decrease the rigidity of the polymer backbone and to inhibit chain packing by introducing kinks • to the main chain, thus reducing the inter chain interactions leading to enhanced solubility ii) the presence of pendent pentadecyl chain along the polymer backbone reduces strong molecular interactions of stiff-chain aromatic polymers, producing an effective chain separation effect and consecutively aid in improved solubility and process ability,. The synthesized di-functional monomers were utilized to synthesize step-growth polymers viz., polyimides, polyamides, poly(azomethine)s, poly(amideimide)s, poly(esterimide)s and polyesters containing pendent flexible pentadecyl chains. The effect of incorporation of pentadecyl chains on the solubility and thermal properties of the polymers was studied.

No. of Pages : 8 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021003668 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DESIGN AND DEVELOPMENT OF ADDITIVE MANUFACTURED CONFORMAL COOLING CHANNELS FOR INJECTION MOLDING.

(51) International classification	:B29C0045730000, B29C0033040000, B33Y0080000000, G06F0017500000, B22F0003105000	(71) <b>Name of Applicant :</b> <b>1)Gaurish M Samant</b> Address of Applicant :H No71Sudha Smruti Near Datta Mandir Tambosem Goa India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Gaurish M Samant</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Reducing the cycle time in plastic injection molding is of significant importance to industry. One approach that has been proposed is to use conformal cooling channels, made possible by additive manufacturing which allows for greater geometric freedom. In this model, a systematic approach is proposed to replace traditionally designed cooling channels in mould with optimally designed conformal cooling channels. Injection molding depends on uniform cooling and heating of plastic material. Generally it becomes very difficult to cool the plastic material quickly and at uniform rate. Cooling is also important because plastic cannot be kept in a molten state for a longer period which leads to the degradation of its quality.

No. of Pages : 3 No. of Claims : 4

(54) Title of the invention : HIGH VOLUME LOW SPEED FAN ASSEMBLY

(51) International classification	:F04D0025080000, F04D0029320000, F04D0019000000, F04D0029600000, F04D0029640000	(71) <b>Name of Applicant :</b> <b>1)ECOAIR COOLING SYSTEM PVT LTD</b> Address of Applicant :Survey No.279/1 & 2, Raison Industrial Park, Hinjewadi Ph-II, Village - Maan,Tal - Mulshi, Pune 411057, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sandeep Jaisinghani</b>
(33) Name of priority country	:NA	<b>2)Ajinkya Goray</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

HIGH VOLUME LOW SPEED FAN ASSEMBLY Abstract Disclosed is a high volume low speed fan assembly (100) with improved design fan that integrates a deep groove ball bearing (54) within the fan blade sub-assembly (60) with a two-piece hub (44), i.e. a main hub (44) and an adapter (42). This reduces the axial load exerted onto the center bolt (58), which typically bears the entire weight of the assembly. Additionally, the fan blades (48) have been modified structurally and a dihedral angle of 9° has been introduced in order to increase the coverage area. Furthermore, the mounting assembly is improved in order to facilitate mounting on inclined surfaces or members. Figure 1

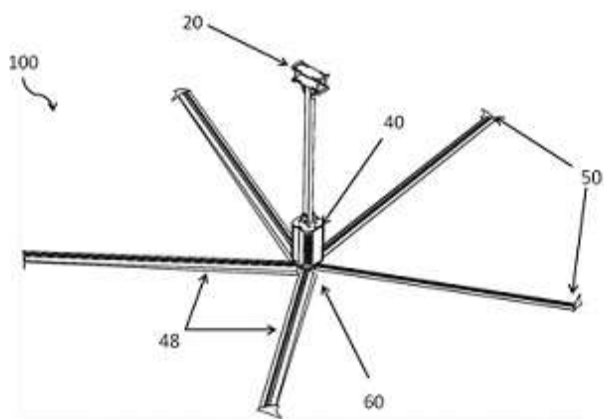


Figure 1

No. of Pages : 22 No. of Claims : 7

(54) Title of the invention : METHOD AND SYSTEM FOR GENERATING TRAINING DATA FOR TRAINING A MACHINE LEARNING DATA MODEL

(51) International classification :G06N0020000000,  
G06K0009620000,  
G06K0009000000,  
G06N0005040000,  
G06N0003080000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Tata Consultancy Services Limited**

Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India

(72)Name of Inventor :

**1)SHARMA, Hrishikesh**

**2)GHOSH, Hiranmay**

**3)PURUSHOTHAMAN, Balamuralidhar**

(57) Abstract :

Quality and accuracy of predictions generated by a Machine Learning (ML) model depends on quality/accuracy of training data used for training and generating the ML model, in addition to other parameters. State of the art systems for generating the training data may miss out on identifying all the objects present in a video/image being processed, which in turn affects quality of the training data. The disclosure herein generally relates to machine learning, and, more particularly, to a method and a system for generating training data for training a machine learning data model. The system determines a geometric constraint of objects present in each of a plurality of frames being processed, and further determines at least one fitting technique that matches the determined geometric constraint. The determined at least one fitting technique is used to generate an enhanced training dataset, which can be used to train a ML model. [To be published with FIGS. 2A and 2B]

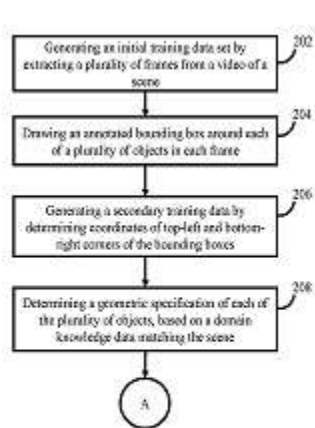


FIG. 2A

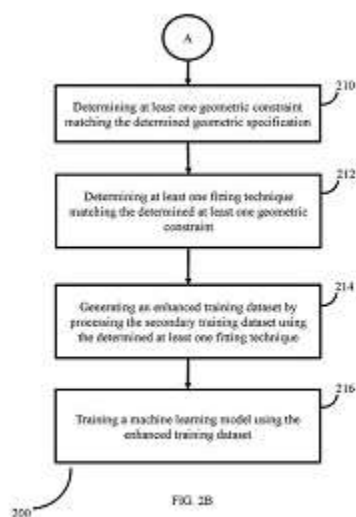


FIG. 2B

(54) Title of the invention : DATA META-MODEL BASED FEATURE VECTOR SET GENERATION FOR TRAINING MACHINE LEARNING MODELS

(51) International classification	:G06N0020000000, G06F0015760000, G06F0016783000, G06K0009460000, G16H0030200000	(71) <b>Name of Applicant :</b> <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)MISHRA, Mayank</b>
(32) Priority Date	:NA	<b>2)KUNDE, Shruti</b>
(33) Name of priority country	:NA	<b>3)ROY CHOUDHURY, Sharod</b>
(86) International Application No	:NA	<b>4)PANDIT, Amey</b>
Filing Date	:NA	<b>5)NAMBIAR, Manoj Karunakaran</b>
(87) International Publication No	: NA	<b>6)VERMA, Siddharth</b>
(61) Patent of Addition to Application Number	:NA	<b>7)SHROFF, Gautam</b>
Filing Date	:NA	<b>8)MALHOTRA, Pankaj</b>
(62) Divisional to Application Number	:NA	<b>9)SINGHAL, Rekha</b>
Filing Date	:NA	

(57) Abstract :

This disclosure relates generally to data meta model and meta file generation for feature engineering and training of machine learning models thereof. Conventional methods do not facilitate appropriate relevant data identification for feature engineering and also do not implement standardization for use of solution across domains. Embodiments of the present disclosure provide systems and methods wherein datasets from various sources/domains are utilized for meta file generation that is based on mapping of the dataset with a data meta model based on the domains, the meta file comprises meta data and information pertaining to action(s) being performed. Further functions are generated using the meta file and the functions are assigned to corresponding data characterized in the meta file. Further functions are invoked to generate feature vector set and machine learning model(s) are trained using the features vector set. Implementation of the generated data meta-model enables re-using of feature engineering code. [To be published with FIG. 2]

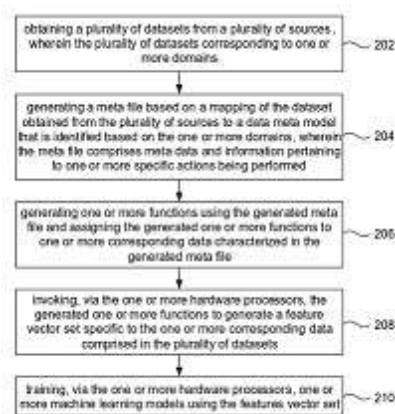


FIG. 2

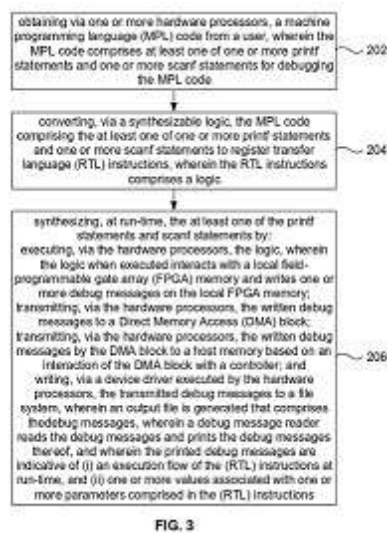
No. of Pages : 44 No. of Claims : 8

(54) Title of the invention : SYNTHESIZING PRINTF AND SCANF STATEMENTS FOR GENERATING DEBUG MESSAGES IN HIGH-LEVEL SYNTHESIS (HLS) CODE

(51) International classification	:H04L0029080000, B64G0001360000, H04N0021274300, H04N0013100000, G09B0005140000	(71)Name of Applicant : <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)BARVE, Mahesh Damodar</b>
(33) Name of priority country	:NA	<b>2)PURANIK, Sunil Anant</b>
(86) International Application No	:NA	<b>3)NAMBIAR, Manoj Karunakaran</b>
Filing Date	:NA	<b>4)RODI, Swapnil Shashikant</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

High level synthesis (HLS) begins with high-level specification of a problem, where behavior is generally decoupled from e.g., clock-level timing. Programming code can be run and debugged during functional simulation using debugging techniques. However, it is not possible to understand execution flow of register transfer level instructions (RTL) generated during RTL debug. Conventionally, it is challenging and not possible due to nature of debugging techniques which ignore printf statements in code for invocation. Systems and methods of present disclosure synthesize printf and/or scanf statements for generating debug messages in HLS code, wherein printf scanf statements is/are included before/after function(s) in sections comprising instructions in code and synthesized as a block during run-time which communicate with host system and debug messages are generated for display on screen. This enables traceability of the code execution on the screen and printf/scanf statements output can be observed without any challenges. [To be published with FIG. 3]

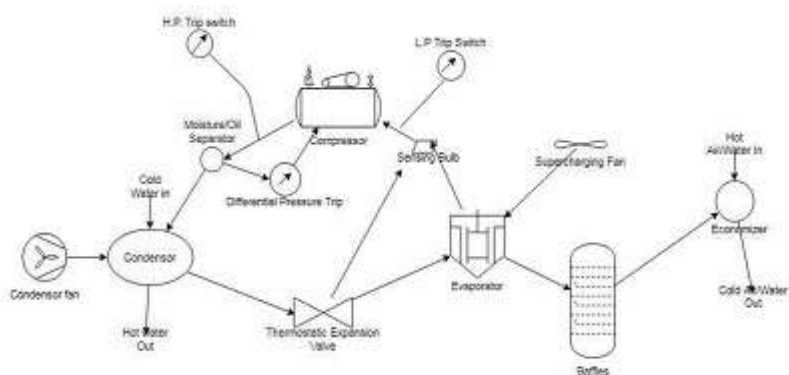


(54) Title of the invention : DESIGN AND DEVELOPMENT OF SYSTEM FOR EXTRACTION OF WATER FROM ATMOSPHERIC AIR USING VAPOR COMPRESSION CYCLE.

(51) International classification	:B01D0005000000, C02F0001680000, F24F0003140000, C02F0001320000, C02F0001780000	(71)Name of Applicant : <b>1)GAURISH MAHABALESHWAR SAMANT</b> Address of Applicant :H No71Sudha Smruti Near Datta Mandir Tambossem Goa India <b>2)GERHARD JESUS LOURENCO</b> <b>3)JOHAN GODINHO</b> <b>4)NOAH AKHIL GOMES</b> <b>5)ANAND KISHOR RAIKAR</b> <b>6)HUBERT ANTONIO RUI DE BARROS</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)ANAND KISHOR RAIKAR</b> <b>2)GAURISH MAHABALESHWAR SAMANT</b> <b>3)JOHAN GODINHO</b> <b>4)HUBERT ANTONIO RUI DE BARROS</b> <b>5)GERHARD JESUS LOURENCO</b> <b>6)NOAH AKHIL GOMES</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

An atmospheric water generator and system for condensing and collecting moisture contained in the air serves to cool and dehumidify the air. The collected water is then purified and can be stored in a tank. It also acts as an air conditioning unit since cool air is dispersed. The water generator uses the principle of cooling the air and getting it below its dew point temperature so as to extract the water which is in the form of humidity; from it .The cooling is done by vapour compression cycle that includes a heat exchanger, condenser, compressor and expansion valve along with the necessary auxiliary sensors and metering devices. The blower lets air into the system enclosure at a constant flow rate which hits the evaporator (heat exchanger) thus cooling the air to the required dew point temperature. The water vapour from the air thus condenses on the cooling coils, fins and baffles and is then collected in a storage tank. As the system contains 3 stage filtration system the water obtained is of the highest grade .The filtration system can also be accessed for purifying undrinkable water or regular tap water thus providing additional usability The cool air which is let out of the enclosure also cools the surrounding thus acting as an air conditioning unit.



No. of Pages : 5 No. of Claims : 6

(54) Title of the invention : METHODS, DEVICES, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR SENSOR SYSTEMS

(51) International classification	:G06F0003048500, B82Y0030000000, B82Y0015000000, G08B0021040000, A61F0007120000	(71) <b>Name of Applicant :</b> <b>1)NERKAR, Sarang Dilip</b> Address of Applicant :19/503, Sabarigiri, Siddhachal Phase-3, Pokhran Road No. 2, Thane West, Maharashtra, 400610, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)NERKAR, Sarang Dilip</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to sensor system arrangements and configurations. In particular, the invention provides methods, devices, systems and computer program products for implementing master-slave based or controller-sensor based configurations, which enable sensor devices to be readily added, substituted, swapped or hot-swapped into or out of a controller-sensor device arrangement. In an embodiment, the sensor system of the present invention includes an interface adaptor configured to enable the above.

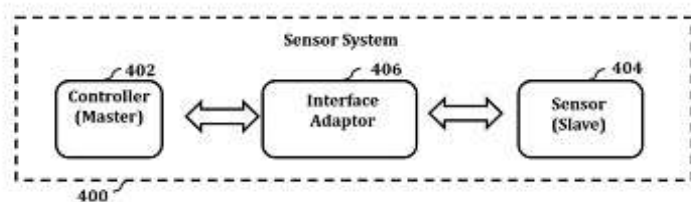


Figure 4

No. of Pages : 57 No. of Claims : 23

(54) Title of the invention : INSECT COMMUNICATION SYSTEM AND ELECTRONIC DEVICE FOR INSECT PEST MANAGEMENT

(51) International classification :H01M0010440000,  
G11B0017049000,  
G03G0015080000,  
A24D0003060000,  
B65D0006220000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)AI-GENIX INTERNATIONAL PRIVATE LIMITED**

Address of Applicant :1103, A Wing, Samarpan CHS. Ltd,  
Unquie Garden, Beverly Park, Kanakia Layout, Mira Road East,  
Mira Bhayandar City, Thane- 401107, Mumbai, Maharashtra  
Maharashtra India

(72)Name of Inventor :

**1)SHAIKH, Shahnaz**

**2)SHAIKH, Khalil**

(57) Abstract :

Insect Communication System And Electronic Device For Insect Pest Management The present invention relates to an insect communication system (100), method, and an artificially intelligent insect pest management device (AIIPMD) (1) to alter the behaviour of insect-pests. The system is capable of generating combination of signals enabling change in behaviour of the insect pests causing the harmful insect pests to aggregate near the signal source of said system, and causing carnivorous insects' parasitoids, nectar-pollen feeding bees to stay away from the system, thereby controlling and minimising the physical damage to the crops and plants. Fig. 2

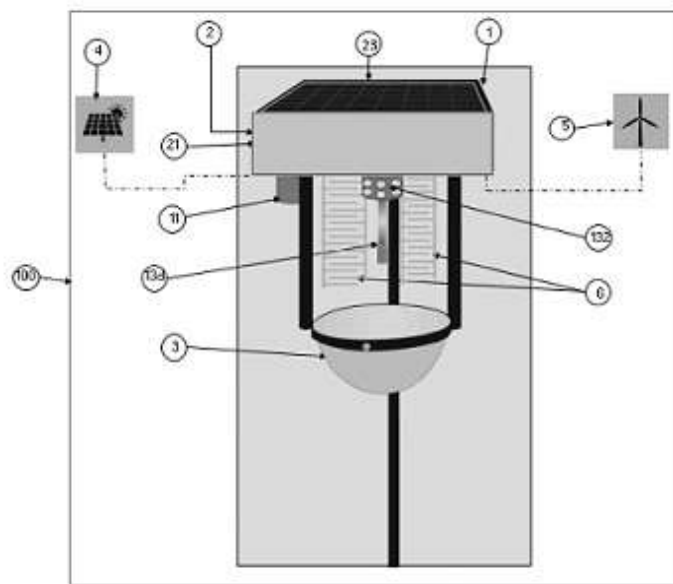


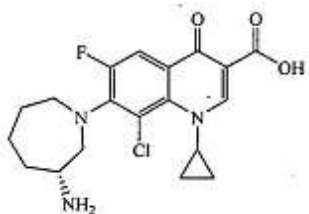
Fig. 2

(54) Title of the invention : PROCESS FOR THE PREPARATION OF BESIFLOXACIN

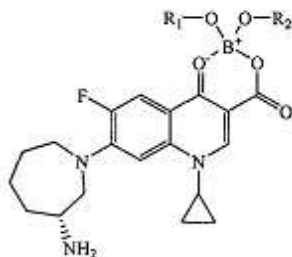
(51) International classification	:C07D0401040000, C07D0215560000, C07C0229220000, C07H0019073000, C07D0223120000	(71) <b>Name of Applicant :</b> <b>1)INDOCO REMEDIES LIMITED</b> Address of Applicant :166,INDOCO HOUSE, CST ROAD, SANTACRUZ EAST, MUMBAI,MAHARASHTRA,INDIA, PIN CODE: 400 098 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SHETH NILIMA RAHUL</b>
(33) Name of priority country	:NA	<b>2)WAGH RUPESH SUDHAKAR</b>
(86) International Application No	:NA	<b>3)RAMESAN PALANGAT VAYALILEVEETIL</b>
Filing Date	:NA	<b>4)PANANDIKAR ADITI MILIND</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a novel process for preparation of 7-[(3R)-3-aminohexahydro-1H-azepin-1-yl]-8-chloro-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxoquinoline-3-carboxylic acid hydrochloride (besifloxacin hydrochloride) of formula - I using novel intermediate compounds of formula - III.



Formula - I



Formula - III

No. of Pages : 36 No. of Claims : 10

(54) Title of the invention : A METHOD FOR MANUFACTURING A MEMBRANE

(51) International classification	:B82Y0030000000, A61K0009500000, G01N0031220000, B22D0021040000, B29C0041120000	(71)Name of Applicant : <b>1)Mahatma Education Society™s Pillai College of Engineering</b> Address of Applicant :Dr. K.M. Vasudevan Pillai Campus, Sector-16, New Panvel, Dist - Raigad, Maharashtra 410206 Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)GOYAL, Prem Sagar</b>
(33) Name of priority country	:NA	<b>2)HIRANI, Bhakti</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is to provide a method 100 for manufacturing a membrane-embedded with carbon-nanotubes. The method 100 comprises steps of adding 0.1-0.5gm of multi-walled carbon-nanotubes powder to an 80-100gm of a lactam solution for obtaining a mixture and sonicating the mixture for 20-30 minutes. Adding 2-4gm fatty acid-coated nanoparticles of iron oxide to the mixture and sonicating again for 20-30 minutes. A 5-10gm of water-soluble polymer and 15-25gm of water-insoluble polymer is added to the sonicated mixture to get a solution. The solution is stored in a container for four-five days and further distributed on a surface of a casting plate. The liquid content is evaporated from the solution by exposing the casting plate to the magnetic field. The exposed casting plate is immersed in the liquid for converting the solid content of the solution. The solid content is formed as the membrane-embedded with carbon-nanotubes on the casting. Figure 1



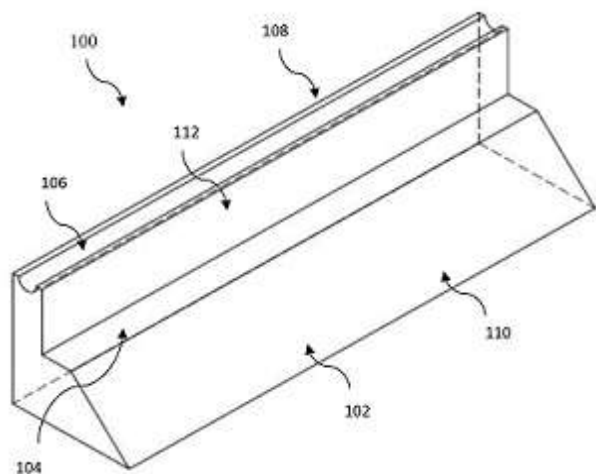
No. of Pages : 17 No. of Claims : 6

(54) Title of the invention : NON-CONVENTIONAL GROOVED STEPPED SHOE RIBS

(51) International classification	:H01L0021768000, F21V0015010000, E04F0011160000, A61K0039000000, B65G0001137000	(71)Name of Applicant : <b>1)SELOKAR, Guniram Rajaram</b> Address of Applicant :Sri Satya Sai University of Technology and Medical Sciences, SH-18, Bhopal-Indore road, Opp. Oil Fed Plant (M.P), Pachama, Madhya Pradesh, India Madhya Pradesh India <b>2)BHOSALE, Sameer Yashwant</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)SELOKAR, Guniram Rajaram</b>
(33) Name of priority country	:NA	<b>2)BHOSALE, Sameer Yashwant</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Disclosed is a non-conventional grooved stepped shoe rib. In one embodiment, a grooved stepped shoe rib for augmenting heat transfer. In one example, the grooved stepped shoe rib comprises a step (104). In one example, the step (104) is coupled to a bottom surface (110) via an inclined surface (102). In one other example, the step (104) is couple to the top surface via a vertical surface (112). Further, a groove (106) located on the top surface, wherein edges of the groove (106) are chamfered (108).

**Figure 1**

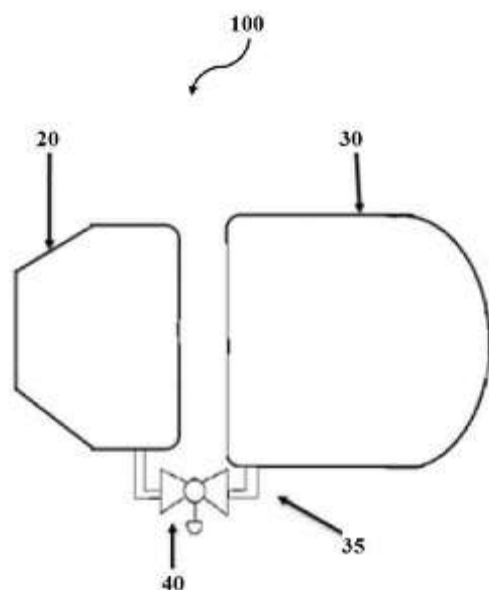
No. of Pages : 17 No. of Claims : 6

(54) Title of the invention : HEIGHT ADJUSTABLE SEAT FOR TWO WHEELER

(51) International classification	:F16F0009000000, A63C0005075000, F16F0015020000, F16F0015023000, B60N0002520000	(71)Name of Applicant : <b>1)Maharshi Karve Stree Shikshan Samshta™s(MKSSST™S)</b> <b>Cummins College of Engineering for Women</b> Address of Applicant :Survey No. 11/2, Karvenagar, Pune- 411052, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Dr. Ajit A. Bhosale</b>
(33) Name of priority country	:NA	<b>2)Sharayu Anil Borse</b>
(86) International Application No	:NA	<b>3)Prajakta Ashok Sudrik</b>
Filing Date	:NA	<b>4)Tejal Gujarathi</b>
(87) International Publication No	: NA	<b>5)Siddhi Bagde</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**HEIGHT ADJUSTABLE SEAT FOR TWO WHEELER** The present invention relates to the design of a two wheeler seat which damps the vibration and also facilitates seat height adjustment. Disclosed is a height adjustable seat (100) for two wheeler that comprises a base with dampers (10), a front bag (20), a rear bag (30), a valve (40), a foam sheet (50) and a cover (60). The height adjustable seat (100) provides customized seat height adjustment for the rider or the occupant. The height adjustable seat (100) uses a fluid as a damping medium reducing the shocks that the spine/lower back bears. The front bag (20) and the rear bag (30) are connected by the valve (40) that helps to pass the fluid from one bag to the other bag effectively. The height adjustable seat (100) facilitates fine height adjustments as per the rider's ergonomic requirement, thereby improving the comfort while riding. Figure 2

**Figure 2**

No. of Pages : 15 No. of Claims : 4

(54) Title of the invention : A DIGESTER, SYSTEM AND METHOD THEREOF FOR PRODUCING BIOFUEL

(51) International classification	:C10L0001020000, C12P0007160000, H01M0008160000, C11B0001100000, C12P0005020000	(71) <b>Name of Applicant :</b> <b>1)Bert Energy India Pvt. Ltd.</b> Address of Applicant :A5/21, Ishan Nagri SNO131/1/1/1 Warje, Pune Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)DORY, Thomas</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed herein a digester (1) for producing biofuel comprising an enclosure (4) provided with atleast one inlet (10) for receiving the biomass and at least one outlet (11) for exiting the produced biofuel, wherein the enclosure (4) comprises of at least two communicating vessels (2), each configured to transfer and exchange the biomass with its adjacent vessel by way of a mixing mechanism to produce biofuel, at least one mixing apparatus (5) capable of enabling a natural and continuous efficient self-mixing of biomass in the communicating vessels (2) without involving any separate source of power for maintaining the mixing of the biomass for a required period of time. Along with the digester, disclosed herein also a method and a system for producing biofuel that work at a reduced power consumption and functions efficiently under a wide range of climatic conditions, easy to install, user compliant, service friendly and cost effective for producing biofuel.

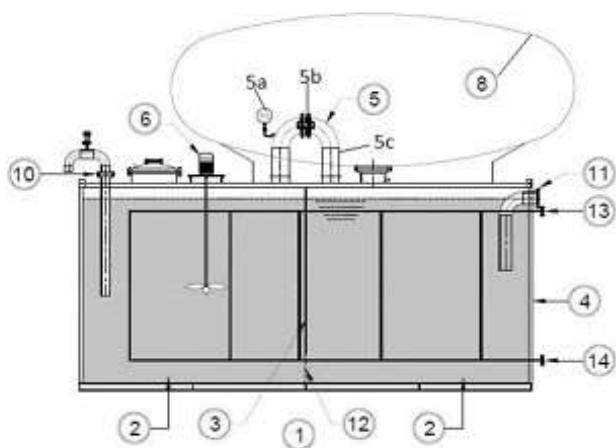


Figure 1

No. of Pages : 26 No. of Claims : 26

(54) Title of the invention : METHOD AND SYSTEM FOR PREDICTION OF MISSING DATA

(51) International classification	:G06N0005040000, G06N0020000000, G06F0011360000, G06F0017180000, H04L0029060000	(71) <b>Name of Applicant :</b> <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SHARMA, Aanchal</b>
(33) Name of priority country	:NA	<b>2)KUMAR, Nishant</b>
(86) International Application No	:NA	<b>3)KALELE, Amit</b>
Filing Date	:NA	<b>4)JAIN, Anubhav</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Prediction of missing data have been very important in various fields such as finance, share market etc. The existing methods for data prediction are generally lacking accuracy of the predicted data. A method and system for prediction of missing data has been provided. The system provides a framework for performing end to end prediction along with data exploration using machine learning techniques. The system performs statistical analysis of data including computing correlations, outlier detection (box and whisker) and removal etc. Further, a large number of model-feature combinations are evaluated and shortlists best performing models based on a chosen metric. A multi-dimensional grid is formed which can be configured for specific problems with minimal code changes.

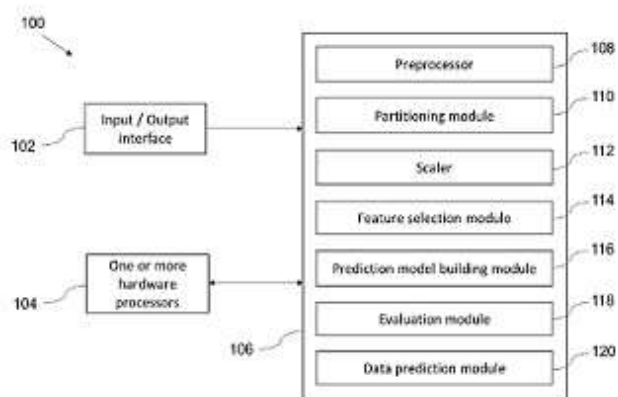


FIG. 1

No. of Pages : 34 No. of Claims : 11

(54) Title of the invention : ENERGY MONITORING AND DYNAMIC POWER CONTROL SYSTEM

(51) International classification	:G05B0015020000, G06F0001329000, H02J0003000000, G06F0001320600, H02J0007350000	(71) <b>Name of Applicant :</b> <b>1)Rajarambapu Institute of Technology</b> Address of Applicant :Rajarambapu Institute of Technology, Rajarmnagar, Islampur, Taluka Walwa, District Sangli, Maharashtra, India, PIN-415414 Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mr. Shubham Arun Omase</b>
(33) Name of priority country	:NA	<b>2)Dr. Anandrao Bajirao Kakade</b>
(86) International Application No	:NA	<b>3)Mr. Ramesh Tukaram Patil</b>
Filing Date	:NA	<b>4)Dr. Himmat tukaram jadhav</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

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(57) Abstract :

The present invention relates to an energy monitoring and dynamic power control system that dynamically controls and keeps power consumption within Sanctioned load by dynamically switching and turning off appliances from main line. The system is based on microcontroller and IoT (internet of things) technology. The system also shows the real time power consumption on LCD display as well as on the android app and also can be controlled. . Ref: Figure 1

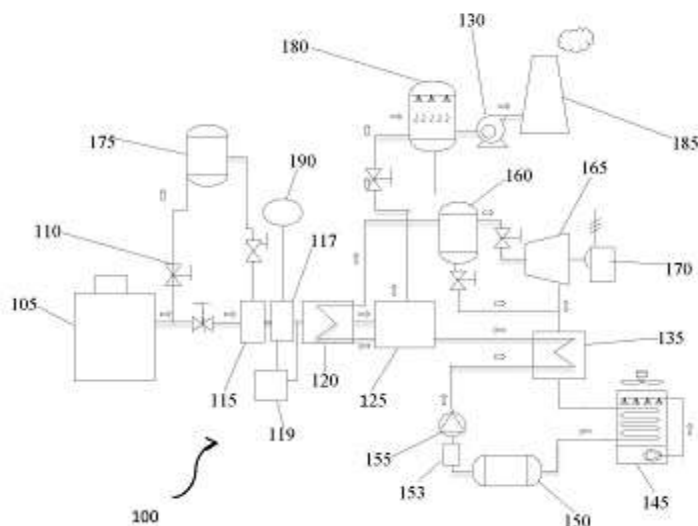


FIG. 1

No. of Pages : 12 No. of Claims : 4

(54) Title of the invention : SYSTEM AND METHOD FOR CUSTOM-MADE MEDICAL DEVICES LIFE CYCLE MANAGEMENT

(51) International classification :H04L0029080000,  
B64G0001360000,  
H04N0021274300,  
H04N0013100000,  
G09B0005140000

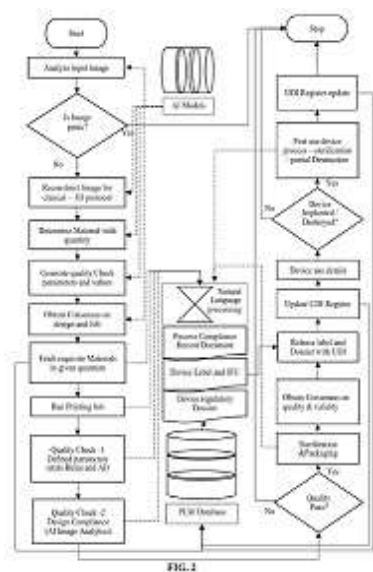
(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Tata Consultancy Services Limited**  
Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India

(72)Name of Inventor :  
**1)INDANI, Ashish Omprakash**  
**2)DAS, Saurabh**  
**3)GOULIKAR, Devraj**  
**4)ROUTRAY, Biswamohan**

(57) Abstract :

This disclosure relates to a system and method for custom made medical devices life cycle management. the life cycle management of the medical devices include tracking of material and procedure to be used in additive manufacturing of the medical device and analyzing design risk as per the raw material and the design specification. Further, it includes to identify potential hazards based upon the materials, their interactions and effect on process to be followed. An artificial intelligence (AI) enabled model is trained with one or more sample datasets pertaining to a plurality of materials to be used in the additive manufacturing to audit design, to determine materials to be used, and to generate a unique code to be used to label the manufactured medical device. A smart contract of blockchain is configured to record received input and update with new points for regulatory compliance. [To be published with FIG. 2]



No. of Pages : 22 No. of Claims : 14

(54) Title of the invention : NEUROMODULATION BASED ADAPTIVE CONTROLLER FOR MITRAL STENOSIS

(51) International classification	:H04L0029080000, H04N0021274300, B64G0001360000, H04N0001000000, C07D0263320000	(71)Name of Applicant : <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)ROY, Dibyendu</b>
(33) Name of priority country	:NA	<b>2)MAZUMDER, Oishee</b>
(86) International Application No	:NA	<b>3)SINHA, Aniruddha</b>
Filing Date	:NA	<b>4)KHANDELWAL, Sundeep</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

This disclosure provides a simulation platform to study and perform predictive analysis on valvular heart disease, Mitral stenosis (MS) and provides a control approach to correct hemodynamic imbalances during MS conditions. Conventional approaches of valve repair or replacement are often associated with risk of thromboembolism, need for anticoagulation, prosthetic endocarditis, and impaired left ventricle function. The cardiovascular hemodynamics model of the present disclosure helps to create ~what if™ conditions to study variations in different hemodynamic parameters like blood flow, aortic and ventricular pressure, etc. during normal and pathological conditions. An adaptive control system in conjunction with the hemodynamic cardiovascular system (CVS) is provided to handle hemodynamic disbalance during moderate to severe MS conditions. The adaptive controller is hypothesized in line with the neuromodulation approach and modulates left ventricular contractility and vagal tone to counter the symptoms associated with MS. [To be published with FIG. 5]

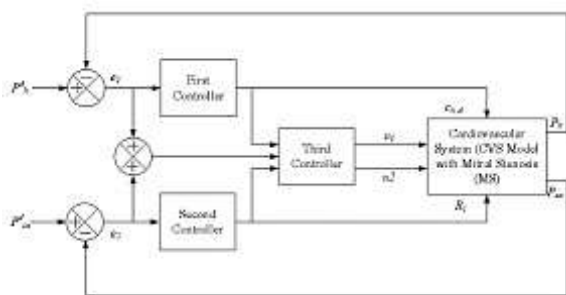


FIG. 5

No. of Pages : 45 No. of Claims : 12

(54) Title of the invention : ROBOTIC TASK PLANNING FOR COMPLEX TASK INSTRUCTIONS IN NATURAL LANGUAGE

(51) International classification	:G06F0009480000, G06F0017270000, A61B0005160000, G06Q0010060000, G09B0019060000	(71) <b>Name of Applicant :</b> <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PRAMANICK, Pradip</b>
(33) Name of priority country	:NA	<b>2)BARUA Hrishav Bakul</b>
(86) International Application No	:NA	<b>3)SARKAR, Chayan</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This disclosure provides systems and methods for robotic task planning when a complex task instruction is provided in natural language. Conventionally robotic task planning relies on a single task or multiple independent or serialized tasks in the task instruction. Alternatively, constraints on space of linguistic variations, ambiguity and complexity of the language may be imposed. In the present disclosure, firstly dependencies between multiple tasks are identified. The tasks are then ordered such that a dependent task is always scheduled for planning after a task it is dependent upon. Moreover, repeated tasks are masked. Thus, resolving task dependencies and ordering dependencies, a complex instruction with multiple interdependent tasks in natural language facilitates generation of a viable task execution plan. Systems and methods of the present disclosure finds application in human-robot interactions. [To be published with FIG. 2]

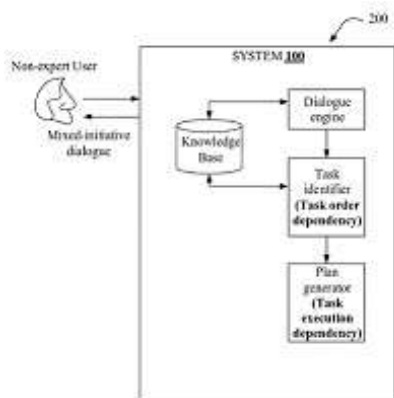


FIG. 2

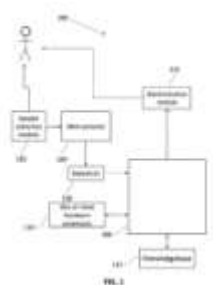
No. of Pages : 38 No. of Claims : 14

(54) Title of the invention : METHOD AND COMPOSITION FOR MICROBIOME BASED AMELIORATION OF SKIN ASSOCIATED AUTOIMMUNE INFLAMMATORY DISEASES

(51) International classification	:A61K0039000000, A61Q0019000000, A61K0031445000, A61Q0017000000, A61K0031470000	(71) <b>Name of Applicant :</b> <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)NAGPAL, Sunil</b>
(33) Name of priority country	:NA	<b>2)BHAR, Subhrajit</b>
(86) International Application No	:NA	<b>3)HAQUE, Mohammed Monzoorul</b>
Filing Date	:NA	<b>4)MANDE, Sharmila Shekhar</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Skin-associated autoimmune diseases are common these days. A method and composition for microbiome based amelioration of skin associated autoimmune inflammatory diseases has been provided. The composition is made of at least one or more of microbiome-associated compounds such as proteins, metabolites, antibiotics, probiotics, etc. The method provides a composition for an affected individual through application of these compositions aimed at improving the bioavailability of lipoic acid. It acts through modulation of the lipoic acid metabolic pathway to do the same. The suggested microbes and compounds can either be used as an effective probiotic supplement in increasing the microbial population involved in lipoic acid biosynthesis (only), or increasing the number of competitors of the microbes involved in escalation of lipoic acid salvage system, or through direct antibiotic or physical action against the latter. [To be published with FIG. 1]



No. of Pages : 63 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202021004030 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PROCESS OF ENZYMATIC PRE-TREATMENT ON VARIETIES OF PIGEON PEA

(51) International classification	:A23N0015100000, H05B0006120000, A23C0011100000, G06T0005000000, C12M0001340000	(71) <b>Name of Applicant :</b> <b>1)Junagadh Agricultural University</b> Address of Applicant :Director of Research Junagadh Agricultural University, Junagadh - 362001, Gujarat, India. Gujarat India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dabhi Mukesh Nathalal</b>
(33) Name of priority country	:NA	<b>2)Sangani Velji Premji</b>
(86) International Application No	:NA	<b>3)Rathod Pankajkumar Jemalbhai</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A process of enzymatic pre- treatment on varieties of pigeon pea before dehulling of pigeon pea to improve its dehulling efficiency. The present invention enhances the cooking time and maintains the protein content of pigeon pea after the dehulling process. The present invention optimizes the enzymatic pre-treatment with parameters like enzyme concentration, incubation time, incubation temperature and pH. The parameters like hulling efficiency, cooking time and protein content are compared with the traditional dehulling method.

No. of Pages : 24 No. of Claims : 5

(54) Title of the invention : METHOD AND SYSTEM FOR TIME LAG IDENTIFICATION IN AN INDUSTRY

(51) International classification	:G06Q0010060000, G06K0009620000, H04L0009320000, G05B0017020000, G07C0009000000	(71) <b>Name of Applicant :</b> <b>1)Tata Consultancy Services Limited</b> Address of Applicant :Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KUMAR, Rajan</b>
(33) Name of priority country	:NA	<b>2)PARIHAR, Manendra Singh</b>
(86) International Application No	:NA	<b>3)KUMAR, Vivek</b>
Filing Date	:NA	<b>4)RUNKANA, Venkataramana</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

This disclosure relates generally to for time lag identification in an industry. The disclosure proposes to monitor an industry continuously at real time to identify one or more parameters from plurality of sources (processes/units/plants) and a time delay or delayed performance or functional impact the identified parameter has on a plurality of Key Performance Indicator (KPI). The proposed time lag identification is performed using one-time lag identification from the proposed plurality of time lag identification techniques that include an individual time lag identification technique, a group-wise time lag identification technique and group-wise/individual time lag identification technique. Further the time lag identification is performed based on domain knowledge as well as data driven techniques. The identified time-lag is used for prediction and forecasting or detection of anomalies in process and manufacturing industries

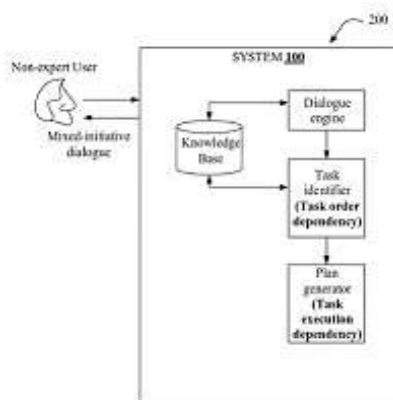


FIG. 2

No. of Pages : 44 No. of Claims : 14

(54) Title of the invention : ARRANGEMENT FOR SYNCING OF PEDALS IN WHEEL MOUNTED BILATERAL DRIVE MECHANISM

(51) International classification	:B62M0001240000, A63B0022000000, B62M0001360000, B62M0001300000, B62M0011180000	(71) <b>Name of Applicant :</b> <b>1)Ravi Shankar Gautam</b> Address of Applicant :203 A-wing, Aqsa Palace, Near Ram Mandir, Off J.P. Road, 1st Gaothan Lane, Andheri West , Mumbai, PIN 400058, Maharashtra Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Ravi Shankar Gautam</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:201921001279	
Filed on	:10/01/2019	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This patent discloses arrangement in wheel mounted bilateral drive mechanism for bicycles and reverse trikes, which facilitates reverse pedaling in the two drive mechanism while maintaining the phase difference between the pedals in the two drive mechanism as 180 degree. Each of the two coaxially parallel drive mechanisms is mounted to the hub of the bicycle at its designated planetary gear via ratchet ball bearing. While pedaling pedals will sync by virtue of ratchet ball bearings but while reverse pedaling cyclist have to consciously keep track of the two pedals to keep them in sync. In order to avoid this difficulty above mentioned designated planetary gears of two drive mechanism needs to be connected via axle of the hub of the driving wheel.

No. of Pages : 5 No. of Claims : 1

(54) Title of the invention : PLASTIC LENS BARREL, CAMERA MODULE AND ELECTRONIC DEVICE

(51) International classification	:G02B0007020000, G02B0001040000, G02B0013000000, G02B0001110000, H05K0003100000	(71) <b>Name of Applicant :</b> <b>1)LARGAN PRECISION CO., LTD.</b> Address of Applicant :No.11, Jingke Rd., Nantun Dist., Taichung City 408, Taiwan
(31) Priority Document No	:62/848,068	(72) <b>Name of Inventor :</b>
(32) Priority Date	:15/05/2019	<b>1)Chun-Hua TSAI</b>
(33) Name of priority country	:U.S.A.	<b>2)Ming-Ta CHOU</b>
(86) International Application No	:NA	<b>3)Lin-An CHANG</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A plastic lens barrel includes an object-side portion, an image-side portion and a tube-shaped portion. The object-side portion is located close to an object side of the plastic lens barrel. The object-side portion includes an object-side opening and an object-side annular surface. The object-side annular surface surrounds the object-side opening and faces toward the object side. The image-side portion is located close to an image side of the plastic lens barrel and includes an image-side opening. The tube-shaped portion surrounds an optical axis. The tube-shaped portion is connected between the object-side portion and the image-side portion, and configured to define an inner space. The object-side annular surface includes a groove structure area. The groove structure area includes a plurality of groove structures. The groove structures are disposed in at least one of an arranging manner and an extending manner along a sagittal direction away from the optical axis.

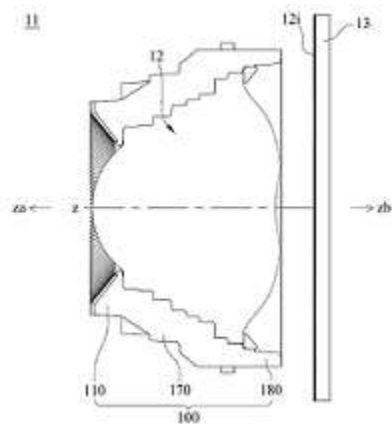


Fig. 1A

No. of Pages : 101 No. of Claims : 24

(54) Title of the invention : SPLICING PRISM UNIT FOR A SPLICER OF A TEXTILE MACHINE

(51) International classification	:H04N0019105000, H05B0037020000, H04L0029080000, A61Q0017040000, G06K0015020000	(71)Name of Applicant : <b>1)SAURER SPINNING SOLUTIONS GMBH &amp; CO. KG</b> Address of Applicant :CARLSTR. 60, 52531 BACH- PALENBERG, GERMANY Germany
(31) Priority Document No	:102019122056.4	(72)Name of Inventor :
(32) Priority Date	:16/08/2019	<b>1)Lrsch, Bernd</b>
(33) Name of priority country	:Germany	<b>2)Neubig, Ottmar</b>
(86) International Application No	:NA	<b>3)Schatton, Siegfried</b>
Filing Date	:NA	<b>4)Wischnowski, Marko</b>
(87) International Publication No	: NA	<b>5)Wolff, Michaela</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT TITLE:** Splicing prism unit for a splicer of a textile machine The invention relates to a splicing prism unit for a splicer of a textile machine and to a method for producing a splicing prism unit for a splicer. In order to provide a splicing prism unit for a splicer of a textile machine, a textile machine and a method for producing a splicing prism unit for a splicer that ensure particularly accurate positioning and orientation of the components of the splicing prism unit, enable simple, adhesive-free fitting, make subsequent correction of the orientation and adjustment of the components unnecessary and exclude the possibility of leaks in the splicing prism unit and damage to the components from incorrect handling or incorrect orientation during installation, the splicing prism unit has a main body made of injection-moulded plastics material and a splicing prism, which is at least partly overmoulded with plastics material and at least partly embedded in the main body.

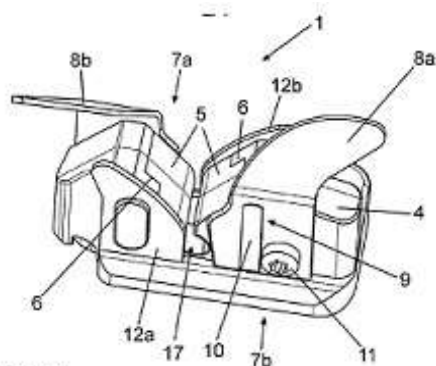


Fig. 2

No. of Pages : 25 No. of Claims : 14

(54) Title of the invention : SYSTEM AND METHOD FOR COMPLEMENTARY AUDIO OUTPUT •

(51) International classification	:H01L0021823800, H04R0003000000, G06F0003160000, H01L0027092000, H01L0021762000	(71) <b>Name of Applicant :</b> <b>1)GENELEC OY</b> Address of Applicant :Olvitie 5, 74100 Iisalmi, Finland Finland
(31) Priority Document No	:20195726	(72) <b>Name of Inventor :</b>
(32) Priority Date	:02/09/2019	<b>1)Giles MacKinnon</b>
(33) Name of priority country	:Finland	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

According to an example aspect of the present invention, there is provided a sound system, the sound system comprising: a first loudspeaker, comprising at least one first speaker element, a second loudspeaker, comprising at least one second speaker element, wherein the first and second loudspeaker have at least partially overlapping frequency ranges, and the first speaker is configured to produce a response within at least one first operating band defined within the frequency range of the first speaker, and the second speaker is configured to produce a response within at least one second operating band defined within the frequency range of the second speaker, and the first and second operating bands do not overlap, and wherein the overall response of the sound system at a first location is comprised of the response within the first operating band and the response within the second operating band. [Fig. 8]

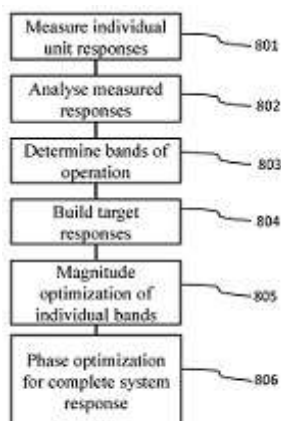


FIG. 8

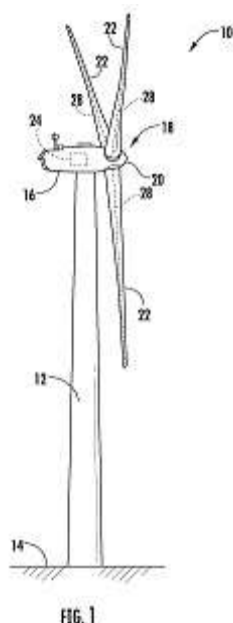
No. of Pages : 34 No. of Claims : 15

(54) Title of the invention : SYSTEM AND METHOD FOR MITIGATING LOADS ACTING ON A ROTOR BLADE OF A WIND TURBINE

(51) International classification	:F03D0001060000, F03D0007020000, F03D0007040000, F03D0017000000, F03D0080000000	(71)Name of Applicant : <b>1)GENERAL ELECTRIC COMPANY</b> Address of Applicant :1 River Road, Schenectady, New York 12345, United States of America U.S.A.
(31) Priority Document No	:201911005568.1	(72)Name of Inventor :
(32) Priority Date	:22/10/2019	<b>1)Ameet Shridhar Deshpande</b>
(33) Name of priority country	:China	<b>2)Shuang Gu</b>
(86) International Application No	:NA	<b>3)Pranav Agarwal</b>
Filing Date	:NA	<b>4)Prashanth Kumar Reddy Vaddi</b>
(87) International Publication No	: NA	<b>5)Bernard Landa</b>
(61) Patent of Addition to Application Number:	NA	<b>6)Arne Koerber</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method for mitigating loads acting on a rotor blade of a wind turbine includes determining, via a state estimator of a controller, a blade state estimation of the rotor blade. The method also includes reconstructing, via the controller, one or more loading signals of the rotor blade from the blade state estimation using modal analysis such that the loading signal(s) include a lead time. Further, the method includes comparing the loading signal(s) of the rotor blade to a loading threshold. Moreover, the method includes implementing a control action based on the comparison such that the lead time provided by the loading signal(s) allows the control action to take effect before a damaging load occurs on the rotor blade. FIG 1



No. of Pages : 26 No. of Claims : 20

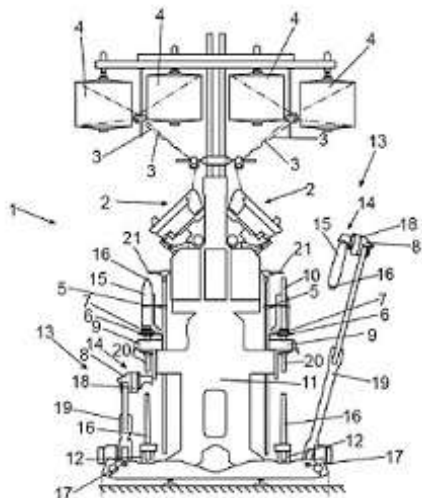
(54) Title of the invention : RING SPINNING MACHINE AND COP GRIPPER

(51) International classification	:D01H0007600000, H01L0021322000, D01H0009180000, F24F0003140000, F25B0013000000	(71)Name of Applicant : <b>1)SAURER SPINNING SOLUTIONS GMBH &amp; CO. KG</b> Address of Applicant :CARLSTR. 60, 52531 UEBACH- PALENBERG GERMANY Germany
(31) Priority Document No	:102019128613.1	(72)Name of Inventor : <b>1)Kahn, Justin</b>
(32) Priority Date	:23/10/2019	
(33) Name of priority country	:Germany	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a ring spinning machine having a plurality of spinning positions arranged side by side, a cop doffing device and a cop gripper, in particular for a cop doffing device of a ring spinning machine, that comprises a gripper main body, a tensioning element arranged on the gripper main body and forming a cop receiving opening together with a receiving portion of the gripper main body, and a clamping element which is arranged on the gripper main body so as to be radially movable in the direction of the cop receiving opening between a release position and a clamping position. In order to provide a ring spinning machine having a plurality of spinning positions arranged next to one another, a cop doffing device and a cop gripper for a cop doffing device, in particular of a ring spinning machine, which can be manufactured at low cost and enable reliable gripping of different cop tubes or full cops, it is provided that, in the cop gripper, the tensioning element is made at least in some portions of a resiliently deformable material. (Fig. 1)

FIG. 1



No. of Pages : 19 No. of Claims : 10

(54) Title of the invention : LOUDSPEAKER AND LOUDSPEAKER CONTROL SYSTEM •

(51) International classification	:H04R0001400000, H04R0005040000, H04R0003120000, H04R0003000000, H04R0009020000	(71)Name of Applicant : <b>1)GENELEC OY</b> Address of Applicant :Olvitie 5, 74100 Iisalmi, Finland Finland
(31) Priority Document No	:20195978	(72)Name of Inventor :
(32) Priority Date	:15/11/2019	<b>1)RAATIKAINEN, Kimmo</b>
(33) Name of priority country	:Finland	<b>2)TIKKANEN, Jussi</b>
(86) International Application No	:NA	<b>3)KOPONEN, Marko</b>
Filing Date	:NA	<b>4)URHONEN, Juha</b>
(87) International Publication No	: NA	<b>5)P-YH-NEN, Kari</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

According to an example aspect of the present invention, there is provided A controllable loudspeaker, the loudspeaker comprising a speaker element and a digital signal processor comprising at least one processing core and at least one memory including computer program code, the at least one memory and the computer program code being configured to receive a multicasted control signal, alter the behavior of the loudspeaker in response to the said control signal, wherein the altering of the behavior comprises applying settings stored in the memory of the digital signal processor of the loudspeaker. Fig- 2

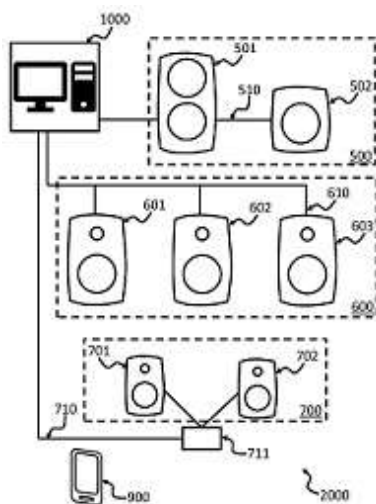


FIG. 2

No. of Pages : 39 No. of Claims : 17

(19) INDIA

(22) Date of filing of Application :15/12/2020

(43) Publication Date : 30/07/2021

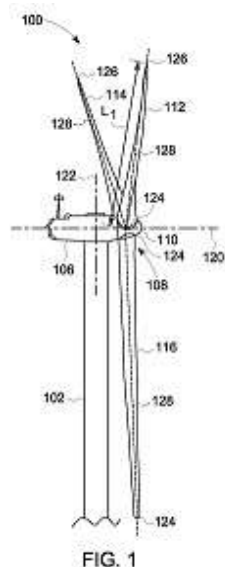
(54) Title of the invention : SYSTEM AND METHOD FOR OPERATION OF WIND TURBINES USING IMPROVED POWER CURVES

(51) International classification	:F03D0007020000, F03D0007040000, F03D0001060000, F03D0009250000, F03D0017000000	(71) <b>Name of Applicant :</b> <b>1)GENERAL ELECTRIC COMPANY</b> Address of Applicant :1, River Road Schenectady, New York 12345, United States of America U.S.A.
(31) Priority Document No	:16/744,498	(72) <b>Name of Inventor :</b> <b>1)Siyun Wang</b>
(32) Priority Date	:16/01/2020	<b>2)Leonardo Cesar Kammer</b>
(33) Name of priority country	:U.S.A.	<b>3)Frederick Wilson Wheeler</b>
(86) International Application No	:NA	<b>4)Dhiraj Arora</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

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(57) Abstract :

A wind turbine control system is disclosed. The wind turbine control system includes a wind turbine, at least one sensor configured to detect at least one environmental condition associated with the wind turbine, and a wind turbine controller communicatively coupled to the wind turbine and the at least one sensor. The wind turbine controller includes at least one processor in communication with at least one memory device. The at least one processor is configured to retrieve at least one wind condition variable associated with the wind turbine, retrieve a power curve, the power curve generated based on the at least one wind condition variable by computing, for each of a plurality of wind speed values, a power value, receive, from the at least one sensor, sensor data, and control the wind turbine using the generated power curve based on the received sensor data. [Figure 1]



No. of Pages : 21 No. of Claims : 20

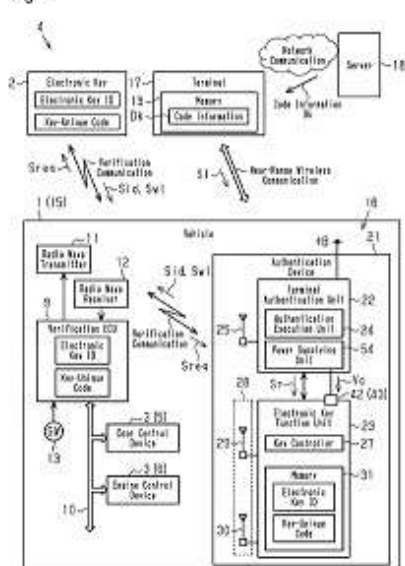
(54) Title of the invention : AUTHENTICATION DEVICE

(51) International classification	:G07C0009000000, B60R0025240000, H04W0012060000, H04L0009320000, A63F0013710000	(71)Name of Applicant : <b>1)KABUSHIKI KAISHA TOKAI RIKA DENKI SEISAKUSHO</b> Address of Applicant :260, Toyota 3-chome, Ohguchi-cho, Niwa-gun, Aichi 480-0195 Japan. Japan
(31) Priority Document No	:2019-238157	(72)Name of Inventor :
(32) Priority Date	:27/12/2019	<b>1)IEDA, Takashi</b>
(33) Name of priority country	:Japan	<b>2)YOSHIKAWA, Fumitaka</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An authentication device (21) includes a terminal authentication unit (22) and an electronic key function unit (23). The terminal authentication unit (22) authenticates a terminal (17). The electronic key function unit (23) performs ID verification with a verification ECU (9) through a communication network of an electronic key system (4). When the terminal (17) is successfully authenticated by the terminal authentication unit (22), the electronic key function unit (23) actuates a vehicle (1) by performing ID verification through the communication network of the electronic key system (4). When a connector (42) is attached, the electronic key function unit (23) is electrically connected to a power supplying unit (54) of the terminal authentication unit (22) and is supplied with power.

Fig.1



No. of Pages : 27 No. of Claims : 6

(54) Title of the invention : HARVESTING MACHINE INCLUDING A CROP RESIDUE DEFLECTOR

(51) International classification	:A01D0045100000, A01D0041120000, A01D0061000000, A01D0051000000, A47L0007000000	(71) <b>Name of Applicant :</b> <b>1)DEERE &amp; COMPANY</b> Address of Applicant :One John Deere Place, Moline, Illinois, 61265, USA U.S.A.
(31) Priority Document No	:16/752869	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)Surfraj Fattepur</b>
(33) Name of priority country	:U.S.A.	<b>2)Matthew J. Hansen</b>
(86) International Application No	:NA	<b>3)Todd J. Rodrigue</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A sugarcane harvester for harvesting sugarcane including a cutter configured to cut sugarcane into a sugarcane mat and a primary extractor disposed adjacent to the sugarcane mat configured to remove crop residue from the sugarcane mat. An elevator includes a conveyor to move the sugarcane mat to an end of the conveyor and an extractor is operatively connected to the elevator. The extractor includes a fan housing having an arm extending laterally from a sidewall of the fan housing and toward a center of the fan housing. A fan assembly is supported by the arm and is configured to remove crop residue from the sugarcane mat at the end of the conveyor. A cover assembly is fixedly connected to the support arm and subtends a fan of the fan assembly and a portion of the support arm, wherein the cover assembly directs crop debris away from the fan and the support arm. FIG.3

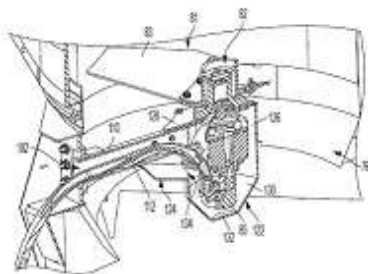


FIG. 3

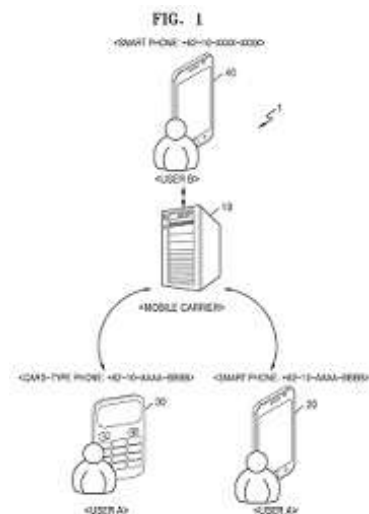
No. of Pages : 23 No. of Claims : 20

(54) Title of the invention : MOBILE COMMUNICATION SYSTEM, DIFFERENT MOBILE DEVICES SHARING SAME PHONE NUMBER ON MOBILE COMMUNICATION SYSTEM, AND METHOD OF PROVIDING MOBILE COMMUNICATION SERVICE BETWEEN DIFFERENT MOBILE DEVICES SHARING SAME PHONE NUMBER

(51) International classification	:H04W0008200000, H04W0004600000, H04W0012000000, H04W0004160000, H04W0048120000	(71)Name of Applicant : <b>1)Samsung Electronics Co., Ltd.</b> Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Republic of Korea Republic of Korea
(31) Priority Document No	:10-2014-0098585	(72)Name of Inventor :
(32) Priority Date	:31/07/2014	<b>1)Shi-yun CHO</b>
(33) Name of priority country	:Republic of Korea	<b>2)Moon-joo LEE</b>
(86) International Application No	:NA	<b>3)Hee-seok JEONG</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:2816/MUM/2015	
Filed on	:24/07/2015	

## (57) Abstract :

A mobile device configured to share a phone number of another mobile device on a mobile communication system, the mobile device including: a controller configured to, after determining that a phone function of the another mobile device is deactivated, activate a phone function of the mobile device to which the phone number of the another mobile device is assigned; and a communicator configured to perform a mobile communication function using the phone number when the phone function of the mobile device is activated.



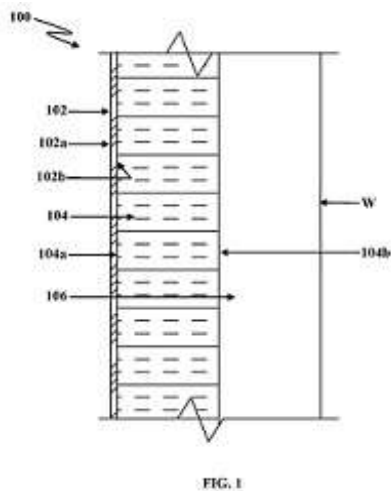
No. of Pages : 176 No. of Claims : 10

(54) Title of the invention : AN ACOUSTIC PANEL FOR SELECTIVELY ABSORBING ACOUSTIC ENERGY

(51) International classification	:E04B0001860000, B32B0027300000, B32B0021040000, B32B0027320000, B32B0005180000	(71) <b>Name of Applicant :</b> <b>1)CONSONANCE ACOUSTICS LLP</b> Address of Applicant :FLAT NO. A-8, SUYASH COMPLEX, KALDA CORNER, AURANGABAD 431 005, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Deshpande Amod Kailas</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:202021003783	
Filed on	:28/01/2020	

## (57) Abstract :

The present invention relates to an acoustic panel for selectively absorbing acoustic energy. In accordance with the present invention the acoustic panel comprises a first layer having a first surface, and a second surface, the first layer characterized by having a predetermined mass per unit area and a first predetermined thickness, a second layer having a first surface, and a second surface, the first surface in contact with the second surface of the first layer, the second layer characterized by having a predetermined air flow resistivity and a second predetermined thickness, and a third layer in contact with the second surface of the second layer, the third layer having a third predetermined thickness, wherein the first layer comprises polyvinyl chloride, or wood plastic composite, wherein the second layer comprises glass wool or polyurethane foam, and the third layer comprises air and/or nitrogen.



No. of Pages : 27 No. of Claims : 10

(54) Title of the invention : ELECTRONIC DEVICE

(51) International classification	:H01Q0001220000, H01Q0001380000, G06F0001160000, B32B0017060000, G01D0005340000	(71) <b>Name of Applicant :</b> <b>1)InnoLux Corporation</b> Address of Applicant :No. 160 Kesuyue Rd., Jhu-Nan Site, Hsinchu Science Park, Jhu-Nan 350, Miao-Li County, Taiwan
(31) Priority Document No	:202010076476.9	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2020	<b>1)Chandra LIUS</b>
(33) Name of priority country	:China	<b>2)Kuan-Feng LEE</b>
(86) International Application No	:NA	<b>3)Yu-Chia HUANG</b>
Filing Date	:NA	<b>4)Hsiao-Lan HUANG</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An electronic device is disclosed in the present disclosure. The electronic device comprises a substrate, a first layer and a second layer. The first layer is disposed on the substrate, and the second layer is disposed on the substrate and surrounds the first layer. An interface between the first layer and the second layer forms a light guiding channel, thereby improving the intensity of a light received by an optical sensor.

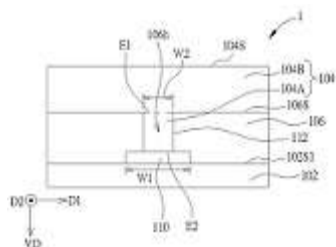


FIG. 1

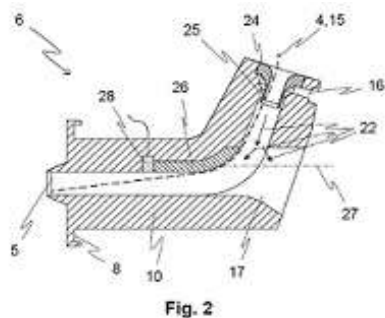
No. of Pages : 39 No. of Claims : 8

(54) Title of the invention : THREAD GUIDING UNIT, OPEN-END ROTOR SPINNING MACHINE, AND METHOD FOR OPERATING A SPINNING STATION

(51) International classification	:D01H0004500000, D03D0047300000, D01H0004080000, D01H0004400000, D01H0007920000	(71)Name of Applicant : <b>1)MASCHINENFABRIK RIETER AG</b> Address of Applicant :Klosterstrasse 20, 8406 Winterthur, Switzerland. Switzerland
(31) Priority Document No	:10 2020 101 840.1	(72)Name of Inventor :
(32) Priority Date	:27/01/2020	<b>1)POHN, Romeo</b>
(33) Name of priority country	:Germany	<b>2)LAUER, Matthias</b>
(86) International Application No	:NA	<b>3)KUEBLER, Markus</b>
Filing Date	:NA	<b>4)RIEGER, Constantin</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention relates to (6) a spinning station (1) of an open-end rotor spinning machine, having a thread guide tube (10), a thread guiding channel (5) formed in the thread guide tube (10) for guiding a thread (4) along a thread route (15), and an air nozzle (16) for introducing a first airstream (22) into the thread guide channel (5). The thread guide channel (5) is interrupted on one side by an air outlet opening (17) formed on the thread guide tube (10), so that the first airstream (22) is deflected at least partially to one side and purposefully out of the thread guide channel (5). The invention further relates to an open-end rotor spinning machine having a plurality of spinning stations (1), wherein each spinning station (1) comprises a spinning aggregate (3), a thread guide unit (6), and a winding unit, and to a method for operating a spinning station (1) of an open-end rotor spinning machine. Figure 2 is the representative figure.



No. of Pages : 27 No. of Claims : 16

(54) Title of the invention : TRANSFER APPARATUS AND METHOD FOR TRANSFERRING ONE OR MORE PLIES ONTO A CARCASS PACKAGE ON A TIRE BUILDING DRUM

(51) International classification	:B29D0030240000, B29D0030260000, C21C0005520000, B29D0030000000, B41F0016000000	(71) <b>Name of Applicant :</b> <b>1)VMI HOLLAND B.V.</b> Address of Applicant :Gelriaweg 16 8161 RK EPE Netherlands
(31) Priority Document No	:2022628	(72) <b>Name of Inventor :</b>
(32) Priority Date	:22/02/2019	<b>1)PAPOT, Dave</b>
(33) Name of priority country	:Netherlands	<b>2)DE GRAAF, Martin</b>
(86) International Application No	:PCT/NL2020/050039	
Filing Date	:27/01/2020	
(87) International Publication No	:WO 2020/171694	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention relates to a transfer apparatus and a method for transferring plies onto a carcass package on a tire building drum, wherein the transfer apparatus comprises a transfer ring with first ring segments and a frame that extends in a circumferential direction about a central axis for holding the first ring segments in first angular positions distributed in the circumferential direction along the frame, wherein the first ring segments are movable relative to the frame in a radial direction from a first radial distance to a second radial distance from the central axis that is smaller than the first radial distance, wherein the transfer apparatus further comprises a first rolling device (4) that is positionable in a second angular position interposed between the first angular positions, wherein the transfer apparatus further comprises a second ring segment (6) that is positionable in the second angular position at the second radial distance from the central axis.



No. of Pages : 25 No. of Claims : 28

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127010067 A

(19) INDIA

(22) Date of filing of Application :10/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : NONSTICK COOKWARE AND MATERIALS, AND METHODS OF MANUFACTURE AND USE

(51) International classification :A47J0036020000,  
A47J0027000000,  
B05D0005080000,  
B29C0070120000,  
B32B0005060000  
(31) Priority Document No :62/719799  
(32) Priority Date :20/08/2018  
(33) Name of priority country :U.S.A.  
(86) International Application No :PCT/US2019/047249  
Filing Date :20/08/2019  
(87) International Publication No :WO 2020/041299  
(61) Patent of Addition to Application  
Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)ADVANCED FLEXIBLE COMPOSITES, INC.**  
Address of Applicant :14 Walter Court Lake In The Hills, IL  
60156 U.S.A.  
(72)Name of Inventor :  
**1)LEWIS, William, Christopher**  
**2)LEWIS, Barton, R.**  
**3)SMITH, Paul, A.E.**  
**4)DUNLEA, Kevin, Patrick**  
**5)BAKER, Michael**  
**6)LEWIS, William, James**  
**7)LEWIS, Barton, Roy**  
**8)GAO, Jian**  
**9)TERPSTRA, Lambert Allen**

(57) Abstract :

Heat resistant and/or nonstick polymer materials and composites, and cookware including a food support surface comprising an integrated or attached cooking surface formed of the materials and composites. The cookware can includes a melt-processible fluoropolymer surface or insert. The cookware can further include a laminate material with structural rigidity, wherein the laminate material includes a flexible substrate impregnated with the heat resistant polymer material, coated with a nonstick coating, and pressed or molded in a shaped cookware or other nonstick items or component. Various cooking devices can be pressed from the material, as well as oven or vehicle components.

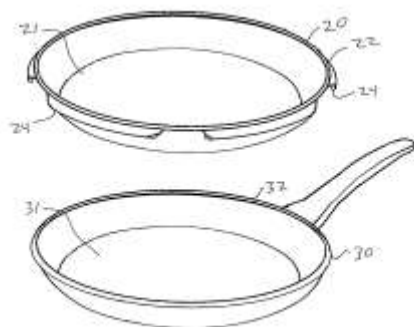


FIG. 1

No. of Pages : 22 No. of Claims : 15

## (54) Title of the invention : HAND WASHING SYSTEM AND METHOD

(51) International classification	:G08B0021240000, H04W0012000000, E03C0001040000, A63B0024000000, G06F0021320000	(71) <b>Name of Applicant :</b> <b>1)SOAPY CARE LTD.</b> Address of Applicant :2 Oppenheimer St. 7670136 Rehovot Israel
(31) Priority Document No	:102018000008282	(72) <b>Name of Inventor :</b> <b>1)SIMONOVSKY, Maxim</b>
(32) Priority Date	:31/08/2018	
(33) Name of priority country	:Italy	
(86) International Application No	:PCT/IL2019/050978	
Filing Date	:31/08/2019	
(87) International Publication No	:WO 2020/044351	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A hand washing system, comprising a reagent and water dispensing unit connected to a server. The dispensing unit comprises a personal identification unit, a reagent dispenser, a connection to a water source, one or more sensors for monitoring the handwashing act, and a controller comprising processor and memory for operating the dispensing unit and for storing handwashing data parameters. The server receives and analyzes handwashing data parameters. When an individual approaches the dispensing unit the identification unit identifies the individual, the one or more sensors confirm that the individual's hands are at location apt for receiving reagent from the reagent dispenser and water for at least a predetermined amount of time and the processor sends the server handwashing data parameters.



No. of Pages : 22 No. of Claims : 14

## (54) Title of the invention : POINT MANAGEMENT METHOD

(51) International classification :G06Q0020380000,  
G06Q0030020000,  
G06Q0020400000,  
G06Q0020240000,  
G06Q0020060000

(31) Priority Document No :10-2018-0121327

(32) Priority Date :11/10/2018

(33) Name of priority country :Republic of Korea

(86) International Application No :PCT/KR2019/004941

Filing Date :24/04/2019

(87) International Publication No :WO 2020/075940

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

## (71)Name of Applicant :

**1)CHOI, Woo**Address of Applicant :104, 58-10, Ujangsan-ro 8-gil,  
Gangseo-Gu Seoul 07682 Republic of Korea

## (72)Name of Inventor :

**1)CHOI, Woo**

## (57) Abstract :

A point management method is disclosed according to one embodiment of the present disclosure. An operation stored in a computer program to process the method comprises the operations of: receiving user information from a franchise store server and/or a user terminal; receiving payment information and a point commission amount limit from the franchise store server; receiving, from each of one or more point servers, all of point information including at least one of point information, a point information-based possessed point amount, and a point information-based point commission rate on the basis of the user information; calculating a point amount to be used for each piece of payment point information that is at least a portion of the entire point information, on the basis of the point commission amount limit; and transmitting, to each of the one or more point servers, a payment request on the basis of the point amount to be used for each piece of payment point information.



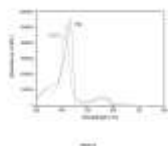
No. of Pages : 98 No. of Claims : 20

(54) Title of the invention : SYSTEM AND METHOD FOR DETERMINING OXYGENATED-BLOOD CONTENT OF BIOLOGICAL TISSUE

(51) International classification	:A61B0005000000, A61B0005145500, G01N0021310000, A61B0005020500, G06K0009000000	(71) <b>Name of Applicant :</b> <b>1)TEL HASHOMER MEDICAL RESEARCH INFRASTRUCTURE AND SERVICES LTD.</b> Address of Applicant :The Chaim Sheba Medical Center Tel Hashomer 5262000 Ramat Gan Israel
(31) Priority Document No	:62/724116	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/08/2018	<b>1)KOSTENICH, Genady</b>
(33) Name of priority country	:U.S.A.	<b>2)ORENSTEIN, Arie</b>
(86) International Application No	:PCT/IL2019/050959	<b>3)ORON-HERMAN, Mor</b>
Filing Date	:27/08/2019	
(87) International Publication No	:WO 2020/044337	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A system and method are presented for use in monitoring oxygenation in biological tissue. The system comprises a control unit being configured and operable to receive data indicative of light response from a region of the biological tissue being subjected to illumination and/or collection at two separate wavelengths in two selected wavelength ranges and processing the data by comparing data indicative of each selected wavelength range to determine an oxygenated/deoxygenated status of the biological tissue. The two wavelength ranges comprise a first wavelength range in which the absorbance of the deoxyhemoglobin within the tissue is higher than the oxyhemoglobin, and a second wavelength range in which the absorbance of the oxyhemoglobin within the tissue is higher than the deoxyhemoglobin or vice versa. The two wavelengths in said two wavelength ranges comprise first and second wavelengths satisfying a predetermined condition of a ratio between the absorbance of the deoxyhemoglobin and the oxyhemoglobin for each of the first and second identified wavelengths.



No. of Pages : 43 No. of Claims : 36

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127010094 A

(19) INDIA

(22) Date of filing of Application :10/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : RESPONSE RECEIVING AND SENDING METHOD, RETRANSMISSION METHOD, COMMUNICATION DEVICE, AND STORAGE MEDIUM

(51) International classification	:H04L0001180000, H04W0072040000, H04L0012841000, G06F0003160000, G06Q0020420000	(71)Name of Applicant : <b>1)ZTE CORPORATION</b> Address of Applicant :ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan Shenzhen, Guangdong 518057 China
(31) Priority Document No	:201810910233.3	(72)Name of Inventor : <b>1)XIA, Shuqiang</b>
(32) Priority Date	:10/08/2018	<b>2)FU, Ting</b>
(33) Name of priority country	:China	<b>3)HAO, Peng</b>
(86) International Application No	:PCT/CN2019/100173	<b>4)LIANG, Chunli</b>
Filing Date	:12/08/2019	<b>5)REN, Min</b>
(87) International Publication No	:WO 2020/030173	<b>6)GOU, Wei</b>
(61) Patent of Addition to Application Number	:NA	<b>7)SHI, Jing</b>
Filing Date	:NA	<b>8)HAN, Xianghui</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Embodiments of the present invention provide a response receiving and sending method, a retransmission method, a communication device, and a storage medium. The method comprises: sending, by means of a pre-configured periodic resource, a transmission block to a first communication device; and receiving, on a pre-configured correct response resource, a correct response corresponding to the transmission block.



No. of Pages : 63 No. of Claims : 10

(54) Title of the invention : PRESSURE REGULATOR FOR GAS DISTRIBUTION SYSTEM AND PILOT DEVICE FOR PILOTING PRESSURE REGULATORS

(51) International classification	:G09G0003340000, H02B0001300000, G01R0029120000, G05D0016060000, B29C0048120000	(71)Name of Applicant : <b>1)PIETRO FIORENTINI S.P.A.</b> Address of Applicant :Via E. Fermi, 8/10 36057 Arcugnano (VI) Italy
(31) Priority Document No	:102018000009698	(72)Name of Inventor :
(32) Priority Date	:23/10/2018	<b>1)ARSEGO, Alberto</b>
(33) Name of priority country	:Italy	<b>2)BERNARDI, Michele</b>
(86) International Application No	:PCT/IB2019/059010	<b>3)BONAMICO, Alessandro</b>
Filing Date	:22/10/2019	
(87) International Publication No	:WO 2020/084484	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention concerns a pressure regulator (10) for gas distribution systems, comprising: a connection body (11) for connection between an upstream pipe and a downstream pipe, the following elements being defined inside the connection body (11): an inlet duct (12), an outlet duct (13), a high- pressure chamber (14) connected to the inlet duct (12), a low-pressure chamber (15) connected to the outlet duct (13), a passage opening (16) between the high-pressure chamber (14) and the low-pressure chamber (15), a movable shutter (17) designed to obstruct the passage opening (16), means for moving the movable shutter (17) in a controlled manner. The means for moving the movable shutter (17) in a controlled manner comprise: a first main control head (18) fixed to the connection body (11) and configured to operate the movable shutter (17) through a first control rod (19), a second auxiliary control head (20) configured to operate the movable shutter (17) through a second control rod (21 ) fixed to the same movable shutter (17).



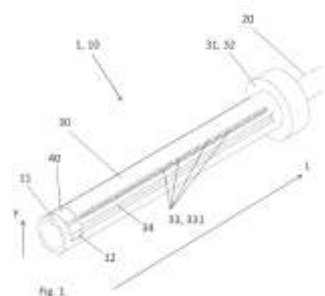
No. of Pages : 14 No. of Claims : 15

(54) Title of the invention : A WEIGHTLIFTING DEVICE

(51) International classification	:A63B0021000000, A63B0021072000, A63B0021078000, A63B0021075000, A63B0021062000	(71) <b>Name of Applicant :</b> <b>1)GUNGNIR AS</b> Address of Applicant :Bogstadveien 25 0355 Oslo Norway
(31) Priority Document No	:20181186	(72) <b>Name of Inventor :</b>
(32) Priority Date	:11/09/2018	<b>1)HANSEN, Markus Leonhard</b>
(33) Name of priority country	:Norway	<b>2)BOSSONNEY GUNDERSEN, Andreas Gunnar</b>
(86) International Application No	:PCT/EP2019/061481	<b>3)SAND, Audun Filip</b>
Filing Date	:06/05/2019	
(87) International Publication No	:WO 2020/052815	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a weightlifting device (1) comprising a longitudinally extending bar (10), the bar comprising at least one weight bearing section (30) adapted for accommodating one or more free weights (100) comprising an opening (101) adapted for surrounding the weight bearing section. The weight bearing section comprises an end stop (31) for the one or more free weights at a first end (32) of the weight bearing section, a recess (12) at or adjacent to a second opposite end (11) of the weight bearing section and a free weight locking member (40) for locking the free weights and for preventing the free weights from unintentionally falling off from the second end. The free weight locking member is movable in a longitudinal direction (L) of the weight bearing section between the recess and at least one free weight locking position (33) located between the recess and the end stop. The free weight locking member is further movable in a second direction at the recess between an immersed position and an elevated position, the immersed position being a position where the free weight locking member is completely, or at least mainly, immersed into the recess, and the elevated position being a position where the free weight locking member is elevated with respect to the immersed position and extends at least partly outside the recess.



No. of Pages : 13 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127010100 A

(19) INDIA

(22) Date of filing of Application :10/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : TRANSMISSION DETERMINATION METHOD AND DEVICE, BASE STATION, TERMINAL, AND COMPUTER-READABLE STORAGE MEDIUM

(51) International classification	:H04W0072120000, H04W0072040000, H04L0005000000, H04W0074080000, H04B0017150000	(71)Name of Applicant : <b>1)ZTE CORPORATION</b> Address of Applicant :ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan Shenzhen, Guangdong 518057 China
(31) Priority Document No	:201810910223.X	(72)Name of Inventor : <b>1)ZHANG, Chenchen</b>
(32) Priority Date	:10/08/2018	<b>2)HAO, Peng</b>
(33) Name of priority country	:China	<b>3)LIU, Xing</b>
(86) International Application No	:PCT/CN2019/100113	
Filing Date	:10/08/2019	
(87) International Publication No	:WO 2020/030168	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed are a transmission determination method, a transmission determination device, a base station, a terminal, and a computer-readable storage medium. The method comprises: determining, according to first information, whether to receive a first transmission and/or to send a second transmission, such that either the first transmission is received or the second transmission is sent at a given moment. The invention is used to ensure that the terminal and/or the base station transmits at most one transmission at a given moment, thereby avoiding a time domain conflict caused by overlapping time domain resources of a transmission scheduled by DCI and a transmission scheduled by higher layer signaling.



No. of Pages : 75 No. of Claims : 39

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127010111 A

(19) INDIA

(22) Date of filing of Application :10/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A GABAA RECEPTOR LIGAND

(51) International classification	:C07D0471040000, A61K0045060000, A61K0031453500, A61K0031415000, A61K0031420000	(71) <b>Name of Applicant :</b> <b>1)SANIONA A/S</b> Address of Applicant :Smedeland 26B 2600 Glostrup Denmark
(31) Priority Document No	:18194297.0	(72) <b>Name of Inventor :</b>
(32) Priority Date	:13/09/2018	<b>1)LARSEN, Janus, S.</b>
(33) Name of priority country	:EPO	<b>2)AMRUTKAR, Dipak</b>
(86) International Application No	:PCT/EP2019/074465	<b>3)JACOBSEN, Thomas, Amos</b>
Filing Date	:13/09/2019	<b>4)DYHRING, Tino</b>
(87) International Publication No	:WO 2020/053377	<b>5)NIELSEN, Karin, Sandager</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to 2-(3-(3-(2,4-dimethoxypyrimidin-5-yl)phenyl)-3H-imidazo[4,5-b]pyridin-6-yl)propan-2-ol, which is useful as a GABA receptor modulator. In one embodiment, said compound is useful in the treatment of pain, neuropathic pain and/or itch.

No. of Pages : 33 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127010112 A

(19) INDIA

(22) Date of filing of Application :10/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : HARDENING METHOD AND APPARATUS, PARTICULARLY APPLICABLE TO METAL AND/OR CERAMICS

(51) International classification	:B29C0070440000, B28B0007000000, G03G0015160000, A61B0017000000, B29C0049000000	(71) <b>Name of Applicant :</b> <b>1)TRITONE TECHNOLOGIES LTD.</b> Address of Applicant :12 Amal Street Park Afek Industrial Zone 4809245 Rosh HaAyin Israel
(31) Priority Document No	:62/724120	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/08/2018	<b>1)BEN-ZUR, Ofer</b>
(33) Name of priority country	:U.S.A.	<b>2)PELED, Hagai</b>
(86) International Application No	:PCT/IL2019/050957	
Filing Date	:27/08/2019	
(87) International Publication No	:WO 2020/044336	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Apparatus and method for hardening a paste within walls of a mold, comprises a sealing hood that opens to a first position allowing paste to be applied within the mold and then closes to provide an airtight seal around the mold and the paste applied within the mold. Then a vacuum source evacuates air from the sealing hood in its closed position to apply a vacuum to the paste. The vacuum causes liquids to evaporate from the paste, and thus hardens the paste.

No. of Pages : 19 No. of Claims : 32

(54) Title of the invention : RFID BEAD LABEL DEVICES CAPABLE OF WITHSTANDING AND MAINTAINING RFID OPERABILITY FOR IDENTIFICATION PURPOSES DURING AND POST-VULCANIZATION OF RUBBER ARTICLES

(51) International classification	:G06K0019077000, G06K0019020000, B32B0038000000, B32B0003260000, F16L0059020000	(71)Name of Applicant : <b>1)FINELINE TECHNOLOGIES</b> Address of Applicant :3145 Medlock Bridge Road Norcross, GA 30071 U.S.A.
(31) Priority Document No	:62/756799	(72)Name of Inventor :
(32) Priority Date	:07/11/2018	<b>1)CASSIDY, Glenn, M.</b>
(33) Name of priority country	:U.S.A.	<b>2)BORGNA, Michael, E.</b>
(86) International Application No	:PCT/US2019/060280	<b>3)UIJLENBROEK, Jos</b>
Filing Date	:07/11/2019	
(87) International Publication No	:WO 2020/097340	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Disclosed are pre-cure RFID-enabled bead labels based on an RFID inlay construction consisting of an aluminum antenna etched on to a high temperature resistant polyimide film that is connected to an integrated memory circuit positioned on the surface of the polyimide film. This RFID inlay being further inserted into an overall label construction having a plurality of layers that include, for example, a plurality of polyester layers and a plurality of high temperature resistant adhesive layers that bond/adhere layers together, the plurality of layers further protecting and insulating the RFID inlay while the label is bonded to the external bead (or sidewall) of a tire. The compositions/devices disclosed herein can be used for electronic identification when applied on rubber-based articles (e.g., tires) prior to being subjected to stress related to the vulcanization process and normal use of this article during the manufacturing process.

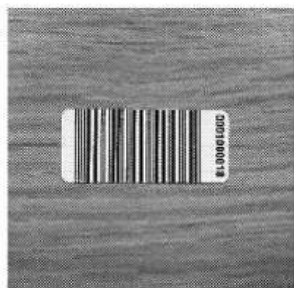


FIGURE 1A

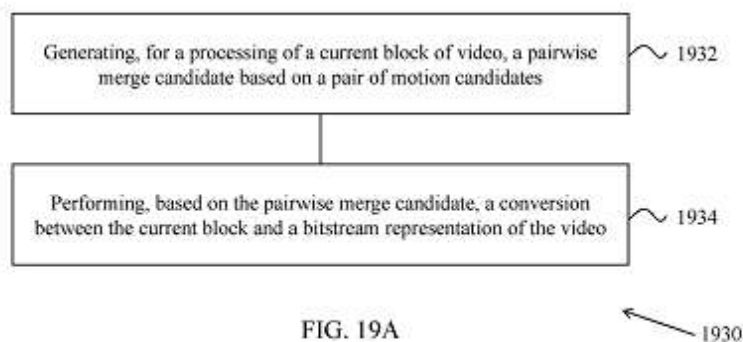
No. of Pages : 19 No. of Claims : 6

(54) Title of the invention : ROUNDING IN PAIRWISE AVERAGE CANDIDATE CALCULATIONS

(51) International classification	:H04N0019700000, H04N0019520000, H04N0019513000, H04N0019593000, H04N0019176000	(71)Name of Applicant : <b>1)BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.</b> Address of Applicant :Room B-0035, 2/F, No.3 Building No.30, Shixing Road, Shijingshan District Beijing 100041 China <b>2)BYTEDANCE INC.</b>
(31) Priority Document No	:PCT/CN2018/114931	(72)Name of Inventor :
(32) Priority Date	:10/11/2018	<b>1)ZHANG, Kai</b>
(33) Name of priority country	:China	<b>2)ZHANG, Li</b>
(86) International Application No	:PCT/CN2019/117119	<b>3)LIU, Hongbin</b>
Filing Date	:11/11/2019	<b>4)WANG, Yue</b>
(87) International Publication No	:WO 2020/094151	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Devices, systems and methods for unified rounding in sub-block based prediction are described. In a representative aspect, a method of video processing includes generating, for a processing of a current block of video, a pairwise merge candidate based on a pair of motion candidates, and performing, based on the pairwise merge candidate, a conversion between the current block and a bitstream representation of the video. In another representative aspect, a method of video processing includes generating, for a current block of video coded using a geometry partition mode, a uni-prediction motion candidate based on a scaled motion vector and a List0 motion vector, and performing, based on the uni-prediction motion candidate, a conversion between the current block and a bitstream representation of the video.



(54) Title of the invention : DEVICE FOR REGISTERING AND STORING DATA ABOUT THE BIRTH AND LIFE-TIME EVENTS OF A USER

(51) International classification	:H04M0001725000, G06F0016930000, G09B0019000000, H04W0024020000, G06K0009000000	(71)Name of Applicant : <b>1)LYAPUKHOV, Nikolai Evgenevich</b> Address of Applicant :ul. Tronina, 10, kv. 35 g. Georgievsk Stavropolsky kr., 357827 Russia
(31) Priority Document No	:2018147527	(72)Name of Inventor : <b>1)LYAPUKHOV, Nikolai Evgenevich</b>
(32) Priority Date	:29/12/2018	
(33) Name of priority country	:Russia	
(86) International Application No	:PCT/RU2019/001008	
Filing Date	:24/12/2019	
(87) International Publication No	:WO 2020/139159	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The group of inventions relates to a method and device for recording and registering data containing information about the time and date of birth of a person, and for storing said data over the course of the entire lifetime of the person with reference to universal time and to the place of birth. The present method includes registering the time of birth of the user by inputting the data into an electronic data recording and registration device, referencing the time of birth of the user to universal time and to the place of birth of the user, initiating counting of the time of the user's life in seconds, or minutes, or hours, or days of the planet Earth taking into account adjustment of the universal time standard, transmitting the data from the data recording and registration device to a server storage facility, integrating the user data with data of other users, building connections with the data of other users, outputting information about the time of the user's life onto an interface of the electronic device, registering the time of the user's life-time events and transmitting the data about the time of the user's life-time events from the data recording and registration device to the server storage facility, and outputting information about the time of the user's life-time events onto the interface of the electronic device.

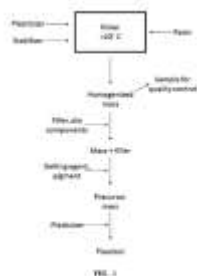
No. of Pages : 4 No. of Claims : 6

(54) Title of the invention : POLYVINYL CHLORIDE-FREE LIPOPHILIC POLYMER BASED AROMATIZED PLASTISOL

(51) International classification	:C08K0005000000, C08K0005120000, A61K0008920000, C08J0003180000, A61L0009030000	(71)Name of Applicant : <b>1)FARDANOV, Aleksandra</b> Address of Applicant :528 Oak Glen Irvine, California 92614 U.S.A. <b>2)FARDANOV, Oleg</b> <b>3)ZADORIN, Dmitry</b>
(31) Priority Document No	:62/741425	(72)Name of Inventor : <b>1)FARDANOV, Aleksandra</b> <b>2)FARDANOV, Oleg</b> <b>3)ZADORIN, Dmitry</b>
(32) Priority Date	:04/10/2018	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/054562	
Filing Date	:03/10/2019	
(87) International Publication No	:WO 2020/072817	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Polymer compositions suitable for modeling are provided as plastisols with a high content of volatile substances, such as bactericidal, aromatizing, and/or flavoring volatiles. Such plastisols are provided by mixing a lyophilic polyamide or lyophilic complex polyester with a plasticizer of moderate to low polarity that includes a bactericidal, aromatizing, and/or flavoring components, such as an essential oil. After mixing, additives such as fillers, pigments, and gelling agents are added. A solid plastic is producing by heating the formed plastisol to a gelation temperature and then heating to a solution temperature to generate a solid plastic with enduring bactericidal activity, scent, and/or flavor.



No. of Pages : 20 No. of Claims : 75

(54) Title of the invention : MICROFLUIDIC SAMPLE PREPARATION DEVICE OFFERING HIGH REPEATABILITY

(51) International classification	:B01L0003000000, B01F0001000000, G01N0001200000, E03D0009030000, A47J0031520000	(71)Name of Applicant : <b>1)COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES</b> Address of Applicant :Bt le Ponant 25 rue Leblanc 75015 PARIS France <b>2)HORIBA ABX SAS</b>
(31) Priority Document No	:1860403	(72)Name of Inventor :
(32) Priority Date	:09/11/2018	<b>1)FOUILLET, Yves</b>
(33) Name of priority country	:France	<b>2)ALI-CHERIF, Anais</b>
(86) International Application No	:PCT/FR2019/052660	
Filing Date	:07/11/2019	
(87) International Publication No	:WO 2020/095000	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Disclosed is a device for preparing a solution from a sample and a reagent, comprising a microfluidic array comprising a sample supply inlet (E1), a reagent supply inlet (E2), a discharge outlet (S1), a solution collection outlet (S2), a sampling zone (ZE) to which the inlets (E1, E2) are connected, first (4) and second (6) preparation chambers connected to the sampling zone (ZE), arranged to either side of the sampling zone (ZE) such that the liquid flowing from one preparation chamber to the other flows through the first sampling zone (ZE), the first preparation chamber (4) having a volume that is variable between a minimum volume and a calibrated volume. The device comprises valves interrupting the flow of the fluid at least at the two inlets (E1, E2) and the collection (S2) and discharge (S1) outlets.

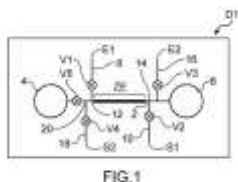


FIG. 1

No. of Pages : 31 No. of Claims : 15

(54) Title of the invention : WHITE LIGHT SOURCE AND ILLUMINATION APPARATUS FOR LIGHTING IN LITHOGRAPHY PROCESS

(51) International classification :H01L0033500000,  
H01L0025075000,  
C09K0011770000,  
F21Y0113130000,  
C08F0026120000

(31) Priority Document No :10-2018-0139897

(32) Priority Date :14/11/2018

(33) Name of priority country :Republic of Korea

(86) International Application No :PCT/KR2019/014594

Filing Date :31/10/2019

(87) International Publication No :WO 2020/101231

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)GLBTECH CO., LTD.**

Address of Applicant :28-86, Gajangsaneopdong-ro Osan-si  
Gyeonggi-do 18103 Republic of Korea

(72)Name of Inventor :

**1)KIM, Han Do**

**2)KIM, Byung Soon**

**3)CHOI, Young Sik**

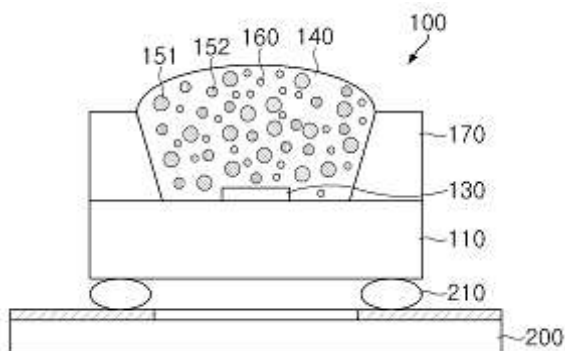
**4)PARK, Guen Ryeol**

**5)PARK, Eun Mi**

**6)CHOI, Yong Sun**

(57) Abstract :

The present invention relates to a white light source and illumination apparatus for lighting in a lithography process and, more particularly, to a white light source and illumination apparatus for lighting in a lithography process, both capable of realizing white light even with the limited wavelength of light used in a lithography process. Disclosed is a white light illumination apparatus for lighting in an exposure room in which a lithography process is performed, the apparatus comprising a white light source comprising: a blue light-emitting diode element having an emission peak wavelength of 450-490 nm; and an encapsulation layer which encapsulates the blue light-emitting diode element, wherein in the encapsulation layer, one or more phosphors which realize white light emission along with the blue light-emitting diode element, and a blocking agent which blocks light of a wavelength used in a lithography process are scattered, thus forming a first peak region at a wavelength of 450-490 nm and a second peak region which realizes white light emission in combination with the first peak region and limiting the wavelength used in the lithography process.



No. of Pages : 26 No. of Claims : 26

(54) Title of the invention : COORDINATION METHOD FOR SUB-BLOCK BASED INTER PREDICTION

(51) International classification	:H04N0019520000, H04N0019176000, H04N0019513000, H04N0019700000, H04L0029060000	(71)Name of Applicant : <b>1)BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.</b> Address of Applicant :Room B-0035, 2/F, No. 3 Building No. 30, Shixing Road, Shijingshan District Beijing 100041 China <b>2)BYTEDANCE INC.</b>
(31) Priority Document No	:PCT/CN2018/116889	(72)Name of Inventor :
(32) Priority Date	:22/11/2018	<b>1)ZHANG, Kai</b>
(33) Name of priority country	:China	<b>2)ZHANG, Li</b>
(86) International Application No	:PCT/CN2019/120301	<b>3)LIU, Hongbin</b>
Filing Date	:22/11/2019	<b>4)XU, Jizheng</b>
(87) International Publication No	:WO 2020/103940	<b>5)WANG, Yue</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Devices, systems and methods for digital video coding, which include sub-block based inter prediction methods, are described. An exemplary method for video processing includes determining, for a conversion between a current block of video and a bitstream representation of the video, a maximum number of candidates in a sub-block based merge candidate list and/or whether to add sub-block based temporal motion vector prediction (SbTMVP) candidates to the sub-block based merge candidate list based on whether temporal motion vector prediction (TMVP) is enabled for use during the conversion or whether a current picture referencing (CPR) coding mode is used for the conversion, and performing, based on the determining, the conversion.



No. of Pages : 105 No. of Claims : 32

(54) Title of the invention : INTERACTION CONTROL METHOD FOR DISPLAY PAGE, AND DEVICE

(51) International classification :G06F0003048800,  
G06F0016957000,  
G06F0003048100,  
G06F0016958000,  
G06F0003048500

(31) Priority Document No :201910082895.0

(32) Priority Date :24/01/2019

(33) Name of priority country :China

(86) International Application No :PCT/CN2020/072225

Filing Date :15/01/2020

(87) International Publication No :WO 2020/151547

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.**Address of Applicant :Room B-0035, 2/F, No. 3 Building,  
No.30, Shixing Road, Shijingshan District Beijing 100041 China

(72)Name of Inventor :

**1)GONG, Yanyun**

(57) Abstract :

An interaction control method for a display page and a device, pertaining to the technical field of computer applications. The method comprises: acquiring a swipe operation of a user with respect to a display page and a swipe parameter corresponding to the swipe operation, wherein the display page comprises multiple display content items (101); controlling, according to the swipe operation, the display page to move, and predicting, according to the swipe parameter, a position of the current display content items in the display page when the display page stops moving (102); determining whether the position of the current display content items meets a pre-determined requirement (103); and if not, correcting the position of the current display content items, such that the position of the current display content items meets the pre-determined requirement when the display page stops moving (104). In this way, the interaction control method for a display page eliminates the influence of the strength of a swipe operation on the position of display content items in the display page, such that the display content items are always displayed at an appropriate position of the display page to improve viewing experience of users.



No. of Pages : 32 No. of Claims : 16

(54) Title of the invention : SPECIAL BRASS ALLOY AND SPECIAL BRASS ALLOY PRODUCT

(51) International classification	:C22C0009040000, C22F0001080000, G05B0023020000, B08B0003120000, H04W0008240000	(71)Name of Applicant : <b>1)OTTO FUCHS - KOMMANDITGESELLSCHAFT</b> Address of Applicant :Derschlag Strae 26 58540 Meinerzhagen Germany
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)REETZ, Bjrn</b>
(33) Name of priority country	:NA	<b>2)GUMMERT, Hermann</b>
(86) International Application No	:PCT/EP2018/079587	<b>3)PLETT, Thomas</b>
Filing Date	:29/10/2018	
(87) International Publication No	:WO 2020/088738	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Described is a special brass alloy containing 62.5 to 65 wt.% Cu, 2.0 to 2.4 wt.% Mn, 0.7 to 0.9 wt.% Ni, 1.9 to 2.3 wt.% Al, 0.35 to 0.65 wt.% Si, 0.3 to 0.6 wt.% Fe, 0.18 to 0.4 wt.% Sn und Cr, either alone or in combination, = 0.1 wt.% Pb, the remainder consisting of Zn and inevitable impurities.

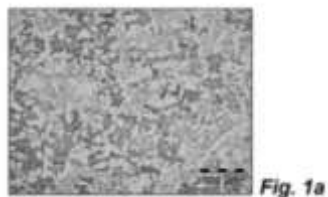


Fig. 1a

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029665 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ACYLPHOSPHINE OXIDE COMPOUND AND PREPARATION METHOD THEREFOR

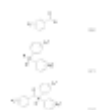
(51) International classification :C07F0009530000,  
C07F0009460000,  
B82Y0030000000,  
C09D0011380000,  
C09D0011101000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :PCT/CN2018/119922  
Filing Date :07/12/2018  
(87) International Publication No :WO 2020/113585  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)ANQING LIGHTING OPTOELECTRONICS TECHNOLOGY CO., LTD**  
Address of Applicant :No.210 Zhongshan Road, Yixiu District  
Anqing, Anhui 246000 China  
(72)Name of Inventor :  
**1)ZHONG, Xiaofeng**  
**2)WU, Jin**  
**3)YUE, Xiangjun**  
**4)HUANG, Tienan**

(57) Abstract :

Disclosed are an acylphosphine oxide compound and a preparation method therefor, which belong to the field of initiators. The method comprises: reacting compound B and compound C under the conditions of an organic base and an organic solvent so as to obtain the acylphosphine oxide compound. The chemical structural formula of compound B is as follows: (B), the chemical structural formula of compound C is as follows: (C), and the chemical structural formula of the acyl phosphine oxide compound is as follows: (A), wherein R1 is hydrogen, a C1-C6alkyl group, methoxy, methylthio, dimethylamino, chloroformyl, phenyl, benzoyl, (4-dimethylamino) phenyl, a-naphthyl, -naphthyl or (9-ethyl-9H-carbazole)-3-yl, R2 and R 1 are the same, n is the substitution number of R1 on the corresponding phenyl ring, and is 1, 2 or 3, and m is the substitution number of R2 on the corresponding phenyl ring, and is 1, 2 or 3. The preparation method is safe and environmentally friendly, and has a high yield.



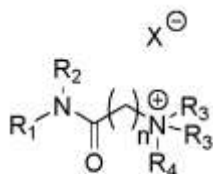
No. of Pages : 27 No. of Claims : 19

(54) Title of the invention : HAIR CONDITIONING COMPOSITION FOR IMPROVED DEPOSITION OF SILICONE

(51) International classification	:A61K0008340000, A61K0008410000, C11D0001620000, A61Q0005120000, C11D0001940000	(71)Name of Applicant : <b>1)UNILEVER GLOBAL IP LIMITED</b> Address of Applicant :Port Sunlight Wirral, Merseyside CH62 4ZD U.K. <b>2)UNILEVER IP HOLDINGS B.V.</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18214093.9	(72)Name of Inventor : <b>1)BARFOOT, Richard, Jonathan</b>
(32) Priority Date	:19/12/2018	<b>2)COOKE, Michael, James</b>
(33) Name of priority country	:EPO	<b>3)MENDOZA FERNANDEZ, Cesar, Ernesto</b>
(86) International Application No	:PCT/EP2019/084380	<b>4)PRICE, Paul, Damien</b>
Filing Date	:10/12/2019	
(87) International Publication No	:WO 2020/126658	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A composition comprising: (i) 0.01 to 10 wt % of a linear, cationic conditioning surfactant; (ii) 0.1 to 10 wt % of a linear fatty material; (iii) a particulate benefit agent selected from conditioning actives, scalp actives, encapsulated fragrance, emulsified fragrance, and mixtures thereof; (iv) 0.01 to 5 wt %, at 100 % active, of a branched cationic co-surfactant, selected from structure 1 wherein: · R<sub>1</sub> and R<sub>2</sub> comprise linear or branched alkyl chains, saturated or unsaturated, with carbon-carbon chain lengths of from C<sub>6</sub> to C<sub>22</sub>; preferably from C<sub>6</sub> to C<sub>12</sub>; · n has a range of from 1 to 6; · R<sub>3</sub> comprises an alkyl chain having a carbon-carbon chain length of from C<sub>1</sub> to C<sub>4</sub>, preferably C<sub>1</sub> to C<sub>2</sub>; · R<sub>4</sub> comprises a proton or an alkyl chain having a carbon-carbon chain length of from C<sub>1</sub> to C<sub>4</sub>, preferably C<sub>1</sub> to C<sub>2</sub>; and · X is an organic or inorganic anion; wherein the molar ratios of branched cationic co-surfactants (iv) to linear cationic surfactants (i) are in the range of from 1:20 to 1:1, preferably from 1:10 to 1:1, most preferably 1:5 to 1:2 provides superior benefit agent deposition.

**Structure 1**

No. of Pages : 18 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029680 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : HAIR CONDITIONING COMPOSITION FOR IMPROVED DEPOSITION

(51) International classification	:A61K0008410000, C11D0003500000, A61K0008040000, A61Q0005120000, C11D0001620000	(71)Name of Applicant : <b>1)UNILEVER GLOBAL IP LIMITED</b> Address of Applicant :Port Sunlight Wirral, Merseyside CH62 4ZD U.K. <b>2)UNILEVER IP HOLDINGS B.V.</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18214091.3	(72)Name of Inventor : <b>1)BARFOOT, Richard, Jonathan</b>
(32) Priority Date	:19/12/2018	<b>2)COOKE, Michael, James</b>
(33) Name of priority country	:EPO	<b>3)GILES, Colin, Christopher, David</b>
(86) International Application No	:PCT/EP2019/084381	<b>4)GUTIERREZ-ABAD, Raquel</b>
Filing Date	:10/12/2019	<b>5)KELSO, Hailey</b>
(87) International Publication No	:WO 2020/126659	<b>6)MENDOZA FERNANDEZ, Cesar, Ernesto</b>
(61) Patent of Addition to Application Number	:NA	<b>7)ZHOU, Rongrong</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A composition comprising: (i) 0.01 to 10 wt % of a linear, cationic conditioning surfactant; (ii) 0.1 to 10 wt % of a linear fatty material; (iii) a particulate benefit agent; (iv) 0.01 to 5 wt %, at 100 % active, of a branched cationic co-surfactant, as defined by structure (1) wherein: - R1 and R2 comprise linear or branched alkyl chains, that are saturated or non-saturated, with carbon-carbon chain lengths of from C2 to C32, preferably C8-C20 and that optionally comprise at least one group selected from an ester group, an amide group and an ether group; - R3 comprises an alkyl chain having a carbon-carbon chain length of from C1 to C4, preferably C1 to C2; - R4 comprises a proton or an alkyl chain having a carbon-carbon chain length of from C1 to C4, preferably C1 to C2; and - X is an organic or inorganic anion; wherein the molar ratios of branched cationic co-surfactants (iv) to linear cationic surfactants (i) are in the range of from 1:20 to 1:1, preferably from 1:10 to 1:1, most preferably 1:5 to 1:2, results in improved benefit agent deposition onto hair; wherein, where R1 and R2 comprise one or more linear alkyl chains, at least one linear alkyl chain has a carbon-carbon chain length of from C1 to C14; wherein the compositions have a viscosity of from 5,000 to 750,000 centipoise, preferably from 50,000 to 600,000 centipoise, more preferably from 50,000 to 450,000 as measured at 30°C on a Brookfield RVT using a Spindle A or B at 0.5 rpm for 60 seconds.

No. of Pages : 20 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029681 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DEPOSITION SYSTEM FOR HAIR

(51) International classification	:A61K0008490000, A61K0008410000, A61Q0005120000, A61K0008340000, A61Q0005000000	(71) <b>Name of Applicant :</b> <b>1)UNILEVER GLOBAL IP LIMITED</b> Address of Applicant :Port Sunlight Wirral, Merseyside CH62 4ZD U.K. <b>2)UNILEVER IP HOLDINGS B.V.</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18213907.1	(72) <b>Name of Inventor :</b>
(32) Priority Date	:19/12/2018	<b>1)GILES, Colin, Christopher, David</b>
(33) Name of priority country	:EPO	<b>2)ZHOU, Rongrong</b>
(86) International Application No	:PCT/EP2019/083916	
Filing Date	:05/12/2019	
(87) International Publication No	:WO 2020/126532	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A hair treatment composition comprising: a) a conditioning base comprising: i) a cationic conditioning surfactant having from 16 to 32 carbon atoms; ii) a fatty alcohol having from 8 to 22 carbon atoms; and b) from 0.1 to 10 wt % of metal pyrithiones and mixtures thereof; wherein the composition further comprises: (c) from 0.1 to 5 wt % of a diesterquat; and wherein the ratio of b) to c) is from 1:1 to 1:0.1, provides improved deposition of metal pyrithione on hair surfaces.

No. of Pages : 16 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029682 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DEPOSITION SYSTEM FOR HAIR

(51) International classification	:A61Q0005120000, A61K0008730000, A61K0008410000, C11D0003300000, A61K0008340000	(71)Name of Applicant : <b>1)UNILEVER GLOBAL IP LIMITED</b> Address of Applicant :Port Sunlight Wirral, Merseyside CH62 4ZD U.K. <b>2)UNILEVER IP HOLDINGS B.V.</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18213912.1	(72)Name of Inventor :
(32) Priority Date	:19/12/2018	<b>1)GILES, Colin, Christopher, David</b>
(33) Name of priority country	:EPO	<b>2)ZHOU, Rongrong</b>
(86) International Application No	:PCT/EP2019/086032	
Filing Date	:18/12/2019	
(87) International Publication No	:WO 2020/127542	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A hair treatment composition comprising: a) a conditioning base comprising: i) a cationic conditioning surfactant having from 16 to 32 carbon atoms; ii) a fatty alcohol having from 8 to 22 carbon atoms; and b) from 0.1 to 10 wt % of a conditioning silicone; (c) from 0.1 to 5 wt % of a diesterquat selected from a diesterquat that comprises branched, saturated chains, a diesterquat that comprises unbranched, unsaturated chains, and mixtures thereof; wherein the ratio of b) to c) is from 1:1 to 1:0.1, provides improved deposition of silicone on hair surfaces.

No. of Pages : 12 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029683 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DEPOSITION SYSTEM FOR HAIR

(51) International classification	:A61Q0005120000, A61K0008730000, C11D0017000000, A61K0008110000, A61K0008410000	(71)Name of Applicant : <b>1)UNILEVER GLOBAL IP LIMITED</b> Address of Applicant :Port Sunlight Wirral, Merseyside CH62 4ZD U.K. <b>2)UNILEVER IP HOLDINGS B.V.</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18213920.4	(72)Name of Inventor : <b>1)BARFOOT, Richard, Jonathan</b>
(32) Priority Date	:19/12/2018	<b>2)CLARKSON, Heather</b>
(33) Name of priority country	:EPO	<b>3)COOKE, Michael, James</b>
(86) International Application No	:PCT/EP2019/085377	<b>4)DICKINSON, Kelvin, Brian</b>
Filing Date	:16/12/2019	<b>5)GILES, Colin, Christopher, David</b>
(87) International Publication No	:WO 2020/127070	<b>6)MENDOZA FERNANDEZ, Cesar, Ernesto</b>
(61) Patent of Addition to Application Number	:NA	<b>7)ZHOU, Rongrong</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A hair treatment composition comprising: a) a conditioning base comprising: i) a cationic conditioning surfactant having from 16 to 32 carbon atoms; ii) a fatty alcohol having from 8 to 22 carbon atoms; and b) from 0.1 to 10 wt % of a microcapsule in which a core comprising benefit agent is encapsulated in a polymeric shell; and (c) from 0.1 to 5 wt % of a diesterquat, provides improved deposition of microcapsules and delivery of benefit agent to hair surfaces.

No. of Pages : 17 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029686 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A NOVEL PROCESS AND COSMETIC COMPOSITION FOR GLOSS AND BLUR

(51) International classification	:C09C0001300000, B01J0029040000, B01J0035020000, B01J0035100000, C09C0001000000	(71)Name of Applicant : <b>1)UNILEVER IP HOLDINGS B.V.</b> Address of Applicant :Weena 455 3013 AL Rotterdam Netherlands <b>2)UNILEVER GLOBAL IP LIMITED</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:PCT/CN2018/124886	(72)Name of Inventor : <b>1)GAO, Huailing</b> <b>2)PAN, Zhao</b> <b>3)WANG, Lin</b> <b>4)YU, Shuhong</b> <b>5)ZHU, Shuqi</b>
(32) Priority Date	:28/12/2018	
(33) Name of priority country	:China	
(86) International Application No	:PCT/EP2019/084230	
Filing Date	:09/12/2019	
(87) International Publication No	:WO 2020/136001	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed a method of preparing composite particles comprising a non-porous spherical particulate inorganic material deposited on a plate-like inorganic material, where refractive index of said particulate inorganic material is greater than that of said plate-like inorganic particulate material, wherein, said spherical material occupies 20 to 80 % of total surface area of said plate-like material and wherein the amount of said spherical material accounts for 2 to 20 wt% of said composite particles, further wherein said plate-like inorganic material is mica and said non-porous spherical particulate inorganic material is silicone dioxide, said method comprising the steps of: (iv) silanization of said plate-like inorganic material to get a silanized material having functional groups A; (v) silanization of said non-porous spherical particulate inorganic material to get a silanized material having functional groups B, where A B; and where said A and said B are capable of reacting with each other such that by way of their reaction, said non-porous spherical particulate inorganic material deposits on said plate-like inorganic material; and, (vi) reacting said silanized material having functional groups A with said silanized material having functional groups B.

No. of Pages : 26 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029687 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ANTIMICROBIAL COMPOSITIONS COMPRISING MODIFIED CLAY AND BIPHENOL

(51) International classification	:A61Q0011000000, A61Q0017000000, A61K0008020000, A61K0009000000, A61K0008040000	(71) <b>Name of Applicant :</b> <b>1)UNILEVER IP HOLDINGS B.V.</b> Address of Applicant :Weena 455 3013 AL Rotterdam Netherlands <b>2)UNILEVER GLOBAL IP LIMITED</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18215311.4	(72) <b>Name of Inventor :</b>
(32) Priority Date	:21/12/2018	<b>1)DASGUPTA, Anindya</b>
(33) Name of priority country	:EPO	<b>2)KUMARAN, Srikala</b>
(86) International Application No	:PCT/EP2019/082587	<b>3)SAJI, Maya, Treesa</b>
Filing Date	:26/11/2019	
(87) International Publication No	:WO 2020/126351	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is in the field of antimicrobial compositions, e.g. for personal care. In particular, the invention relates to antimicrobial compositions for oral care, such as toothpastes, comprising antimicrobial particles and biphenol. Accordingly, the present invention relates to antimicrobial compositions comprising a modified clay particle, the particle comprising an antimicrobial compound and a clay particle, and at least one biphenol compound. The invention further relates to the uses and methods of the antimicrobial compositions of the invention.

No. of Pages : 20 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029688 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ORAL CARE COMPOSITION

(51) International classification	:A61Q0011000000, A61K0008190000, A61K0008460000, A61K0008270000, A61K0008900000	(71) <b>Name of Applicant :</b> <b>1)UNILEVER IP HOLDINGS B.V.</b> Address of Applicant :Weena 455 3013 AL Rotterdam Netherlands <b>2)UNILEVER GLOBAL IP LIMITED</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18215831.1	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/12/2018	<b>1)ALLAHBASH, Shahin</b>
(33) Name of priority country	:EPO	<b>2)BARNE, Sameer, Keshav</b>
(86) International Application No	:PCT/EP2019/082360	<b>3)VAIDYA, Ashish, Anant</b>
Filing Date	:25/11/2019	
(87) International Publication No	:WO 2020/135952	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an oral care composition for minimizing staining of teeth. The present inventors have achieved this by combining a very specific triblock co-polymer with a specific phosphate compound in calculated amounts.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029689 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ANTIMICROBIAL COMPOSITIONS COMPRISING MODIFIED CLAY AND NONIONIC TRIBLOCK COPOLYMERS

(51) International classification	:A61Q0011000000, A61Q0017000000, A61Q0005120000, A61K0008020000, A61Q0019100000	(71)Name of Applicant : <b>1)UNILEVER IP HOLDINGS B.V.</b> Address of Applicant :Weena 455 3013 AL Rotterdam Netherlands <b>2)UNILEVER GLOBAL IP LIMITED</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:18215295.9	(72)Name of Inventor : <b>1)APPAVOO, Shanthi</b>
(32) Priority Date	:21/12/2018	<b>2)DASGUPTA, Anindya</b>
(33) Name of priority country	:EPO	<b>3)KUMARAN, Srikala</b>
(86) International Application No	:PCT/EP2019/082364	<b>4)SAJI, Maya, Treesa</b>
Filing Date	:25/11/2019	
(87) International Publication No	:WO 2020/126317	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention is in the field of antimicrobial compositions, e.g. for personal care. In particular, the invention relates to antimicrobial compositions for oral care, such as toothpastes, comprising antimicrobial particles and a nonionic triblock copolymer. Accordingly, the present invention relates to antimicrobial compositions comprising a modified clay particle, the particle comprising an antimicrobial compound and a clay particle, and at least one a nonionic triblock copolymer. The invention further relates to the uses and methods of the antimicrobial compositions of the invention.

No. of Pages : 19 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029690 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : HAIR CARE COMPOSITION COMPRISING PYRITHIONE

(51) International classification	:A61Q0005000000, A61K0008490000, A61Q0017040000, A61Q0005020000, A61K0008350000	(71) <b>Name of Applicant :</b> <b>1)UNILEVER IP HOLDINGS B.V.</b> Address of Applicant :Weena 455 3013 AL Rotterdam Netherlands <b>2)UNILEVER GLOBAL IP LIMITED</b> <b>3)CONOPCO, INC., D/B/A UNILEVER</b>
(31) Priority Document No	:PCT/CN2018/122794	(72) <b>Name of Inventor :</b>
(32) Priority Date	:21/12/2018	<b>1)CHEN, Guoqiang</b>
(33) Name of priority country	:China	<b>2)PAN, Xiaoyun</b>
(86) International Application No	:PCT/EP2019/082627	<b>3)TANG, Xuezhi</b>
Filing Date	:26/11/2019	
(87) International Publication No	:WO 2020/126356	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed are composite particles comprising a photolabile antidandruff agent and an organic UV filter whose melting point is from 30°C to 105°C, characterized in that said composite particles comprise a cationic polymer having weight average molecular weight of 1000 Da to 10000000 Da.

No. of Pages : 26 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202127029701 A

(19) INDIA

(22) Date of filing of Application :01/07/2021

(43) Publication Date : 30/07/2021

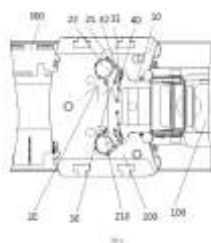
(54) Title of the invention : COUNTER-BALANCED MOBILE DEVICE AND CRANE

(51) International classification :B66C0023760000,  
H04R0001100000,  
F16M0011180000,  
F16M0011200000,  
B66D0001360000  
(31) Priority Document No :201811520387.8  
(32) Priority Date :12/12/2018  
(33) Name of priority country :China  
(86) International Application No :PCT/CN2019/075621  
Filing Date :21/02/2019  
(87) International Publication No :WO 2020/118895  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)SANY MOBILE CRANES CO. , LTD.**  
Address of Applicant :Jinzhou Avenue No. 168 Jinzhou  
Development Zone Changsha, Hunan 410000 China  
(72)Name of Inventor :  
**1)YANG, Chun**  
**2)SU, Long**  
**3)YANG, Shangfeng**

(57) Abstract :

Disclosed are a counter-balanced mobile device and a crane. The counter-balanced mobile device comprises a counter-balanced carriage (10), a connecting assembly (20), a transmission assembly (30), and a driving part (40), wherein the counter-balanced carriage (10) is configured to be connected to a rotary platform (100), the connecting assembly (20) is configured to be connected to a counter-weight (200), the connecting assembly (20) is rotatably connected to the counter-balanced carriage (10), and the driving part (40) is fixed on the counter-balanced carriage (10) and is connected to the connecting assembly (20) by means of the transmission assembly (30) to drive the connecting assembly (20) to rotate so as to the adjust the distance from the connecting assembly (20) to a set reference on the counter-balanced carriage (10). The counter-balanced mobile device can change the position of the counter-weight (200) relative to the rotary platform (100) without changing the counter-weight, thereby improving the counter-balancing performance and the stability of the crane.



No. of Pages : 14 No. of Claims : 10

(54) Title of the invention : BEAM FAILURE PROCESSING METHOD AND RELATED DEVICE

(51) International classification :H04B0007060000,  
H04W0072040000,  
H04B0007080000,  
H04W0076190000,  
H04W0024080000

(31) Priority Document No :201811613070.9

(32) Priority Date :27/12/2018

(33) Name of priority country :China

(86) International Application No :PCT/CN2019/110762

Filing Date :12/10/2019

(87) International Publication No :WO 2020/134358

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)VIVO MOBILE COMMUNICATION CO., LTD.**Address of Applicant :#283, BBK Road, Wusha, Chang'an  
Dongguan, Guangdong 523860 China

(72)Name of Inventor :

**1)YANG, Yu****2)SUN, Peng**

(57) Abstract :

The present disclosure provides a beam failure processing method and related device, said method comprising: according to a beam failure detection (BFD) reference signal (RS) resource group, determining whether a beam failure has occurred in a first cell group, the BFD RS resource group being configured in the first cell group; in case of beam failure in the first cell group, sending a beam failure recovery request message to a network-side device.

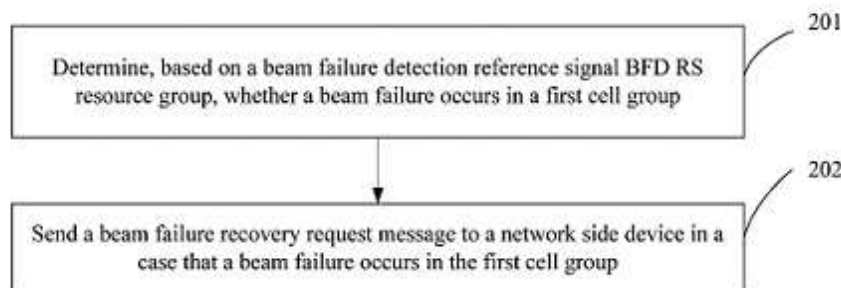


FIG. 2

No. of Pages : 48 No. of Claims : 23

(54) Title of the invention : INFORMATION RECEIVING METHOD, INFORMATION SENDING METHOD, TERMINAL, AND NETWORK SIDE DEVICE

(51) International classification :H04W0024080000,  
H04W0072040000,  
H04L0001000000,  
H04W0056000000,  
H04W0048120000

(31) Priority Document No :201811646619.4

(32) Priority Date :29/12/2018

(33) Name of priority country :China

(86) International Application No :PCT/CN2019/128522

Filing Date :26/12/2019

(87) International Publication No :WO 2020/135548

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)VIVO MOBILE COMMUNICATION CO., LTD.**

Address of Applicant :#283, BBK Road, Wusha, Chang'an Dongguan, Guangdong 523860 China

(72)Name of Inventor :

**1)SHEN, Xiaodong**

**2)LIU, Siqi**

**3)DING, Yu**

(57) Abstract :

Provided are an information receiving method, an information sending method, a terminal, and a network side device. The information receiving method comprises: detecting an SSB; according to transmission configuration information of first information, determining a candidate SSB set quasi-co-located with a detected first SSB, wherein the first information comprises the SSB; and according to the first SSB and the candidate SSB set, carrying out first processing, wherein the first processing comprises one of the following: receiving system information scheduled by a physical control channel associated with the first SSB; carrying out radio link monitoring; and carrying out radio resource management and measurement.

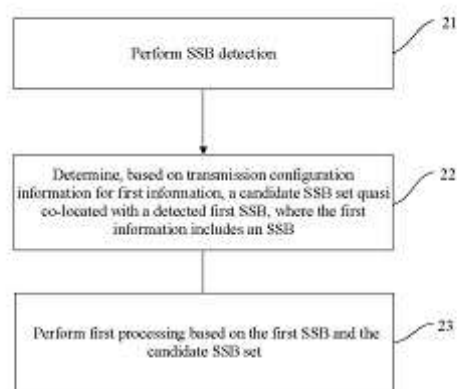


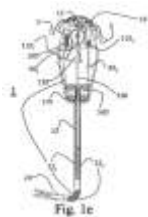
FIG. 2

(54) Title of the invention : STEERABLE MEDICAL DEVICE

(51) International classification	:A61B0017000000, A61B0034300000, G02B0023240000, A61B0017290000, A61B0001005000	(71) <b>Name of Applicant :</b> <b>1)Human Xtensions Ltd.</b> Address of Applicant :4 Meir Ariel Street, Grand Netter Building, 2nd floor, P.O. Box 8180, Netanya, 4250574, Israel. Israel
(31) Priority Document No	:61/972,518	(72) <b>Name of Inventor :</b>
(32) Priority Date	:31/03/2014	<b>1)SHOLEV, Mordehai</b>
(33) Name of priority country	:U.S.A.	<b>2)BLYAKHMAN, Yuval</b>
(86) International Application No	:PCT/IL2015/050342	
Filing Date	:31/03/2015	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201627030115	
Filed on	:02/09/2016	

(57) Abstract :

A medical device is provided. The medical device includes an elongated device body having a steerable portion including a plurality of segments. The segments are co-axially mounted over at least one elongated elastic element which is configured for limiting rotation of the segments with respect to each other. The medical device also includes a control wire running alongside the elongated device body and being unrestrained at the steerable portion such that tensioning of the control wire angles the steerable portion from a longitudinal axis of the elongated device body and deflects the control wire away from the steerable portion.



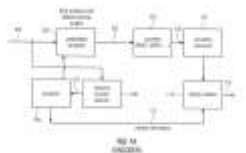
No. of Pages : 50 No. of Claims : 9

(54) Title of the invention : APPARATUS AND METHOD FOR GENERATING AN ENCODED SIGNAL OR FOR DECODING AN ENCODED AUDIO SIGNAL USING A MULTI OVERLAP PORTION

(51) International classification	:G10L0019022000, H04N0019176000, H03M0007360000, G10L0019020000, H04N0019440000	(71) <b>Name of Applicant :</b> <b>1)FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V.</b> Address of Applicant :Hansastraße 27c, 80686 München, Germany. Germany
(31) Priority Document No	:61/767,115	(72) <b>Name of Inventor :</b>
(32) Priority Date	:20/02/2013	<b>1)HELMRICH, Christian</b>
(33) Name of priority country	:U.S.A.	<b>2)LECOMTE, Jérôme</b>
(86) International Application No	:PCT/EP2014/053287	<b>3)MARKOVIC, Goran</b>
Filing Date	:20/02/2014	<b>4)SCHNELL, Markus</b>
(87) International Publication No	: NA	<b>5)EDLER, Bernd</b>
(61) Patent of Addition to Application Number	:NA	<b>6)REUSCHL, Stefan</b>
Filing Date	:NA	
(62) Divisional to Application Number	:2101/MUMNP/2015	
Filed on	:29/07/2015	

## (57) Abstract :

An apparatus for generating an encoded signal, comprises: a window sequence controller (808) for generating a window sequence information (809) for windowing an audio or image signal, the window sequence information indicating a first window (1500) for generating a first frame of spectral values, a second window function (1502) and at least one third window function (1503) for generating a second frame of spectral values, wherein the first window function (1500), the second window function (1502) and the one or more third window functions overlap within a multi-overlap region (1300); a preprocessor (802) for windowing (902) a second block of samples corresponding to the second window function and the at least one third window functions using an auxiliary window function (1100) to obtain a second block of windowed samples, and for preprocessing (904) the second block of windowed samples using a folding-in operation of a portion of the second block overlapping with a first block into the multi-overlap portion (1300) to obtain a preprocessed second block of windowed samples having a modified multi-overlap portion; a spectrum converter (804) for applying an aliasing-introducing transform (906) to the first block of samples using the first window function to obtain the first frame of spectral values, for applying the aliasing introducing transform to a first portion of the preprocessed second block of windowed samples using the second window function to obtain a first portion of spectral samples of a second frame and for applying the aliasing introducing transform to a second portion of the preprocessed second block of windowed samples using the one or more third window functions (1503) to obtain a second portion of spectral samples of the second frame; and a processor (806) for processing the first frame and the second frame to obtain encoded frames of the audio or image signal.



No. of Pages : 95 No. of Claims : 36

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202128024086 A

(19) INDIA

(22) Date of filing of Application :30/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD FOR PRODUCING SPIROOXINDOLE DERIVATIVE

(51) International classification	:C07D0487100000, C07D0491107000, B01J0031180000, C07D0497100000, C07D0491100000	(71) <b>Name of Applicant :</b> <b>1)DAIICHI SANKYO COMPANY, LIMITED</b> Address of Applicant :3-5-1, Nihonbashi Honcho Chuo-ku Tokyo Japan 1038426 Japan
(31) Priority Document No	:2013-182928	(72) <b>Name of Inventor :</b>
(32) Priority Date	:14/09/2013	<b>1)YAMAUCHI, Motoshi</b>
(33) Name of priority country	:Japan	<b>2)NAKAYAMA, Keiji</b>
(86) International Application No	:PCT/JP2014/073233	
Filing Date	:03/09/2014	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201627005761	
Filed on	:19/02/2016	

(57) Abstract :

Provided is a method with which it is possible to efficiently manufacture a compound having a spirooxindole structure, for example a compound having a spirooxindole structure and having antitumor activity which inhibits the interaction between Mdm2 protein and p53 protein, or an intermediate of of said compound, using an asymmetric catalyst. By performing a catalytic asymmetric 1,3-bipolar cyclic addition using a chiral ligand and Lewis acid, with ketimine as a reaction substrate, a compound having an optically active tricyclic dispiroindole structure is obtained efficiently.

No. of Pages : 153 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application  
No.201941053745 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date :  
30/07/2021

(54) Title of the invention : A LIFT SEPARATION SABOT FOR KINETIC ENERGY PROJECTILES

(51)  
International :F42B0014060000,F41H0005040000,F42B0012060000,F02M0026010000,C04B0035486000

classification

(31) Priority

Document :NA

No

(32) Priority :NA

Date

(33) Name  
of priority :NA

country

(86)

International

Application :NA

No :NA

Filing

Date

(87)

International : NA

Publication

No

(61) Patent

of Addition

to

Application :NA

Number :NA

Filing

Date

(62)

Divisional to

Application :NA

Number :NA

Filing

Date

(71)Name of Applicant  
:

**1)Indian Institute of  
Technology Madras  
(IIT Madras)**

Address of Applicant  
:Indian Institute of  
Technology Madras (IIT  
Madras), IPM cell,  
Industrial Consultancy &  
Sponsored Research  
(IC&SR) building, IIT  
P.O., CLRI opposite,  
Adyar, Chennai 600036  
Tamil Nadu India

(72)Name of Inventor :

**1)G RAJESH**

**2)SREELAL M R**

(57) Abstract :

A lift separation sabot for kinetic energy projectiles wherein the lift separation sabot is weightless and minimizes the sabot discard interference to the projectiles, is disclosed herein. The weightless sabot can increase the muzzle velocity as well as the discard performance thereby increasing the performance without increasing the chamber pressure of the gun system. The sabot uses additional lifting surface (lift separation) close to the center of gravity to reduce the rotation of the sabot ensuring less mechanical contact between the projectile and the sabot thereby improving the accuracy of the ammunition. The sabot teaches pressurization of the cavity under the center band using high speed free stream flow in order to achieve lift separation in the kinetic energy projectiles.

No. of Pages : 29 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201941054140 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR IMAGE OR VIDEO ANALYTICS

(51) International classification	:G06K0009000000, B23K0009095000, H04N0005247000, G06N0003080000, H04N0005225000	(71) <b>Name of Applicant :</b> <b>1)Rupam Bhattacharjee</b> Address of Applicant :Mahalakshmi Chambers, 29, MG Road Next to Trinity Metro Station, opp. Kotak Bank, Bengaluru, Karnataka 560001 Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Rupam Bhattacharjee</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method (200) for capturing and analysing images and/or videos, comprising facilitating (210) one or more image sensors (1022) to capture a plurality of images as per a set of predefined parameters, the plurality of images including a plurality of objects; receiving (220) the plurality of images captured, along with a respective time stamp; performing (230) image correction and noise reduction by using the set of predefined parameters and considering predetermined one or more objects in the plurality of images as a background, thereby generating a plurality of enhanced images irrespective of lighting conditions; saving (240) the plurality of enhanced images in a form of binary modules for future reference, thereby reducing storage and bandwidth requirements; and sending (250) the plurality of enhanced images to the one or more computing devices (312), in real-time, for image analysis involving one or more operations as per the user application. [Figure 2]

No. of Pages : 31 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201947047177 A

(19) INDIA

(22) Date of filing of Application :19/11/2019

(43) Publication Date : 30/07/2021

(54) Title of the invention : MOBILE TERMINAL AND ANTENNA RADIATION METHOD OF MOBILE TERMINAL

(51) International classification	:H01Q0001120000, H01Q0001240000, H01Q0001380000, H01Q0001520000, H01Q0005307000	(71)Name of Applicant : <b>1)BEIJING XIAOMI MOBILE SOFTWARE CO., LTD.</b> Address of Applicant :OM 01, FLOOR 9, RAINBOW CITY SHOPPING MALL II OF CHINA RESOURCES, NO. 68, QINGHE MIDDLE STREET, HAIDIAN DISTRICT, BEIJING, China
(31) Priority Document No	:201910343400.5	(72)Name of Inventor :
(32) Priority Date	:26/04/2019	<b>1)GUAN, Wenjie</b>
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure provides a mobile terminal and an antenna radiation method of the mobile terminal, relating to the field of wireless communication technologies. The mobile terminal includes a frame employed as an antenna, the frame having a feed point; an antenna bracket positioned within the frame; a first metal sheet positioned on the antenna bracket, and coupled to the feed point; and a second metal sheet positioned on the antenna bracket, a gap being positioned between the second metal sheet and the first metal sheet, the second metal sheet being coupled to the first metal sheet via the gap for feeding. By providing the first metal sheet and the second metal sheet on the antenna bracket, coupling the first metal sheet to the feed point in the frame, providing the gap between the second metal sheet and the first metal sheet, and coupling the second metal sheet to the first metal sheet for feeding via the gap, the second metal sheet may radiate electromagnetic waves, and the manner of coupled feeding may stabilize the radiation capability of the second metal sheet, such that the mobile terminal may support more frequency bands.

No. of Pages : 23 No. of Claims : 10

(54) Title of the invention : HYDROXYAPARTITE NONOPARTICLES INFUSED PRIMARY ROOT FILLING SUBSTANCE

(51) International classification	:A61K0006000000, A61C0005500000, A61C0005400000, A61K0006060000, A61K0006033000	(71)Name of Applicant : <b>1)SAVEETHA DENTAL COLLEGE AND HOSPITALS, SAVEETHA UNIVERSITY, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES</b> Address of Applicant :SAVEETHA DENTAL COLLEGE AND HOSPITALS, 162, POONAMALLE HIGH ROAD, VELAPANCHAVADI, CHENNAI-600 077, TAMILNADU, INDIA Tamil Nadu India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)DR. PRAGYNA PRIYADARSHINI 2)DR. MAHESH RAMAKRISHNAN 3)DR. RAJESH KUMAR.S 4)DR. DEEPAK NALLASWAMY. V</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Primary teeth with pulp necrosis are mainly of polymicrobial in nature, with predominance of anaerobic bacteria residing deep with in the dentin and cementum around the periapex. Inspite of chemomechanical preparation and copious irrigation of canal, there are chances of failure of pulp therapy in primary teeth due to entrapped microorganisms in the tortuous and complex nature of the root canal system. Thus owing to the difficulties perceived in complete debridement of the canal system related to the complex canal morphology and close proximity of succedaneous tooth bud, emergence of substances with antimicrobial properties are advocated as obturating materials in primary teeth. Any ideal obturating material should be biocompatible, should eliminate residual pathogens, should neutralize their toxic products to prevent canal reinfection and to create favourable environment for the healing process to occur. Root canal treatment in primary teeth has been advocated for irreversible pulpitis, however no consensus exists as to the preferred filling material and technique. The success of endodontic therapy in primary teeth depends mainly on the reduction or elimination of bacteria from the root canals by using obturating materials having good antibacterial properties. This has led to the search for an effective root filling material which could overcome all anatomic complexities and instrumentation obstacles, leading to success of root canal treatment in primary teeth. The present newer primary root filling substance overcomes the disadvantages of the existing root filling substance comprising of its major ingredients calcium hydroxide, iodoform, zinc oxide and hydroxyapatite nanoparticles infused in an oil-based medium.

No. of Pages : 5 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041002964 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : COLLAPSIBLE SPECIMEN COLLECTION JARS

(51) International classification	:B01L0003000000, G01N0001420000, A61B0010000000, A61B0010020000, G01N0001310000	(71)Name of Applicant : <b>1)SAVEETHA DENTAL COLLEGE AND HOSPITALS, SAVEETHA UNIVERSITY, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES</b> Address of Applicant :SAVEETHA DENTAL COLLEGE AND HOSPITALS, SAVEETHA UNIVERSITY, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES 162, POONAMALLE HIGH ROAD, VELAPANCHAVADI, CHENNAI-600 077, TAMILNADU, INDIA. Tamil Nadu India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)GHEENA.S</b>
(32) Priority Date	:NA	<b>2)PRATIBHA RAMANI</b>
(33) Name of priority country	:NA	<b>3)ABILASHA RAMASUBRAMANIAN</b>
(86) International Application No	:NA	<b>4)DEEPAK NALLASWAMY</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This modified specimen jar standardizes the specimen collection method in designing a collapsible silicone jar with suspended silicone sieve for holding small tissue specimens afloat in requisite amount of buffered formalin. The collapsible jar design helps in manipulation of the jars and transport. The .wide necked design allows easy access to the specimens without distortion while removing. The bar code on the neck gives specifics related to the patient particulars and facilitates easy identification during retrieval.

No. of Pages : 9 No. of Claims : 2

(54) Title of the invention : ELECTRONIC METHODS AND SYSTEMS FOR REAL-TIME IDENTIFICATION AND ACCEPTANCE OF PAYMENT CARDS AT TRANSACTION TERMINALS

(51) International classification	:G06Q0020400000, G06Q0020340000, G06Q0020380000, G06Q0020200000, G06Q0020100000	(71) <b>Name of Applicant :</b> <b>1)MASTERCARD INTERNATIONAL INCORPORATED</b> Address of Applicant :2000 Purchase Street, Purchase, NY 10577, United States of America U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Rohan Ganpat Rane</b>
(33) Name of priority country	:NA	<b>2)Selwyn Kaitha</b>
(86) International Application No	:NA	<b>3)Swagata Chakraborty</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT ELECTRONIC METHODS AND SYSTEMS FOR REAL-TIME IDENTIFICATION AND ACCEPTANCE OF PAYMENT CARDS AT TRANSACTION TERMINALS Embodiments provide methods, and systems for real-time validation of a Bank Identification Number (BIN) of an issuer associated with a payment card of a cardholder. The method performed by payment transaction terminal includes accessing the BIN associated with the payment card and identifying whether the BIN is present among a plurality of BINs of a BIN table associated with the payment transaction terminal. The method includes generating a payment transaction request including at least the BIN associated with the payment card, and in response to identifying that the BIN is unavailable with the payment transaction terminal, transmitting the payment transaction request and a BIN unavailable message to a server system associated with the payment transaction terminal. The method further includes receiving an authorization response message, wherein the authorization response message is received from the server system, when the BIN is available with the server system or with a payment server. FIG. 3A



No. of Pages : 62 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041002978 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN IMPROVED PROCESS FOR THE PREPARATION OF (10R)-7-AMINO-12-FLUORO-2,10,16-TRIMETHYL-15-OXO-10,15,16,17-TETRAHYDRO-2H-4,8-METHENOPYRAZOLO[4,3H][2,5,11]BENZOXADIAZACYCLOTETRADECINE-3-CARBONITRILE AND ITS INTERMEDIATES THEREOF

(51) International classification	:C07D0498180000, C07H0015203000, C07D0413060000, C07K0002000000, C07C0051090000	(71)Name of Applicant : <b>1)MSN Laboratories Private Limited, R&amp;D Center</b> Address of Applicant :MSN Laboratories Private Limited, R&D Center; Plot No. 12, Phase-IV, Sy.No: 119 to 140, 258, 275 to 280, IDA, Pashamylaram (Vil), Patancheru (Mdl), Sangareddy (Dist), Telangana, India 502307 Telangana India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Srinivasan Thirumalai Rajan</b>
(33) Name of priority country	:NA	<b>2)Muppa Kishore Kumar</b>
(86) International Application No	:NA	<b>3)Muddasani Ramakrishna</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract Title: An improved process for the preparation of (10R)-7-amino-12-fluoro-2,10,16-trimethyl-15-oxo-10,15,16,17-tetrahydro-2H-4,8-methenopyrazolo [4,3-h][2,5,11]Benzoxadiazacyclo tetradecine-3-carbonitrile and its intermediates thereof The present invention relates to an improved process for the preparation of (10R)-7-amino-12-fluoro-2,10, 16-trimethyl-15-oxo-10,15,16,17-tetrahydro-2H-4,8-methenopyrazolo [4,3-h] [2,5,11] benzoxadiazacyclotetradecine-3-carbonitrile of formula-1 and its intermediates Formula-1.

No. of Pages : 14 No. of Claims : 8

(54) Title of the invention : SYSTEM AND METHOD FOR OPTIMIZING OPERATIONS OF TRAINS TRAVELLING ALONG A RAILWAY LINE

(51) International classification	:B61L0027000000, G06Q0010060000, B61L0003000000, B60L0015400000, B61L0023040000	(71) <b>Name of Applicant :</b> <b>1)ALSTOM TRANSPORT TECHNOLOGIES</b> Address of Applicant :48 rue Albert Dhalenne 93400 SAINT-OUENSUR-SEINE, France France (72) <b>Name of Inventor :</b> <b>1)GANESAN, Muniandi</b> <b>2)GURUSAMY, Palanikumar</b> <b>3)BENNI, Jijo</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

System (100) and related method (200) for optimizing the operations of a train (1) traveling along a railway line (10), wherein one or more cameras (110) are installed at a platform (2) of a first station (3) located along the railway line (10) and are adapted to capture images of the train (1) relative to said platform (2) and of passengers (5) over the platform (2) moving for boarding on/de-boarding from the train (1). An image processing system (120) is configured at least to measure the actual dwell time and to calculate an optimum dwell time for the train (1) at the platform (2) of the first station (3) based on the image data received from said one or more cameras (110). A first data elaboration system (130) is configured to calculate a predicted dwell time for the train (1) at the platform (2) of an upcoming station (4) along the railway line (10), based on one or more parameters selected from the group comprising a calculated number of actual passengers inside the train (1), number of passengers at the platform (2) of the upcoming station (4), measured actual dwell time and calculated optimum dwell time at the platform (2) of the upcoming station (4) for a preceding train travelling along the railway line (10), data related to actual environmental conditions along the railway line (1) or parts thereof, data indicative of passengers traffic-related characteristics for a calendar date or part thereof.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041002991 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHODS AND SYSTEMS FOR MERCHANT-INDUSTRY MAPPING BASED ON AMBIENT NOISE

(51) International classification	:H03G0003320000, G06Q0020200000, G06Q0020320000, H04R0003000000, G06F0001200000	(71) <b>Name of Applicant :</b> <b>1)MASTERCARD INTERNATIONAL INCORPORATED</b> Address of Applicant :2000 Purchase Street, Purchase, NY 10577, United States of America U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Priyanshee Palriwala</b>
(33) Name of priority country	:NA	<b>2)Aditi Garg</b>
(86) International Application No	:NA	<b>3)Dinesh Kumar Lal</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT METHODS AND SYSTEMS FOR MERCHANT-INDUSTRY MAPPING BASED ON AMBIENT NOISE**

Embodiments provide a method and a system for conducting merchant-industry mapping based on ambient noise. The method includes receiving a payment transaction request and an audio signal comprising ambient noise in surrounding of a merchant terminal of a merchant. The ambient noise is recorded by the merchant terminal and includes a plurality of sounds. The method includes determining whether the merchant is an aggregated merchant or a non-aggregated merchant. The method includes processing the ambient noise to determine a type of the merchant upon determining that the merchant is the non-aggregated merchant. The method includes mapping the merchant to an industry from a plurality of industries available in the server system based on the type of the merchant. The method further includes storing the mapping of the industry and the merchant in a database associated with the server system. FIG. 4



No. of Pages : 46 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041002992 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM AND METHOD TO PROVIDE ADMISSIONS FOR STUDENTS

(51) International classification	:G06Q0050200000, G06Q0010100000, G06Q0050000000, E04B0002020000, G06Q0020040000	(71) <b>Name of Applicant :</b> <b>1)SYED ZAKIR HUSSAIN</b> Address of Applicant :# 6-1-145 to 149, SARASWATHY RESIDENCY, FLAT NO 502, PADMARAO NAGAR, SECUNDERABAD, TELANGANA STATE. Telangana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SYED ZAKIR HUSSAIN</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT The present invention relates to system and method for obtaining admissions in educational institution such as schools, intermediate, Graduation, Post Graduation and professional courses. Figure 1 illustrates block diagram of the components of the system of the present invention.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003005 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR DEPLOYING SOFTWARE-DEFINED DATA CENTERS

(51) International classification	:G06F0008610000, H04L0029080000, G06F0016220000, G06F0009500000, G06F0021570000	(71) <b>Name of Applicant :</b> <b>1)VMWARE, INC.</b> Address of Applicant :3401 Hillview Avenue, Palo Alto, California U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ASHOK ALETITY</b>
(33) Name of priority country	:NA	<b>2)SRI NARAYANAN THANGA NADAR</b>
(86) International Application No	:NA	<b>3)NITHIN KRISHNAN</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Aspects directed towards deploying a software-defined data center (SDDC) are disclosed. In one example, an SDDC software package is received at a public cloud computing environment in which the SDDC software package facilitates creating an SDDC on a plurality of host computers. A first test of the SDDC is then performed via a first testing server and a second test is performed via a second testing server. For this example, the first test is a generic test of the SDCC corresponding to a generic deployment of the SDDC software package on the plurality of host computers, whereas the second test is a custom test of the SDCC corresponding to a custom deployment of the SDCC software package. A usability of the SDCC is then validated based on at least one of the first test or the second test.

No. of Pages : 34 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003006 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : CONNECTIVITY CHECK WITH SERVICE INSERTION

(51) International classification	:H04L0029060000, H04L0029120000, G06F0021100000, H04L0012640000, H04W0024060000	(71) <b>Name of Applicant :</b> <b>1)VMWARE, INC.</b> Address of Applicant :3401 Hillview Avenue, Palo Alto, California U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)YUXIAO ZHANG</b>
(33) Name of priority country	:NA	<b>2)RAHUL MISHRA</b>
(86) International Application No	:NA	<b>3)PIERLUIGI ROLANDO</b>
Filing Date	:NA	<b>4)KANTESH MUNDARAGI</b>
(87) International Publication No	: NA	<b>5)RAJU KOGANTY</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Example methods and systems for connectivity check with service insertion have been disclosed. One example may comprise a computer system receiving a connectivity check packet that is injected for forwarding along a service path between a source virtualized computing instance and a destination virtualized computing instance. In response to detecting a connectivity issue associated with the service path, first report information identifying the first service virtualized computing instance and an observation that the connectivity check packet is dropped may be generated and sent. Otherwise, the connectivity check packet may be forwarded towards a second virtualized computing instance, being a next-hop on the service path, or the destination virtualized computing instance. Second report information identifying the first service virtualized computing instance and an observation that the connectivity check packet is forwarded may be generated and sent.

No. of Pages : 37 No. of Claims : 10

(54) Title of the invention : A BANDAGE DEVICE

(51) International classification	:A61F0013000000, A61F0013060000, A61K0045060000, A61K0031704000, A61K0031700800	(71) <b>Name of Applicant :</b> <b>1)ROHITH TV</b> Address of Applicant :THEJUS HOUSE, MALAYAMMA PO, NIT VIA, KOZHIKODE PIN 673601, KERELA, INDIA Kerala India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ROHITH TV</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A BANDAGE DEVICE ABSTRACT The present disclosure provides for a bandage device for different medicaments and for numerous different symptoms or conditions. The bandage device comprises a medicinal pouch and a bandage. The medicinal pouch contains semi solid herbal medicament for treatment of stiffness, joint pain, swelling, and muscle strain. The bandage includes a first adhesive region to attach to the medicinal pouch and to removably attach the medicinal pouch onto the desired body part to which the herbal medicament to be delivered. The present disclosure provides the improved bandage device for the convenient and hassle free application of the medicament. The bandage device can be used for numerous different symptoms or conditions and not limited to joint pain and inflammation. FIG. 2

No. of Pages : 14 No. of Claims : 5

(54) Title of the invention : A FUEL INJECTOR COMPRISING A ROTATING NEEDLE

(51) International classification	:F02M0061160000, F02M0061180000, F02M0051060000, H01M0008247500, F02M0061120000	(71) <b>Name of Applicant :</b> <b>1)Bosch Limited</b> Address of Applicant :Post Box No 3000, Hosur Road, Adugodi, Bangalore 560030, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Amaravathi Mangalarapu</b>
(33) Name of priority country	:NA	<b>2)Ajay Kamat</b>
(86) International Application No	:NA	<b>3)Hariprasad Madhwaraj</b>
Filing Date	:NA	<b>4)Utsav Kini</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A fuel injector 10 is described. The fuel injector 10 comprises a housing 12, wherein the housing 12 of the fuel injector 10 comprises at least one vertical groove 14 defined on a wall of the housing 12 of the fuel injector 10. An injector needle 16 is inserted within the housing 12 of the fuel injector 10, the injector needle 16 comprising at least one vertical groove 18 defined on an outer periphery of the injector needle 16. The at least one vertical groove 14 that is defined on the outer periphery of the injector needle 16 is aligned with the at least one vertical groove 14 that is defined on the wall of the housing 12 of the fuel injector 10 to facilitate allowing fuel to flow out of the fuel injector 10 via the at least one vertical groove 18 of the injector needle 16.



No. of Pages : 15 No. of Claims : 7

(54) Title of the invention : A FUEL FILTER IN A FUEL SUPPLY SYSTEM

(51) International classification	:F02M0037220000, B01D0036000000, B01D0029110000, B01D0035300000, F02M0037460000	(71) <b>Name of Applicant :</b> <b>1)Bosch Limited</b> Address of Applicant :Post Box No 3000, Hosur Road, Adugodi, Bangalore 560030, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Praveen Kumar Mellahalli Vasantharaju</b>
(33) Name of priority country	:NA	<b>2)Prashanth Ashok Kumar</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A fuel filter in a fuel supply system The fuel filter 12 comprises a housing 14 and a top end cap 16. The fuel filter 12 further comprises a bottom end cap 18 and a filter element 20 detachably fitted inside the housing 14, in between the top end cap 16 and the bottom end cap 18. The bottom end cap 18 comprises a first portion 22 to accommodate the filter element 20 and a second portion 24 connected around the first portion 22 through at least one flexible element 26. The elimination of the usage of a spring in the fuel filter 12 makes the invention a cost-effective solution. With the present design of the fuel filter 12, the pressure of holding the filter element 20 only by the top end cap 16 (as in the conventional methods) is reduced.



No. of Pages : 12 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003029 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PRIMING COMPONENT FOR A FUEL FILTER HEAD

(51) International classification	:F02M0037220000, B01D0035300000, F02M0037300000, B01D0036000000, A61M0005310000	(71) <b>Name of Applicant :</b> <b>1)Bosch Limited</b> Address of Applicant :Post Box No. 3000, Hosur Road, Adugodi, Bangalore 560030, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Shamantha Mruthunjaya Mogali</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract The present disclosure proposes a priming component (101) for a fuel filter head (100). The priming component (101) is placed between a housing (103) and a top cover (102) in the operative configuration of the filter. The housing (103) comprises a groove (104) and at least a flange (105) with threaded holes. The top cover (102) is attached to the housing (103) by a screw (106) tightened with the threaded hole in the operative configuration of the filter. The priming component (101) for a fuel filter head (100) as claimed in is made of an elastomer.

No. of Pages : 9 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003030 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PRESSURE SWITCH FOR A FUEL FILTER

(51) International classification	:H01H0035240000, H01H0035340000, F02M0037220000, H01R0013500000, B01D0035143000	(71) <b>Name of Applicant :</b> <b>1)Bosch Limited</b> Address of Applicant :Post Box No. 3000, Hosur Road, Adugodi, Bangalore 560030, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Harish Shimoga Eshwarappa</b>
(33) Name of priority country	:NA	<b>2)Basireddy Suresh</b>
(86) International Application No	:NA	<b>3)Nadumetalu Reshma Raghava</b>
Filing Date	:NA	<b>4)Purushothaman Swaminathan</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract The present disclosure proposes a pressure switch (101) for a fuel filter (100). The pressure switch (101) comprises a housing means (102) and an electrical connector (103). The electrical connector (103) is connected to an indicating means on the dashboard of a vehicle. The housing means (102) further comprises a first opening (104), a second opening (105), a piston (106), a spring (107), an elastically flexible diaphragm (108), a plunger (109) and at least a set of metallic contacts (110). The electrical connector (103) comprises a mating feature (1031) and at least an electrical circuit (1032). The housing means (102) and the electrical connector (103) are affixed to each other. Figure 1.

No. of Pages : 15 No. of Claims : 6

(54) Title of the invention : INTELLIGENT ELECTRONIC PROBOSCIS

<div>(51) International classification</div> <div>:G06N0003000000, H01L0027146000, F25D0017040000, F25D0029000000, F25D0025020000</div> <div>(31) Priority Document No</div> <div>:NA</div> <div>(32) Priority Date</div> <div>:NA</div> <div>(33) Name of priority country</div> <div>:NA</div> <div>(86) International Application No</div> <div>:NA</div> <div>Filing Date</div> <div>:NA</div> <div>(87) International Publication No</div> <div>: NA</div> <div>(61) Patent of Addition to Application Number</div> <div>:NA</div> <div>Filing Date</div> <div>:NA</div> <div>(62) Divisional to Application Number</div> <div>:NA</div> <div>Filing Date</div> <div>:NA</div>	<div>(71)Name of Applicant :</div> <div><b>1)D.M.Sriya Devi</b></div> <div>Address of Applicant :Assistant Professor, Department of Electrical &amp; Electronics Engineering, Bannai Amman Institute of Technology, Sathyamangalam, Erode(Dt), Tamilnadu-638401. Tamil Nadu India</div> <div><b>2)K.Renuka</b></div> <div><b>3)A.shinisha</b></div> <div><b>4)N.P.Gopika</b></div> <div><b>5)Andril Alagusabai</b></div> <div><b>6)C.Kokilavani</b></div> <div>(72)Name of Inventor :</div> <div><b>1)D.M.Sriya Devi</b></div> <div><b>2)K.Renuka</b></div> <div><b>3)A.shinisha</b></div> <div><b>4)N.P.Gopika</b></div> <div><b>5)Andril Alagusabai</b></div> <div><b>6)C.Kokilavani</b></div>
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(57) Abstract :

Even though there are many inventions for the refrigerators that are with highly efficient sensibility, it has been a tiring problem in detecting the spoiled fruits and vegetables in the fridge. In order to enhance the sensibility of the refrigerator this idea is propounded to reduce the air pollutants such as ammonia and H<sub>2</sub>S that is produced due to the spoilage of groceries that affect the environment of the fridge. It can be used in our day to day lives for both domestic and commercial purpose. Current invention plays a magnificent role in preventing bacterial multiplication. The system utilizes a camera from which the inputs are sensed and detected using sensors. Using these sensed inputs, the data are processed by image processor and Artificial Neural network which identifies the actual odor of the particular fruit or vegetable with the database, when it ties, it gives the information to the user via communication protocol interfaced with mobile phone.

No. of Pages : 9 No. of Claims : 10

(54) Title of the invention : LP PROCESSOR-RESONABLE AND EMINENT PROCESSOR FOR ALL THE REALTIME UTILIZATIONS

(51) International classification	:G06F0009380000, G06F0001240000, G06F0013380000, G06F0001328700, G06T0001200000	(71) <b>Name of Applicant :</b> <b>1)S.Lakshmipriya</b> Address of Applicant :7, Varadampalayam, Sathyamangalam, Tamilnadu, India-638401. Tamil Nadu India <b>2)C.R.Suganya Devi</b> <b>3)V.Parvathy</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)S.Lakshmipriya</b> <b>2)C.R.Suganya Devi</b> <b>3)V.Parvathy</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The LP Processor is mainly used for reducing space consumption, Power consumption. Here the pins 36-38 are used for the future purposes. There are two ground pins and three port pins PO, PI and P2. There is a reset pin for resetting the system with a clock pin for inducing the inputs. The LP core is the central processing unit that has the kernels that induces the processing of the processor through the instructions and task management systems produced in the kernels. The bus architecture composes the serial communication protocols for the communication efficiency. The graphic processor unit enhances the features of the display control. The General Purpose Input output Pins are properly configured into the kernel architecture so that they keep their break properly. The external peripherals! can be easily interfaced without any hindrance in the systems. The reduced shape, power makes the LP Processor more efficient in their way. The LP processor is also having only reduced instruction sets for processing and they uses the Linux Operating systems for the processing.

No. of Pages : 10 No. of Claims : 7

(54) Title of the invention : A SYSTEM AND METHOD FOR RECONSTRUCTING REGRESSION TEST SCENARIOS USING POST-PRODUCTION EVENTS

(51) International classification	:G06F0011360000, G11B0027034000, G06F0021570000, G06Q0030060000, H04N0021258000	(71) <b>Name of Applicant :</b> <b>1)Cognizant Technology Solutions India Pvt. Ltd.</b> Address of Applicant :Techno Complex, No. 5/535 Old Mahabalipuram Road Okkiyam Thoraipakkam Chennai 600 097, Tamil Nadu India Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Subbiah Muthiah</b>
(33) Name of priority country	:NA	<b>2)Kumaran Surendran</b>
(86) International Application No	:NA	<b>3)Khaja Nizamuddin Kurumulakota</b>
Filing Date	:NA	<b>4)Vignesh Nagarajan</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides for a system and a method for reconstructing regression test cases using post production events. The present invention provides for a test case reconstruction engine configured to extract post-production identifiable elements associated with a post-production event and pre-production identifiable elements associated with a pre-production event. The present invention provides for a system and a method for determining similarity between the pre-production event and the post-production event based on a comparison of one or more pre-production parent identifiable elements and one or more pre-production child identifiable elements of a subject identifiable element, with the post-production identifiable elements. The present invention provides for a system and a method for reconstructing a regression test case based on a comparison of functions of the extracted pre-production identifiable elements and the post-production identifiable elements after the determination of similarity between the pre-production event and the post-production event.

No. of Pages : 30 No. of Claims : 19

(54) Title of the invention : SYSTEM AND METHOD FOR IMPROVING INDOOR COVERAGE OF CELLULAR RECEPTION USING A SMART TELEVISION

(51) International classification	:H04W0004060000, H04L0012280000, H04N0021450000, H04L0029080000, H04B0007185000	(71) <b>Name of Applicant :</b> <b>1)SAANKHYA LABS PVT LTD</b> Address of Applicant :EMBASSY ICON, FLOOR-3, NO:3, INFANTRY ROAD, Dr. AMBEDKAR VEEDHI, BANGALORE Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Parag Naik</b>
(33) Name of priority country	:NA	<b>2)Anindya Saha</b>
(86) International Application No	:NA	<b>3)Gururaj Padaki</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

SYSTEM AND METHOD FOR IMPROVING INDOOR COVERAGE OF CELLULAR RECEPTION USING A SMART TELEVISION A system for improving indoor coverage of cellular reception is provided. The system includes an Intelligent receiver 118 and a Pico transmitter 119. The intelligent receiver demodulates a signal received from a Broadcast radio head (BRH) with a HPHT or a LPLT topology 108 through an outdoor high gain rooftop antenna 112 that is externally connected to the intelligent receiver. The intelligent receiver includes an artificial intelligence (AI) or Machine learning (ML) based indoor coverage monitoring unit 202 and a Pico transmitter application 204. The AI/ML based indoor coverage monitoring unit continuously monitors cellular reception factors of indoor user devices 120A-N. The AI/ML based indoor coverage monitoring unit predicts an optimal indoor modulation profile and selects a required modulation index required for the indoor user devices. The Pico transmitter application re-broadcasts or relays the demodulated signal, based on an optimal indoor modulation profile required for the indoor user devices. FIG. 1

No. of Pages : 28 No. of Claims : 19

(54) Title of the invention : METHOD TO AUTOMATICALLY DETECT MOTION TO TRIGGER HIGH-SPEED EVENT MOTION CAPTURES •

(51) International classification	:H04N0019527000, G06K0009000000, G06T0007269000, G06T0007200000, H04N0005140000	(71) <b>Name of Applicant :</b> <b>1)Samsung Electronics Co., Ltd.</b> Address of Applicant :129,Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do - - Republic of Korea 443-742 Republic of Korea
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PRADEEP KUMAR SINDHAGATTA KRISHNAPPA</b>
(33) Name of priority country	:NA	<b>2)RAKSHIT SHUKLA</b>
(86) International Application No	:NA	<b>3)ISHU JAIN</b>
Filing Date	:NA	<b>4)SRINIVAS REDDY EREGALA</b>
(87) International Publication No	: NA	<b>5)DIVAKAR VERMA</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Method and electronic device for automatically controlling capturing of super slow-motion video of scene •

Embodiments herein provide a method for automatically controlling capturing of an SSM video of a scene using an electronic device (100). The method includes receiving image frames of the scene displayed in a FOV of a first image sensor (140A) of the electronic device (100), where each of the image frames includes at least one ROI. The method includes determining a confidence map for each of the image frames, where the confidence map corresponds to motion data of each of the at least one ROI. The method includes selecting at least one image frame from the image frames based on the confidence map. The method includes detecting whether a motion of the at least one ROI in the at least one selected image frame. The method includes triggering capture of the SSM video based on the detection of the motion in the at least one ROI. FIG. 1

No. of Pages : 73 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003116 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR MONITORING DERMAL CONDITION

(51) International classification	:G06K0009000000, G06T0007000000, G06T0007136000, G06K0009460000, G06T0007110000	(71) <b>Name of Applicant :</b> <b>1)Manipal Academy of Higher Education</b> Address of Applicant :Tiger Circle Road, Madhav Nagar, Manipal 576104, Karnataka, India. Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SAMEENA PATHAN</b>
(33) Name of priority country	:NA	<b>2)P C SIDDALINGASWAMY</b>
(86) International Application No	:NA	<b>3)SATISH B PAI</b>
Filing Date	:NA	<b>4)GOPALAKRISHNA PRABHU K</b>
(87) International Publication No	: NA	<b>5)TANWEER</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure provides a system and a method for monitoring dermal condition of a subject. The images being associated with at least a part of body of the subject are received by a scanning unit 106. Each image is pre-processed by a dermal monitoring system 102 for detection and exclusion of dermal features like hair, moles, scars, and ruler markings. The dermal monitoring system 102 transforms the colour-space associated with each image. A Region of Interest (ROI) is identified for each image based on analysis of pigmentation attributes such as colour of the skin, intensity, brightness of pixels associated with each image. A threshold is determined based on pixels associated with each image for delineating the identified ROI from each image. The ROI is quantified based on metrics associated with the images.

No. of Pages : 39 No. of Claims : 10

(54) Title of the invention : INVENTORY MANAGEMENT SYSTEM

(51) International classification	:E21B0044000000, E21B0047090000, B61L0027000000, H04L0012280000, G01G0019080000	(71) <b>Name of Applicant :</b> <b>1)NASH INDUSTRIES INDIA PRIVATE LTD.</b> Address of Applicant :236-237/2, 8th MAIN, 3rd Phase, Peenya Industrial Area, Bangalore-580058 Karnataka, India. Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Parthasarathy Kannaiyan</b>
(33) Name of priority country	:NA	<b>2)PRAVEEN MOHANASAN</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An inventory management system is disclosed. The system includes a plurality of sensors. The plurality of sensors is configured over a container. The system also includes a controller processing unit. The controller processing unit includes a data receiving module, configured to receive a plurality of data as collected by the plurality of sensors. The controller processing unit also includes a data analysing module, configured to analyse the plurality of data by an analysing technique. The controller processing unit also includes a data comparison module, configured to compare each of a plurality of analysed data with reference to the container by a comparing technique. The controller processing module also includes a notification generation module, configured transmit each of a plurality of compared data as a notification by a plurality of means. Radio frequency identification communication means is being used intimate a user about the plurality of compared data. FIG. 1

No. of Pages : 21 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003122 A

(19) INDIA

(22) Date of filing of Application :23/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : Long-Lived Photoluminescent PMMA Silver Terephthalate Polymer Composite Films With Antibacterial Activity

(51) International classification	:B82Y0030000000, C08K0003080000, C07F0005000000, H01M0004136000, C23C0014060000	(71) <b>Name of Applicant :</b> <b>1)Cochin University of Science and Technology (CUSAT)</b> Address of Applicant :The Registrar, Cochin University of Science and Technology (CUSAT), Cochin University P.O., Cochin 682022 Kerala, India Kerala India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SIVAKAMIAMMAL, Sailaja Gopalakrishnanchettiar</b>
(33) Name of priority country	:NA	<b>2)GEORGE, Liz Hannah</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides photoluminescent nanocomposite film comprising silver terephthalate, and polymethyl methacrylate (PMMA) and a process of preparation thereof, wherein the process involves synthesis of long-lived photoluminescent silver terephthalate followed by fabrication of long-lived photoluminescent PMMA silver terephthalate polymer composite films. Further, in the present invention, silver terephthalate polymer composite films were prepared by solvent casting of the PMMA solution containing silver terephthalate. Photoluminescent materials obtained herein shows a long lifetime and hence can be effectively employed for applications in the field of optoelectronics. The material also exhibit antibacterial activity.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003163 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DESIGN OF NETWORK TRAFFIC MODELS FOR OPTIMAL MANAGEMENT

(51) International classification	:G06F0017500000, H04L0001000000, A61K0008670000, H04Q0003660000, G06Q0010040000	(71) <b>Name of Applicant :</b> <b>1)BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH</b> Address of Applicant :173, Agharam Road, Selayur, Chennai 600 073 Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)S.Thirunavukkarasu</b>
(33) Name of priority country	:NA	<b>2)Dr.K.P.Kaliyamurthie</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**ABSTRACT** DESIGN OF NETWORK TRAFFIC MODELS FOR OPTIMAL MANAGEMENT This invention relates to a network optimal management, which is to avoid congestion of networks, adaptation of source rates and routing to efficiently utilize the network resources. The proposed algorithm attempts to perform the numerical level simulation and packet level simulation to maximize the utility and throughput. Also, it discusses distributed ways to solve various formulations of network utility maximization problem by decomposing the given problem into many subproblems using Primal Dual Decomposition Techniques. By applying direct resource allocation method and adjusting the resources step by step until reaching the equilibrium state.

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003177 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : CORE MUSCLE FEEDBACK LOOP

(51) International classification	:A63B0023020000, A63B0021000000, A63B0021055000, A63B0026000000, A63B0021068000	(71)Name of Applicant : <b>1)DR. JOTHILINGAM MUTHUKUMARAN</b> Address of Applicant :202, STAFF QUARTERS, SAVEETHA UNIVERSITY THANDALAM CHENNAI TAMIL NADU INDIA-602015 Tamil Nadu India <b>2)MS. AMALRAJ BRITE SAGHAYA RAYNA</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)DR. JOTHILINGAM MUTHUKUMARAN</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In the field of fitness and sports conditioning industry core muscle training plays the major role and its intervention inevitable now a days. Usually thee exercise involves tucking of abdominal muscle towards spine (back) and hold the same position for few seconds. Further this exercise will be added with limb movements in various positions and various platforms like floor and unstable platforms like, Swiss ball, Core board. And the evidence for this kind of exercise is at budding stage a lot of evidences are coming up with favor of incorporation of core exercise as preventive strategy, and rehabilitation after injury. Traditionally the position of abdominal wall in said position would be ensured subjectively by the client itself and alternatively by palpating the navel level of the client and this would not be possible at all the clients due to various reasons. And ensuring the correct position of abdominal wall during core exercises is at par mount importance and it's the maneuver activates the core muscles. In order to overcome this practical difficulty I have come up with device with touch sensors, which shall be worn around abdomen at navel level by the client during core exercise, and this device designed in such a way to make alarm if the client loses control, over activation of core muscles . the usefulness of this device not only over comes the practical difficulty of manual palpation core muscle activation also serve as motivating tool to the client.

No. of Pages : 5 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003186 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AIR DISTRIBUTION SYSTEM FOR A VEHICLE, HVAC SYSTEM FOR A VEHICLE COMPRISING SUCH AIR DISTRIBUTION SYSTEM, AND RELATED VEHICLE

(51) International classification	:B60H0001000000, B05B0013040000, B61D0027000000, F24F0013260000, B60H0001240000	(71)Name of Applicant : <b>1)ALSTOM TRANSPORT TECHNOLOGIES</b> Address of Applicant :48 rue Albert Dhalenne 93400 SAINT- OUEN-SUR-SEINE, France France (72)Name of Inventor : <b>1)TANKALA, Triloka</b> <b>2)SAHU, Vinay kant</b> <b>3)DESHPANDE, Vishal</b> <b>4)TENDULKAR, Aniket</b> <b>5)SREEDHAR, Prasanth</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An air distribution system (1) for distributing conditioned air inside a vehicle, in particular a railway vehicle (100), comprising at least: - a first duct (10) having a first air intake (11) for introducing conditioned air inside the first duct (10), a first conduit (12) and a second conduit (13) which extend, along a longitudinal axis (X), in a first direction and in a respective opposite second direction with reference to the first air intake (11). The first air intake (11) comprises a first splitter (14) splitting the incoming conditioned air into a first flow (1D) conveyed inside the first conduit (12), and a second flow (1R) conveyed inside the second conduit (13); - a second duct (20) having a second air intake (21) for introducing conditioned air inside the second duct (20), a third conduit (22) and a fourth conduit (23) which extend, along the longitudinal axis (X), along said first direction and said respective opposite second direction with reference to the second air intake (21). The second air intake (21) comprises a second splitter (24) splitting incoming conditioned air into a third flow (2D) conveyed inside the third conduit (22), and a fourth flow (2R) conveyed inside the fourth conduit (23). The invention also provides a HVAC system (200) comprising such an air distribution system, and a related vehicle (100), in particular a railway vehicle.

No. of Pages : 18 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003192 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESS FOR THE PREPARATION OF AMORPHOUS BICTEGRAVIR SODIUM

(51) International classification	:A61P0031180000, A61K0031553000, A61K0047380000, C07C0271160000, A61K0047100000	(71) <b>Name of Applicant :</b> <b>1)Mylan Laboratories Ltd</b> Address of Applicant :Mylan Laboratories Ltd, Plot No 564/A/22,Road No 92, Jubilee Hills, Hyderabad 500033,India Telangana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Ramakoteswararao Jetti</b>
(33) Name of priority country	:NA	<b>2)Bommareddy Aggi Ramireddy</b>
(86) International Application No	:NA	<b>3)Sreenivasarao Pathuri</b>
Filing Date	:NA	<b>4)Sureshbabu Jayachandra</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to a process for the preparation of amorphous form bictegavir sodium.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003224 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DETERGENT BAR COMPOSITIONS

(51) International classification	:C11D0017000000, C11D0003386000, C12N0009520000, A61K0045060000, C11D0010040000	(71) <b>Name of Applicant :</b> <b>1)NOVOZYMES A/S</b> Address of Applicant :36 Krogshoejvej Bagsvaerd Denmark Denmark (72) <b>Name of Inventor :</b> <b>1)SIVAKUMAR, Rajthilak</b> <b>2)VERMA, Salil</b> <b>3)MUKHERJEE, Koushik</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to non-soap detergent bar compositions comprising a protease, and use thereof for cleaning, e.g. for laundry.

No. of Pages : 39 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003239 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR GENERATING NEURAL NETWORK FOR OBJECT RECOGNITION IN AN IMAGE

(51) International classification	:G06N0003080000, G06K0009620000, G06K0009460000, G06K0009000000, G06N0003040000	(71) <b>Name of Applicant :</b> <b>1)HITACHI, LTD.</b> Address of Applicant :6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8280, Japan Japan (72) <b>Name of Inventor :</b> <b>1)MANIKANDAN R</b> <b>2)SHIBASHISH SEN</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT The present invention relates to a method of generating a neural network (601) for object recognition in an image. The method includes receiving information (217) regarding a hierarchical relationship between one or more objects. Further, providing one or more images (401A, 401B, ... 401N) from the training dataset (104) as an input to a base neural network (501) based on the information (217). Furthermore, determining for each input image (502), a loss value of the base neural network (501) based on an output (503) of the base neural network (501) and a class label (402A, 402B, ... 402N). Finally, updating one or more parameters for the each input image (502) based on at least one of the output (503), the loss value of the base neural network (501) and a second user input for generating the neural network (601), where the neural network (601) is used for the object recognition. FIGURE 3



No. of Pages : 67 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003284 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A WEARABLE DEVICE FOR THE TREATMENT OF DRY EYES AND AMBLYOPIA

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)SPHERE SIGHT PRIVATE LIMITED</b> Address of Applicant :Plot No 17, First Street, Sarathy Nagar, Near Enfield Avenue, Madipakkam, Chennai - 600091, Tamil Nadu Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mohan V</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A wearable device for the treatment of amblyopia and dry eyes is disclosed. The wearable device comprises: a pair of films; an Internet of Things module; an Internet of Things control unit; a plurality of sensors; an at least a control unit; a computer module; and an at least a power source. The disclosed wearable device is drop-free, drug-free, easy to use, portable, cost-effective, and capable of being used by the user directly without the supervision of a skilled medical practitioner. Further, it may also be used in sports training for activities such as focusing on a target, spatial attention, brain-neural-motor connection, hand eye coordination, and fast skill learning.

No. of Pages : 19 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003295 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A PROSPECTIVE OBSERVATIONAL STUDY ON PREVALENCE AND MORBIDITY IN NEPHROLOGY DEPARTMENT

(51) International classification	:G01N0033680000, G16H0010200000, G06Q0050220000, G16H0010600000, G16H0050500000	(71) <b>Name of Applicant :</b> <b>1)Sandhya Rani Guggilla</b> Address of Applicant :University College of Pharmaceutical Sciences, kakatiya University Telangana India (72) <b>Name of Inventor :</b> <b>1)Sandhya Rani Guggilla</b> <b>2)Middela Karthik</b> <b>3)Pogula Swetha</b> <b>4)Boini Shailendra</b> <b>5)Jooluru Bharath Kumar</b> <b>6)Alli Ramesh</b> <b>7)K Mahesh Kommula</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT: Conducting this study will help in identifying the complications occurring in CKD patients of Telangana region. It is imperative to know the complications in chronic kidney disease patients so as to take necessary steps to decrease the risk of complications and reduce the disease progression. Though there are many studies from the western countries, there are very few studies conducted in India, especially in our region. Therefore this study is conducted to observe the health condition in CKD patients in Telangana region and to compare the obtained data with literature. Observing the complications in CKD patients will give a prospective approach towards the disease condition and progression which helps in concentrating towards patient care. This information obtained provides necessary information regarding the relative complications and morbidity among CKD patients, thus it helps improving the pattern of approach to prevent complications and reduce disease progression. Study duration: This study was conducted for eight months from January 5 to August 5 2018. Sample size: A total of 240 patients from different regions of Warangal were considered and the patient's pertinent information was collected. Inclusion and exclusion criteria were considered in this study in a well designed proforma.

No. of Pages : 19 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003320 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ASSEMBLY FOR CONNECTING ENGINE RADIATORS IN A PARALLEL CONNECTION

(51) International classification	:F02B0029040000, C09K0005100000, F01P0007160000, F16L0027080000, F02M0026280000	(71) <b>Name of Applicant :</b> <b>1)Daimler AG</b> Address of Applicant :70546, Stuttgart, Germany Karnataka India (72) <b>Name of Inventor :</b> <b>1)Raviprasad Bhat</b> <b>2)Reiko Haase</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

[0021] The present invention discloses an assembly for connecting engine radiators in a parallel connection, wherein the assembly comprises at least one pair of radiators (101a, 101b) which are connected in a parallel connection and are employed for converting a pre-defined quantity of high temperature coolant to low temperature coolant. Each of the radiators (101a, 101b) comprise a top tank for receiving high temperature coolant from the internal combustion engine and bottom tank for receiving low temperature coolant from the core of the radiators (101a, 101b). Additionally, the assembly (100) comprises at least one pair of connectors (102a, 102b) for securing the pair of radiators (101a, 101b), wherein each of the connectors (102a, 102b) comprise a toric joint for preventing leakage of coolant and maintaining optimum pressure of the coolant in top and bottom tanks of the radiators (101a, 101b). (Figure 1a)

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003328 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ONLINE AUTOMATED SYSTEM FOR VACCINATION AND IMMUNIZATION PROCESS OF PREGNANT WOMAN AND CHILD

(51) International classification	:A61K0039000000, A61K0039020000, G06Q0050220000, A61K0039150000, G06F0016000000	(71) <b>Name of Applicant :</b> <b>1)MS.B. JANANI</b> Address of Applicant :167/G9, VEDAMBAL NAGAR, GANAPATHY, COIMBATORE, TAMILNADU, INDIA-641 006. Tamil Nadu India <b>2)DR. D. SASIKALA</b> <b>3)MS. K.DHANA SHREE</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MS.B. JANANI</b>
(33) Name of priority country	:NA	<b>2)DR. D. SASIKALA</b>
(86) International Application No	:NA	<b>3)MS. K.DHANA SHREE</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Immunization describes the process whereby people are protected against illness caused by infection with micro-organisms. The term vaccine refers to the material used for immunization, while vaccination refers to the act of giving a vaccine to a person. Immunization saves 3 million lives every year. More than I million infants and young children all over the world die every year from rotavirus diarrhoea and pneumococcal disease. Both of these diseases can be prevented through vaccination. The global measles mortality rate has reduced by 74%. This has been possible due to intense campaigns for vaccination worldwide. Hepatitis B vaccines have caused a drop in the incidence of liver cancer. Our system supports to remind the date of vaccination of the mother and the child .The proposed system ensure the vaccination of mother and child under two different stages. Stage I: Pre-Delivery - the date of vaccination is reminded to the mother during gestation Stage 2: Post-Delivery - the date of vaccination of a child is reminded to the parent through the health care centers for specific duration of 5 years

No. of Pages : 6 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003349 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : IMPROVED POWER GENERATION AND DISTRIBUTION SYSTEM

(51) International classification	:H02J0004000000, H02J0003000000, H02J0007350000, H02J0009060000, B60W0010040000	(71) <b>Name of Applicant :</b> <b>1)Regen Technologies Pty. Ltd.</b> Address of Applicant :Unit 4, 90 Catalano Circuit Canning Vale 6155 Australia. Australia
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)NAYAR, Chemmangot Velayudhan</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An improved power generation and distribution system is disclosed. The disclosed system in micro grid architecture includes at least one first power source (101) to generate electrical power; a second power source (102) to generate electrical power; a third power source (103) to generate electrical power; and a control unit configured to activate at least one of the at least one first power source (101), the second power source (102), and the third power source (103) to supply electrical power to a load based on one or more parameters of any one or a combination of the load, the at least one first power source, the second power source, and the third power source. The second power source (102) is configured to operate in one of a constant speed mode in which an engine (102a) of the second power source operates at a constant speed, and a variable speed mode in which the engine of the second power source operates at variable speeds to generate the electrical power.

No. of Pages : 32 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003357 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A MODULAR DIPSTICK ASSEMBLY FOR MEASURING FLUID LEVEL

(51) International classification	:G01F0023040000, G01F0023260000, G01F0023296000, G01F0023292000, B64F0005600000	(71) <b>Name of Applicant :</b> <b>1)Mahindra &amp; Mahindra Ltd.</b> Address of Applicant :Mahindra & Mahindra Limited, Mahindra Research Valley, Mahindra World City, Plot No:41/1, Anjur P.O. Chengalpattu, Tamilnadu-603004 India, Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ABHAY KHATATE</b>
(33) Name of priority country	:NA	<b>2)HIRANANDANI PRAVESH</b>
(86) International Application No	:NA	<b>3)SACHIN CHANDRAKANT DHORE</b>
Filing Date	:NA	<b>4)SANJAY DHOKA</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT A modular dipstick assembly (100, 100A, 200, 300) for measuring fluid level. The modular dipstick assembly (100) includes a handle (102), a locking element (104) and at least one fluid level indicating member (106). The modular dipstick assembly (100, 100A, 200, 300) is adapted for measuring the level of fluid in various sizes and configurations of at least one of an engine, a gearbox and a fluid compartment. The modular dipstick assembly (100, 100A, 200, 300) provides interchangeability of a plurality of fluid level measuring members onto a common handle thereby achieving customized dipstick assembly for various sizes and configurations of at least one of the engines, the gearboxes and the fluid compartments. Fig. 1

No. of Pages : 26 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003379 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN IMPROVED PROCESS FOR THE PREPARATION OF LOSARTAN POTASSIUM

(51) International classification	:C07D0403100000, A61K0031417800, A61K0031417400, A61K0009500000, C07C0257140000	(71) <b>Name of Applicant :</b> <b>1)SOLARA ACTIVE PHARMA SCIENCES LIMITED</b> Address of Applicant :SAPS Research Centre, 27, Vandaloor Kelambakkam Road, Keelakottaiyur Village, Melakottaiyur Post, Chennai - 600127, Tamil Nadu, India. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ARJUNAN, Sankar</b>
(33) Name of priority country	:NA	<b>2)PALANIVEL, Senthilnathan</b>
(86) International Application No	:NA	<b>3)SOKAPPAN, Vijayan</b>
Filing Date	:NA	<b>4)NADIMUTHU, Satheeskumar</b>
(87) International Publication No	: NA	<b>5)RAY, Uttam Kumar</b>
(61) Patent of Addition to Application Number	:NA	<b>6)SRINIVASAN, Swaminathan</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an improved process for the preparation of Losartan potassium.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003386 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN IMPROVED PROCESS FOR THE PURIFICATION OF FOLINIC ACID SALTS THEREOF

(51) International classification	:A61K0031519000, C07D0231120000, C07C0067030000, C07D0213380000, C07D0409120000	(71) <b>Name of Applicant :</b> <b>1)SOLARA ACTIVE PHARMA SCIENCES LIMITED</b> Address of Applicant :SAPS Research Centre, 27, Vandaloor Kelambakkam Road, Keelakottaiyur Village, Melakottaiyur Post, Chennai - 600127, Tamil Nadu, India. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)ARJUNAN, Sankar</b>
(33) Name of priority country	:NA	<b>2)PONRAJ, Pravin Kamaraj</b>
(86) International Application No	:NA	<b>3)VEERASAMY, Balamurugan</b>
Filing Date	:NA	<b>4)MANI, Loganathan</b>
(87) International Publication No	: NA	<b>5)RAY, Uttam Kumar</b>
(61) Patent of Addition to Application Number	:NA	<b>6)SRINIVASAN, Swaminathan</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides a purification process for folinic acid salts thereof, preferably calcium and sodium comprising the steps of washing solid folinic acid salt with a mixture of cyclohexane and alcohol and also a process for the preparation of pure calcium folinate from sodium folinate.

No. of Pages : 10 No. of Claims : 6

(54) Title of the invention : EXPERIMENTAL AND NUMERICAL INVESTIGATION OF DOUBLE PIPE HEAT EXCHANGER WITH DIFFERENT CONFIGURATION

(51) International classification	:F28F0001080000, F28F0009260000, H04W0004100000, H04W0076450000, F28F0013120000	(71) <b>Name of Applicant :</b> <b>1)BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH</b> Address of Applicant :173, Agharam Road, Selaiyur, Chennai 600 073 Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)K.Sivakumar</b>
(33) Name of priority country	:NA	<b>2)Dr.K.Rajan</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Experimental And Numerical Investigation Of Double Pipe Heat Exchanger With Different Configuration This invention is related to study of the heat transfer characteristics of laminar flow of water through the circular tube fitted with twisted tape inserts with different configuration of twisted tape. The geometrical configuration of twisted tape used has three models of twisted tape inserts, like PTT, TCTT and CCTT. Based on these studies, the following major conclusion has been arrived the Nusselt number and heat transfer coefficient of triangular cut twisted tape is higher than the plain twisted tape and circular hole cut twisted tape for the twist ratio 5.4. The expected data of the PT, PTT, CCTT and TCTT used in the present study are matching with the experimental data within the maximum deviation of Nusselt number + 12% and + 10% for the friction factor respectively. Similarly, the simulation results are compared with the experimental results of PT, PTT, CCTT and TCTT with the maximum deviation of errors +8 % for both friction factor and Nusselt number.

No. of Pages : 30 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003444 A

(19) INDIA

(22) Date of filing of Application :25/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : NETWORK FUNCTION SECURITY ISOLATION USING SELECTIVE SERVICE INSTANTIATION

(51) International classification	:H04L0029080000, H04W0052260000, H01L0021762000, G06F0009500000, H04W0048120000	(71) <b>Name of Applicant :</b> <b>1)NOKIA TECHNOLOGIES OY</b> Address of Applicant :Karaportti 3, Espoo FI-02610, Finland Finland (72) <b>Name of Inventor :</b> <b>1)BYKAMPADI, Nagendra S</b> <b>2)NAIR, Suresh</b> <b>3)JERICHOW, Anja</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Techniques for network function security isolation using selective service instantiation in a communication system are provided. For example, a method comprises: deploying a first instance of a network function type in a core network of a communication system, wherein the first instance of the network function type is configured to provide one or more services to one or more entities internal to the core network; and deploying a second instance of the network function type in the core network, wherein the second instance of the network function type is configured to provide one or more services to one or more entities external to the core network.

No. of Pages : 37 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003445 A

(19) INDIA

(22) Date of filing of Application :25/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SEAT ASSEMBLY

(51) International classification	:B60N0002580000, B60N0002750000, B60N0002060000, A61K0009480000, A61G0005100000	(71) <b>Name of Applicant :</b> <b>1)TVS Motor Company Limited</b> Address of Applicant :TVS Motor Company Limited Chaitanya • , No.12 Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KARNAM VENKATA MANGA RAJU</b>
(33) Name of priority country	:NA	<b>2)RAVISANKAR RAJAMANI</b>
(86) International Application No	:NA	<b>3)MANISH GARG</b>
Filing Date	:NA	<b>4)VELAGAPUDI SAI PRAVEEN</b>
(87) International Publication No	: NA	<b>5)MOHAN KOTHANDAPANI</b>
(61) Patent of Addition to Application Number	:NA	<b>6)SHATHICK BASHA JEELANI</b>
Filing Date	:NA	<b>7)MONALISHA MAHARANA</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a seat assembly (130) comprising of a seat heating-cooling device (300) sandwiched between the seat cover (130C) and foam member (130B). The seat heating-cooling device (300) is positioned at a pre-determined distance X from the seat start point SS of the seat assembly (130). Further, as per the present invention, the distance between two consecutive rows of the seat heating-cooling device (300) is at a pre-determined distance Y along the width of the seat assembly (130) of the vehicle (100)

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003446 A

(19) INDIA

(22) Date of filing of Application :25/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A STEP-THROUGH VEHICLE

(51) International classification	:B62K0011100000, B62K0019460000, B60R0005040000, B62J0009000000, B60R0025000000	(71) <b>Name of Applicant :</b> <b>1)TVS Motor Company Limited</b> Address of Applicant :TVS Motor Company Limited, Chaitanya • , No.12 Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)RAMANATHAN ANANTHA NARAYANAN</b>
(33) Name of priority country	:NA	<b>2)MONALISHA MAHARANA</b>
(86) International Application No	:NA	<b>3)BURRA TIRUMALA SRIKAR</b>
Filing Date	:NA	<b>4)PRASAD RAVILLA</b>
(87) International Publication No	: NA	<b>5)RAJAMANI RAVISANKAR</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present subject matter generally relates to a step-through vehicle (100) having a step-through region (106) in which floorboard (107) is provided for a rider to rest his feet. In the present subject matter, an external lid member (201) is provided to cover a auxiliary space formed in the step-through region (106). The auxiliary space is bordered on four sides by the floorboard member (107). Further, the external lid member (201) has a locking member (205) for locking the external lid member (201) to the floorboard (107). In order to ensure easy access to said space (205) while also ensuring security of items disposed therein, the locking member (205) is actuated from a portion beneath a seat (130) of the step-through vehicle, for unlocking the external lid member (201).

No. of Pages : 25 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003447 A

(19) INDIA

(22) Date of filing of Application :25/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DRIVER ASSISTANCE SYSTEM

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71) <b>Name of Applicant :</b> <b>1)TVS Motor Company Limited</b> Address of Applicant :TVS Motor Company Limited, Chaitanya • , No.12 Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)VALAVANUR UMASANKAR KALPANA</b>
(33) Name of priority country	:NA	<b>2)DIPANJAN MAZUMDAR</b>
(86) International Application No	:NA	<b>3)SAMRAJ JABEZ DHINAGAR</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present subject matter relates generally to a driver assistance system 100 and method for a vehicle 108. The driver assistance system 100 includes a vehicle 108 having a plurality of sensors, a telematics unit 104 to communicate vehicle level data to the surroundings of said vehicle 108, a display device 105 to display the vehicle level data, a server 106, and a smart device 107. The smart device 107 communicates with the server 106 on a first network and with said display device 105 on a second network. The vehicle 108, said server 106, and said smart device 107 communicates through each other via communication network. The invention is based on smart device 107 interface with different communication devices to provide the user with real time vehicle, environmental data, and user related data.

No. of Pages : 35 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003448 A

(19) INDIA

(22) Date of filing of Application :25/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SADDLE-TYPE VEHICLE HAVING A FRONT STRUCTURE

(51) International classification	:F21S0041240000, F21S0041200000, B24D0009080000, B62K0025040000, A41B0009020000	(71) <b>Name of Applicant :</b> <b>1)TVS Motor Company Limited</b> Address of Applicant :TVS Motor Company Limited, Chaitanya • , No.12 Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)YOGESH CHANDRAKANT KOTNIS</b>
(33) Name of priority country	:NA	<b>2)RAMANATHAN ANANTHA NARAYANAN</b>
(86) International Application No	:NA	<b>3)BURRA TIRUMALA SRIKAR</b>
Filing Date	:NA	<b>4)KANDASAMY MALARKODI</b>
(87) International Publication No	: NA	<b>5)MONALISHA MAHARANA</b>
(61) Patent of Addition to Application Number	:NA	<b>6)DASARATHAN SATHISHVARAN</b>
Filing Date	:NA	<b>7)KURMAM SHANMUKHA PRADEEP</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a front structure of a saddle-type vehicle. The front structure comprises two or more front panels including a bottom front panel member (201b) housing a headlamp unit (204). The front structure comprises a ribbed support structure (202) disposed behind the bottom front panel member (201b) and attached to a head tube of the saddle-type vehicle. The ribbed support member (202) comprises a rear surface (206) extending downwards from an upper support surface (207), wherein both the rear surface (206) and the upper support surface (207) support the headlamp unit (204) and the bottom front panel member (201b) respectively. The ribbed support member (202) thus provides additional support to the headlamp unit (204) which is supported to the bottom front panel member (201b) at multiple locations (215,216). Additionally, the ribbed support member also provides additional support to one of the front panel members (201b) housing the headlamp unit (204). < To be published with Fig. 8>

No. of Pages : 24 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003460 A

(19) INDIA

(22) Date of filing of Application :26/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : ARTIFICIAL INTELLIGENCE AND BLOCKCHAIN ENABLED ANTIVIRUS

(51) International classification	:H04L0029060000, G06F0021560000, G06F0021530000, C12Q0001700000, G06F0021000000	(71) <b>Name of Applicant :</b> <b>1)Sidharth Kaushik</b> Address of Applicant :Flat 1805, LIG B2, Vindhyagiri BDA Apartments, Whitefield, Bangalore Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)Sidharth Kaushik</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT In general, for virus and attacks detection we use different detection techniques (Signature, Heuristic, Behavioral, Sandbox, Data Mining) which are not so suitable in the current days. A lot of attacks are happening out there which we get to know too late when someone will become victim of it. We need a better approach to detect the viruses and zero-days, kill chains, DDOS attacks which are happening right now. However, we need a process to gather information by letting hackers to hack our fake infrastructure and let them come up with their latest attacks and then gather the logs from these servers and process them with artificial intelligence and create new signatures and databases and push all those signatures to the client side whoever is using Antivirus, this method of invention is way efficient and faster than the current process.

No. of Pages : 7 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003492 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : Methods and systems for managing processing of neural network across heterogeneous processors

(51) International classification	:G06F0009500000, G06Q0010000000, G06F0012020000, H04L0029080000, G06F0008410000	(71) <b>Name of Applicant :</b> <b>1)SAMSUNG ELECTRONICS CO., LTD</b> Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742 Republic of Korea
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Akshay Parashar</b>
(33) Name of priority country	:NA	<b>2)Arun Abraham</b>
(86) International Application No	:NA	<b>3)Payal Anand</b>
Filing Date	:NA	<b>4)Deepthy Ravi</b>
(87) International Publication No	: NA	<b>5)Venkappa Mala</b>
(61) Patent of Addition to Application Number:	NA	<b>6)Vikram Nelvoy Rajendiran</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Methods and systems for managing processing of neural network across heterogeneous processors. A method disclosed herein includes creating a unified neural network profile for a plurality of processors. The method further includes receiving at least one request to perform at least one task on at least one input using the neural network. The method further includes determining a type of the requested at least one task. The method further includes parallelizing processing of the neural network across the plurality of processors to perform the requested at least one task on the at least one input, based on the type of the requested at least one task and the created unified neural network profile. FIG. 6

No. of Pages : 102 No. of Claims : 35

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003516 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : ACTIVE INFECTION PREVENTION SYSTEM (AIPS) FOR SECUREMENT DEVICE

(51) International classification	:H05K0001180000, H01L0051520000, C07K0016120000, A61N0005060000, G06F0001180000	(71) <b>Name of Applicant :</b> <b>1)3M INNOVATIVE PROPERTIES COMPANY</b> Address of Applicant :3M Center, P O Box 33427, Saint Paul MN 55133-3427, USA U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Kannan, Ganesh Prasad Durgam</b>
(33) Name of priority country	:NA	<b>2)Prajapati, Vipulkumar Himatbhai</b>
(86) International Application No	:NA	<b>3)Srinivasan, Gokul</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

[0040] Embodiment herein provide an Active Infection Prevention System (AIPS) (300) for a securement device (100). The AIPS (300) comprises terminal contacts (302) connected to one or more electrodes (104) of the securement device (100) covering an area of interest on a subject, a printed circuit board (PCB) (304) connected to the terminal contacts (302), and a power source (306), connected to the PCB (304), to provide current to the one or more electrodes (104) of the securement device (100) through the terminal contacts (302) of the AIPS (300). The printed circuit board (304) is configured to continuously discharge the current from the power source (306) into the area of interest on the subject to prevent infection at the area of interest. FIG. 4

No. of Pages : 21 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003542 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A MULTI-SPORT MODE DETECTION USING GESTURE IN WEARABLE FITNESS BAND

(51) International classification	:G06F0003010000, A63B0069000000, H04L0027260000, A63B0021055000, G06F0003048800	(71) <b>Name of Applicant :</b> <b>1)TITAN COMPANY LIMITED</b> Address of Applicant :Integrity • No.193, Veerasandra, Electronic City P.O., Off Hosur Main Road, Bangalore 560100, Karnataka, India. Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)JAYADEVAN JANARDANAN</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :  
AS ENCLOSED

No. of Pages : 36 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003544 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : IMPROVED PROCESSES FOR THE PREPARATION OF TAFAMIDIS AND ITS MEGLUMINE SALT.

(51) International classification	:G01N0033574000, H04L0029080000, G06F0003000000, A61K0008060000, C10L0001020000	(71)Name of Applicant : <b>1)Dr. Reddy™s Laboratories Limited</b> Address of Applicant :8-2-337, Road No. 3, Banjara Hills, Hyderabad Telangana India (72)Name of Inventor : <b>1)Srinivas Oruganti</b> <b>2)Vishnu Vardhana Vema Reddy Eda</b> <b>3)Balachennaiah Darapaneni</b> <b>4)Rajeev Rehani Budhdev</b> <b>5)Mohammed Azeezulla Baig</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to improved processes for the preparation of Tafamidis and a salt thereof. The present invention also relates to one-pot process for the preparation of Tafamidis and its purification. The present invention relates to amorphous solid dispersions of Tafamidis and its meglumine salt, and their processes. The present invention also relates to novel crystalline forms of Tafamidis and their processes.

No. of Pages : 41 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003547 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : CHARACTERIZATION OF A NOVEL VARIANT IN A MONOCLONAL ANTIBODY COMPOSITION

(51) International classification	:G01N0033680000, G01N0030020000, C07K0001180000, C07K0016320000, C07K0016240000	(71) <b>Name of Applicant :</b> <b>1)Dr. Reddy<sup>TM</sup>s Laboratories Limited</b> Address of Applicant :8-2-337, Road No. 3, Banjara Hills, Hyderabad Telangana India (72) <b>Name of Inventor :</b> <b>1)Rakesh Komarla Sathyanarayana Setty</b> <b>2)Avinash Bharati</b> <b>3)Rajiv Pranesh Bharadwaj</b> <b>4)Murali Jayaraman</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT TITLE OF INVENTION: CHARACTERIZATION OF A NOVEL VARIANT IN A MONOCLONAL ANTIBODY COMPOSITION • The present invention discloses an analytical method for identification and characterization of a novel sequence variant in an anti-TNF-a monoclonal antibody preparation. The invention provides a novel method with a characterization workflow combining CEX chromatography, partial proteolytic digestion, peptide mapping and LC-MS for precise, error-free detection and characterization to specifically characterize a transition mutation in the heavy chain of the anti TNF-a monoclonal antibody. Thus claimed method utilizes characterization techniques to identify and characterize unanticipated variants and monitor for better clone selection and superior product development.

No. of Pages : 24 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003554 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : INVESTIGATING THE ANTIOXIDANT OF URACILS USING 1-AMINOANTHRAQUINONE BY STEADY STATE AND LIFETIME

(51) International classification	:C07D0239540000, A61K0031513000, G01N0021640000, G01N0033520000, G01N0033500000	(71) <b>Name of Applicant :</b> <b>1)MANIVANNAN CHANDRAKUMAR</b> Address of Applicant :Chemistry Department, Bannari Amman Inst of Tech, Sathyamangalam, 638401, Tamil Nadu, India Tamil Nadu India <b>2)SATHISH VEERASAMY</b> <b>3)RAMESHKUMAR ARUMUGAM</b> <b>4)VIMALRAJ VINAYAGAM</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b> <b>1)MANIVANNAN CHANDRAKUMAR</b> <b>2)SATHISH VEERASAMY</b> <b>3)RAMESHKUMAR ARUMUGAM</b> <b>4)VIMALRAJ VINAYAGAM</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present work focuses on exploring the antioxidant activity of uracil and their derivatives using 1-AAQ dye. The interaction between the dye molecule and uracil were probed using steady state and lifetime measurements. Addition of uracil molecules increases the absorbance at 265 nm followed by bathochromic shift and decrease in absorbance is observed at 460 nm accompanied with blue shift. The ground state interaction was also confirmed from lifetime measurements. The fluorescence of 1-AAQ was effectively quenched by the U of uracil,molecules. The magnitude of quenching efficiency (k

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003556 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PYRENE BASED CONJUGATES AS FLUORESCENT PROBES FOR ANIONS, BIOMOLECULES AND BIOIMAGING

(51) International classification	:G01N0021640000, G01N0021770000, A61K0009000000, G01N0033580000, C09K0011060000	(71)Name of Applicant : <b>1)SATHISH VEERASAMY</b> Address of Applicant :DEPARTMENT OF CHEMISTRY, BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM, ERODE DISTRICT, TAMIL NADU, INDIA - 638 401. Tamil Nadu India <b>2)MATHAVAN ALAGARSAMY</b> <b>3)RAMDASS ARUMUGAM</b>
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)SATHISH VEERASAMY</b> <b>2)MATHAVAN ALAGARSAMY</b> <b>3)RAMDASS ARUMUGAM</b>
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The presently described subject matter is directed to pyrene conjugates and the derivatives thereof that exhibit aggregation induced emission, as well as water dispersable fluorescent nanoparticles and the derivatives thereof. Also provided are methods of making and using the compound, derivatives and particles of the presently described subject matter. The presently described water soluble pyrene derivatives are useful as bioprobes for the detection of biomacromolecules, in the manufacture of sensors> and in developing bioimaging studies.

No. of Pages : 13 No. of Claims : 5

(54) Title of the invention : TO STUDY THE COMPARISON OF INCIDENCE AND PREVALENCE OF INFECTIOUS AND NON INFECTIOUS DISEASES IN RURAL AND URBAN AREA IN AND AROUND WARANGAL REGION

(51) International classification	:C12Q0001680600, A61K0039390000, A61K0039120000, A61P0031120000, G16H0050800000	(71) <b>Name of Applicant :</b> <b>1)GUGGILLA SANDHYARANI</b> Address of Applicant :2-9-225/9, VIKASNAGAR, HANAMKONDA, TELANGANA, INDIA-506001. Telangana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)GUGGILLA SANDHYARANI</b>
(33) Name of priority country	:NA	<b>2)ALLI RAMESH</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

As paediatrics are more prone to infections due to weak immune system. The occurrence of Infectious and Non Infectious diseases are raising day by day. It is very important to conduct a study and determine the incidence and prevalence of both Infectious and Non Infectious diseases in paediatric patients in Warangal region. We have conducted study in 3 hospitals and included 480 patients. Out of 480 patients 77.08% (n = 370) were exposed to infectious diseases and 22.9% (n = 110) were exposed to non- infectious diseases. We have observed 16 different infectious diseases out of which pneumonia accounts for 44.86%, Acute gastroenteritis 16.75%, Lower respiratory tract infection 11.08%, Neonatal septicaemia 8.1%, Urinary tract infections 2.70%, Typhoid 2.42%, Bronchiolitis 2.43%, Meningitis 2.16%, sepsis 2.16%, Urinary tract infections 1.62%, Dengue 1.62% Mumps 1.35%, Gastroesophageal reflux disease 0.81%, Tuberculosis 0.64%, Measles 0.27 % and we observed 7 different noninfectious diseases such as Neonatal jaundice 40.9%, Seizures 29%, Asthma 10.9%, Anaemia 10.9%, Congenital heart disease 4.5%, Diabetes mellitus 1.81% and glomerulonephritis 1.81%. Studies have been conducted in few regions of India but not in Warangal region, so we have selected Warangal area and conducted the study to determine the prevalence of infectious and Non infectious diseases in paediatric patients and to compare the obtained data with literature.

No. of Pages : 19 No. of Claims : 1

(54) Title of the invention : A PROCESS FOR PRODUCING BIOPESTICIDE FORMULATION OF ENTOMOPATHOGENIC NEMATODES WITH EXTENDED SHELF LIFE

(51) International classification	:A01N0063000000, A01K0067033000, A01N0025000000, C12N0001140000, A61L0015600000	(71)Name of Applicant : <b>1)DIRECTOR ICAR-SUGARCANE BREEDING INSTITUTE</b> Address of Applicant :ICAR-SUGARCANE BREEDING INSTITUTE COIMBATORE 641007 TAMIL NADU, INDIA Tamil Nadu India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)SANKARANARAYANAN CHELLAPPA</b>
(33) Name of priority country	:NA	<b>2)SINGARAVELU BALASUBRAMANIAN</b>
(86) International Application No	:NA	<b>3)RAJESHKUMAR MUTHUSAMY</b>
Filing Date	:NA	<b>4)NICI ASHOK</b>
(87) International Publication No	: NA	<b>5)HARI KUPPUSAMY</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A novel EPN powder formulation was developed first of its kind by storing EPN in a combination of Superabsorbent Polymers (SAP) and a carrier material Talc powder in order to extend the shelf life of EPN by providing adequate aeration, moisture and arresting the mobility of nematodes by physical trapping to save the stored energy present in the nematodes. The composition was prepared in such a way that one liter aqueous suspension of EPN contained talc and SAP in a ratio of 3.2 - 4.8 : 0.0016-0.0024 to maintain 15 - 23 % moisture content. The EPN formulation can be stored at room temperature of 30±5°C in a sealed aluminum lined high density polyethylene sachets. The process for the formulation of entomopathogenic nematode based biopesticide includes *Heterorhabditis indica* strain SBITND78 (GenBank Accession Number KF937809) and *Steinernema glaseri* strain SBILN1 (GenBank Accession Number MK503713). The formulation containing *Heterorhabditis indica* strain DSM78 has a shelf life of nine months with 92% survival of nematodes at a temperature range of 30±5°C. The formulation containing *Steinernema glaseri* strain LN1 has a shelf life of 12 months with 90% survival of nematodes at a temperature range of 30±5°C. The formulation maintained a moisture content of 15 - 23% and water activity (aw) of 0.968 - 0.999. The EPN formulation contains 105 Us of *Heterorhabditis indica* strain DSM78 and 5x10<sup>4</sup> Us of *Steinernema glaseri* strain LN1 per gram. The EPN powder formulation caused mortality of the insect larvae of *Galleria mellonella* and white grub *Holotrichia serrata*.

No. of Pages : 27 No. of Claims : 9

(54) Title of the invention : TO STUDY THE PREVALENCE OF MOST FREQUENTLY OCCURRING INFECTIOUS AND NON INFECTIOUS DISEASES IN PEDIATRIC PATIENTS

(51) International classification	:G01N0033569000, G16H0050800000, C07K0016100000, C12N0007000000, A61K0033000000	(71) <b>Name of Applicant :</b> <b>1)SANDHYA RANI GUGGILLA</b> Address of Applicant :UNIVERSITY COLLEGE OF PHARMACEUTICAL SCIENCES, KAKATIYA UNIVERSITY Telangana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SANDHYA RANI GUGGILLA</b>
(33) Name of priority country	:NA	<b>2)MIDDELA KARTHIK</b>
(86) International Application No	:NA	<b>3)POGULA SWETHA</b>
Filing Date	:NA	<b>4)BOINLSHAILENRA</b>
(87) International Publication No	: NA	<b>5)JOLURU BHARATKUMAR</b>
(61) Patent of Addition to Application Number	:NA	<b>6)ALLI RAMESH</b>
Filing Date	:NA	<b>7)K MAHESH</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Paediatrics is the sole discipline concerned with all aspects of the well-being of infants, children, and adolescents, including their health; their physical, mental, and psychologic growth and development; and their opportunity to achieve full potential as adults [Robert M. Kliegman et al; Nelson book of paediatrics 19th edition] An infectious disease can be defined as an illness due to a pathogen or its toxic product, which arises through transmission from an infected person, an infected animal, or a contaminated inanimate object to a susceptible host. Lower respiratory tract infections, diarrheal diseases, HIV/AIDS, malaria, and tuberculosis (TB) are among the top causes of overall global mortality (Vos et al, 2015). Infectious diseases also include emerging infectious diseases; diseases that have newly appeared (e.g., Middle East Respiratory Syndrome) or have existed but are rapidly increasing in incidence or geographic range (e.g., extensively drug-resistant tuberculosis (XDR TB) and Zika virus (Morse, 1995). Infectious disease control and prevention relies on a thorough understanding of the factors determining transmission [Jean Maguire van Seventer et al; 2017].

No. of Pages : 14 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003585 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : NATURAL ANTIMICROBIAL FINISH ON FABRICS AND METHOD THEREOF

(51) International classification	:A23K0020147000, C12P0019040000, B82Y0030000000, C22B0003000000, C08L0097020000	(71) <b>Name of Applicant :</b> <b>1)KIRUTHIKA KANNAPPAN</b> Address of Applicant :Sharadha Terry Products Ltd., Badrakali Amman Koil Road, Mettupalayam, Coimbatore. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)KIRUTHIKA KANNAPPAN</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an anti-microbial finish on the fabrics. The present invention particularly relates to an antimicrobial microencapsulated fabric finish composition comprising Neem extract and Azadirachta derived from flower and fruits of Azadirachta indica. The invention relates an antimicrobial finish coat on fabrics, particularly Terry towels. Further the invention relates to method of finishing of fabric with antimicrobial composition of Azadirachta indica, to provide a durable and anti-microbial fabric, wherein the fabric is preferably terry towel and woven plain fabrics like sheetings and bed linen.

No. of Pages : 24 No. of Claims : 8

(54) Title of the invention : IMPROVED PROCESS FOR THE PREPARATION OF LIRAGLUTIDE

(51) International classification	:H02H0009020000, C07K0014605000, C07K0014695000, A61K0038260000, C07J0073000000	(71) <b>Name of Applicant :</b> <b>1)Neuland Laboratories Limited</b> Address of Applicant :Neuland Laboratories Limited, Sanali Info Park, 'A' Block, Ground Floor, 8-2-120/113, Road No. 2, Banjara Hills, Hyderabad-500034, India. Telangana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. Mohammed Khalid Anwer</b>
(33) Name of priority country	:NA	<b>2)Ms. Rehana Begum</b>
(86) International Application No	:NA	<b>3)Mr. Shaik Shavali</b>
Filing Date	:NA	<b>4)Dr. Mohosin Layek</b>
(87) International Publication No	: NA	<b>5)Mr. Shaik Mohammed Sharif</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Dr. Poola Bhaskar</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Improved process for the preparation of Liraglutide having the structural formula (I). His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys(Glu-Palmitoyl)-Glu-Phe-Ile-Ala-Trp-Leu-Val-Arg-Gly-Arg-Gly-OH Formula-I The present invention relates to novel fragments-2 and -4 which are useful in the preparation of Liraglutide. Fragment-2: Fmoc-Thr(tBu)-Phe-Thr(tBu)-Ser(tBu)-Asp(OtBu)-Val-Ser(Oxa)-OH Fragment-4: Fmoc-Gln(Trt)-Ala-Ala-Lys(palmityl--Glu-OtBu)-Glu(OtBu)-Phe-Ile-Ala-Trp(Boc)-OH The present invention also relates to the following fragments which are useful in the preparation of Liraglutide. Fragment-1: Boc-His(Trt)-Ala-Glu(OtBu)-Gly-OH Fragment-2: Fmoc-Thr(tBu)-Phe-Thr(tBu)-Ser(tBu)-Asp(OtBu)-Val-Ser(Oxa)-OH Fragment-3: Fmoc-Ser(tBu)-Tyr(tBu)-Leu-Glu(OtBu)-Gly-OH Fragment-4: Fmoc-Gln(Trt)-Ala-Ala-Lys(palmityl--Glu-OtBu)-Glu(OtBu)-Phe-Ile-Ala-Trp(Boc)-OH Fragment-5: Leu-Val-Arg(pbf)-Gly-Arg(pbf)-Gly-OtBu Fragment-6: H-Gln(Trt)-Ala-Ala-Lys(palmityl--Glu-OtBu)-Glu(OtBu)-Phe-Ile-Ala-Trp(Boc)-Leu-Val-Arg(Pbf)-Gly-Arg(Pbf)-Gly-OtBu Fragment-7: Boc-His(Trt)-Ala-Glu(OtBu)-Gly-Thr(tBu)-Phe-Thr(tBu)-Ser(tBu)-Asp(OtBu)-Val-Ser(Oxa)-OH

No. of Pages : 60 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003621 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR VISUALIZATION OF GLASS PRODUCTS

(51) International classification	:G06Q0030060000, G06Q0030020000, G01R0031000000, G06Q0050040000, G06T0019000000	(71) <b>Name of Applicant :</b> <b>1)Saint-Gobain Glass France</b> Address of Applicant :18 Avenue D'alsace, Courbevoie,France France (72) <b>Name of Inventor :</b> <b>1)Ganesh AT</b> <b>2)Sai teja V</b> <b>3)Srihari Kezhedath</b> <b>4)Rajadurai S</b> <b>5)D.R. Sundaram</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A SYSTEM AND METHOD FOR VISUALIZATION OF GLASS PRODUCTS ABSTRACT A system and method for visualization of glass products in real-time is disclosed. The method includes measuring dimension of a room by a hand-held measurement device. The room measurements are received by a server that triggers mapping of the measurements to related glass products. Thereafter, at least one selected glass product and parameters are received from a user through a graphical user interface of the computing device. The selected glass product made by the user is mapped to a catalogue glass product from a plurality of glass products stored in a database, where the chosen glass product is confirmed after verifying the glass products suited to the provided room measurements. A three-dimensional image of the chosen glass product is generated. Finally, th three-dimensional image of the chosen glass product is overlaid on the three-dimensional image of the room to create a panoramic and realistic 3D image of the product on a graphical user interface of the computing device. The method also includes providing one of a virtual display, augmented reality, and an immersive display of the glass product.

No. of Pages : 22 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003636 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : EVENT CORRELATION BASED ON PATTERN RECOGNITION AND MACHINE LEARNING

(51) International classification	:G06F0011300000, G06N0020000000, G06N0003080000, G06F0016000000, G06Q0010060000	(71) <b>Name of Applicant :</b> <b>1)GAVS Technologies Pvt. Ltd.</b> Address of Applicant :No.11, Old Mahabalipuram Road, Sholinganallur, Chennai, Tamil Nadu 600119 Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PLAKATTU KUZHIYIL ARAVINDAKSHAN, Anoop</b>
(33) Name of priority country	:NA	<b>2)PANDIARAJ, Veeramanikandan</b>
(86) International Application No	:NA	<b>3)SUBASH, Vimalraj</b>
Filing Date	:NA	<b>4)VEERASAMY, Silambarasan</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method and a system of improving correlation of events and alerts in or more enterprise networks (103) are disclosed. The method includes receiving, by a processor (402), event data from a plurality of devices (104) in the network (103), wherein the event data comprises one or more of performance metrics data, alerts data, and incident data. The event data is cleaned based on predetermined input parameters and the cleaned event data is labeled based on predetermined definitions. The method further includes performing sequence pattern identification to identify patterns in the labeled event data. The recurring identified patterns are clustered to obtain correlated events. The method includes improving the accuracy of the correlated events using reinforcement learning. FIG. 6



No. of Pages : 34 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003642 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEMS AND METHODS FOR CONTROLLING FUEL FLOW TO DUAL FUEL ENGINE

(51) International classification	:F02D0041000000, F02D0019060000, F02D0019080000, F02B0043100000, F02D0011020000	(71) <b>Name of Applicant :</b> <b>1)Mahindra &amp; Mahindra Limited</b> Address of Applicant :Mahindra Research Valley, Mahindra World City, Plot No:41/1, Anjur P.O., Chengalpattu Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Rajamani Parthiban</b>
(33) Name of priority country	:NA	<b>2)N Joykumar</b>
(86) International Application No	:NA	<b>3)N Vigneshwaran</b>
Filing Date	:NA	<b>4)Ashwin S Raj</b>
(87) International Publication No	: NA	<b>5)Elango Viknesh</b>
(61) Patent of Addition to Application Number:	NA	<b>6)S Anand</b>
Filing Date	:NA	<b>7)Kuppurajan Karthikeyan</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Systems (100, 200) and methods (300, 400) for controlling fuel flow to dual fuel engine. The system (100) mainly includes a primary fuel control means (102), at least one linkage (104), at least one stopper (105), a locking element (106), a lock nut (108) and a sensor (110). The system (200) enables the engine to produce desired power to restrict switching off the engine and/or to improve operability of a vehicle in agricultural fields. The system (100, 200) has better primary fuel substitution rate during at least one of part throttle operation, full throttle operation in a vehicle, operating speed and operating load of the engine. The system (100, 200) improves overall fuel economy and improves operating economy of the vehicle. Fig. 2

No. of Pages : 43 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003644 A

(19) INDIA

(22) Date of filing of Application :27/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : ROTATIONAL LOCK IN INNER RING OF OUTBOARD BEARING TO AVOID LOCK WASHER

(51) International classification	:B60B0027000000, B62D0007180000, A61M0005240000, B60B0007000000, B60G0003140000	(71) <b>Name of Applicant :</b> <b>1)VOLVO TRUCK CORPORATION</b> Address of Applicant :405 08 Gteborg, Sweden Sweden
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Ramachandran SANDRASEKARAN</b>
(33) Name of priority country	:NA	<b>2)Marcel PALMGREN</b>
(86) International Application No	:NA	<b>3)Kent AUGUSTSSON</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a wheel end assembly for a vehicle, comprising a central wheel support member such as a spindle or a steering knuckle, and an outboard wheel end bearing arranged concentrically around the central wheel support member. The outboard wheel end bearing comprises roller elements accommodated between an inner race-forming part and an outer race-forming part surrounding the inner race-forming part. The inner race-forming part is configured to be supported by the central wheel support member. The central wheel support member comprises a first rotational lock portion. The inner race-forming part comprises a second rotational lock portion configured to engage with the first rotational lock portion to prevent the inner race-forming part from rotating relative to the central wheel support member. The invention also relates to a vehicle comprising such a wheel end assembly.

No. of Pages : 27 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003670 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SURFACE TOLERANT EPOXY COATING COMPOSITIONS WITH CORE SHELL RUBBER NANOPARTICLES

(51) International classification	:C09D0163000000, C08L0063000000, C08G0059300000, C09D0007400000, C08G0059320000	(71) <b>Name of Applicant :</b> <b>1)3M INNOVATIVE PROPERTIES COMPANY</b> Address of Applicant :3M Center, P O Box 33427, Saint Paul MN 55133-3427, USA U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Madhup, Mukesh Kumar</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention generally relates to epoxy coating compositions, method of preparing the epoxy coating composition, and methods of applying said epoxy coating compositions to achieve properties such as surface-tolerance, adhesion, anti-corrosion and chemically resistance.

No. of Pages : 39 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003675 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : DIGITAL LOCK-KEY SECURITY SYSTEMS OF AUTOMOBILE

(51) International classification	:H04L0029060000, G08B0013140000, E05B0019000000, H04L0009320000, G08B0025000000	(71) <b>Name of Applicant :</b> <b>1)MR. KARTHICK E</b> Address of Applicant :NO.103/1, NEHRU STREET, NGGO NAGAR, THIRUKKOILUR, VILLUPURAM DISTRICT TAMIL NADU INDIA 605757 Tamil Nadu India <b>2)MR. SUDHAKAR K</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)MR. KARTHICK E</b>
(33) Name of priority country	:NA	<b>2)MR. SUDHAKAR K</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

DIGITAL LOCK-KEY Security Systems of Automobile is the digital security systems for automobile, which is protected by a 4 digit alpha-numeric password, to prevent automobile theft. The automobile which is locked by the Digital Lock-Key, will not start unless the secret code matches to unlock it. If anybody attempt to tamper or breach or try to start the automobile without entering the correct password, the remote Digital Lock-Key system will make sound alarm in the automobile and the alarm coupled with a RF activates the systems and sends a security alert. The Processes and the product uses entirely new approach in which the remote device uses a main control unit (MCU) which creates a pattern that is uniquely matched to the receiver installed in the automobile.

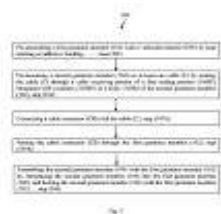
No. of Pages : 18 No. of Claims : 10

(54) Title of the invention : GROMMET DEVICES AND METHODS FOR MANAGING CABLE(S)

(51) International classification	:H02G0003220000, H02G0015013000, B60R0016020000, H02G0003080000, H04L0029080000	(71) <b>Name of Applicant :</b> <b>1)Mahindra &amp; Mahindra Limited</b> Address of Applicant :Mahindra Research Valley, Mahindra World City, Plot No:41/1, Anjur P.O., Chengalpattu, Tamilnadu Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SHAILESH CHANDRAKANT CHAVAN</b>
(33) Name of priority country	:NA	<b>2)ROHAN SHRIRAM KAMAT</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Grommet devices (100, 200) and methods (300, 400) for managing cable(s). The grommet devices (100, 200) are adapted for managing cable(s)/ wiring harness(s) in at least a vehicular member (DW) such as a water shield present in a vehicle door. The grommet devices (100, 200) are adapted to which route cable(s)/ wiring harness(s) therethrough as well as to seal the cable interface. The grommet devices (100, 200) simultaneously accommodate and allow various types of cables to pass therethrough and also to seal the cable interface. The grommet device (100, 200) allows routing of cables in a plurality of directions at the same time. The grommet devices (100) achieve reduced assembly time and retain the cable (C) in a better position and provide air tight sealing of cable(s)/ wiring harness(s) Fig. 3



No. of Pages : 38 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003691 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A GROMMET DEVICE AND A METHOD FOR MANAGING CABLE(S)

(51) International classification	:H02G0003220000, H02G0015013000, H05K0009000000, H02G0003040000, H02G0003180000	(71) <b>Name of Applicant :</b> <b>1)Mahindra &amp; Mahindra Limited</b> Address of Applicant :Mahindra Research Valley, Mahindra World City, Plot No:41/1, Anjur P.O., Chengalpattu, Tamilnadu Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SHAILESH CHANDRAKANT CHAVAN</b>
(33) Name of priority country	:NA	<b>2)ROHAN SHRIRAM KAMAT</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A grommet device (700) and a method (800) for managing cable(s). The grommet device (700) is adapted for managing cable(s) in at least a vehicular member (DW) such as a water shield present in a vehicle door. The grommet device (700) includes a grommet member (702) and a locking member (704). The grommet device (700) is adapted to route cable(s) therethrough as well as to seal the cable interface. The grommet device (700) simultaneously accommodates and allows various types of cables to pass therethrough and also to seal the cable interface. The grommet device (700) allows routing of cables in a plurality of directions at the same time. The grommet device (700) achieves reduced assembly time and retains the cable (C) in a better position. Fig. 2

No. of Pages : 23 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003695 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN AUTOMATED SYSTEM FOR PROVIDING QUALITY ASSURANCE OF RADIATION THERAPY WITH INTEGRATED RADIATION FIELD ANALYZER

(51) International classification	:A61N0005100000, A61B0005055000, H01S0003094000, A61B0006000000, A61N0005060000	(71)Name of Applicant : <b>1)Panacea Medical Technologies Pvt. Ltd</b> Address of Applicant :Panacea Medical Technologies Pvt. Ltd, Plot #35, Phase-IV, KIADB Industrial Area, H-Hosakote Village, Lakkur Hobli, Malur Taluk, Kolar District Karnataka India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Mr. Goteti Venkata Subrahmanyam</b>
(33) Name of priority country	:NA	<b>2)Mr. Tamilarasan Mani</b>
(86) International Application No	:NA	<b>3)Mr. Girish Hulmani</b>
Filing Date	:NA	<b>4)Mr. Manikandan Palanisamy</b>
(87) International Publication No	: NA	<b>5)Mr. Avinash Kuppa Rao</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Mr. Kamsala Manoj Kumar</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An automated system for providing Quality assurance of radiation therapy with an integrated Radiation Field Analyzer [0024] The present invention discloses an automated system for providing Quality assurance of radiation therapy with an integrated Radiation Field Analyzer (RFA), wherein the system (100) comprises a radiation therapy equipment (101) for emitting one or more radiation beams (101a) and an RFA (102) detachably integrated or permanently integrated to the radiation therapy equipment (101). Further, the integrated RFA (102) comprises one or more radiation detectors (103) for performing data dosimetry operations with assistance of 3 independent axis modules. Furthermore, the system (100) comprises a three-dimensional phantom (104) which is disposed on the couch tabletop (101c) or on a pedestal into the gantry ring during the process of performing data dosimetry operations on one or more radiation beams (101a). (Figure 1a)

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003726 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD FOR ADMINISTRATION OF URSODEOXYCHOLIC ACID

(51) International classification	:A61K0031575000, A61K0031522000, A61K0038120000, A61K0031425000, A61K0009200000	(71) <b>Name of Applicant :</b> <b>1)SHILPA MEDICARE LIMITED</b> Address of Applicant :#12-6-214/A1, Hyderabad Road, Raichur 584 135, Karnataka, India Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PALMIERI BENIAMINO</b>
(33) Name of priority country	:NA	<b>2)PRADEEP SHIVAKUMAR</b>
(86) International Application No	:NA	<b>3)TOPPALADODDI KRISHNAMURTHY</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

[065] The present invention provides the method and/or compositions for administering a therapeutically effective amount of ursodeoxycholic acid (UDCA) intravenously for the treatment and/or the prevention of liver diseases, preferably chronic liver diseases. The present invention also relates to methods of intravenous administration of UDCA in a dose of about 15 mg/kg to about 200 mg/kg at a dosage interval of once every 12 hours to once every 72 hours.

No. of Pages : 24 No. of Claims : 10

(54) Title of the invention : SYSTEM AND METHOD FOR SECURELY ACCESSING A USER ACCOUNT

(51) International classification	:H04L0029060000, G08G0001096700, G06K0009000000, H04L0029080000, G01S0005000000	(71) <b>Name of Applicant :</b> <b>1)Gaurav Upadhyay</b> Address of Applicant :C403, Aditya DSR Lake View, Indra Nagar, Gachibowli, Hyderabad 500032, Telangana Telangana India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Gaurav Upadhyay</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A system for securely accessing a user account is disclosed. The system includes an environmental data subsystem to receive a set of environmental data representative of an environment from sensors, wherein the set of environmental data includes a first set of environmental data received at a first time instant and a second set of environmental data received at a second time instant; an environment identification subsystem to extract a first set of unique features of the environment from the first set of environmental data and a second set of unique features of the environment from the second set of environmental data; an environmental data comparison subsystem to compare the second set of unique features with the first representation of the first set of unique features, to determine similarities between the second set of unique features and the first representation, to generate a confidence score based on the similarity analysis. FIG. 1

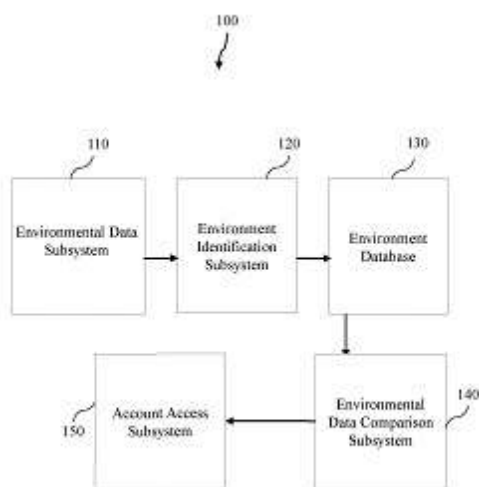


FIG. 1

No. of Pages : 25 No. of Claims : 9

(54) Title of the invention : CLAMPING MECHANISM FOR FUEL CELL

(51) International classification	:H01M0008101100, H01M0008027300, H01M0008100400, H01M0004860000, H01M0008040820	(71) <b>Name of Applicant :</b> <b>1)Indian Institute of Technology Madras (IIT Madras)</b> Address of Applicant :ICSR Building, IIT PO Chennai, India - 600036 Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)CHETTY, Raghuram</b>
(33) Name of priority country	:NA	<b>2)ABRAHAM, Bincy George</b>
(86) International Application No	:NA	<b>3)KUMAR, Ranjith N.</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a passive air breathing direct methanol fuel cell (AB-DMFC) that has a central clamping cylinder to clamp membrane electrode assembly (MEA) layers to a reservoir. The clamping cylinder is configured to transfer the clamping pressure uniformly through a pressure plate to the MEA layers to prevent leakage. The use of the central clamping cylinder reduces the internal resistance across the fuel cell and enables a mechanism for easy replacement of MEA layers and quick testing of multiple MEAs for performance. A multiple fuel cell assembly that is fabricated by stacking two or more fuel cells that share a common liquid fuel reservoir is also disclosed. The passive AB-DMFC may be applied as portable power sources in portable consumer electronics like smartphones, tablets and other handheld devices, that may need power for a long time. (FIG. 1B)

No. of Pages : 27 No. of Claims : 9

(54) Title of the invention : METHODS AND SYSTEMS FOR MANAGING A VOICE BOUNDARY OF A SMART ASSISTANT

(51) International classification	:G10L0015220000, G10L0015180000, G10L0017000000, G03F0001360000, G10L0015260000	(71) <b>Name of Applicant :</b> <b>1)SAMSUNG ELECTRONICS CO., LTD</b> Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Republic of Korea
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Raghavendra Vaddarahalli Rame Gowda</b>
(33) Name of priority country	:NA	<b>2)Raunaq Biswas</b>
(86) International Application No	:NA	<b>3)Inbarajan P</b>
Filing Date	:NA	<b>4)Sowbarnika Thiruppathiraj</b>
(87) International Publication No	: NA	<b>5)Madhusmita Dash</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Shiva Prasad Nitturi</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Methods and systems for managing a voice boundary of a smart assistant. The voice boundary of the smart assistant is adjusted to remove any overlap between the voice boundaries of the smart assistant and other smart assistants. Presence of other smart assistant in the vicinity of the smart assistant is detected to determine whether the overlap exists. If there is an overlap, then the voice boundaries are mutually adjusted such that there is no overlap. The adjustment is based on spatial distances between the smart assistant and the other smart assistants. Commands issued by users/devices can be detected. The commands are executed if the commands are localized within the voice boundary of the smart assistant. Otherwise, the commands are ignored. FIG. 6



No. of Pages : 34 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003806 A

(19) INDIA

(22) Date of filing of Application :28/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : EXECUTION OF FUNCTIONS BY CLUSTERS OF COMPUTING NODES

(51) International classification	:G06F0009500000, H04M0015000000, G06Q0040000000, G06Q0040020000, H04N0021422000	(71) <b>Name of Applicant :</b> <b>1)HEWLETT PACKARD ENTERPRISE DEVELOPMENT LP</b> Address of Applicant :11445 Compaq Center Drive, West Houston, Texas 77070 U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)RANJAN, Jyoti</b>
(33) Name of priority country	:NA	<b>2)MURTHY, Prabhu</b>
(86) International Application No	:NA	<b>3)SINGH, Siddhartha</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Example techniques for execution of functions by clusters of computing nodes are described. In an example, if a cluster does not have resources available for executing a function for handling a service request, the cluster may request another cluster for executing the function. A result of execution of the function may be received by the cluster and used for handling the service request.

No. of Pages : 42 No. of Claims : 20

(54) Title of the invention : THERMOCATALYTIC MATERIAL FOR AIR POLLUTION

(51) International classification	:B01J0021060000, B09B0003000000, B01J0035060000, B01D0053340000, C10G0001100000	(71) <b>Name of Applicant :</b> <b>1)THEVASAHAYAM AROCKIADOSS</b> Address of Applicant :28/9A MAYANDI THEVAR STREET PKM NAGAR KOCHADAI MADURAI TAMILNADU INDIA Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)THEVASAHAYAM AROCKIADOSS</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

**TITLE: THERMOCATALYTIC MATERIAL FOR AIR POLLUTION APPLICANT: THEVASAHAYAM AROCKIADOSS**

**ABSTRACT** The present invention discloses a process of preparing a thermocatalytic material configured to thermo dependent splitting of harmful air pollutants into environmentally harmless gasses for discharging into environment thereby preventing air pollution and thermocatalytic material thereof. a thermocatalytic material configured to thermo dependent splitting of harmful air pollutants into environmentally harmless gasses for discharging into environment thereby preventing air pollution. The thermocatalytic material of the present invention comprises of metals in Group V, VI and VII carbide or nitride or combinations thereof characterized in producing a thermally excited electron/s and has substantially less C-C scission sites with less residual polymeric carbon and low chemisorption binding energies thereby providing substantially more active catalytic surface sites for splitting harmful air pollutants into intermediate products and/or constituents environmentally harmless gasses using the said thermally excited electron/s. The present invention also discloses thermocatalytic devices adapted to positioned at various locations with combustion process, configured to thermo dependent splitting of harmful air pollutants into environmentally harmless gasses for discharging into environment and also absorbing particulates in air, thereby preventing air pollution. The present invention further discloses a method of splitting of harmful air pollutants into environmentally harmless gasses for discharging into environment thereby preventing air pollution employing thermocatalytic device of present invention.

No. of Pages : 35 No. of Claims : 27

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003881 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : NOVEL DENTAL CARE AND CLEANSING COMPOSITION

(51) International classification	:A61Q0011000000, A61C0019060000, A61K0008970000, A61K0033400000, A61K0008220000	(71) <b>Name of Applicant :</b> <b>1)Group Pharmaceuticals Limited</b> Address of Applicant :521/A, 2nd Block, 2nd Main, 2nd Stage, Rajajinagar, Bengaluru - 560 055, Karnataka, India. Karnataka India
(31) Priority Document No	:NA	<b>2)Dr. Ratnadeep Patil</b>
(32) Priority Date	:NA	(72) <b>Name of Inventor :</b>
(33) Name of priority country	:NA	<b>1)Dr. Ratnadeep Patil</b>
(86) International Application No	:NA	<b>2)Ann Attavar</b>
Filing Date	:NA	<b>3)Laxmikant Sugandhi</b>
(87) International Publication No	: NA	<b>4)Rajesh Kapoor</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Novel Dental Care and cleansing Composition The present invention discloses a novel dental care composition comprising combination of various ingredients majorly includes natural ingredients which acts synergistically to treat various dental related disorders. The natural ingredients herein includes a synergistic composition of guava leaf extract, sodium perborate and honey. The said composition exhibits anti-oxidant, anti-microbial, anti-inflammatory and anti-septic properties.

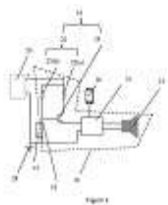
No. of Pages : 30 No. of Claims : 10

(54) Title of the invention : AN ANTI-THEFT DEVICE

(51) International classification	:G08B0013140000, B60R0025100000, G07F0009020000, B60R0025102000, A61B0001045000	(71) <b>Name of Applicant :</b> <b>1)Bosch Limited</b> Address of Applicant :Post Box No 3000, Hosur Road, Adugodi, Bangalore 560030, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Bonu Sankara Rao</b>
(33) Name of priority country	:NA	<b>2)Manvendra Singh</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT An anti-theft device The anti-theft device 10 comprises a breaking circuit 14 and a control unit 16 connected to the breaking circuit 14. The device 10 further comprises a cable 18 that is routed through the component 12. The cable 18 connects the breaking circuit 14 and a power source 20. The control unit 16 adapted to detect removal of the component 12 when the cable 18 is cut-off. The user of the component 12 is intimated about the theft of the component 12 in the real-time. The cable 18 is positioned in the component 12 in such a way that, the cable 18 is not visible to the unauthorized person. The theft of the components 12 is avoided in an efficient way by using the above disclosed device



No. of Pages : 11 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003889 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A THERMAL MANAGEMENT ASSEMBLY, SYSTEM AND METHOD FOR MULTIPLE BATTERIES IN A VEHICLE

(51) International classification	:H01M0002100000, H01M0010613000, H01M0010625000, B60K0001040000, B60L0003000000	(71)Name of Applicant : <b>1)Robert Bosch Engineering and Business Solutions Private Limited</b> Address of Applicant :123, Industrial Layout, Hosur Road, Koramangala, Bangalore 560095, Karnataka, India Karnataka India
(31) Priority Document No	:NA	<b>2)Robert Bosch GmbH</b>
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	<b>1)Varunprabhu Ramaswamy</b>
(86) International Application No	:NA	<b>2)Anil Kumar Velagapudi</b>
Filing Date	:NA	<b>3)Deepak Pilakattu</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The thermal management assembly 100 is applied to multiple batteries in a vehicle. The assembly 100 comprises an inlet duct 110 for circulating a coolant. The coolant is gas or a liquid, however in the present invention the coolant is air. The assembly 100 is characterized by a first duct 102 and at least one second duct 104 branched from the inlet duct 110. The first duct 102 and the at least one second duct 104 are fluidly coupled to a first battery pack 106 and at least one second battery pack 108, respectively. A thermal management system 300 and a method of operation is also disclosed. The present invention provides efficient air cooling with optimal and low cost design. The valves 302, 304 are controllable to a required opening position to control the flowrate and quantity of the coolant passing through the respective ducts. (Figure 1)

No. of Pages : 17 No. of Claims : 10

(54) Title of the invention : AN AIRFLOW MANIFOLD FOR A BATTERY PACK

(51) International classification	:H01M0008241000, H01M0010625000, H01L0027300000, F28F0009020000, A41D0013005000	(71)Name of Applicant : <b>1)Robert Bosch Engineering and Business Solutions Private Limited</b> Address of Applicant :123, Industrial Layout, Hosur Road, Koramangala, Bangalore 560095, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Varunprabhu Ramaswamy</b>
(33) Name of priority country	:NA	<b>2)Anil Kumar Velagapudi</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

AN AIRFLOW MANIFOLD FOR A BATTERY PACK Abstract The battery pack 110 comprises multiple stacked cells 102 having multiple recesses 118 there between. The airflow manifold 100 comprises an inlet 108 to receive a coolant, such as air. The airflow manifold 100 is characterized by, an outlet 112 comprising multiple openings 116. Each of the openings 116 are aligned with the recesses 118 between the stack of cells 102. The outlet 112 is on the surface opposite to the inlet 108. The airflow manifold 100 is used for distributing the coolant for temperature control/thermal regulation of the battery pack 110. The recess 118 between the stack of cells 102 are used to facilitate cooling and heating of the battery packs 110. (Figure 1)

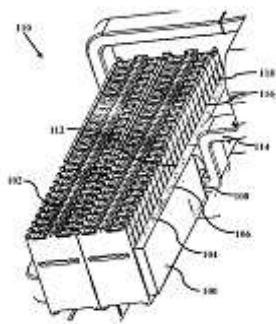


FIG. 1

No. of Pages : 10 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003891 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN ELECTROMECHANICAL BRAKE BOOSTER IN A VEHICLE AND A METHOD THEREOF

(51) International classification	:B60T0013740000, B60T0007040000, B60T0011180000, B60T0013660000, B60T0013570000	(71)Name of Applicant : <b>1)Robert Bosch Engineering and Business Solutions Private Limited</b> Address of Applicant :123, Industrial Layout, Hosur Road, Koramangala, Bangalore 560095, Karnataka, India Karnataka India
(31) Priority Document No	:NA	<b>2)Robert Bosch GmbH</b>
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	<b>1)Umesh Vernekar</b>
(86) International Application No	:NA	<b>2)Vikranth Kambhaluru</b>
Filing Date	:NA	<b>3)Nikhil Hudrali Nagendra</b>
(87) International Publication No	: NA	<b>4)Nilutpal Borah</b>
(61) Patent of Addition to Application Number:	NA	<b>5)Sampath Hegde</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract An electromechanical brake booster in a vehicle and a method thereof The brake booster 10 comprises a gear box 14 connected between a motor 12 and a spindle assembly 16. The brake booster 10 further comprises an input rod 11 connected to a brake pedal 22. The input rod 11 is arranged passing through the motor 12, the gear box 14 and the spindle assembly 16. The brake booster 10 comprises a sensing element 18 positioned in proximity to the input rod 11. The sensing element 18 is adapted to detect a distance travelled by the input rod 11 via the brake pedal 22. The brake booster 10 comprises a control unit 20 adapted to operate the spindle assembly 16 through the motor 12 and the gear box 14 based on the detected distance travelled by the input rod 11. The above-disclosed brake booster 10 is a cost-effective solution as it uses less components to boost/increase the force. (Figure 1)

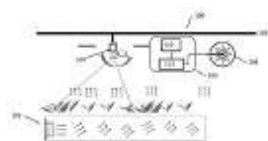
No. of Pages : 11 No. of Claims : 8

(54) Title of the invention : A SYSTEM FOR MONITORING TEA LEAVES DURING WITHERING PROCESS

(51) International classification	:A23F0003060000, A23F0003080000, G01N0021840000, F24F0011460000, A24C0005340000	(71)Name of Applicant : <b>1)Robert Bosch Engineering and Business Solutions Private Limited</b> Address of Applicant :123, Industrial Layout, Hosur Road, Koramangala, Bangalore 560095, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b> (72)Name of Inventor : <b>1)Guru Prasad Arudi Subbarao</b> <b>2)Ashwarya Gupta</b> <b>3)Kalathingal Muhammed Sirajul Huda</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A SYSTEM FOR MONITORING TEA LEAVES DURING WITHERING PROCESS ABSTRACT A system (100) for monitoring tea leaves during withering process, is provided. The system includes a withering bench (102) configured to keep the plucked tea leaves and remove the excess moisture content by evaporating a portion of moisture. The system further includes an imaging module (104) mounted over a guide rail (103) in a movable arrangement. The imaging module (104) is configured to generate a temperature matrix for the tea leaves kept on the withering bench (102). Furthermore, the system includes a processing module (106) configured to receive the temperature matrix, from the imaging module (104). The processing module (106) is further configured to process the received temperature matrix to estimate position and density signals from the tea leaves kept over the withering bench (102). Moreover, the system includes a laser module (108) configured to receive the estimated position and density signals from the processing module (106) and highlight the regions of the tea leaves which are having sub optimum withering. (Figure 1)



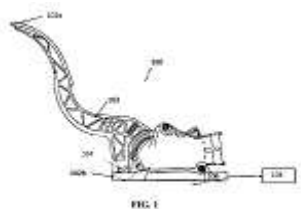
No. of Pages : 13 No. of Claims : 8

(54) Title of the invention : A FOOT PEDAL ASSEMBLY FOR IDENTIFYING EXCESS LOAD APPLIED ON THE PEDAL OF A VEHICLE

(51) International classification	:B60T0007060000, G01L0001260000, A63B0022060000, B60K0026020000, B60R0021090000	(71)Name of Applicant : <b>1)Bosch Limited</b> Address of Applicant :Post Box No 3000, Hosur Road, Adugodi, Bangalore 560030, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Sujay Hebbale Sreenatha</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A FOOT PEDAL ASSEMBLY FOR IDENTIFYING EXCESS LOAD APPLIED ON THE PEDAL OF A VEHICLE ABSTRACT A foot pedal assembly (100) for a vehicle is provided. The foot pedal assembly (100) comprises a pedal arm (102) having a first end for engaging a foot (102a) and a bearing pedestal (102b). The foot pedal assembly (100) comprises a mechanical stopping device (104) attached to the bearing pedestal (102b) and adapted to get engaged with a snap hook inside the bearing pedestal (102b) on application of load more than a certain threshold. Further, the foot pedal assembly (100) comprises a force measuring element (106) attached to said bearing pedestal (102b) in a way that movement of said pedal arm (102) causes change in output characteristics of said force measuring element (106). Advantages of the foot pedal assembly (100) includes identifying the root cause during an instance of pedal breakage or damage of pedal, the root cause of pedal breakage occurring due to abuse or overload on the pedal can be clearly detected. (Figure 1)



No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003894 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : AN EDGE PROTECTOR FOR A SHIPPER BOX

(51) International classification	:B65D0005420000, B32B0005020000, A45F0005020000, F25D0003080000, B65D0081050000	(71) <b>Name of Applicant :</b> <b>1)Bosch Limited</b> Address of Applicant :Post Box No 3000, Hosur Road, Adugodi, Bangalore 560030, Karnataka, India Karnataka India <b>2)Robert Bosch GmbH</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sanap Gurudatta</b>
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT An edge protector 10 for a shipper box is described. The edge protector 10 for the shipper box comprises a plate 12 comprising an L-shaped portion, a first face 14 of the L-shaped portion positioned against a first face of the shipper box and secured thereto. A second face 16 of the L-shaped portion is orthogonally defined with respect to the first face 14 of the L-shaped portion and positioned against a second face of the shipper box and secured thereto. A first flap 18 is positioned against an opposing face of the first face 14 of the L-shaped portion and secured thereto, and a second flap 20 is positioned against an opposing face of the second face 16 of the L-shaped portion and secured thereto.

No. of Pages : 11 No. of Claims : 8

(54) Title of the invention : SELF-REGULATING PET FEED DISPENSER DEVICE

(51) International classification	:A01K0005020000, G11C0007100000, H04N0005232000, H02J0007000000, G06K0007100000	(71) <b>Name of Applicant :</b> <b>1)M. Karthiga</b> Address of Applicant :Department of Computer Science and Engineering, Bannari Amman Institute of Technology, Sathyamangalam, Erode(Dt), TamilNadu-638401. Tamil Nadu India
(31) Priority Document No	:NA	
(32) Priority Date	:NA	<b>2)R.M.Tharsanee</b>
(33) Name of priority country	:NA	<b>3)B.Vishnu Priva</b>
(86) International Application No	:NA	(72) <b>Name of Inventor :</b>
Filing Date	:NA	<b>1)Ms.M. Karthiga</b>
(87) International Publication No	: NA	<b>2)Ms.R.M.Tharsanee</b>
(61) Patent of Addition to Application	:NA	<b>3)Ms.B.Vishnu Priva</b>
Number	:NA	<b>4)Dr.A.Bazila Banu</b>
Filing Date	:NA	<b>5)Mr.R.Rajesh</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A Self-regulating Pet Feed Dispenser device includes a microcontroller with a timer system fixed in it to control the camera attached to the controller. The device can be switched 1 on/off using the push button in the timer module. When the animal approaches the setup, the camera is used to capture the image of the pet, which in turn is sent back to the controller. The controller transmits the image to the cloud where in Machine Learning techniques are used to categorize the pets using the images. The categorized results are sent back to the controller. A rotating motor attached to the controller is rotated to disperse the food according to the categorized result.

No. of Pages : 12 No. of Claims : 5

(54) Title of the invention : METHOD AND SYSTEM FOR MANAGING WATER SUPPLY IN A WATER DISTRIBUTION NETWORK

<p>(51) International classification :G06Q0010060000, E03B0001020000, A01G0025160000, E03B0007020000, H04L0012280000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)Hitachi, Ltd.</b>  Address of Applicant :6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8280, Japan Japan</p> <p>(72)<b>Name of Inventor :</b>  <b>1)Parag Gurav</b></p>
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(57) Abstract :

**METHOD AND SYSTEM FOR MANAGING WATER SUPPLY IN A WATER DISTRIBUTION NETWORK ABSTRACT**

Disclosed herein is method and system for managing water supply in a Water Distribution Network (WDN). In some embodiments, a hydraulic model corresponding to WDN is simulated, for non-supply hours of WDN for maintaining a target average minimum pressure in WDN, for estimating preliminary operational setting for operating each of plurality of Flow Control Valves (FCVs) and Pressure Reducing Valves (PRVs) configured in WDN. Thereafter, real-time flow information related to WDN is collected and an optimal operational setting for each of plurality of FCVs and PRVs is estimated by simulating the hydraulic model using real-time flow information. Finally, plurality of FCVs and PRVs are controlled in the estimated optimal operational setting for managing the water supply in WDN. In some embodiments, the present disclosure involves maintaining a target average minimum pressure in the WDN during non-supply hours of WDN, thereby preventing contamination of water and enhancing life of the WDN. FIG. 1



No. of Pages : 31 No. of Claims : 16

(54) Title of the invention : A TECHNIQUE TO IDENTIFY PHASE TRANSITION TEMPERATURES IN THERMOTROPIC LIQUID CRYSTALS

<p>(51) International classification :G02F0001141000, G01N0025480000, G01K0011160000, C09K0019260000, C30B0029220000</p> <p>(31) Priority Document No :NA</p> <p>(32) Priority Date :NA</p> <p>(33) Name of priority country :NA</p> <p>(86) International Application No :NA</p> <p>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number:NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)M.L.N MADHU MOHAN</b>  Address of Applicant :LCRL, BIT, SATHYAMANGALAM,  TAMILNADU, INDIA-638401. Tamil Nadu India  <b>2)M. HARI KISHOR</b></p> <p>(72)<b>Name of Inventor :</b>  <b>1)M.L.N MADHU MOHAN</b>  <b>2)M. HARI KISHOR</b></p>
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(57) Abstract :

Measurement of transition temperatures is a basic characterization tool to identify various phases of liquid crystals. Many established thermal techniques like specific heat, thermograms etc. are available in the literature, broadly these techniques can be classified into two classes where in the sample requirement will be microscopic and macroscopic. Though measurement of capacitance is well understood its limitations like dielectric breakdown, variation with applied frequency make it a vulnerable parameter. For the first time in the measurement history of liquid crystals, to overcome the disadvantages of the existing techniques, we proposed a unique, simple, nondestructive and reliable technique for the measurement of transition temperatures. This technique with 9 claims involves the measurement of liquid crystal sample resistance in the cooling run with a predetermined scan rate, to establish various phase transitions. This technique allows to detect both first order and second order phase transition temperatures of any Thermotropic liquid crystal, in the present patent a liquid crystal namely dextro tartaric acid mixed with undecyloxy benzoic acid abbreviated as DTA+11BAO used. The scheme of chemical synthesis of DTA+11BAO is shown in figure 1. This technique is validated with phase transitions temperatures associated with ferroelectric liquid crystal ingredient namely dextro tartaric acid mixed with undecyloxy benzoic acid abbreviated as DTA+11BAO shown as in figure 2. 9 Claims, 2 Figures.

No. of Pages : 10 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003900 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM FOR DIGITIZING DOCUMENTS AND METHOD TO OPERATE THE SAME

(51) International classification	:G06K0009000000, G06K0009620000, G06T0007000000, G06K0009460000, G06F0016432000	(71) <b>Name of Applicant :</b> <b>1)IASSIST INNOVATIONS LAB</b> Address of Applicant :B-004, Residency Park, Somasunderpallya Road, HSR Layout, Bangalore, Karnataka, India Karnataka India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Sharad Kumar</b>
(33) Name of priority country	:NA	<b>2)Kumar Rahul</b>
(86) International Application No	:NA	<b>3)Manjesh N</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

SYSTEM FOR DIGITIZING DOCUMENTS AND METHOD TO OPERATE THE SAME ABSTRACT A system for digitizing documents and a method to operate the same. The method includes extracting one or more features from one or more corresponding images using a feature extraction technique upon receiving the one or more images, comparing one or more extracted features of the one or more corresponding images with one or more prestored features associated with the one or more corresponding documents to identify format of the one or more corresponding images, identifying one or more parameters from at least one identified image, extracting one or more characters from one or more identified parameters, recognizing one or more extracted characters using a character recognition technique, creating one or more words by mapping the one or more words with a database using a mapping technique to convert in a digitized format. FIG. 1



No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003939 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR DATA MANAGEMENT IN AN EDGE SERVER

(51) International classification	:H04L0029080000, G06F0009500000, H04L0029060000, G06F0015173000, H04L0001180000	(71) <b>Name of Applicant :</b> <b>1)Hewlett Packard Enterprise Development LP</b> Address of Applicant :11445 Compaq Center Drive West, Houston, TX 77070, United States of America U.S.A.
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Chandrashekar, Charan Acharya</b>
(33) Name of priority country	:NA	<b>2)George, Aneesh</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Example implementations relate to method and system for data management in a computing system, such as an edge server having a processing resource. During operation, the processing resource collects data from a plurality of smart devices and process a portion of the data at each edge-stage of a plurality of first edge-stages to generate partially processed data. Further, the processing resource evaluates a data processing load at an edge-stage of the plurality of first edge-stages based on a throughput of the edge-stage or a size of a data processing queue of a next edge-stage of the plurality of first edge-stages. The processing resource further pushes the partially processed data to the next edge-stage or a portion of the partially processed data to an external computing system and a remaining portion of the partially processed data to the next edge-stage, based on the data processing load at the edge-stage.

No. of Pages : 49 No. of Claims : 20

(54) Title of the invention : INVENTION FOR THE TREATMENT OF DEADLY VIRAL FEVERS SUCH AS DENGUE AND THROMBOCYTOPENIA USING VELLARU

(51) International classification	:A23L0002520000, A61K0009000000, A61F0002900000, A61K0036480000, A61K0031715000	(71) <b>Name of Applicant :</b> <b>1)DR.THIRUTHANIKASALAM</b> Address of Applicant :600/8, ALAGIRI SAMY SALAI, K.K. NAGAR, CHENNAI, TAMIL NADU,INDIA - 600078. Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1) DR.THIRUTHANIKASALAM</b>
(33) Name of priority country	:NA	<b>2)DR.S.VENI</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

This invention is directed to the method of preparation and the oral administration of combination of herbal extract solution for most deadly viral fevers specially for Dengue, comprising at least one major herbal called vellarugu in Tamil ie 'Enicostemma Auxillare'. This herbal solution is freshly prepared and kept under anaerobic conditions from its formulation to its administration. The present invention is also used as the easiest way of treating decreasing platelet cell counts under various conditions of different patients suffering from different fevers, patients undergoing chemotherapy against cancer or tumour, etc.. In other words, the invented herbal extract is also used to prevent or treat thrombocytopenia, which is defined as platelet counts below 50,000 per ml.

No. of Pages : 34 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041003975 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : INCREASE MILEAGE BY USING SPRING

(51) International classification	:F02D0041140000, F02M0027040000, B60K0001020000, H04N0021438000, G11C0016120000	(71) <b>Name of Applicant :</b> <b>1)JAYAPRAKASH.R</b> Address of Applicant :98/51, VEDNARY HOSPITAL STREET, KALLUR VILLAGE (POST), GUDIYATTAM (TALUK), VELLORE ,TAMIL NADU,INDIA- 632 602. Tamil Nadu India
(31) Priority Document No	:NA	<b>2)SHALINI.P</b>
(32) Priority Date	:NA	(72) <b>Name of Inventor :</b>
(33) Name of priority country	:NA	<b>1)JAYAPRAKASH.R</b>
(86) International Application No	:NA	<b>2)SHALINI.P</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The internal combustion engine depends upon the fuel. The vehicles mileage is reduced by several reasons. One of the reason clutch pressing time so how to save that energy loss by using constant force spring so you can see in this invention.

No. of Pages : 7 No. of Claims : 5

(54) Title of the invention : METHOD AND ELECTRONIC DEVICE FOR DELIVERING INFORMATION OF NOTIFICATION IN IOT ENABLED ENVIRONMENT

(51) International classification	:H04L0029080000, H04W0068000000, H04W0004020000, H04N0021472200, G06F0016955000	(71) <b>Name of Applicant :</b> <b>1)Samsung Electronics Co., Ltd.</b> Address of Applicant :House No. 129 Street Samsung-ro, Yeongtong-gu, City Suwon-si State Gyeonggi- do Country Republic of Korea Pin code 443-742 Republic of Korea
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Kaushik Das</b>
(33) Name of priority country	:NA	<b>2)Prakhar Shukla</b>
(86) International Application No	:NA	<b>3)Prabhat Mishra</b>
Filing Date	:NA	<b>4)Parnab Kumar Chanda</b>
(87) International Publication No	: NA	<b>5)Prateek Singh Chauhan</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Nitin Vishwari</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Method and electronic device for delivering information of notification in IoT enabled environment • Embodiments herein provide a method for delivering information of notification by an electronic device (100). The method includes receiving at least one notification. The method includes determining a current context of a user and a historical data associated with the at least one notification. The method includes determining at least one portion of information of the at least one notification to be delivered to the user based on the at least one notification, history data associated with the at least one notification and the current context of the user. The method includes creating a delivery plan for delivering the at least one portion of the information of the at least one notification. The method includes delivering the at least one portion of the information of the at least one notification to the user based on the delivery plan. FIG. 1



No. of Pages : 92 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041004010 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR IMPROVING CHARGE-DISCHARGE RATES AND CYCLE LIFE OF A BATTERY

(51) International classification	:H01M0010420000, H02J0007000000, H01M0010120000, G01R0031360000, H01M0010060000	(71) <b>Name of Applicant :</b> <b>1)MESHA ENERGY SOLUTIONS PVT. LTD</b> Address of Applicant :#25, 8th Main, 2nd Floor, Vasanth Nagar, Bangalore Karnataka India 560052 Karnataka India (72) <b>Name of Inventor :</b> <b>1)Sudarshan T</b> <b>2)P Sridhar</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses a system and method for improving charge-discharge rates of a lead acid battery (302). The system comprises a lead acid battery (302) comprising processed carbon impregnated negative electrodes (304) and positive electrodes (306). The system described in the present invention aids in improving dynamic parameters of battery performance by reducing sulfation through the processed carbon impregnated negative electrodes (304) and consequently improves cycle life of the power battery (302).

No. of Pages : 35 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041004011 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : PROCESSED CARBON ADDITIVE FOR ELECTRODES AND A METHOD OF MANUFACTURE THEREOF

(51) International classification	:H01M0004620000, H01M0010052500, H01M0004583000, C02F0001380000, H01G0011380000	(71) <b>Name of Applicant :</b> <b>1)MESHA ENERGY SOLUTIONS PVT. LTD.</b> Address of Applicant :#25, 8th Main, 2nd Floor, Vasanth Nagar, Bangalore Karnataka India (72) <b>Name of Inventor :</b> <b>1)P Sridhar</b> <b>2)Sudarshan T</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention discloses an elaborate method of processing a carbon additive (110). In the present invention, activated carbon (104) is first derived from a carbon source (102). The derived activated carbon (104) is then mixed with a binder (106) in an ultrasonicator (108) to form a carbon paste. The carbon paste is dried at high temperatures to derive a carbon additive (110) to be further used in electrodes (306) of electrochemical cells.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041004029 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR TRANSMITTING AND RECEIVING SYSTEM INFORMATION

(51) International classification	:H04W0048120000, G06Q0020040000, H04N0021835500, H04W0048160000, G16H0050300000	(71) <b>Name of Applicant :</b> <b>1)Samsung Electronics Co., Ltd</b> Address of Applicant :129,Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do Republic of Korea -443-742 Republic of Korea
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Mangesh Abhimanyu Ingale</b>
(33) Name of priority country	:NA	<b>2)Anil Agiwal</b>
(86) International Application No	:NA	<b>3)HIMKE VAN DER VELDE</b>
Filing Date	:NA	<b>4)Soenghun Kim</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

ABSTRACT Method and UE for handling SI in wireless communication system • Accordingly, the embodiment herein discloses a method for handling SI in a wireless communication system (1000) by a UE (100) in a RRC connected mode. The method includes deciding that the UE (100) requires at least one SIB from a plurality of SIBs indicated in a SI scheduling information broadcasted by a network (200). The method includes determining, from the plurality of SIBs, that the UE (100) does not have a stored SIB as required or a stored version of a required SIB exists but the stored version of the required SIB is not valid. Further, the method includes checking that the UE (100) is allowed to send a SI request based on a network configuration. Further, the method includes sending the SI request for the required SIB in response to checking that the UE (100) is allowed to send the SI request based on the network configuration. FIG. 2

No. of Pages : 51 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041004031 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : IMPROVED PROCESS FOR THE PREPARATION OF (2E)-N-{4-[(3-CHLORO-4-FLUOROPHENYL)AMINO]-7-METHOXYQUINAZOLIN-6-YL}-4-(PIPERIDIN-1-YL)BUT-2-ENAMIDE MONOHYDRATE

(51) International classification	:C07D0231560000, C08L0025180000, C07H0015203000, C07D0403100000, G06T0007200000	(71)Name of Applicant : <b>1)MSN Laboratories Private Limited, R&amp;D Center</b> Address of Applicant :MSN Laboratories Private Limited, R&D Center Plot No. 12, Phase-IV, Sy No. 119 to 140, 258, 275 to 280, IDA, Pashamylaram (Vill), Patancheru (Mdl), Sangareddy (Dist), Telangana. India -502 307. Telangana India
(31) Priority Document No	:NA	(72)Name of Inventor : <b>1)Srinivasan Thirumalai Rajan</b>
(32) Priority Date	:NA	<b>2)Sajja Eswaraiah</b>
(33) Name of priority country	:NA	<b>3)Vijayavithal T. Mathad</b>
(86) International Application No	:NA	<b>4)Gade Srinivas Reddy</b>
Filing Date	:NA	<b>5)Thippireddy Purna Chandrasekhar Reddy</b>
(87) International Publication No	: NA	<b>6)Rachala Sridhar Goud</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Abstract Title of the Invention: Improved process for the preparation of (2E)-N-{4-[(3-chloro-4- 5 fluorophenyl)amino]-7-methoxyquinazolin-6-yl}-4-(piperidin-1-yl)but-2-enamide monohydrate. The present invention relates to an improved process for the preparation of (2E)-N-{4- [(3-chloro-4-fluorophenyl)amino]-7-methoxyquinazolin-6-yl}-4-(piperidin-1-yl)but-2- enamide monohydrate represented by the following structural formula-1, which is referred to 10 as Dacomitinib monohydrate. Formula-1

No. of Pages : 16 No. of Claims : 6

## (54) Title of the invention : AIRBAG DEPLOYMENT SYSTEM

(51) International classification	:A23K0020147000, C12P0019040000, B82Y0030000000, C22B0003000000, C08L0097020000	(71) <b>Name of Applicant :</b> <b>1)S. KAUSHIK</b> Address of Applicant :43, Nanjappa Nagar, Nagarpalayam Post, Gobichettipalayam - 638452, Erode District, Tamil Nadu, India Tamil Nadu India
(31) Priority Document No	:NA	<b>2)JEEVARAAM. K</b>
(32) Priority Date	:NA	<b>3)SHRUTHI. N.T</b>
(33) Name of priority country	:NA	<b>4)ANBARASU. G</b>
(86) International Application No	:NA	(72) <b>Name of Inventor :</b>
Filing Date	:NA	<b>1)S. KAUSHIK</b>
(87) International Publication No	: NA	<b>2)JEEVARAAM. K</b>
(61) Patent of Addition to Application Number	:NA	<b>3)SHRUTHI. N.T</b>
Filing Date	:NA	<b>4)ANBARASU. G</b>
(62) Divisional to Application Number	:NA	<b>5)VIGNESWAR. N</b>
Filing Date	:NA	

## (57) Abstract :

An adaptive and failsafe airbag deployment system (100) is disclosed. Said system (100) comprises: an at least a sensor (101); a control unit (102) that facilitates the monitoring and controlling of the system (100), said control unit (102) comprising an at least a decision-making module; an alert module (103); and a power supply unit. The at least one sensor (101) includes, a buckle sensor (1011), a thermal sensor (1012), and a rotary encoder (1013). An analytics module (1025) facilitates the making of a decision as to whether to deploy the airbag or not, and transmits its decision to an electronic control unit (104) of the vehicle. Since the system (100) comes to a conclusion based on the results from all the sensors, the chances of failure are very less.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041004064 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : MODULAR WASTEWATER TREATMENT PLANT

(51) International classification	:C02F0001040000, A01G0009160000, B08B0003000000, E04B0007020000, E03B0007090000	(71) <b>Name of Applicant :</b> <b>1)SUBATHRA BOMB</b> Address of Applicant :Old No. 20, New No. 29, Dewan Rama Road, 2nd Floor, Purasawalkam, Chennai 600084, Tamil Nadu Tamil Nadu India
(31) Priority Document No	:NA	<b>2)Y NAVEEN KUMAR SETHIYA</b>
(32) Priority Date	:NA	(72) <b>Name of Inventor :</b>
(33) Name of priority country	:NA	<b>1)Y NAVEEN KUMAR SETHIYA</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A modular and algae-based wastewater treatment plant (100) is disclosed. Said plant (100) comprises a base frame (101) with a plurality of legs, said base frame (101) being strengthened with a plurality of stiffeners (102). The top of the base frame (101) is covered with a platform (103), with the top surface of the platform (103) being configured to be rough and of uneven shape. The plant (100) also comprises: a transparent cover (104) that encloses the platform (103); at least one sensor (105); a controller; a blower (106) that is associated with the cover (104); a pump (110); an inlet pipe (107); a horizontal pipe comprising a plurality of holes; an outlet pipe (108); and a tank (109). The plant (100) is easily moveable, requires small area, is installable on roofs and on the side walls of any building, and provides a sustainable, long-term, and zero discharge disposal solution.

No. of Pages : 15 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202043003346 A

(19) INDIA

(22) Date of filing of Application :24/01/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : A SYSTEM FOR DETERMINING BMD FACTOR

(51) International classification	:A61B0005000000, C30B0029060000, G06K0009460000, G06K0009620000, A61B0005110000	(71) <b>Name of Applicant :</b> <b>1)SREE BALAJI MEDICAL COLLEGE &amp; HOSPITAL</b> Address of Applicant :No. 7, CLC Works Road, Chromepet, Chennai Tamil Nadu India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)PRABHU KALIYAPERUMAL</b>
(33) Name of priority country	:NA	<b>2)MANI RAMESH</b>
(86) International Application No	:NA	<b>3)RAJESH KUMAR DURAI</b>
Filing Date	:NA	<b>4)SUMATHI CHELLAPAN</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:	
Filed on	:04/06/2013	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to a system for determining BMD factor 101. The system comprises an image processing system 103 connected to an input/output interface 102. The processor 104 obtains general profile parameters of a subject and further geometric parameters of femoral region of the subject. The processor 104 is further configured to determine the BMD factor and compare the same with a predefined cut-off. The processor 104 thereafter sends the output of comparison, whether the BMD factor is greater or lesser than the predefined cut-off to input/output interface 102.

No. of Pages : 25 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202044050577 A

(19) INDIA

(22) Date of filing of Application :20/11/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : TAPE DRIVE

(51) International classification	:B41J0002325000, B41J0033340000, B41J0035280000, B41J0033160000, B41J0017320000	(71) <b>Name of Applicant :</b> <b>1)VIDEOJET TECHNOLOGIES INC.</b> Address of Applicant :1500 Mittel Boulevard, Wood Dale, IL 60191, USA U.S.A.
(31) Priority Document No	:2001041.9	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2020	<b>1)Martin McNestry</b>
(33) Name of priority country	:U.K.	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

There is provided a tape drive comprising a base, a supply spool support extending from the base on which a ribbon supply spool may be installed, the supply spool support being rotationally fixed with respect to the base, the supply spool support defining a spool rotation axis about which the ribbon supply spool may be caused to rotate to allow ribbon to travel along a ribbon path and a spring. The spring is configured to provide a first spring action, the first spring action configured to generate a braking force by friction and thereby resist relative rotation between the supply spool and the supply spool support and provide a second spring action configured to provide compliance in a length of the ribbon path during printing. [Figure 9]

No. of Pages : 33 No. of Claims : 28

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202044052286 A

(19) INDIA

(22) Date of filing of Application :01/12/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : IP69 PROTECTION ILLUMINATION PUSH BUTTON

(51) International classification	:H01R0013520000, A44B0001140000, H02G0003080000, H01R0025000000, A61M0005280000	(71) <b>Name of Applicant :</b> <b>1)Continental Automotive GmbH</b> Address of Applicant :Vahrenwalder Strae 9, 30165 Hannover, GERMANY Germany
(31) Priority Document No	:2000964.3	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2020	<b>1)Manimaran, SUGUMARAN</b>
(33) Name of priority country	:Germany	<b>2)Sivaprakasam, PALANIAPPEN</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A button cap unit for enclosing a plurality of electronic components within a housing is disclosed. The button cap unit includes an ingress sealing element configured to keep dust and moisture from entering the housing, wherein the ingress sealing element further comprises an engagement portion at two distal end. Each engagement portion at the distal end has a profiled geometrical shape. A button cover with one distal end has a retaining mechanism. The retaining mechanism is to be engaged into the engagement portion of the ingress sealing element. Fig. 4

No. of Pages : 17 No. of Claims : 11

(54) Title of the invention : FAILURE DETECTION DEVICE

(51) International classification	:F02D0013020000, F02D0041000000, F02B0037180000, F02B0037160000, F02M0026490000	(71) <b>Name of Applicant :</b> <b>1)KEIHIN CORPORATION</b> Address of Applicant :26-2, Nishishinjuku 1-chome, Shinjuku-ku, Tokyo 163-0539, Japan Japan
(31) Priority Document No	:2020-010884	(72) <b>Name of Inventor :</b> <b>1)TASHIRO, Yuuki</b>
(32) Priority Date	:27/01/2020	
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number:	NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

In a failure detection device S, an estimated pressure to be compared with a measured pressure PB by a failure detection unit 120 is calculated from a reference estimated pressure corresponding to a rotational speed NE of an internal combustion engine 1 and an opening degree TH of a valve body 12, the reference estimated pressure being a value obtained by detecting a pressure on a downstream side of an intake pipe 10 in advance. A corrected opening degree is used as the opening degree TH for calculating the estimated pressure. The corrected opening degree is obtained by correcting the opening degree TH in accordance with a control amount by which an actuator 17 is controlled and driven, the actuator 17 moving a bypass valve 16 that opens/closes a bypass passage 15. [FIGURE 1]

No. of Pages : 54 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202044054684 A

(19) INDIA

(22) Date of filing of Application :16/12/2020

(43) Publication Date : 30/07/2021

(54) Title of the invention : ELECTRONIC CONTROL DEVICE

(51) International classification	:B41J0002210000, G06F0001140000, H04W0056000000, H04L0029120000, H04L0012911000	(71) <b>Name of Applicant :</b> <b>1)KEIHIN CORPORATION</b> Address of Applicant :26-2, Nishishinjuku 1-chome, Shinjuku-ku, Tokyo 163-0539, Japan Japan
(31) Priority Document No	:2020-010810	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)TASHIRO, Yuuki</b>
(33) Name of priority country	:Japan	<b>2)IMAMURA, Takumi</b>
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An electronic control device performs a time resetting process in which time data of a clock IC is rewritten to test time data in which all time elements in the time data can be updated within a predetermined time to cause the clock IC to perform a timing process. The electronic control device also performs an abnormality detection process for detecting an abnormality in the clock IC based on a comparison result between a time measured in the timing process and a time measured in the timing process by the clock IC when the predetermined time has passed since start of the time resetting process. [Figure 1]

No. of Pages : 21 No. of Claims : 2

(54) Title of the invention : SYSTEM FOR MONITORING A SWITCHGEAR

(51) International classification	:H04N0005330000, G06T0015040000, B60R0001000000, G01N0025720000, G01J0005000000	(71) <b>Name of Applicant :</b> <b>1)ABB SCHWEIZ AG</b> Address of Applicant :Bruggerstrasse 66, 5400 Baden, Switzerland Switzerland
(31) Priority Document No	:20154319.6	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2020	<b>1)Stephan WILDERMUTH</b>
(33) Name of priority country	:EPO	<b>2)Aydin BOYACI</b>
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention relates to a system for monitoring a switchgear. The system comprises an infrared camera, a visible camera, a processing unit, and an output unit. The infrared camera is configured to acquire an infrared image of a switchgear. The visible camera is configured to acquire a visible image of the switchgear. The processing unit is configured to map a plurality of pixels in the visible image to a plurality of pixels in the infrared image. The plurality of pixels in the visible image comprises a plurality of sub-sets of pixels with each sub-set comprising at least one pixel and wherein each sub-set of pixels in the visible image is mapped to a corresponding pixel in the infrared image. Each sub-set of pixels in the visible image and the corresponding pixel in the infrared image relate to image data of the same part of the switchgear. The processing unit is configured to determine a combined image comprising utilization of the plurality of pixels in the visible image mapped to the plurality of pixels in the infrared image. The output unit is configured to output the combined image. (Fig. 1)

No. of Pages : 18 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144002383 A

(19) INDIA

(22) Date of filing of Application :19/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ELECTROMAGNETIC FUEL INJECTION VALVE

(51) International classification	:F02M0051060000, F02M0047020000, F02M0051000000, F02M0065000000, F16H0055560000	(71) <b>Name of Applicant :</b> <b>1)KEIHIN CORPORATION</b> Address of Applicant :26-2, Nishishinjuku 1-chome, Shinjuku-ku, Tokyo 163-0539, Japan Japan
(31) Priority Document No	:2020-009613	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2020	<b>1)GOTO, Kazuya</b>
(33) Name of priority country	:Japan	<b>2)MIURA, Yudai</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

[SUBJECT] To provide an electromagnetic fuel injection valve that minimizes an abutting area between a movable core and a fixed core so as to enhance valve-closing responsiveness and can control a valve body with high accuracy so that an influence due to wear of the abutting part between the cores can be effectively restrained. [MEANS FOR SOLUTION] In an electromagnetic fuel injection valve I, a movable core 12 is provided with a stopper surface 37a capable of abutting against an end surface 5f of a fixed core 5. The stopper surface 37a is annularly disposed close to a radially inner end of a surface, opposing the fixed core 5, of the movable core 12, and has a cross section configured as a curved surface that is curved convexly toward the fixed core 5. The end surface 5f of the fixed core 5 is formed as a tapered surface gradually separated from the movable core 12 in going from an inner side to an outer side in a radial direction of the end surface 5f. A plurality of recesses 5fo are provided in a part, opposing the stopper surface 37a, of the end surface 5f and radially formed at intervals in a peripheral direction. [FIGURE 2]

No. of Pages : 25 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144002415 A

(19) INDIA

(22) Date of filing of Application :19/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BALL STUD ARRANGEMENT

(51) International classification	:F16C0011060000, H01M0010653000, D04B0027260000, B60G0007000000, F23M0005020000	(71) <b>Name of Applicant :</b> <b>1)KARL MAYER STOLL R&amp;D GmbH</b> Address of Applicant :Industriestrasse 1, 63179 Obertshausen, Germany Germany
(31) Priority Document No	:20153730.5	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2020	<b>1)KOCH, J/rgen</b>
(33) Name of priority country	:EPO	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A ball stud, in particular, in a pattern arrangement of a warp knitting machine, with a first end (2) comprising at least one part of a spherical shape, a second end (3) and a section (4) between the first end (2) and the second end (2) is described, wherein at least one part of the ball stud comprises a cavity (9) which is fluidically connected to an outer surface (7) by at least one channel (5). A reduction in the configuration effort of the warp knitting machine and the maintenance effort of the ball stud (1) are intended. For this purpose, an element (8) consisting of thermally conductive material surrounds the section (4). [Figure 2]

No. of Pages : 12 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144002761 A

(19) INDIA

(22) Date of filing of Application :20/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PATH DISCRIMINATION

(51) International classification	:C07K0016280000, G01T0003060000, B42D0025328000, B42D0025364000, G07D0007060000	(71) <b>Name of Applicant :</b> <b>1)Nokia Technologies Oy</b> Address of Applicant :Karakaari 7, 02610 Espoo, Finland Finland
(31) Priority Document No	:20205087	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2020	<b>1)CAPORAL DEL BARRIO, Samantha</b>
(33) Name of priority country	:Finland	<b>2)SVENDSEN, Simon</b>
(86) International Application No	:NA	<b>3)BJERRUM, Bo Holm</b>
Filing Date	:NA	<b>4)ROM, Christian</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :  
Attached

No. of Pages : 38 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144002891 A

(19) INDIA

(22) Date of filing of Application :21/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : CRUSHER

(51) International classification	:B65H0019100000, B02C0021020000, B65G0023440000, B65H0043000000, B03C0001020000	(71) <b>Name of Applicant :</b> <b>1)KLEEMANN GMBH</b> Address of Applicant :Manfred-Wrner-Str. 160, 73037 Gppingen, Germany Germany
(31) Priority Document No	:10 2020 101 863.0	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/01/2020	<b>1)K-PF, Reiner</b>
(33) Name of priority country	:Germany	<b>2)H.,BERLE, Steffen</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a crusher (10), in particular a rock crusher, having a crusher unit (40), to which a band conveyor unit (60) having an endlessly circulating band conveyor is indirectly or directly assigned, wherein a magnetic separator (70) having a magnet (79) is held in the area of the band conveyor unit (60) above the band conveyor in the direction opposite from the direction of gravity, and wherein an adjustment unit (80) is provided, which can be used to change the height of the magnet (79) above the band conveyor. To enable the reliable operation of such a crusher, it is provided according to the invention that the magnetic separator (70) is suspended from at least two limp ties (81, 82, 84, 85), and that the limp ties (81, 82, 84, 85) can be adjusted by means of at least one actuator unit (90) to change the height of the magnet (79). (Figure 1)

No. of Pages : 30 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144003365 A

(19) INDIA

(22) Date of filing of Application :25/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SHIELDING SPRING SHELL FOR HIGH CURRENT PLUG-IN CONNECTIONS

(51) International classification	:H01R0043160000, H01R0013110000, H01R0012700000, H01R0013658200, H01R0012580000	(71) <b>Name of Applicant :</b> <b>1)TE Connectivity Germany GmbH</b> Address of Applicant :Amp`restrasse 12-14, 64625, Bensheim, Germany Germany
(31) Priority Document No	:10 2020 200 976.7	(72) <b>Name of Inventor :</b> <b>1)LISTING, Martin</b>
(32) Priority Date	:28/01/2020	<b>2)LEONHARDT, Bernd</b>
(33) Name of priority country	:Germany	<b>3)VEIHL, Maximilian</b>
(86) International Application No	:NA	<b>4)KOSMALSKI, Christoph</b>
Filing Date	:NA	<b>5)SAUER, J`rgen</b>
(87) International Publication No	: NA	<b>6)SACHS, Soenke</b>
(61) Patent of Addition to Application Number	:NA	<b>7)FERTIG, Jochen</b>
Filing Date	:NA	<b>8)IVANOV, Ivan</b>
(62) Divisional to Application Number	:NA	<b>9)WOLF, Marco</b>
Filing Date	:NA	

(57) Abstract :

The invention relates to a shielding spring shell (1) for high current plug-in connections. The shielding spring shell (1) comprises at least one contact tab (2) with two spring sections (6) adjoining a fillet (4), wherein one of the two spring sections (6) is configured as an at least radially resilient radial spring (8) and another of the two spring sections (6) as an at least axially resilient axial spring (10). The contact tab (2) can be supported both in the radial direction as well as in the axial direction on a mating connector (74, 76) and thus compensate for relative motions between the connector (42) and the mating connector (74, 76). (Figure 1)

No. of Pages : 22 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144003555 A

(19) INDIA

(22) Date of filing of Application :27/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : VEHICLE OPERATING DEVICE

(51) International classification	:B62K0023040000, B62K0021260000, B62K0023020000, H01H0009060000, B62J0099000000	(71) <b>Name of Applicant :</b> <b>1)TOYO DENSO CO., LTD.</b> Address of Applicant :10-4, Shimbashi 2-chome, Minato-ku, Tokyo 105-0004, Japan Japan
(31) Priority Document No	:2020-012429	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2020	<b>1)SHINOHARA, Hiroyuki</b>
(33) Name of priority country	:Japan	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A vehicle operating device (10) includes: a handlebar (12) having at least one hole (18); a grip (14) attached to an end of the handlebar (12); and a housing (16) into which the handlebar (12) is inserted, the housing (16) being fixed to the handlebar (12) at a position that lies on a vehicle center side relative to the grip (14). The housing (16) at least includes: a mounting part (30) having a projection (42) inserted into the hole (18) of the handlebar (12); and an elastically deformable part (32) configured to keep at least a part of the projection (42) of the mounting part (30) in a state of being inserted into the hole (18) of the handlebar (12). [FIGURE 2]

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144003559 A

(19) INDIA

(22) Date of filing of Application :27/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : POWER SEMICONDUCTOR MODULE

(51) International classification	:H01L0023000000, H01L0025070000, H01L0023310000, H01L0023373000, H01L0031048000	(71) <b>Name of Applicant :</b> <b>1)ABB Power Grids Switzerland AG</b> Address of Applicant :Bruggerstrasse 72, 5400 Baden, Switzerland Switzerland
(31) Priority Document No	:20154276.8	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2020	<b>1)MALEKI, Milad</b>
(33) Name of priority country	:EPO	<b>2)BEYER, Harald</b>
(86) International Application No	:NA	<b>3)TRUESEL, Dominik</b>
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a power semiconductor module (10) comprising a baseplate (12) being at least in part covered by an encapsulation material (14), wherein the baseplate (12) is adapted for being connected to the heat dissipating element (24) by applying a clamping force (40) with a clamping part (28), and wherein the power semiconductor module (10) has an improved producibility and an improved long-term reliability and integrity of the molded part. (Figure 3)

No. of Pages : 35 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202144003785 A

(19) INDIA

(22) Date of filing of Application :28/01/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMPOSITION FOR COATING AN OVERHEAD CONDUCTOR

(51) International classification	:B01J0035000000, C08G0077160000, C09D0183040000, B01J0021060000, C08K0003360000	(71) <b>Name of Applicant :</b> <b>1)CABLE COATINGS LIMITED</b> Address of Applicant :Nexus, University of Leeds, Discovery Way, Leeds, LS2 3AA, Great Britain. U.K.
(31) Priority Document No	:2001197.9	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/01/2020	<b>1)COOGAN, Niall</b>
(33) Name of priority country	:U.K.	<b>2)PARKER, Rachel</b>
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A composition for coating an overhead conductor is disclosed comprising: (i) a reflective agent; (ii) a photocatalytic agent comprising = 70 wt% anatase titanium dioxide (TiO<sub>2</sub>) having an average particle size (aps • ) = 100 nm; (iii) a polyorganosiloxane binder; and (iv) a superhydrophobic agent comprising either: surface functionalised silica nanoparticles, a functional polysiloxane or a polymethylsilsequioxane.

No. of Pages : 87 No. of Claims : 29

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202145033539 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : Please see the attachment

(51) International classification	:C09B0067220000, E02D0033000000, B22F0003040000, C07H0015203000, C09K0008584000	(71) <b>Name of Applicant :</b> <b>1)Daicel Corporation</b> Address of Applicant :3-1, Ofuka-cho, Kita-ku, Osaka-shi, Osaka 530-0011, Japan Japan
(31) Priority Document No	:2016-185811	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/09/2016	<b>1)UEDA, Takunori</b>
(33) Name of priority country	:Japan	<b>2)HAMASAKI, Ryota</b>
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201744009816	
Filed on	:21/03/2021	

(57) Abstract :  
Please see the attachment.

No. of Pages : 50 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202145033692 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BRAKE SYSTEM FOR AN INTERNAL COMBUSTION ENGINE SYSTEM AND ENGINE SYSTEM

(51) International classification	:F01L0001180000, F01L0013060000, F01L0013000000, F01L0001260000, F01N0003023000	(71) <b>Name of Applicant :</b> <b>1)Cummins Inc.</b> Address of Applicant :500 Jackson St., Columbus, Indiana 47201 USA U.S.A.
(31) Priority Document No	:2018114502459	(72) <b>Name of Inventor :</b> <b>1)Bing Sun</b>
(32) Priority Date	:30/11/2018	
(33) Name of priority country	:China	
(86) International Application No	:PCT//	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201944048465	
Filed on	:26/11/2019	

(57) Abstract :

**BRAKE SYSTEM FOR AN INTERNAL COMBUSTION ENGINE SYSTEM AND ENGINE SYSTEM ABSTRACT** The application relates to a braking system for an internal combustion engine system and an engine system. A braking system for an internal combustion engine system includes 5 an exhaust rocker lever, a solenoid control valve, and a control oil passage. The solenoid control valve is configured to enable/disable braking. The control oil passage is connected between the solenoid control valve and the exhaust rocker lever to deliver oil to the exhaust rocker lever. At least a portion of the control oil passage is integrated within the exhaust rocker lever. 10 Figure 3A

No. of Pages : 31 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147014863 A

(19) INDIA

(22) Date of filing of Application :31/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR SUPPORTING HETEROGENEOUS AND ASYMMETRIC DUAL RAIL FABRIC CONFIGURATIONS IN A HIGH PERFORMANCE COMPUTING ENVIRONMENT

(51) International classification	:G06F0009500000, H04L0029080000, H04L0029060000, H04L0012931000, G06F0009455000
(31) Priority Document No	:16/261362
(32) Priority Date	:29/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/015468
Filing Date	:28/01/2020
(87) International Publication No	:WO 2020/160032
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**  
**1)ORACLE INTERNATIONAL CORPORATION**  
Address of Applicant :500 Oracle Parkway, M/S 5OP7  
Redwood Shores, California 94065 U.S.A.  
(72)**Name of Inventor :**  
**1)JOHNSEN, Bj, rn Dag**  
**2)HODOBA, Predrag**  
**3)HOLEN, Line**  
**4)TJEMSLAND, Kurt**

(57) Abstract :

Systems and methods for supporting heterogeneous and asymmetric dual rail fabric configurations in a high performance computing environment. A method can provide, comprising at one or more computers each including one or more microprocessors, a plurality hosts, each of the plurality of hosts comprising at least one dual port adapter, a private fabric, the private fabric comprising two or more switches, and a public fabric, the public fabric comprising a cloud fabric. A workload can be provisioned at a host of the plurality of hosts. A placement policy can be assigned to the provisioned workload. Then, network traffic between peer nodes of the provisioned workload can be assigned to one or more of the private fabric and the public fabric in accordance with the placement policy.

No. of Pages : 73 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147014929 A

(19) INDIA

(22) Date of filing of Application :31/03/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR A SINGLE LOGICAL IP SUBNET ACROSS MULTIPLE INDEPENDENT LAYER 2 (L2) SUBNETS IN A HIGH PERFORMANCE COMPUTING ENVIRONMENT

(51) International classification	:H04L0012931000, H04L0012741000, H04L0012721000, H04L0029120000, H04L0012933000	(71) <b>Name of Applicant :</b> <b>1)ORACLE INTERNATIONAL CORPORATION</b> Address of Applicant :500 Oracle Parkway, M/S 5OP7 Redwood Shores, California 94065 U.S.A.
(31) Priority Document No	:16/261362	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2019	<b>1)JOHNSEN, Bj, rn Dag</b>
(33) Name of priority country	:U.S.A.	<b>2)SIDDABATHUNI, Ajoy</b>
(86) International Application No	:PCT/US2020/015470	<b>3)HODOBA, Predrag</b>
Filing Date	:28/01/2020	
(87) International Publication No	:WO 2020/160034	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Systems and methods for supporting a single logical IP subnet across multiple independent layer 2 subnets in a high performance computing environment. A method can provide, at a computer including one or more microprocessors, a logical device, the logical device being addressed by a layer 3 address, wherein the logical device comprises a plurality of network adapters, each of the network adapters comprising a physical port, and a plurality of switches. The method can arrange the plurality of switches into a plurality of discrete layer 2 subnets. The method can provide a mapping table at the logical device.

No. of Pages : 72 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147022375 A

(19) INDIA

(22) Date of filing of Application :19/05/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMPOSITION FOR PREVENTING OR TREATING INFLAMMATORY BOWEL DISEASE, CONTAINING, AS ACTIVE INGREDIENT, TAURODEOXYCHOLIC ACID OR PHARMACEUTICALLY ACCEPTABLE SALT THEREOF

(51) International classification	:A61K0009000000, A23L0033100000, A61K0009160000, A61K0031190000, A61P0017000000	(71)Name of Applicant : <b>1)SHAPERON INC.</b> Address of Applicant :#606(Jagok-dong), Gangnam ACE Tower 174-10, Jagok-ro Gangnam-gu, Seoul 06373 Republic of Korea
(31) Priority Document No	:10-2019-0008527	(72)Name of Inventor :
(32) Priority Date	:23/01/2019	<b>1)SEONG, Seung-Yong</b>
(33) Name of priority country	:Republic of Korea	<b>2)SEO, Sang-Uk</b>
(86) International Application No	:PCT/KR2020/001179	<b>3)MUNKHBILEG, Bolormaa</b>
Filing Date	:23/01/2020	
(87) International Publication No	:WO 2020/153794	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a composition for preventing or treating inflammatory bowel disease, containing, as an active ingredient, taurodeoxycholic acid or a pharmaceutically acceptable salt thereof. Particularly, it has been ascertained that the clinical symptoms and histopathological symptoms caused by inflammatory bowel disease are alleviated using a salt of taurodeoxycholic acid and the increase in inflammatory cells in the intestine and the production of pro-inflammatory cytokines are suppressed, and thus taurodeoxycholic acid and a pharmaceutically acceptable salt thereof can be used as an active ingredient of a composition for preventing or treating inflammatory bowel disease.

No. of Pages : 44 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147027985 A

(19) INDIA

(22) Date of filing of Application :22/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : CARBONATE AGGREGATE COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME

(51) International classification	:C12N0015100000, C04B0035630000, C04B0035565000, B01D0053620000, C04B0022100000	(71) <b>Name of Applicant :</b> <b>1)BLUE PLANET SYSTEMS CORPORATION</b> Address of Applicant :100 Cooper Court, Suite A Los Gatos, California 95032 U.S.A.
(31) Priority Document No	:62/795986	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2019	<b>1)KANG, Seung-Hee</b>
(33) Name of priority country	:U.S.A.	<b>2)YOUNES, Mohamad El Hajj</b>
(86) International Application No	:PCT/US2020/014817	<b>3)SCHNEIDER, Jacob</b>
Filing Date	:23/01/2020	<b>4)CONSTANTZ, Brent R.</b>
(87) International Publication No	:WO 2020/154518	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods of making carbonate aggregates are provided. Aspects of the methods include: preparing a carbonate slurry, subjecting the carbonate slurry to rotational action, e.g., by introducing the carbonate slurry (optionally with an aggregate substrate) into a revolving drum under conditions sufficient to produce a carbonate aggregate, e.g., made up of a spherical coating on a substrate and/or agglomeration particles. Also provided are aggregate compositions produced by the methods, as well as compositions that includes the carbonate coated aggregates, e.g., concretes, and uses thereof.

No. of Pages : 58 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147028375 A

(19) INDIA

(22) Date of filing of Application :24/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COORDINATING RADIO RESOURCE CONTROL SIGNALING WITH UPPER LAYER DIRECT LINK ESTABLISHMENT PROCEDURES

(51) International classification	:H04W0092120000, H04W0060040000, H04L0012180000, H04W0068000000, H04W0072040000	(71)Name of Applicant : <b>1)QUALCOMM INCORPORATED</b> Address of Applicant :ATTN: International IP Administration 5775 Morehouse Drive San Diego, California 92121-1714 U.S.A.
(31) Priority Document No	:62/797290	(72)Name of Inventor : <b>1)WU, Zhibin</b>
(32) Priority Date	:27/01/2019	<b>2)CHENG, Hong</b>
(33) Name of priority country	:U.S.A.	<b>3)BAGHEL, Sudhir Kumar</b>
(86) International Application No	:PCT/US2020/014933	<b>4)GULATI, Kapil</b>
Filing Date	:24/01/2020	<b>5)PATIL, Shailesh</b>
(87) International Publication No	:WO 2020/154584	<b>6)LI, Junyi</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods, systems, and devices for wireless communications are described. A user equipment (UE) may initiate a radio resource control (RRC) layer signaling procedure between the UE and a target UE, include an upper layer signaling message in an RRC message based in part on the RRC layer signaling procedure, and transmit the RRC message including the upper layer signaling message to the target UE. Alternatively, upper layer signaling messages may be transmitted separately before or after the RRC layer signaling procedure.

No. of Pages : 75 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147028601 A

(19) INDIA

(22) Date of filing of Application :25/06/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SUPPORT FOR EARLY DATA TRANSMISSION WITH CENTRAL UNIT/DISTRIBUTED UNIT FUNCTIONAL SPLIT

(51) International classification	:H04L0005000000, H04L0009320000, H04W0088080000, A61B0005000000, H04B0001160000	(71) <b>Name of Applicant :</b> <b>1)QUALCOMM INCORPORATED</b> Address of Applicant :Attn: International IP Administration 5775 Morehouse Drive San Diego, California 92121-1714 U.S.A.
(31) Priority Document No	:62/797900	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/01/2019	<b>1)PHUYAL, Umesh</b>
(33) Name of priority country	:U.S.A.	<b>2)LEE, Soo Bum</b>
(86) International Application No	:PCT/US2020/014720	<b>3)LOPES, Luis Fernando Brisson</b>
Filing Date	:23/01/2020	<b>4)RICO ALVARINO, Alberto</b>
(87) International Publication No	:WO 2020/159785	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods, systems, and devices for wireless communications are described. A receiving device (305) may receive, at a central unit (320) of the receiving device (305), information from which the central unit (320) is able to identify a hash calculated based at least in part on a data portion of a message received by a distributed unit (350) of the receiving device (305). The receiving device (305) may confirm, at the central unit (320) and based at least in part on the hash, an integrity of the data portion of the message. Additionally or alternatively, a distributed unit (350) of the receiving device (305) may confirm the integrity of the data portion of the message. The receiving device (305) may authorize, based at least in part on the integrity confirmation, one or more user plane tunnels with the distributed unit (350) to forward the data portion of the message from the distributed unit (350) to the central unit (325) after processing at the distributed unit (350).

No. of Pages : 58 No. of Claims : 54

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147030147 A

(19) INDIA

(22) Date of filing of Application :05/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : EXCLUDING INTRA CODED REFERENCE SAMPLES FROM LOCAL ILLUMINATION  
COMPENSATION PARAMETER DERIVATION

(51) International classification	:H04N0019176000, H04N0019105000, H04N0019186000, H04N0019159000, H04N0021433000	(71) <b>Name of Applicant :</b> <b>1)QUALCOMM INCORPORATED</b> Address of Applicant :ATTN: International IP Administration 5775 Morehouse Drive San Diego, California 92121-1714 U.S.A.
(31) Priority Document No	:62/797252	(72) <b>Name of Inventor :</b> <b>1)SEREGIN, Vadim</b>
(32) Priority Date	:26/01/2019	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2020/014796	
Filing Date	:23/01/2020	
(87) International Publication No	:WO 2020/154504	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A rectangular block of video data is obtained, and the lengths of first and second sides of the block are determined. Intra-coded samples may be excluded from the first and/or second sides, or replaced with intra-coded samples from a reference block. Lengths of the first and second sides are determined based on non-excluded samples. Based on these lengths, a shortest or greatest side is selected. In some cases, additional samples may be excluded so that the total number of samples is a power of two. Illumination compensation parameters are determined based on remaining (non-excluded) samples neighboring the current block.

No. of Pages : 82 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032813 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMBS FOR HAIR CUTTING APPLIANCES

(51) International classification	:B26B0019200000, B26B0019380000, G02B0027640000, A45D0024220000, H01F0027020000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19150364.8	(72) <b>Name of Inventor :</b>
(32) Priority Date	:04/01/2019	<b>1)PANDIS, Spyridon, Errikos</b>
(33) Name of priority country	:EPO	<b>2)IACCARINO, Luca</b>
(86) International Application No	:PCT/EP2019/087134	
Filing Date	:30/12/2019	
(87) International Publication No	:WO 2020/141152	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A comb (100) for a hair cutting appliance (10) is provided. The comb comprises: a first comb portion (110) defining a comb surface (112) to be held against a user's skin; a second comb portion (120) comprising a plurality of comb teeth (122) projecting from the first comb portion in a first direction D1, the first direction having a component in a direction perpendicular to the comb surface, wherein the plurality of comb teeth are spaced apart from one another in a second direction D2, the second direction being parallel to the comb surface; a third comb portion (130) comprising one or more further comb teeth (132) extending in a third direction D3, the third direction having a component in a direction perpendicular to the comb surface, wherein the further comb teeth are arranged on the same side of the comb surface as the comb teeth, and wherein the further comb teeth extend further forwards, in a direction D4 perpendicular to the first and second directions, than the comb teeth and/or the comb teeth extend further rearwards, in the direction perpendicular to the first and second directions, than the further comb teeth; and wherein the width of each of the further comb teeth in the second direction is approximately equal to the width of the spaces between the comb teeth.

No. of Pages : 12 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032814 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ADAPTIVE HELICAL COMPUTED TOMOGRAPHY

(51) International classification	:A61B0006000000, A61B0006030000, A61B0006020000, A61B0005055000, A61B0006040000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19150983.5	(72) <b>Name of Inventor :</b>
(32) Priority Date	:09/01/2019	<b>1)BONTUS, Claas</b>
(33) Name of priority country	:EPO	<b>2)SCHMITT, Holger</b>
(86) International Application No	:PCT/EP2020/050112	
Filing Date	:06/01/2020	
(87) International Publication No	:WO 2020/144124	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A device (10) for controlling an image acquisition of a multi-slice computed tomography system (1), MSCT, is disclosed. The device comprises an input (11) for receiving projection image data from the MSCT (1), an output (12) for controlling operation of the MSCT (1) and a processor (13). The processor (13) is adapted for controlling the MSCT to acquire a large volume localizer radiograph, and for defining an organ region in the localizer radiograph that delimits an organ of interest. The processor is adapted for acquiring a large volume helical CT scan of the subject, in which an X-ray cone angle is increased when the organ region in the subject is translated into the examination volume and decreased when the organ region is translated out of the examination volume.

No. of Pages : 18 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032815 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AUTHENTICATION SYSTEM WITH REDUCED ATTACK SURFACE

(51) International classification	:H04L0029060000, H04L0009320000, G06Q0020360000, H04W0012060000, H04L0009080000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19150995.9	(72) <b>Name of Inventor :</b>
(32) Priority Date	:09/01/2019	<b>1)DE HOOGH, Sebastiaan, Jacobus, Antonius</b>
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2020/050075	
Filing Date	:03/01/2020	
(87) International Publication No	:WO 2020/144110	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Some embodiments are directed to an authentication system (100; 101; 102) for computing an authentication token for a service provider to authenticate a user system to the service provider, the authentication system comprising a processor configured to jointly blind with a user system an encrypted user identity and to compute an encrypted identity for the service provider from the blinded encrypted user identity.

No. of Pages : 34 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032828 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : UPLINK SIGNAL TRANSMISSION METHOD AND DEVICE

(51) International classification	:H04L0001180000, H04W0072040000, H04W0072000000, H04B0007060000, H04W0074080000	(71) <b>Name of Applicant :</b> <b>1)VIVO MOBILE COMMUNICATION CO., LTD.</b> Address of Applicant :#283, BBK Road, Wusha, Chang'an Dongguan, Guangdong 523860 China
(31) Priority Document No	:201811629804.2	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/12/2018	<b>1)SI, Ye</b>
(33) Name of priority country	:China	<b>2)SUN, Peng</b>
(86) International Application No	:PCT/CN2019/105440	<b>3)SUN, Xiaodong</b>
Filing Date	:11/09/2019	
(87) International Publication No	:WO 2020/134188	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Provided in the embodiment of the present invention is an uplink signal transmission method and device, relating to the technical field of communications and used for solving the problem that how to transmit an uplink signal by a terminal device in a NR network system. The method comprises: transmitting a target uplink signal on the basis of a target transmission pattern, wherein the target transmission pattern is related to at least one of the uplink beamforming capability of a terminal device and the number of retransmissions of the target uplink signal. The embodiment of the present invention is used for the transmission of an uplink signal.

No. of Pages : 52 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032877 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : MITOCHONDRIAL DNA DELETIONS ASSOCIATED WITH ENDOMETRIOSIS

(51) International classification	:C12Q0001688300, C12Q0001688600, C12Q0001687400, C12N0009140000, C07K0014245000	(71) <b>Name of Applicant :</b> <b>1)MDNA LIFE SCIENCES INC.</b> Address of Applicant :Corporation Trust Centre 1209 Orange Street Wilmington, Delaware 19801 U.S.A.
(31) Priority Document No	:62/784403	(72) <b>Name of Inventor :</b>
(32) Priority Date	:22/12/2018	<b>1)CREED, Jennifer</b>
(33) Name of priority country	:U.S.A.	<b>2)MAGGRAH, Andrea</b>
(86) International Application No	:PCT/US2019/068098	<b>3)REGULY, Brian</b>
Filing Date	:20/12/2019	<b>4)HARBOTTLE, Andrew</b>
(87) International Publication No	:WO 2020/132596	<b>5)USHER, Robert</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Aberrant mitochondrial DNA (mtDNA) molecules having specific large-scale deletions and having an association with endometriosis are provided. The aberrant, or mutated, mtDNA may comprise the parent nucleic acid (i.e. the large sublimon), particularly when re-circularized, wherein adjacent nucleotides are fused following the deletion to form a junction site. Alternatively, the mtDNA may comprise the deleted strand (i.e. the small sublimon), also particularly when re-circularized to create a junction site. In addition, fusion transcripts resulting from such mutated mtDNA, and their putative protein products, are provided, where such transcripts and proteins are also associated with endometriosis. Hybridization probes and amplification primers and kits containing same are provided for detecting, diagnosing, or monitoring endometriosis.

No. of Pages : 85 No. of Claims : 54

(54) Title of the invention : SUBSTRATE PROVIDED WITH A STACK HAVING THERMAL PROPERTIES AND AN ABSORBENT LAYER

(51) International classification	:C03C0017360000, B32B0017100000, G02B0001100000, G02B0005280000, G02B0005200000	(71) <b>Name of Applicant :</b> <b>1)SAINT-GOBAIN GLASS FRANCE</b> Address of Applicant :12 place de l'Iris Tour Saint-Gobain 92400 Courbevoie France
(31) Priority Document No	:1900314	(72) <b>Name of Inventor :</b>
(32) Priority Date	:14/01/2019	<b>1)MONMEYRAN, Corentin</b>
(33) Name of priority country	:France	<b>2)MARTIN, Estelle</b>
(86) International Application No	:PCT/FR2020/050039	
Filing Date	:14/01/2020	
(87) International Publication No	:WO 2020/148498	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention relates to a substrate which is coated on one of its faces with a stack of thin layers having reflection properties in the infrared and/or in solar radiation, comprising two metallic functional layers, in particular on the basis of silver. Each of the metallic functional layers is disposed between two dielectric coatings. According to the invention, the dielectric coating (Di2) situated between the two functional layers (F) comprises at least one absorbent layer (A) which absorbs solar radiation in the visible part of the spectrum. It has been found that for a stack for laminated glazing, some symmetry at the functional metal layers and the dielectric layers 1 and 3 is favorable. The invention also relates to laminated glazings comprising such a substrate coated on side 2.

No. of Pages : 16 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032933 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : AIR JIG HAVING A PRESSURE-MEASURING DEVICE

(51) International classification	:B03B0004020000, B03B0004000000, B03B0004060000, B03B0005240000, B07B0004080000	(71) <b>Name of Applicant :</b> <b>1)ALLMINERAL AUFBEREITUNGSTECHNIK GMBH &amp; CO. KG</b> Address of Applicant :Willsttterstrae 15 40549 D¼sseldorf Germany
(31) Priority Document No	:10 2019 101 908.7	(72) <b>Name of Inventor :</b>
(32) Priority Date	:25/01/2019	<b>1)–ZDEMIR, Hakan</b>
(33) Name of priority country	:Germany	
(86) International Application No	:PCT/EP2020/050069	
Filing Date	:03/01/2020	
(87) International Publication No	:WO 2020/151931	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to an air jig for the dry processing of raw materials, in particular coal, comprising: at least one material-feeding device (1); at least one jigging-material carrier (2), which is provided with openings; an air funnel (3), which is arranged below the jigging-material carrier (2) and by means of which an air flow can be fed as working air (4) to the jigging-material carrier, which working air is composed of a partial flow constantly flowing through the jigging-material carrier (2) and a pulsing partial flow superposed thereon, such that the working air (4) can flow through the material fed onto the jigging-material carrier (2) and said material can be stratified into a heavy material layer (5) acting as a jig bed and into a light material layer (6) lying thereon; and a discharge device (7) for the heavy material and light material stratified on the jigging-material carrier (2) during the jigging process.

No. of Pages : 9 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032934 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ULTRAFINE BUBBLE MAKER AND ULTRAFINE BUBBLE WATER PREPARING DEVICE

(51) International classification	:B01F0003040000, F25B0031000000, F04D0029420000, F25B0041000000, F25B0049020000	(71)Name of Applicant : <b>1)MIIKE TEKKOU KABUSHIKIGAISHA</b> Address of Applicant :396-2, aza-Sannochou, ooaza- Kawaminami, Kannabechou, Fukuyama-shi Hiroshima 7202124 Japan
(31) Priority Document No	:2018-241810	(72)Name of Inventor :
(32) Priority Date	:25/12/2018	<b>1)KOBAYASHI, Yoshikazu</b>
(33) Name of priority country	:Japan	<b>2)KOBAYASHI, Hidemasa</b>
(86) International Application No	:PCT/JP2019/051036	<b>3)HAYASHI, Masahide</b>
Filing Date	:25/12/2019	<b>4)FUJIWARA, Koji</b>
(87) International Publication No	:WO 2020/138248	<b>5)ISHII, Etsuo</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This ultrafine bubble water preparing device 1 is provided with: a volute pump 3; an ejector 4; a cascade pump 6; a branch part P on the downstream side of the cascade pump 6; a return passage 7 connected from the branch part P to a portion between the ejector 4 and the cascade pump 6; a flow rate adjusting valve 9 and a first ultrafine bubble maker 2A which are provided in the return passage 7; a discharge path 8 connected to the branch part P; and a second ultrafine bubble maker 2B and a control device 13 which are provided in the discharge path 8. The control device 13 adjusts an air amount adjusting valve 5, the volute pump 3, the cascade pump 6, and the flow rate adjusting valve 9, on the basis of a measured value of a densitometer 10 in the discharge path 8 and measured values of first and second pressure gauges 11, 12 on the upstream and downstream sides of the cascade pump 6.

No. of Pages : 48 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032936 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD FOR MANUFACTURING NONAQUEOUS ELECTROLYTE SECONDARY BATTERY AND NONAQUEOUS ELECTROLYTE SECONDARY BATTERY

(51) International classification	:H01M0010058700, H01M0004525000, H01M0004505000, H01M0010040000, H01M0010052500	(71)Name of Applicant : <b>1)SANYO ELECTRIC CO., LTD.</b> Address of Applicant :1-1, Sanyo-cho, Daito-shi, Osaka 5748534 Japan
(31) Priority Document No	:2019-021805	(72)Name of Inventor : <b>1)</b>
(32) Priority Date	:08/02/2019	
(33) Name of priority country	:Japan	
(86) International Application No	:PCT/JP2019/046298	
Filing Date	:27/11/2019	
(87) International Publication No	:WO 2020/162000	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The nonaqueous electrolyte secondary battery according to one embodiment of the present invention includes a flat wound electrode body in which a positive plate and a negative plate are wound via a separator and is characterized in that the positive plate has a positive core and a positive mixed material layer that is formed on both sides of the positive core, the positive mixed material layer includes a lithium metal composite oxide represented by general formula  $Li1+xMaO2+b$  (in the formula, x, a, and b satisfy the conditions  $x+a=1$ ,  $-0.2$

No. of Pages : 21 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032937 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : UPDRAFT GASIFIER AND METHOD, APPARATUS, AND SYSTEM FOR BIOMASS DECOMPOSITION

(51) International classification	:C10B0053020000, C10B0053000000, F23G0005027000, C10J0003660000, C10B0057020000	(71) <b>Name of Applicant :</b> <b>1)CUMMINS INC.</b> Address of Applicant :500 Jackson Street Columbus, Indiana 47201 U.S.A.
(31) Priority Document No	:62/798025	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2019	<b>1)PENDRAY, John, R.</b>
(33) Name of priority country	:U.S.A.	<b>2)CHANG, Ismael</b>
(86) International Application No	:PCT/US2020/015205	<b>3)HAMILTON-ANTONSON, Jaimie, E.</b>
Filing Date	:27/01/2020	
(87) International Publication No	:WO 2020/159867	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A method, system, and apparatus for decomposing a biomass feedstock include providing a layer of inert particulate matter, such as sand, to line and insulate the bottom surface of a main chamber of a reactor where pyrolysis and oxidation are conducted to produce char and producer gases as primary products. In an embodiment, feedstock positioned in a side region of the reaction chamber insulates side walls of the main chamber from heat in the center region of the main chamber. In an embodiment of the method, a rate of removal of solid products such as char from the reactor is controlled in response to a temperature detected at a position of an extraction tube inlet of the reactor. Activated charcoal may be obtained as a primary product using the system and method, by feeding oxygen into the reactor at an inlet positioned adjacent to an inlet to the extraction chamber.

No. of Pages : 17 No. of Claims : 31

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032938 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ANTI-ELASTIN ANTIBODIES AND METHODS OF USE

(51) International classification :A61K0039000000,  
C07K0016280000,  
A61K0045060000,  
C07K0016420000,  
A61K0047690000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :PCT/US2019/014537  
Filing Date :22/01/2019  
(87) International Publication No :WO 2020/153940  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)CLEMSON UNIVERSITY RESEARCH FOUNDATION**  
Address of Applicant :P.O. Box 946 Clemson, SC 29633-0946  
U.S.A.  
(72)Name of Inventor :  
**1)VYAVAHARE, Narendra R.**  
**2)RICE, Charles D.**  
**3)NOSOUDI, Nasim**  
**4)PARASARAM, Vaideesh**  
**5)KARAMCHED, Saketh**

(57) Abstract :

Antibodies and antigen binding fragments thereof that specifically recognize and bind an epitope of elastin that is exposed and accessible in degraded elastic fiber are described. The antibodies and/or antigen binding fragments can be operably linked to a secondary component including biologically active agents such as therapeutics and/or imaging agents. Optionally, the antibodies and/or antigen binding fragments thereof can be attached to a surface of a carrier, such as a particle, for specific binding and delivery of the carried agents to degraded elastic fiber.

No. of Pages : 43 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032939 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : LUBRICANT COMPOSITION FOR BALL JOINTS

(51) International classification :C10M0169060000,  
C10M0169000000,  
F16C0011060000,  
G01N0019020000,  
C10M0161000000  
(31) Priority Document No :2018-244984  
(32) Priority Date :27/12/2018  
(33) Name of priority country :Japan  
(86) International Application No :PCT/EP2019/086915  
Filing Date :23/12/2019  
(87) International Publication No :WO 2020/136163  
(61) Patent of Addition to Application  
Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)SHELL INTERNATIONALE RESEARCH  
MAATSCHAPPIJ B.V.**  
Address of Applicant :Carel van Bylandtlaan 30 2596 HR  
THE HAGUE Netherlands  
**2)SHELL OIL COMPANY**  
(72)Name of Inventor :  
**1)FUJIMAKI, Yoshitomo**  
**2)YANO, Hiroki**  
**3)ABE, Kunitoshi**

(57) Abstract :

The invention provides a grease composition for a ball joint which has a low friction coefficient under a load from normal temperatures to high temperatures, a small difference between static friction and dynamic friction, and little change in the friction coefficient even after repeated operation. TO this end, the invention provides a grease composition for a ball joint comprising: (i) a polyisoprene rubber and/or (ii) a polyisoprene rubber viscous material; a specific aliphatic amide and/or a specific aliphatic bisamide; and a specific urea compound.

No. of Pages : 25 No. of Claims : 6

(54) Title of the invention : RAILWAY BRAKING DEVICE AND MANUFACTURING METHOD OF A RAILWAY BRAKING DEVICE

(51) International classification	:B33Y0030000000, B22F0003105000, B33Y0010000000, F15B0005000000, B60T0013660000	(71) <b>Name of Applicant :</b> <b>1)FAIVELEY TRANSPORT ITALIA S.P.A.</b> Address of Applicant :Via Volvera 51 10045 Piosasco (Torino) Italy
(31) Priority Document No	:102019000000999	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2019	<b>1)LORE', Giuseppe</b>
(33) Name of priority country	:Italy	<b>2)DE BURETEL DE CHASSEY, Henri Guillaume Marie</b>
(86) International Application No	:PCT/IB2020/050519	<b>3)TIONE, Roberto</b>
Filing Date	:23/01/2020	
(87) International Publication No	:WO 2020/152612	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A manufacturing method of a railway braking device (D) is described comprising a main body (MB) arranged to receive at least partially: at least two different pneumatic or electro-pneumatic elements (RV, 414, 416); and channels (C) connecting the at least two pneumatic or electro-pneumatic elements (RV, 414, 416); the manufacturing method comprising the step of: constructing said main body (MB) of the railway braking device (D) through additive manufacturing of a monolithic block provided with at least two seats (600, 602) for said at least two pneumatic or electro-pneumatic elements (RV, 414, 416) and said channels; a railway braking device (D) is further described constructed by means of a manufacturing method of a railway braking device (D).

No. of Pages : 10 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032942 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DEVICE AND METHOD FOR DELIVERING AN INGESTIBLE MEDICAMENT INTO THE GASTROINTESTINAL TRACT OF A USER

(51) International classification	:A61B0005000000, A61M0031000000, A61B0005070000, A61K0009480000, A61M0035000000	(71) <b>Name of Applicant :</b> <b>1)VIBRANT LTD.</b> Address of Applicant :Hakochav Yokneam Building P.O. Box 516 2069206 Yokneam Israel
(31) Priority Document No	:1900082.7	(72) <b>Name of Inventor :</b>
(32) Priority Date	:03/01/2019	<b>1)BEN-TSUR, Lior</b>
(33) Name of priority country	:U.K.	<b>2)MOLNAR, Shai</b>
(86) International Application No	:PCT/IB2020/050008	<b>3)SHABBAT, Ronny</b>
Filing Date	:02/01/2020	
(87) International Publication No	:WO 2020/141469	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Devices and methods for delivering an ingestible medicament of a medicament tablet into the gastrointestinal tract of a user. A device according to the invention includes a vibrating ingestible capsule and a hollow medicament compartment housing. The vibrating capsule includes a housing, a vibrating agitation mechanism disposed within the housing, a power supply, and a control element. The hollow medicament compartment housing is associated with the housing of the capsule and includes at least one aperture. The hollow of the medicament compartment housing is configured to have the medicament tablet disposed therein. The aperture(s) are dimensioned to enable fluid communication the surrounding environment and the hollow.

No. of Pages : 53 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147032951 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : OPEN LOOP POWER CONTROL FOR TWO-STEP RANDOM ACCESS

(51) International classification	:H04W0074080000, H04W0052240000, H04W0052140000, H04L0005000000, H04W0074000000	(71) <b>Name of Applicant :</b> <b>1)QUALCOMM INCORPORATED</b> Address of Applicant :Attn: International IP Administration 5775 Morehouse Drive San Diego, California 92121-1714 U.S.A.
(31) Priority Document No	:62/801527	(72) <b>Name of Inventor :</b>
(32) Priority Date	:05/02/2019	<b>1)LEI, Jing</b>
(33) Name of priority country	:U.S.A.	<b>2)SUNDARARAJAN, Jay Kumar</b>
(86) International Application No	:PCT/US2020/012606	<b>3)HE, Linhai</b>
Filing Date	:07/01/2020	<b>4)PARK, Seyong</b>
(87) International Publication No	:WO 2020/163032	<b>5)HUANG, Yi</b>
(61) Patent of Addition to Application Number	:NA	<b>6)LY, Hung Dinh</b>
Filing Date	:NA	<b>7)JI, Tingfang</b>
(62) Divisional to Application Number	:NA	<b>8)SORIAGA, Joseph Binamira</b>
Filing Date	:NA	<b>9)BHUSHAN, Naga</b>

(57) Abstract :

Methods, systems, and devices for wireless communications are described. A user equipment (UE) may receive system information from a base station indicating at least one configuration rule for power control parameter setting for random access. The UE may measure one or more reference signals and may estimate a path loss of wireless communications between the base station and the UE based on the measured reference signals. The UE may select one or more parameters from one or more sets of parameters indicated in the configuration rule. The UE may select a first transmit power for a preamble of a random access message and a second transmit power for a payload of the random access message, based on the estimated path loss and the configuration rule for power control parameters and power ramping procedures. The UE may transmit the random access message according to the selected first and second transmit powers.

No. of Pages : 63 No. of Claims : 71

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033006 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : HIGH RESOLUTION AUDIO CODING

(51) International classification	:G10L0019090000, G10L0025900000, G10L0019040000, G10L0019000000, G10L0025780000	(71) <b>Name of Applicant :</b> <b>1)HUAWEI TECHNOLOGIES CO., LTD.</b> Address of Applicant :Huawei Administration Building Bantian, Longgang District Shenzhen, Guangdong 518129 China
(31) Priority Document No	:62/791822	(72) <b>Name of Inventor :</b>
(32) Priority Date	:13/01/2019	<b>1)GAO, Yang</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2020/013301	
Filing Date	:13/01/2020	
(87) International Publication No	:WO 2020/146869	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods, systems, and apparatus, including computer programs encoded on computer storage media, for performing long-term prediction (LTP) are described. One example of the methods includes determining a pitch gain and a pitch lag of an input audio signal for at least a predetermined number of frames. It is determined that the pitch gain of the input audio signal has exceeded a predetermined threshold and that a change of the pitch lag of the input audio signal has been within a predetermined range for at least the predetermined number of frames. In response to determining that a pitch gain of the input audio signal has exceeded the predetermined threshold and that the change of the third pitch lag has been within the predetermined range for at least the predetermined number of frames, a pitch gain is set for a current frame of the input audio signal.

No. of Pages : 46 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033007 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PERMANENT ECO-FERTILIZER AGAINST FRUIT PHYSIOLOGICAL DISORDERS AND PESTS

(51) International classification	:C08K0003260000, C05D0003020000, C05G0001000000, C05G0005270000, C05F0003000000	(71) <b>Name of Applicant :</b> <b>1)S.A. REVERT% PRODUCTOS MINERALES</b> Address of Applicant :Afores s/n 08729 Castellet I La Gornal (Barcelona) Spain
(31) Priority Document No	:19382016.4	(72) <b>Name of Inventor :</b>
(32) Priority Date	:11/01/2019	<b>1)PRIETO GIG, Arcadio</b>
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2019/087130	
Filing Date	:30/12/2019	
(87) International Publication No	:WO 2020/144076	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention refers to a permanent solid calcium fertilizer suitable against fruit physiological disorders and pests, characterized in that it comprises more than 98.5% weight of calcium carbonate. It is also an object of the invention the use of this fertilizer for the protection of agricultural crops against pests and preferably for the protection of pear and/or apple crops.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033009 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR CONTENT AGNOSTIC FILE INDEXING

(51) International classification	:G06F0016174000, G06F0016130000, G06F0016220000, H04N0021845000, H04L0029060000	(71) <b>Name of Applicant :</b> <b>1)LOGNOVATIONS HOLDINGS, LLC</b> Address of Applicant :810 South Sterling Avenue Tampa, FL 33609 U.S.A. <b>2)MCELVEEN, Christopher</b>
(31) Priority Document No	:16/244332	(72) <b>Name of Inventor :</b>
(32) Priority Date	:10/01/2019	<b>1)MCELVEEN, Christopher</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2020/012661	
Filing Date	:08/01/2020	
(87) International Publication No	:WO 2020/146448	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A computer-implemented method for content-agnostic referencing of a binary data file, the method comprising: pregenerating a table of all permutations of data of a particular length, determining a length of the binary data file, the length comprising the number of bits of the binary data file; chunking the binary data into chunks of data of a smaller length; for each chunk, determining if the chunk is in the pregenerated table, and if so using that chunks index in the pregenerated table, and otherwise chunking the data again until the sub-chunks are located in the pregenerated table, and using the number of chunks and associated indices to indicate the binary data file.

No. of Pages : 14 No. of Claims : 19

(54) Title of the invention : SURFACE CLEANING UTENSIL

(51) International classification	:A47L0011400000, A47L0009040000, B08B0001000000, B01D0046100000, A47L0001020000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19152057.6	(72) <b>Name of Inventor :</b> <b>1)ESPIN FRANCO, Fermin</b>
(32) Priority Date	:16/01/2019	
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2020/050340	
Filing Date	:09/01/2020	
(87) International Publication No	:WO 2020/148136	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Surface cleaning utensil, comprising a wet cleaning unit (WCU) having a wetting unit (WP) and a brush unit (BU) for brushing a surface wetted by the wetting unit (WP), the brush unit (BP) having a brush (B) having a plurality of brush elements (BE) (e.g. bristles) at an angle of at least 45°, and preferably at least 70°, to a surface to be cleaned, and a driving unit for driving the brush to move in a plane at an angle of at most 45°, and preferably at most 20°, to the surface. Preferably, the brush unit (BU) comprises a plurality of rotating brushes (B) having a rotation axis at an angle of at least 45°, and preferably at least 70°, to the surface to be cleaned, wherein at least 50% of an area defined by a circumference of each brush (B) is provided with brush elements (BE). Preferably, adjacent brushes (B) have opposite rotation directions. Preferably, the brushes (B) comprise gear-shaped elements (G). Preferably, the driving unit is arranged for causing a translational movement of the brush (B) with respect to the surface cleaning utensil. Preferably, the wet cleaning unit further comprises a drying pad (DP), the brush unit (BU) being positioned between the wetting unit (WP) and the drying pad (DP). Preferably, the surface cleaning utensil further comprises an air inlet (N) located before the wet cleaning unit (WCU) in a motion direction of the surface cleaning utensil.

No. of Pages : 5 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033088 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : IRRIGATOR FLUIDIC COMMUNICATION

(51) International classification	:A61C0017020000, A47G0033020000, A61M0003020000, D06F0033000000, A61M0025010000	(71)Name of Applicant : <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:62/791965	(72)Name of Inventor : <b>1)GROVES, Jeffrey</b>
(32) Priority Date	:14/01/2019	<b>2)ZIJLSTRA, Aldert Geert</b>
(33) Name of priority country	:U.S.A.	<b>3)FARRELL, Nathan</b>
(86) International Application No	:PCT/EP2020/050735	<b>4)KOOIJKER, Klaas</b>
Filing Date	:14/01/2020	<b>5)BOERSMA, Joldert Maria</b>
(87) International Publication No	:WO 2020/148241	<b>6)GEBRESILASSIE, Desalegn</b>
(61) Patent of Addition to Application Number	:NA	<b>7)VAN DE VEEN, Egbert</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An oral irrigator having an irrigator tip, the tip including a handle portion, a tip portion, a channel in fluid communication with the tether and arranged within the handle portion and the tip portion, and an actuator located on or within the handle portion, the actuator arranged to at least partially alter a flow of a fluid through the channel. The oral irrigator further includes a housing, the housing having a reservoir in fluid communication with a pump sub-assembly, a sensor arranged to measure a first pressure or first electrical load within the pump sub-assembly, and a control unit arranged to control an operational current provided to the pump sub-assembly where operation of the actuator produces a second pressure or electrical load measured by the sensor and the control unit is arranged to alter the operational current of the motor in response to the change.

No. of Pages : 27 No. of Claims : 15

(54) Title of the invention : WIRELESS POWER TRANSFER

(51) International classification	:H02J0007020000, H02J0050800000, H02J0050100000, H02J0050120000, H02J0007000000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19152176.4	(72) <b>Name of Inventor :</b>
(32) Priority Date	:16/01/2019	<b>1)STARING, Antonius, Adriaan, Maria</b>
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2020/050003	
Filing Date	:02/01/2020	
(87) International Publication No	:WO 2020/148096	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A power transmitter (101) provides power to a power receiver (105) via an electromagnetic power transfer signal. The power transmitter (101) comprises an output circuit (302, 103) with a transmitter coil (103) generating the power transfer signal in response to a drive signal generated by a driver (301). A configuration controller (303) switches between power transfer configurations having different maximum power limits and voltage amplitudes for the drive signal. A transmitter (307) transmits a power configuration message to the power receiver (105) comprising data indicative of a voltage amplitude for a first power transfer configuration a receiver (305) receives a power transfer configuration change request message from the power receiver (105). The configuration controller (303) switches the power transmitter (101) to the first power transfer configuration in response to the power transfer configuration change request message. The approach allows a power transmitter and receiver to collaborate to change power transfer configurations providing different maximum power limits.

No. of Pages : 33 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033090 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : FUNCTIONALIZED SUBSTRATE TO MANIPULATE CELL FUNCTION AND DIFFERENTIATION

(51) International classification	:C12M0001420000, A61K0038190000, A61L0027180000, C12N0015100000, F01N0003022000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19152226.7	(72) <b>Name of Inventor :</b>
(32) Priority Date	:17/01/2019	<b>1)VAN DE STOLPE, Anja</b>
(33) Name of priority country	:EPO	<b>2)BECKERS, Lucas, Johannes, Anna, Maria</b>
(86) International Application No	:PCT/EP2020/051125	
Filing Date	:17/01/2020	
(87) International Publication No	:WO 2020/148427	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a scaffold for steering cells into a predetermined direction of cell functionality, preferably a cell differentiation scaffold for steering cells into a predetermined direction of cell differentiation. The scaffold comprises a polydimethylsiloxane (PDMS)-, or rubber-, or silicone-based polymeric surface, and one or more cell functionality-inducing stimuli, preferably one or more cell differentiation-inducing stimuli, coupled to the polymeric surface.

No. of Pages : 36 No. of Claims : 19

(54) Title of the invention : AUTOMATED DETECTION OF RECEIVE COIL LOCATION

(51) International classification	:A61B0005055000, G01R0033340000, A61B0005000000, G01R0033480000, G01R0033280000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19151321.7	(72) <b>Name of Inventor :</b>
(32) Priority Date	:11/01/2019	<b>1)VERNICKEL, Peter</b>
(33) Name of priority country	:EPO	<b>2)LEUSSLER, Christoph, G<sup>1</sup>/nther</b>
(86) International Application No	:PCT/EP2020/050471	<b>3)LIPS, Oliver</b>
Filing Date	:10/01/2020	<b>4)SCHMALE, Ingo</b>
(87) International Publication No	:WO 2020/144300	<b>5)FINDEKLEE, Christian</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The invention provides for a magnetic resonance imaging system (100, 300). The magnetic resonance imaging system comprises: a subject support (120) configured for moving a subject between a loading position (121) and an imaging position (200); a receive magnetic resonance imaging coil (114) configured for being placed on the subject; and a light detection system (115) comprising at least one ambient light sensor for measuring light data (144). The light detection system is any one of the following: mounted to the main magnet such that the light data is measured from the imaging zone and mounted to the receive magnetic resonance imaging coil. The execution of the machine executable (140) instructions by a processor (130) cause the processor to: move (500) the subject support from the loading position to the imaging position; acquire (502) the light data using the at least one ambient light sensor when the subject support is in the imaging position; determine (504) if the receive magnetic resonance imaging coil is positioned for acquiring magnetic resonance imaging data using the light data; and provide (506) a signal (146) if the receive magnetic resonance imaging coil is positioned for acquiring the magnetic resonance imaging data.

No. of Pages : 23 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033108 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COFFEE EXTRACTION PROCESS AND COFFEE PRODUCT

(51) International classification	:A23F0005400000, A23F0005240000, A23F0005360000, A23F0005140000, A61K0039000000	(71)Name of Applicant : <b>1)KONINKLIJKE DOUWE EGBERTS B.V.</b> Address of Applicant :Vleutensevaart 35 3532 AD Utrecht Netherlands
(31) Priority Document No	:1821274.6	(72)Name of Inventor :
(32) Priority Date	:28/12/2018	<b>1)HENSON, Sian</b>
(33) Name of priority country	:U.K.	<b>2)ASHWORTH, Paul</b>
(86) International Application No	:PCT/EP2019/086859	<b>3)FOX, Simon</b>
Filing Date	:20/12/2019	<b>4)KENNY, Francisco Javier Silanes</b>
(87) International Publication No	:WO 2020/136146	<b>5)EDGE, Charles</b>
(61) Patent of Addition to Application Number	:NA	<b>6)ESPINO ORD‘EZ, Eva</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention provides an instant coffee composition for forming a coffee beverage, wherein the composition comprises at least 6wt% of an insoluble coffee sediment fraction, the insoluble coffee sediment fraction comprising, when analysed after acid hydrolysis, 1 wt% or less arabinose.

No. of Pages : 29 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033110 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PSEUDOBOEHMITE, AND MANUFACTURING METHOD THEREFOR AND APPLICATION THEREOF

(51) International classification	:C10G0011050000, B01J0035100000, B01J0021040000, B01J0037040000, B01J0029080000	(71)Name of Applicant : <b>1)CHINA PETROLEUM &amp; CHEMICAL CORPORATION</b> Address of Applicant :No.22 Chaoyangmen North Street, Chaoyang District Beijing 100728 China <b>2)DALIAN RESEARCH INSTITUTE OF PETROLEUM AND PETROCHEMICALS, SINOPEC CORP.</b>
(31) Priority Document No	:201811618213.5	(72)Name of Inventor :
(32) Priority Date	:28/12/2018	<b>1)ZHU, Huihong</b>
(33) Name of priority country	:China	<b>2)YANG, Tao</b>
(86) International Application No	:PCT/CN2019/129197	<b>3)LIU, Tiebin</b>
Filing Date	:27/12/2019	<b>4)JIN, Hao</b>
(87) International Publication No	:WO 2020/135714	<b>5)YANG, Guang</b>
(61) Patent of Addition to Application Number	:NA	<b>6)LIU, Lu</b>
Filing Date	:NA	<b>7)LV, Zhenhui</b>
(62) Divisional to Application Number	:NA	<b>8)FANG, Xiangchen</b>
Filing Date	:NA	

(57) Abstract :

Provided is a pseudoboehmite, which has a dry basis content of 55-85wt%, includes phosphate groups, and has a sodium oxide content not greater than 0.5wt% and a phosphorus content as phosphorus pentoxide of 1.2-5.7wt%, relative to the pseudoboehmite total weight 100wt%. The present pseudoboehmite has advantages such as a very low sodium content. Also provided are a manufacturing method for the pseudoboehmite, and an application of the pseudoboehmite in aluminium oxide manufacturing, hydrogenation catalyst manufacturing and oil hydrogenation.

No. of Pages : 31 No. of Claims : 16

(54) Title of the invention : BALLISTIC-RESISTANT ARTICLE BASED ON FILMS PROVIDED WITH MATRIX

(51) International classification	:F41H0005040000, B32B0005260000, B32B0018000000, B32B0038000000, B32B0005020000	(71) <b>Name of Applicant :</b> <b>1)TEIJIN ARAMID B.V.</b> Address of Applicant :Velperweg 76 6824 BM ARNHEM Netherlands
(31) Priority Document No	:19153440.3	(72) <b>Name of Inventor :</b>
(32) Priority Date	:24/01/2019	<b>1)CALIS, Ruben</b>
(33) Name of priority country	:EPO	<b>2)WILBERS, Dennis</b>
(86) International Application No	:PCT/EP2020/051711	
Filing Date	:24/01/2020	
(87) International Publication No	:WO 2020/152309	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention pertains to a process for the manufacture of a ballistic resistant article comprising the steps of a) stacking a stretchable lamina of ultra-high molecular weight polyethylene (UHMWPE) and a stretchable continuous film of a polymer as organic matrix material to form a lamina-film stack, the continuous film of a polymer as organic matrix material not being an UHMWPE film, b) elongating the lamina-film stack formed in step a) at a temperature below the melting point of the stretchable UHMWPE lamina, to an elongation ratio of at least 2, thereby providing a UHMWPE film with an organic matrix material in which the UHMWPE film is co-stretched with the film of polymer as organic matrix material, c) aligning a plurality of films provided according to step b) to form a layer of films, d) stacking at least two layers of films formed according to step c) to form a sheet, e) stacking a plurality of sheets formed according to step d) to form a stack of sheets, and consolidating the sheets prior to and/or after stacking according to step e) by applying pressure and optionally heat. The invention also pertains to a ballistic-resistant article that can be obtained by the claimed method.

No. of Pages : 35 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033140 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ATMOSPHERIC WATER GENERATOR WITH A DEFROST SYSTEM

(51) International classification	:F25B0047020000, E03B0003280000, F25B0041040000, F25B0013000000, B60H0001000000	(71) <b>Name of Applicant :</b> <b>1)WATERGEN LTD.</b> Address of Applicant :2 Granit Street Petah Tiqwa 4951446 Israel
(31) Priority Document No	:62/789648	(72) <b>Name of Inventor :</b>
(32) Priority Date	:08/01/2019	<b>1)DULBERG, Sharon</b>
(33) Name of priority country	:U.S.A.	<b>2)GOLDBERG, Moshe</b>
(86) International Application No	:PCT/IL2020/050026	
Filing Date	:08/01/2020	
(87) International Publication No	:WO 2020/144681	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An atmospheric water generator (AWG) includes a defrost or reversing valve embedded on the refrigeration cycle of the AWG. The defrost or reversing valve enables, when activated, hot compressed refrigerant gas to flow from the condenser to the evaporator of the refrigeration cycle for melting frost buildup on the evaporator. In one embodiment, a defrost valve is connected, to the refrigerant line connecting the compressor to the condenser and to one of (i) the refrigerant line connecting the expansion means to the evaporator or (ii) the refrigerant line connecting the evaporator to the compressor.

No. of Pages : 25 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033141 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : GEARBOX WITH NOVEL BEARING CONFIGURATION FOR RAILWAY VEHICLE

(51) International classification :F16C0033660000,  
F16C0035040000,  
H02K0005173000,  
F16H0025200000,  
B01F0015000000

(31) Priority Document No :201811624264.9

(32) Priority Date :28/12/2018

(33) Name of priority country :China

(86) International Application No :PCT/CN2019/113951

Filing Date :29/10/2019

(87) International Publication No :WO 2020/134510

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)CRRC QISHUYAN INSTITUTE CO., LTD.**

Address of Applicant :No. 258, Wuyi Road Changzhou,  
Jiangsu 213011 China

(72)Name of Inventor :

**1)LI, Feng**

**2)QUE, Hongbo**

**3)ZHAO, Hui**

**4)LI, Hua**

**5)JIN, Siqin**

(57) Abstract :

A gearbox for a railway vehicle, comprising a driving shaft (120), a driven shaft (180), a first bearing seat (169) and a second bearing seat (183). The gearbox further comprises a first roller bearing (150) provided between the first bearing seat (169) and the driving shaft (120), a ball bearing (130), a bearing inner retaining ring (149) and a bearing outer retaining ring (140) for drainage. The bearing inner retaining ring (149) and the bearing outer retaining ring (140) are provided between the first roller bearing (150) and the ball bearing (130) along the axial direction of the driving shaft (120), a first drainage channel is provided on the bearing outer retaining ring (140), and a second drainage channel (162) is provided on the first bearing seat (169). A lubricant can sequentially pass through the second drainage channel (162) and the first drainage channel and be guided from the outside of the first bearing seat (169) into the first roller bearing (150) and the ball bearing (130). The gearbox can greatly improve the lubrication performance on the first roller bearing and the ball bearing on the driving shaft, and is particularly suitable for a low temperature working condition.

No. of Pages : 11 No. of Claims : 18

(54) Title of the invention : AUTOMATED ROAD SWEEPER AND ROAD CLEANING METHOD USING SAID ROAD SWEEPER

(51) International classification	:E01H0001080000, E21B0037020000, G03G0015040000, B65G0045100000, B08B0009000000	(71) <b>Name of Applicant :</b> <b>1)DULEVO INTERNATIONAL S.P.A.</b> Address of Applicant :Via Giovannino Guareschi, 1 43012 Fontanellato (Parma) Italy
(31) Priority Document No	:102019000001111	(72) <b>Name of Inventor :</b>
(32) Priority Date	:25/01/2019	<b>1)TAGLIAFERRI, Fabrizio</b>
(33) Name of priority country	:Italy	
(86) International Application No	:PCT/IB2019/060720	
Filing Date	:12/12/2019	
(87) International Publication No	:WO 2020/152526	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

An automated road sweeper (1) is provided comprising means of transport (2) suitable to allow the sweeper (1) to travel on a road surface (10) including debris (11), a plurality of cleaning members (3) arranged at fixed points located in different portions of the sweeper (1) and suitable for cleaning within predetermined cleaning areas (3a), and selection means (4) operatively connected to the cleaning members (3), suitable for scanning the road surface (10) and locating the debris (11) so as to select and exclusively operate the cleaning members (3), the cleaning area (3a) of which covers the debris (11) during the movement of the sweeper (1).

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033144 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR CONDITIONING GAS FOR ANALYSIS

(51) International classification	:G01N0033000000, G01N0033497000, A61B0005145000, B01L0003000000, G01N0021750000	(71) <b>Name of Applicant :</b> <b>1)BIOMETRY INC.</b> Address of Applicant :50 Milk Street Floor 15 Boston, MA 02109 U.S.A.
(31) Priority Document No	:62/797147	(72) <b>Name of Inventor :</b>
(32) Priority Date	:25/01/2019	<b>1)NOLAN, Bryan</b>
(33) Name of priority country	:U.S.A.	<b>2)MORGAN, Thomas, T.</b>
(86) International Application No	:PCT/US2020/015250	<b>3)CAMPBELL, Devon, C.</b>
Filing Date	:27/01/2020	
(87) International Publication No	:WO 2020/154740	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods and systems for conditioning a gas sample for analysis and measuring, detecting, and/or determining the concentration of at least one analyte in a gas sample. Methods include a combination and/or repetition of dehumidifying and/or humidifying the gas, and/or performing a chemical reaction on an analyte, and measuring, detecting, and/or determining the concentration of an analyte or an output analyte resulting from the chemical reaction. Systems to adjust the humidity of a gas sample and/or perform a chemical reaction on an analyte, and measure, detect, and/or determine the concentration of an analyte or an output analyte resulting from the chemical reaction comprise cartridges, capsules, test strips or test strip chambers and one or more sensors. Systems may further comprise a humidity exchange material to further adjust the humidity. Gas samples include exhaled breath. Analytes include nitric oxide. Output analytes include nitrogen dioxide.

No. of Pages : 76 No. of Claims : 173

(54) Title of the invention : SYSTEMS AND/OR METHODS FOR PARALLAX CORRECTION IN LARGE AREA TRANSPARENT TOUCH INTERFACES

(51) International classification	:G06K0009000000, G06F0003041000, G06F0003010000, G06F0003044000, G06F0003048800	(71) <b>Name of Applicant :</b> <b>1)GUARDIAN GLASS, LLC</b> Address of Applicant :2300 Harmon Road Auburn Hills, Michigan 48326 U.S.A.
(31) Priority Document No	:62/786679	(72) <b>Name of Inventor :</b>
(32) Priority Date	:31/12/2018	<b>1)SOBOLEV, Alexander</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/IB2019/061453	
Filing Date	:31/12/2019	
(87) International Publication No	:WO 2020/141446	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

Certain example embodiments of this invention relate to dynamically determining perspective for parallax correction purposes, e.g., in situations where large area transparent touch interfaces and/or the like are implemented. By leveraging computer vision software libraries and one or more cameras to detect the location of a user's viewpoint and a capacitive touch panel to detect a point that has been touched by that user in real time, it becomes possible to identify a three-dimensional vector that passes through the touch panel and towards any/all targets that are in the user's field of view. If this vector intersects a target, that target is selected as the focus of a user's touch and appropriate feedback can be given. These techniques advantageously make it possible for users to interact with one or more physical or virtual objects of interest beyond a transparent touch panel.

No. of Pages : 44 No. of Claims : 102

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033160 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PICHIA PASTORIS MUTANT STRAIN FOR EXPRESSING EXOGENOUS GENE

(51) International classification :C12N0015810000,  
C12N0009020000,  
C12N0009200000,  
C12R0001840000,  
C12R0001150000  
(31) Priority Document No :201811619556.3  
(32) Priority Date :28/12/2018  
(33) Name of priority country :China  
(86) International Application No :PCT/CN2019/129359  
Filing Date :27/12/2019  
(87) International Publication No :WO 2020/135763  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)WILMAR (SHANGHAI) BIOTECHNOLOGY  
RESEARCH & DEVELOPMENT CENTER CO., LTD**  
Address of Applicant :No.118 Gaodong Road, Pudong New  
District Shanghai 200137 China  
(72)Name of Inventor :  
**1)WU, Wei  
2)DAI, Xiaojun  
3)CAO, Haisheng  
4)ZHOU, Meifeng  
5)NIU, Qiwen**

(57) Abstract :

Provided is a Pichia pastoris mutant strain for expressing an exogenous gene. Specifically, provided is a Pichia pastoris mutant strain comprising, with respect to Pichia pastoris mutant strain GS115 or CICC32806, one or more of the following six mutations: BQ9382\_C1-2260, EKK deletions at positions 308-310, a hypothetical protein; BQ9382\_C1-3800, E129K, 60S ribosomal subunit assembly/exported protein LOC1; BQ9382\_C1-5700, I312M, mitochondrial external NADH dehydrogenase, type II NAD(P)H:quinone oxidoreductase; BQ9382\_C2-3950, Q145X, an essential protein having a binding partner Psr1p and used for completely activating a general stress response; BQ9382\_C3-2220, E188K, a hypothetical protein, and BQ9382\_C3-4370, W196X, orotidine 5'-phosphate decarboxylase. The provided Pichia pastoris mutant strain is an effective commonly employed host for exogenous expression, and can efficiently express different proteins, especially phospholipase and lipase.

No. of Pages : 39 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033162 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ATMOSPHERIC WATER GENERATOR WITH WATER COOLING SYSTEM

(51) International classification :H01F0027100000,  
C02F0001440000,  
E03B0003280000,  
F25D0031000000,  
F28D0001060000  
(31) Priority Document No :62/789648  
(32) Priority Date :08/01/2019  
(33) Name of priority country :U.S.A.  
(86) International Application No :PCT/IL2020/050027  
Filing Date :08/01/2020  
(87) International Publication No :WO 2020/144682  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)WATERGEN LTD.**  
Address of Applicant :2 Granit Street Petah Tiqwa 4951446  
Israel  
(72)Name of Inventor :  
**1)DULBERG, Sharon**  
**2)NECHEMIA, Chen**

(57) Abstract :

An atmospheric water generator (AWG) with a water cooling system is disclosed. In some embodiments, the AWG includes a cooling compartment defined by walls, designed to comprise a cooling medium and comprising a refrigerant coil. The storage tank for storing the water that are generated by the AWG shares at least a portion of a common wall with the cooling compartment. The refrigerant coil of the cooling compartment is in fluid communication with the refrigeration cycle and designed to be at least partially submerged in the cooling medium. In some embodiments, the stored water tank is submerged in the cooling compartment. Other embodiments are also disclosed.

No. of Pages : 25 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033194 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : TRANSMISSION GAP CONFIGURATION FOR RANDOM ACCESS MESSAGES

(51) International classification	:H04W0074080000, H04W0072040000, H04W0074000000, H04W0056000000, H04L0005000000	(71) <b>Name of Applicant :</b> <b>1)QUALCOMM INCORPORATED</b> Address of Applicant :Attn: International IP Administration 5775 Morehouse Drive San Diego, California 92121-1714 U.S.A.
(31) Priority Document No	:62/809505	(72) <b>Name of Inventor :</b>
(32) Priority Date	:22/02/2019	<b>1)LEI, Jing</b>
(33) Name of priority country	:U.S.A.	<b>2)GAAL, Peter</b>
(86) International Application No	:PCT/US2020/013679	<b>3)SORIAGA, Joseph Binamira</b>
Filing Date	:15/01/2020	<b>4)CHEN, Wanshi</b>
(87) International Publication No	:WO 2020/171898	<b>5)PARK, Seyong</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods, systems, and devices for wireless communications are described in which a UE may determine a time duration of a transmission gap between a random access preamble and random access payload. The time duration of the transmission gap may be based on a configuration of the random access channel resources, a timing adjustment for uplink transmissions from the UE, a beam management procedure at the UE and/or the base station, or combinations thereof. The UE may select an initial transmission gap duration based on the configuration of the random access channel resources, and may adjust the initial transmission gap duration based on the timing adjustment. Multiple UEs may be configured such that random access channel transmissions align with a random access occasion (RO) window. A base station may decode messages from multiple UEs using joint or successive decoding to recover the corresponding random access messages.

No. of Pages : 72 No. of Claims : 46

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033198 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMMUNICATION METHOD, COMMUNICATION APPARATUS, AND STORAGE MEDIUM

(51) International classification	:H04W0072040000, H04L0005000000, H04L0001000000, H04W0072120000, H04B0001100000	(71) <b>Name of Applicant :</b> <b>1)HUAWEI TECHNOLOGIES CO., LTD.</b> Address of Applicant :Huawei Administration Building, Bantian,Longgang District Shenzhen, Guangdong 518129 China
(31) Priority Document No	:201910023940.5	(72) <b>Name of Inventor :</b>
(32) Priority Date	:10/01/2019	<b>1)LI, Shengyu</b>
(33) Name of priority country	:China	<b>2)GUAN, Lei</b>
(86) International Application No	:PCT/CN2019/127702	<b>3)LI, Yuan</b>
Filing Date	:24/12/2019	
(87) International Publication No	:WO 2020/143441	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present application provides a communication method, a communication apparatus and a storage medium. Said method comprises: a terminal device determining uplink information; when the uplink information is first feedback information, the terminal device determining a first uplink control channel resource corresponding to the first feedback information and sending the first feedback information on the first uplink control channel resource; and when the uplink information comprises aperiodic channel state information (A-CSI), the terminal device determining a second uplink control channel resource corresponding to the uplink information and sending the uplink information on the second uplink control channel resource, the first uplink control channel resource being different from the second uplink control channel resource. Thus, a network device identifies, by means of a control channel resource used by received uplink information, whether the uplink information contains A-CSI, and is able to correctly receive uplink information, without the need to perform blind detections multiple times, having low receiving complexity.

No. of Pages : 76 No. of Claims : 46

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033201 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A BIMETALLIC NANOPARTICLE-BASED CATALYST, ITS USE IN SELECTIVE HYDROGENATION, AND A METHOD OF MAKING THE CATALYST

(51) International classification	:B01J0035000000, B01J0037000000, B01J0037020000, B01J0035100000, B01J0023440000	(71)Name of Applicant : <b>1)SHELL OIL COMPANY</b> Address of Applicant :Woodcreek Campus P.O. Box 576 Houston, Texas 77001-0576 U.S.A. <b>2)SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.</b>
(31) Priority Document No	:62/793561	(72)Name of Inventor :
(32) Priority Date	:17/01/2019	<b>1)HERZFELD, Tobias</b>
(33) Name of priority country	:U.S.A.	<b>2)KLEMT, Andreas</b>
(86) International Application No	:PCT/US2020/013682	<b>3)SCHOLZ, Sven</b>
Filing Date	:15/01/2020	
(87) International Publication No	:WO 2020/150354	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Presented is a selective hydrogenation catalyst and a method of making the catalyst. The catalyst comprises a carrier containing bi-metallic nanoparticles. The nanoparticles comprise a silver component and a palladium component. The catalyst is made by incorporating an aqueous dispersion of the bi-metallic nanoparticles onto a catalyst carrier followed by drying and calcining the carrier having incorporated therein the dispersion. The catalyst is used in the selective hydrogenation of highly unsaturated hydrocarbons contained olefin product streams.

No. of Pages : 19 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033209 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : VACUUM CLEANER NOZZLE

(51) International classification	:H01R0009240000, A47L0009020000, H04Q0001140000, H01R0024540000, H01R0105000000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19152585.6	(72) <b>Name of Inventor :</b>
(32) Priority Date	:18/01/2019	<b>1)KLEINE-DOEPKE, Bastian, Cornelis</b>
(33) Name of priority country	:EPO	<b>2)AL-SHORACHI, Albert</b>
(86) International Application No	:PCT/EP2020/050475	
Filing Date	:10/01/2020	
(87) International Publication No	:WO 2020/148165	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Vacuum cleaner nozzle (N), comprising an air inlet area (AIA) having a front- end boundary (FEB), the front-end boundary (FEB) having a predetermined number of front openings (FO), and front guide elements (FGE) having a surface at an angle to the front-end boundary (FEB) for guiding dirt towards the front openings (FO), openings left by the front guide elements being aligned with the front openings (FO), a width of the openings left by the front guide elements (FGE) not exceeding 300% of a width of the front openings (FO). The front-end boundary (FEB) preferably has between 4 and 6 front openings (FO). An aperture of the front openings (FO) is preferably between 5x5 mm<sup>2</sup> and 7x7 mm<sup>2</sup>.

No. of Pages : 9 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033219 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : TERMINAL AND COMMUNICATION METHOD

(51) International classification	:H04W0074080000, H04W0074000000, G05D0001020000, H02J0007040000, G06F0013400000	(71) <b>Name of Applicant :</b> <b>1)PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA</b> Address of Applicant :20000 Mariner Avenue, Suite 200, Torrance, California 90503 U.S.A.
(31) Priority Document No	:2019-024182	(72) <b>Name of Inventor :</b>
(32) Priority Date	:14/02/2019	<b>1)YAMAMOTO, Tetsuya</b>
(33) Name of priority country	:Japan	
(86) International Application No	:PCT/JP2019/047377	
Filing Date	:04/12/2019	
(87) International Publication No	:WO 2020/166179	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A terminal, with which it is possible to improve the efficiency of a random access process. In a terminal (200), a control unit (209) dynamically determines a parameter pertaining to the transmission of a data part out of a random access signal that includes a preamble part and the data part. A transmission unit (217) notifies the determined parameter to a base station (100) using the random access signal.

No. of Pages : 50 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033220 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : INFORMATION TRANSMISSION FOR PRE-CONFIGURING DEDICATED RESOURCES IN IDLE MODE

(51) International classification	:H04W0072040000, H04W0088080000, H04W0076100000, H04W0072120000, H04L0007000000	(71) <b>Name of Applicant :</b> <b>1)ZTE CORPORATION</b> Address of Applicant :ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan Shenzhen, Guangdong 518057 China
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SHA, Xiubin</b>
(33) Name of priority country	:NA	<b>2)DAI, Bo</b>
(86) International Application No	:PCT/CN2019/071450	<b>3)LU, Ting</b>
Filing Date	:11/01/2019	<b>4)LIU, Xu</b>
(87) International Publication No	:WO 2020/034572	<b>5)LIU, Kun</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods, systems, and devices related to related to digital wireless communication, and more specifically, to techniques related to transmitting pre-configured dedicates resources for data transmission. In one exemplary aspect, a method for wireless communication includes transmitting a pre-configured transmission resource information indicating a time domain location to a core network node. The method also includes receiving transmission data from the core network node at the time domain location indicated in the pre-configured transmission resource information. In another exemplary aspect, a method for wireless communication includes connecting a communication node to a core network node. The method also includes receiving transmission data including a pre-configured transmission resource information at a time domain location from the core network node.

No. of Pages : 35 No. of Claims : 44

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033293 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : GALECTIN-3 INHIBITING C-GLYCOSIDES

(51) International classification	:C07H0015207000, C07H0015260000, A61K0031713000, A61K0045060000, C12N0015113000	(71) <b>Name of Applicant :</b> <b>1)GLYCOMIMETICS, INC</b> Address of Applicant :9708 Medical Center Drive Rockville, MD 20850 U.S.A.
(31) Priority Document No	:62/785588	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/12/2018	<b>1)MAGNANI, John L.</b>
(33) Name of priority country	:U.S.A.	<b>2)PETERSON, John M.</b>
(86) International Application No	:PCT/US2019/068597	<b>3)SARKAR, Arun K.</b>
Filing Date	:26/12/2019	<b>4)VOHRA, Yusufbhai U.</b>
(87) International Publication No	:WO 2020/139960	<b>5)GHOSH, Indranath</b>
(61) Patent of Addition to Application Number	:NA	<b>6)NOGUEIRA, Jason</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Compounds, compositions, and methods for treatment and/or prevention of at least one disease, disorder, and/or condition by inhibiting binding of galectin-3 to ligands are disclosed. For example, inhibitors of galectin-3 are described and pharmaceutical compositions comprising at least one such agent is described.

No. of Pages : 98 No. of Claims : 62

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033319 A

(19) INDIA

(22) Date of filing of Application :24/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : REDUCING INTERFERENCE IN WIRELESS NETWORKS

(51) International classification	:H04L0005000000, H04W0072040000, H04W0052360000, H04L0027260000, H04W0074080000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/CN2019/072333
Filing Date	:18/01/2019
(87) International Publication No	:WO 2020/034586
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**  
**1)ZTE CORPORATION**  
Address of Applicant :ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan Shenzhen, Guangdong 518057 China  
(72)**Name of Inventor :**  
**1)FANG, Huiying**  
**2)DAI, Bo**  
**3)BIAN, Luanjian**

(57) Abstract :

Methods, systems, and devices related to wireless communication are described. A method of wireless communication includes determining, by a communication device, one or more silent subcarriers among a plurality of subcarriers in a physical resource block (PRB) associated with a communication system; and determining to mute the one or more silent subcarriers in a resource mapping process based on a signaling instruction.

No. of Pages : 20 No. of Claims : 23

(54) Title of the invention : AUTOMATED INTEGRATED CONTINUOUS SYSTEM AND BIOPROCESS FOR PRODUCING THERAPEUTIC PROTEIN

(51) International classification	:C12M0001000000, G05B0019418000, C12M0001340000, B01D0015180000, G01N0030020000	(71)Name of Applicant : <b>1)ENZENE BIOSCIENCES LIMITED</b> Address of Applicant :Plot No. 165/1/26, Block T, Bhosari MIDC, Pune Maharashtra 411 026 Maharashtra India
(31) Priority Document No	:201921003147	(72)Name of Inventor : <b>1)BARTAKE, Hrishikesh</b>
(32) Priority Date	:25/01/2019	<b>2)GADGIL, Himanshu</b>
(33) Name of priority country	:India	<b>3)BANERJEE, Abir</b>
(86) International Application No	:PCT/IB2019/052654	<b>4)LONDHE, Harshita</b>
Filing Date	:01/04/2019	<b>5)BHORI, Abijar</b>
(87) International Publication No	:WO 2020/152509	<b>6)BUTTI, Abhijit</b>
(61) Patent of Addition to Application Number	:NA	<b>7)VARMA, Samir</b>
Filing Date	:NA	<b>8)GODSE, Rohan</b>
(62) Divisional to Application Number	:NA	<b>9)REDDY, Veerendra</b>
Filing Date	:NA	

## (57) Abstract :

The present invention relates to an automated integrated continuous bioprocess system and bioprocess that are capable of continuously producing therapeutic protein in an uninterrupted manner and scalable from laboratory to manufacturing scale. The present invention provides an automated integrated continuous bioprocess system and bioprocess for producing therapeutic protein, in which the system and process is controlled with one or more control system selected from supervisory control and data acquisition (SCADA) control system (110), proportional integral derivative (PID), programmable logic circuit (PLC), industrial PC (IPC), distributed control system (DCS), message relaying system and automated UPLC/HPLC sampling for online testing to run the system and process and in an uninterrupted manner and continuously produce therapeutic protein.

No. of Pages : 33 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033412 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : CERIUM OXIDE PARTICLES AND METHOD FOR PRODUCTION THEREOF

(51) International classification	:C01F0017206000, C09K0003140000, B01J0035100000, B01D0053940000, B82Y0030000000	(71) <b>Name of Applicant :</b> <b>1)RHODIA OPERATIONS</b> Address of Applicant :52 rue de la Haie Coq 93300 Aubervilliers France
(31) Priority Document No	:18306864.2	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/12/2018	<b>1)OHTAKE, Naotaka</b>
(33) Name of priority country	:EPO	<b>2)NISHIMURA, Kaoru</b>
(86) International Application No	:PCT/EP2019/086207	<b>3)SASAKI, Toshihiro</b>
Filing Date	:19/12/2019	<b>4)OKAZUMI, Mitsuhiro</b>
(87) International Publication No	:WO 2020/136072	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to cerium oxide particles that have excellent heat resistance under hydrothermal conditions at high temperature. The present invention also relates to a method for preparing such cerium oxide particles and to a catalytic composition comprising said cerium oxide.

No. of Pages : 25 No. of Claims : 25

(54) Title of the invention : SYSTEMS AND METHODS FOR BROADBAND WIRELESS COMMUNICATION FOR MISSION CRITICAL INTERNET OF THINGS (IOT)

(51) International classification	:H04L0005000000, H04W0072040000, H04W0024000000, H04W0028200000, H04W0016120000	(71) <b>Name of Applicant :</b> <b>1)ONDAS NETWORKS INC.</b> Address of Applicant :687 N. Pastoria Avenue Sunnyvale, California 94085 U.S.A.
(31) Priority Document No	:62/790774	(72) <b>Name of Inventor :</b>
(32) Priority Date	:10/01/2019	<b>1)SHAHAR, Menashe</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2020/013179	
Filing Date	:10/01/2020	
(87) International Publication No	:WO 2020/146793	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

A system and method for PtMP wireless communication is provided. The PtMP wireless communication system can include a plurality of sectors each including a base station and a remote station(s). A total bandwidth the system can be determined based on a frequency range of a continuous band allocated to the system, or one or more PLMR channels when the system communicates over a Private Land Mobile Radio (PLMR) band having one or more channels. The total bandwidth can be portioned into subchannel(s), each having fixed subchannel bandwidth. Each sector can be assigned a subset of the plurality of subchannels. A subchannel bit map can be created and populated for the plurality of subchannels, specifying whether availability of each subchannel for the particular sector, and the base stations of each sector can communicate over the subchannels allocated to the at least one sector according to the respective populated subchannel bit map.

No. of Pages : 29 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033414 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHODS, BASE STATION AND TERMINAL DEVICE FOR TWO-STEP RANDOM ACCESS PROCEDURE

(51) International classification	:H04W0074080000, H04W0074000000, H04L0027000000, H04W0072000000, C23C0002400000	(71) <b>Name of Applicant :</b> <b>1)TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)</b> Address of Applicant :164 83 Stockholm Sweden (72) <b>Name of Inventor :</b> <b>1)LIN, Zhipeng</b> <b>2)HARRISON, Robert Mark</b> <b>3)GR-VLEN, Asbjrn</b>
(31) Priority Document No	:PCT/CN2018/125733	
(32) Priority Date	:29/12/2018	
(33) Name of priority country	:China	
(86) International Application No	:PCT/EP2019/085121	
Filing Date	:13/12/2019	
(87) International Publication No	:WO 2020/136024	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods, a base station and a terminal device for two-step random access procedure are disclosed. According to an embodiment, the base station transmits a signalling message indicating a waveform of at least one of a preamble and a physical uplink shared channel (PUSCH) which are to be used for a request message in two- step random access procedure, through an air interface. The base station receives the request message based on the waveform of the at least one of the preamble and the PUSCH through the air interface in two-step random access procedure.

No. of Pages : 39 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033415 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHODS, BASE STATION AND TERMINAL DEVICE FOR TWO-STEP RANDOM ACCESS PROCEDURE

(51) International classification	:H04W0074080000, H04W0074000000, H04B0007045200, H04W0088020000, H04W0004700000	(71) <b>Name of Applicant :</b> <b>1)TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)</b> Address of Applicant :SE-164 83 Stockholm Sweden <b>2)LIN, Zhipeng</b>
(31) Priority Document No	:PCT/CN2018/125611	(72) <b>Name of Inventor :</b> <b>1)LIN, Zhipeng</b>
(32) Priority Date	:29/12/2018	<b>2)LIN, Zhipeng</b>
(33) Name of priority country	:China	<b>3)GR-VLEN, Asbjrn</b>
(86) International Application No	:PCT/CN2019/101097	
Filing Date	:16/08/2019	
(87) International Publication No	:WO 2020/134121	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Methods, a base station and a terminal device for two-step random access procedure are disclosed. According to an embodiment, the base station transmits a first message indicating a subcarrier spacing (SCS) of at least one of a preamble and a physical uplink shared channel (PUSCH) which are to be used for a second message in two-step random access procedure, through an air interface. The SCS of the PUSCH is the same as an SCS used for message 3 in four-step random access procedure. The base station receives the second message based on the SCS of the PUSCH through the air interface in two-step random access procedure.

No. of Pages : 41 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033420 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ANTI-PD-1 BINDING PROTEINS AND METHODS OF USE THEREOF

(51) International classification	:A61K0039000000, C07K0016280000, A61K0039395000, C07K0016220000, C40B0040040000	(71) <b>Name of Applicant :</b> <b>1)GIGAGEN, INC.</b> Address of Applicant :One Tower Place, Suite 750 South San Francisco, CA 94080 U.S.A.
(31) Priority Document No	:62/785660	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/12/2018	<b>1)JOHNSON, David, Scott</b>
(33) Name of priority country	:U.S.A.	<b>2)ADLER, Adam, Shultz</b>
(86) International Application No	:PCT/US2019/068824	<b>3)MIZRAHI, Rena, Aviva</b>
Filing Date	:27/12/2019	<b>4)LIM, Yoong, Wearn</b>
(87) International Publication No	:WO 2020/140088	<b>5)ASENSIO, Michael</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Provided herein are antigen-binding proteins (ABPs) that selectively bind to PD-1 and its isoforms and homologs, and compositions comprising the ABPs. Also provided are methods of using the ABPs, such as therapeutic and diagnostic methods.

No. of Pages : 105 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033428 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR LOCATION BASED GROUP MESSAGE DELIVERY

(51) International classification :H04W0004700000,  
G06F0016290000,  
H04W0064000000,  
H04W0072000000,  
H04W0004060000

(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :PCT/CN2018/125586  
Filing Date :29/12/2018  
(87) International Publication No :WO 2020/133406  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)**  
Address of Applicant :SE-164 83 Stockholm Sweden  
**2)ZENG, Hao**  
(72)Name of Inventor :  
**1)ZENG, Hao**  
**2)TAO, Jingrui**

(57) Abstract :

A method for Non-IP Data Delivery to a group of UE in the specific geographic area is proposed. The method which may be performed by a exposure function node comprises receiving from an application server node a Non-IP delivery data message including geographic information; determining location area information based on the geographic information; and The method further comprises transmitting to a first node for monitoring event of the at least one UE which are related to the location area,. According to the embodiments of the present disclosure, the Non-IP Data can be delivered to at least UE in the specific geographic area, so that it makes the SCS/AS more flexible to deliver the message to UEs in a customer defined Geographic Area in an efficient and simple way.

No. of Pages : 35 No. of Claims : 22

(54) Title of the invention : SPUTTER REMOVAL DEVICE AND SPUTTER REMOVAL METHOD

(51) International classification	:B23K0009320000, B23K0009290000, H05K0013040000, B29C0048070000, B23K0026040000	(71) <b>Name of Applicant :</b> <b>1)HONDA MOTOR CO., LTD.</b> Address of Applicant :1-1, Minami-Aoyama 2-chome, Minato-ku, Tokyo 1078556 Japan
(31) Priority Document No	:2018-247097	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/12/2018	<b>1)OHNAKA Shinichi</b>
(33) Name of priority country	:Japan	<b>2)IWAGUCHI Yoshimasa</b>
(86) International Application No	:PCT/JP2019/029361	
Filing Date	:26/07/2019	
(87) International Publication No	:WO 2020/136966	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present invention provides a sputter removal device (10) and a sputter removal method, wherein a nozzle (12) is moved in a relative manner by a welding device (14), whereby the outer peripheral surface (18b) of a nozzle body (18) is brought into contact with the tip section (34) of a plate spring (26), and a deflecting section (32) is made to deflect by a pressing force acting from the outer peripheral surface (18b) to the tip section (34). Next, when the nozzle (12) is moved in a relative manner in direction A2 by the welding device (14), thereby returning the deflection of the deflecting section (32), sputter (16) adhering to the tip position of the nozzle body (18) is scraped off from the nozzle (12) by the tip section (34).

No. of Pages : 21 No. of Claims : 5

(54) Title of the invention : PREDICTIVE METHOD FOR CONTROLLING A RADIOLOGICAL APPARATUS AND RADIOLOGICAL APPARATUS IMPLEMENTING IT

(51) International classification	:A61B0006000000, H04N0005320000, H05G0001440000, A61B0006040000, H05G0001460000	(71)Name of Applicant : <b>1)GENERAL MEDICAL MERATE - S.P.A.</b> Address of Applicant :Via Partigiani, 25 I-24068 Seriate (BG) Italy
(31) Priority Document No	:102019000001225	(72)Name of Inventor : <b>1)PERLETTI, Ivan</b>
(32) Priority Date	:28/01/2019	
(33) Name of priority country	:Italy	
(86) International Application No	:PCT/IB2020/050595	
Filing Date	:27/01/2020	
(87) International Publication No	:WO 2020/157623	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The method is used to control a radiological apparatus (100) through a) a control unit (130) adapted to activate the emission of X-rays by an X-ray emitter (110) of the radiological apparatus at the beginning of an exposure and to deactivate the emission of X-rays by said X-ray emitter (110) subsequently, and b) an X-ray transducer (140) associated with an image detector (120) of the radiological apparatus; the control unit (130) repeatedly determines, preferably with a predetermined period dt, a predicted value of total X-ray dose based on a signal received from said X-ray transducer (140), and deactivates the emission of X-rays based at least on said predicted value; in order to determine the predicted value, the control unit (130) repeatedly performs estimates of the total X-ray dose according to a model; one or more parameters of the model are determined and modified during the operation of the radiological apparatus (100).

No. of Pages : 12 No. of Claims : 14

(54) Title of the invention : PRISMATIC NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY

(51) International classification :H01M0010052500,  
H01M0010056900,  
H01M0010056700,  
H01M0004620000,  
H01M0004134000

(31) Priority Document No :2019-014663

(32) Priority Date :30/01/2019

(33) Name of priority country :Japan

(86) International Application No :PCT/JP2019/046733

Filing Date :29/11/2019

(87) International Publication No :WO 2020/158153

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

**1)PANASONIC INTELLECTUAL PROPERTY  
MANAGEMENT CO., LTD.**Address of Applicant :1-61, Shiromi 2-chome, Chuo-ku,  
Osaka-shi, Osaka 5406207 Japan

(72)Name of Inventor :

**1)**

(57) Abstract :

This prismatic non-aqueous electrolyte secondary battery is provided with a negative electrode and a nonaqueous electrolyte. The negative electrode is provided with a negative electrode current collector and a negative electrode mixture layer formed on the negative electrode current collector. The negative electrode mixture layer comprises a first layer containing a first carbon active material, a Si active material and a polyacrylic acid or a salt thereof, and a second layer containing a second carbon active material. The nonaqueous solvent configuring the nonaqueous electrolyte contains a cyclic carbonate. The total content of the cyclic carbonate is 20-30 vol% of the total volume of the nonaqueous solvent, and the content of the ethylene carbonate belonging to the cyclic carbonate is less than or equal to 10 vol% of the total volume of the nonaqueous solvent. The nonaqueous electrolyte contains vinylene carbonate. With this configuration, it is possible to provide a prismatic nonaqueous electrolyte secondary battery in which swelling of the battery accompanying charge/discharge cycles is suppressed.

No. of Pages : 25 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033438 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD OF MANUFACTURING A BUILDING ELEMENT AND A BUILDING ELEMENT

(51) International classification	:E04F0015100000, H01M0004139100, B32B0021040000, B32B0037240000, C09D0004000000	(71) <b>Name of Applicant :</b> <b>1)V.,LINGE INNOVATION AB</b> Address of Applicant :Prstavgen 513 SE-263 64 VIKEN Sweden
(31) Priority Document No	:1950022-2	(72) <b>Name of Inventor :</b>
(32) Priority Date	:10/01/2019	<b>1)HEDLUND, Anette</b>
(33) Name of priority country	:Sweden	<b>2)NILSSON, Sofia</b>
(86) International Application No	:PCT/SE2020/050010	
Filing Date	:09/01/2020	
(87) International Publication No	:WO 2020/145871	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present disclosure relates to a method of manufacturing a building element (10), including applying a first layer (1) on a first surface of a substrate (2), the first layer (1) including a mixture of a binder, at least one filler and fine non-pigment cohesive particles, wherein an amount of the fine non-pigment cohesive particles in the mixture may be between 0.05 wt% and 9 wt% of the mixture, and applying heat and/or pressure to the first layer (1) and/or the substrate (2) thereby forming the building element (10). The disclosure further relates to such a building element (10).

No. of Pages : 21 No. of Claims : 28

(54) Title of the invention : MODULAR SYSTEM FOR TRANSFORMING A VEHICLE PARKING SPACE INTO A MULTIFUNCTIONAL

(51) International classification	:G08G0001140000, E04B0001344000, G06F0003048800, G06F0040103000, F16H0057033000	(71) <b>Name of Applicant :</b> <b>1)OPESKINA, Olena</b> Address of Applicant :Frantsuzkyi Bulvar, 22, corp., 4, fl. 161 Odesa, 65058 Ukraine
(31) Priority Document No	:u201812993	(72) <b>Name of Inventor :</b> <b>1)OPESKINA, Olena</b>
(32) Priority Date	:27/12/2018	
(33) Name of priority country	:Ukraine	
(86) International Application No	:PCT/IB2019/060632	
Filing Date	:10/12/2019	
(87) International Publication No	:WO 2020/136485	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A modular system for transforming a vehicle car park into a multifunctional environment, which consists of a frame and additional modules, is different and characterized by a system for transforming parking equipment, namely a frame in the form of columns of various geometric shapes and elements of a given shape, which are attached to the columns of the frame in a detachable manner that divides the site into parking zones of a given size, with roof, frame modules of various geometric shapes and sizes, interconnected in a detachable or permanent way, regardless of the type of geometric shape and size of the frame module.

No. of Pages : 5 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033472 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ANTI-PD-L1 BINDING PROTEINS AND METHODS OF USE THEREOF

(51) International classification	:A61K0039000000, C07K0016280000, A61K0039395000, C07K0016220000, C40B0040040000	(71) <b>Name of Applicant :</b> <b>1)GIGAGEN, INC.</b> Address of Applicant :One Tower Place, Suite 750 South San Francisco, CA 94080 U.S.A.
(31) Priority Document No	:62/785667	(72) <b>Name of Inventor :</b>
(32) Priority Date	:27/12/2018	<b>1)JOHNSON, David, Scott</b>
(33) Name of priority country	:U.S.A.	<b>2)ADLER, Adam, Shultz</b>
(86) International Application No	:PCT/US2019/068826	<b>3)MIZRAHI, Rena, Aviva</b>
Filing Date	:27/12/2019	<b>4)LIM, Yoong, Wearn</b>
(87) International Publication No	:WO 2020/140090	<b>5)ASENSIO, Michael</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Provided herein are antigen-binding proteins (ABPs) that selectively bind to PD-L1 and its isoforms and homologs, and compositions comprising the ABPs. Also provided are methods of using the ABPs, such as therapeutic and diagnostic methods.

No. of Pages : 97 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033476 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : MICRONIZED SULPHUR POWDER

(51) International classification	:C01B0017020000, C01B0017100000, C05D0009000000, H01L0029510000, B01J0002060000	(71) <b>Name of Applicant :</b> <b>1)SULVARIS INC.</b> Address of Applicant :6443 - 2nd Street S.E. Calgary, Alberta T2H 1J5 Canada
(31) Priority Document No	:62/786134	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/12/2018	<b>1)MACKIE, Robert</b>
(33) Name of priority country	:U.S.A.	<b>2)SEBASTIAN, Bri</b>
(86) International Application No	:PCT/CA2019/051904	<b>3)FLEGEL, Mitchel</b>
Filing Date	:23/12/2019	
(87) International Publication No	:WO 2020/132746	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A process is provided to produce a micronized sulphur powder product, including the preparation of a micronized sulphur emulsion from molten sulphur and a dispersant solution, including a surfactant in a concentration less than the critical micelle concentration of the surfactant.

No. of Pages : 30 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033477 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PEPTIDE LIBRARIES AND METHODS OF USE THEREOF

(51) International classification	:C12N0015100000, C07K0001040000, C07K0007640000, G01N0033500000, C07K0005020000	(71) <b>Name of Applicant :</b> <b>1)REPERTOIRE IMMUNE MEDICINES, INC.</b> Address of Applicant :26 Landsdowne Street Cambridge, Massachusetts 02139 U.S.A.
(31) Priority Document No	:62/788678	(72) <b>Name of Inventor :</b>
(32) Priority Date	:04/01/2019	<b>1)SWAIN, Joanna Feltham</b>
(33) Name of priority country	:U.S.A.	<b>2)AFZELIUS, Ellen Lovisa Larsdotter</b>
(86) International Application No	:PCT/US2020/012236	<b>3)GORDON, William Michael</b>
Filing Date	:03/01/2020	<b>4)MATRANGA, Christian B.</b>
(87) International Publication No	:WO 2020/142724	<b>5)ROTEM, Assaf</b>
(61) Patent of Addition to Application Number	:NA	<b>6)HU, Gang</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The disclosure relates to peptide libraries and uses thereof.

No. of Pages : 57 No. of Claims : 110

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033478 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : MONOCLONAL ANTIBODIES SPECIFIC FOR THE PB2 ANTIGEN OF THE HUMAN INFLUENZA VIRUS (FLU), NUCLEOTIDE SEQUENCES, METHOD AND DIAGNOSTIC KIT FOR FLU INFECTION

(51) International classification	:A61K0039000000, C07K0016100000, G01N0033574000, C07K0016240000, C07K0016400000	(71) <b>Name of Applicant :</b> <b>1)PONTIFICIA UNIVERSIDAD CATLICA DE CHILE</b> Address of Applicant :Avenida Libertador Bernardo O'Higgins 340 Santiago Chile
(31) Priority Document No	:3871-2018	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/12/2018	<b>1)KALERGIS PARRA, Alexis Mikes</b>
(33) Name of priority country	:Chile	<b>2)BUENO RAM • REZ, Susan Marcela</b>
(86) International Application No	:PCT/CL2019/050155	
Filing Date	:27/12/2019	
(87) International Publication No	:WO 2020/132772	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to the generation of monoclonal antibodies, or fragments of same, which recognises the PB2 protein of the human influenza virus (flu), wherein the monoclonal antibodies or fragments of same comprise a variable domain of the heavy chain and a variable domain of the light chain. Also provided is a diagnostic method for detecting flu infections in biological samples of nasopharyngeal secretions, using the monoclonal antibodies in the format of a diagnostic kit.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033480 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : MONOCLONAL ANTIBODY OR ANTIGEN BINDING FRAGMENT THEREOF THAT BINDS TO THE L PROTEIN OF THE HUMAN PARAINFLUENZA VIRUS (PIV); METHOD AND KIT FOR DETECTING PIV

(51) International classification	:A61K0039000000, C07K0016100000, C07K0014005000, G01N0033569000, G01N0033574000	(71)Name of Applicant : <b>1)PONTIFICIA UNIVERSIDAD CATLICA DE CHILE</b> Address of Applicant :Avenida Libertador Bernardo O'Higgins 340 Santiago Chile (72)Name of Inventor : <b>1)KALERGIS PARRA, Alexis Mikes</b> <b>2)BUENO RAM • REZ, Susan Marcela</b>
(31) Priority Document No	:3869-2018	
(32) Priority Date	:28/12/2018	
(33) Name of priority country	:Chile	
(86) International Application No	:PCT/CL2019/050157	
Filing Date	:27/12/2019	
(87) International Publication No	:WO 2020/132774	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention presents the generation of monoclonal antibodies, or fragments thereof, which recognise the L protein of the Human Parainfluenza Virus (PIV), wherein said monoclonal antibodies or fragments thereof comprise a variable region of the heavy chain and a variable region of the light chain. A diagnosis method for infection by PIV in a biological sample is also provided, which uses the monoclonal antibodies in diagnostic kit format.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033497 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ORTHOGONAL MULTIPLE ACCESS AND NON-ORTHOGONAL MULTIPLE ACCESS

(51) International classification	:H04L0027260000, H04L0005000000, H04J0013000000, H04W0072040000, H04J0013160000	(71) <b>Name of Applicant :</b> <b>1)GENGHISCOMM HOLDINGS, LLC</b> Address of Applicant :PO Box 17355 Boulder, Colorado 80308 U.S.A.
(31) Priority Document No	:62/796994	(72) <b>Name of Inventor :</b>
(32) Priority Date	:25/01/2019	<b>1)SHATTIL, Steve</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2020/014862	
Filing Date	:23/01/2020	
(87) International Publication No	:WO 2020/154550	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Enhanced discrete Fourier transform spread Orthogonal Frequency Division Multiplexing (DFT-s-OFDM) selects spreading code roll-off factors based on available spectrum resources in a wireless network and power efficiency needs of at least one wireless device. This can exploit excess spectral resources to increase processing gain and reduce peak-to-average power, both of which improve a wireless device's power efficiency. Each layer can employ a portion of the DFT-s-OFDM code space in a DFT-s-OFDM symbol for orthogonal multiple access or non-orthogonal multiple access, allowing multiple layers to share the same DFT-s-OFDM symbol. This provides transmissions with low peak-to-average power and frequency diversity due to DFT-s-OFDM spreading. Since codes in the DFT-s-OFDM code space are cyclic shifts of each other, a DFT-s-OFDM discrete-time signal can be synthesized from cyclic shifts of a kernel discrete-time waveform.

No. of Pages : 60 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033500 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : VIRTUAL TELEPORTATION IN FIXED ENVIRONMENTS

(51) International classification :G02B0027010000,  
G06F0011140000,  
H04W0088020000,  
G06F0015160000,  
G06K0009000000  
(31) Priority Document No :62/804657  
(32) Priority Date :12/02/2019  
(33) Name of priority country :U.S.A.  
(86) International Application No :PCT/US2019/068066  
Filing Date :20/12/2019  
(87) International Publication No :WO 2020/167383  
(61) Patent of Addition to Application  
Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)QUALCOMM INCORPORATED**  
Address of Applicant :5775 Morehouse Drive ATTN:  
International IP Administration San Diego, California 92121-1714  
U.S.A.  
(72)Name of Inventor :  
**1)FORUTANPOUR, Bijan**  
**2)THAGADUR SHIVAPPA, Shankar**  
**3)NGUYEN, Phi Hung**

(57) Abstract :

The techniques disclosed herein include a first device for receiving a communication signal from a second device, the first device including one or more processors configured to receive, in the communication signal, packets that represent a virtual image as part of a virtual teleportation of one or more visual objects embedded in the virtual image. The one or more processors may be configured to decode the packets that represent the virtual image, and output the virtual image at a physical location within a fixed environment. The first device may also include a memory configured to store the packets that represent the virtual image as part of the virtual teleportation of one or more visual objects embedded in the virtual image.

No. of Pages : 51 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033507 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SYSTEM TO ENABLE FOLDING IN AN ADDITIVE MANUFACTURING MACHINE

(51) International classification	:A47C0007440000, E04H0015400000, H02S0020320000, F16L0001200000, E04B0001320000	(71)Name of Applicant : <b>1)BESIM, Bulent</b> Address of Applicant :PO Box 1317, South Melbourne, Australia 3025 South Melbourne Australia <b>2)WEATHERLY, Stephen</b>
(31) Priority Document No	:16/233138	(72)Name of Inventor :
(32) Priority Date	:27/12/2018	<b>1)BESIM, Bulent</b>
(33) Name of priority country	:U.S.A.	<b>2)WEATHERLY, Stephen</b>
(86) International Application No	:PCT/IB2019/061089	
Filing Date	:19/12/2019	
(87) International Publication No	:WO 2020/136518	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A system is provided for rotating a structure to assume a folded position or an upright position. The structure enables movement of a print head of an additive manufacturing machine along a vertical axis. The system comprises a hub and a second member. The hub comprises a first member defining an arched surface and a plurality of notches. The second member is pressed against the first member by a tensioning member. The hub is operable to be rotated to assume the upright position or the folded position of the structure. Rotation of the hub results in at least a portion of the arched surface to slide against the second member, which is enabled by retraction of the second member. The second member is received by one of the plurality of notches to retain the structure in the folded position or the upright position.

No. of Pages : 12 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033508 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, AND INFORMATION PROCESSING PROGRAM

(51) International classification	:G06K0009000000, G06F0003120000, H04N0005770000, G06F0008658000, G04R0020060000	(71) <b>Name of Applicant :</b> <b>1)MITSUBISHI ELECTRIC CORPORATION</b> Address of Applicant :7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 1008310 Japan (72) <b>Name of Inventor :</b> <b>1)SHOMURA, Shun</b> <b>2)NOGUCHI, Satoshi</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT/JP2019/006655	
Filing Date	:21/02/2019	
(87) International Publication No	:WO 2020/170401	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

According to the present invention, a collation unit (14) extracts a difference between two pieces of operation setting data, which are data for respectively setting the operation of a device before there is a request from the user, and generates difference information indicating the extracted difference. A collation result management unit (15) stores, in a storage device (150), the difference information generated by the collation unit (14). A display unit (16) acquires the difference information from the storage device (150) and outputs the acquired difference information to the display device, when there is a request from the user.

No. of Pages : 35 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033522 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : VENTRICULAR ASSIST DEVICE

(51) International classification	:A61B0017000000, A61M0001120000, A61B0017220000, A61B0090000000, A61B0017340000	(71) <b>Name of Applicant :</b> <b>1)MAGENTA MEDICAL LTD</b> Address of Applicant :Haofeh 1 6092000 Kadima Israel
(31) Priority Document No	:62/796138	(72) <b>Name of Inventor :</b> <b>1)TUVAL, Yosi</b>
(32) Priority Date	:24/01/2019	<b>2)SOHN, Zev</b>
(33) Name of priority country	:U.S.A.	<b>3)SCHWAMMENTHAL, Ehud</b>
(86) International Application No	:PCT/IB2020/050515	<b>4)LUBINSKY, Gad</b>
Filing Date	:23/01/2020	<b>5)TROSHIN, Victor</b>
(87) International Publication No	:WO 2020/152611	<b>6)MUSTACCHI, Shaul</b>
(61) Patent of Addition to Application Number	:NA	<b>7)ELISHA, Yinnon</b>
Filing Date	:NA	<b>8)SUDIN, Yuri</b>
(62) Divisional to Application Number	:NA	<b>9)ZEMER HAREL, Hagit</b>
Filing Date	:NA	<b>10)ROZENFELD, Avi</b>

(57) Abstract :

Apparatus and methods are described including a left-ventricular assist device (20) that includes a tube (24) configured to traverse a subject's aortic valve, with a distal portion of the tube disposed within the subject's left ventricle. A frame (34) is disposed within the distal portion of the tube. A pump (50) disposed within the frame pumps blood through the tube. A distal-tip element (107) defines a straight proximal portion (346) that defines a longitudinal axis (348), and a curved distal portion that is shaped such as to curve in a first direction with respect to the longitudinal axis before passing through an inflection point and curving in a second direction with respect to the longitudinal axis (348), such that the curved distal portion defines a bulge (351) on one side of the longitudinal axis (348). Other applications are also described.

No. of Pages : 121 No. of Claims : 54

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033524 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DRY NONWOVEN ANTIBACTERIAL ARTICLE

(51) International classification	:D04H0001429100, D04H0001640000, D04H0001587000, D06M0015227000, D04H0001425000	(71) <b>Name of Applicant :</b> <b>1)TWE MEULEBEKE</b> Address of Applicant :Marialoopsteenweg 51 8760 Meulebeke Belgium <b>2)HYGINN BVBA</b>
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)DE SMEDT, Vincent</b>
(33) Name of priority country	:NA	<b>2)MICHELIS, Dany</b>
(86) International Application No	:PCT/EP2019/051721	<b>3)DECAMBWAY, Vronique</b>
Filing Date	:24/01/2019	<b>4)LEBEER, Sarah</b>
(87) International Publication No	:WO 2020/151824	<b>5)VANDENHEUVEL, Dieter</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to the field of individual hygiene and in particular disinfecting nonwoven articles. A dry antibacterial article comprising at least a dispersible nonwoven layer is characterized in that unprotected and dry bacterial spores are spread within the nonwoven layer, said spores being selected to specifically inhibit the growth of pathogenic bacteria upon reactivation. The invention further relates to the use of the antibacterial article, a dispenser for wipes made from the article as well as manufacturing processes.

No. of Pages : 28 No. of Claims : 27

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033645 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : CONTROL METHOD, CONTROL SYSTEM, AND DEPARTURE ACTUATING MECHANISM  
CONTROL METHOD FOR HANGING ASSEMBLY LINE

(51) International classification	:G06K0017000000, D06F0033000000, A47G0025140000, G07B0015040000, G06Q0020200000	(71)Name of Applicant : <b>1)NINGBO SUNRISE INDUSTRIAL AUTOMATION CO., LTD.</b> Address of Applicant :Room 4-19, No. 6 Jingyuan Road, High-Tech Zone Ningbo, Zhejiang 315000 China <b>2)ZHEJIANG RUIFENG INTELLIGENT INTERNET OF THINGS TECHNOLOGY CO., LTD.</b>
(31) Priority Document No	:201910724135.5	(72)Name of Inventor :
(32) Priority Date	:07/08/2019	<b>1)SUN, Jianguo</b>
(33) Name of priority country	:China	<b>2)YU, Yunlin</b>
(86) International Application No	:PCT/CN2019/128127	<b>3)YUAN, Feng</b>
Filing Date	:25/12/2019	<b>4)YUAN, Jian</b>
(87) International Publication No	:WO 2021/022768	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A departure control method for a hanging assembly line, comprising a departure card reader (302) reading information of a clothes hanger (5), and sending a signal to a host computer (1), the host computer (1) determining whether a push rod (6) currently passing through an arrival card reader (301) is empty: if so, the host computer (1) controlling the departure actuating mechanism (306) or controlling same by means of a communication data controller (304), to drive the departure of the clothes hanger (5), the push rod (6) pushing the departed clothes hanger (5) to move on a main track (2), the main computer (10) associating the push rod (6) number with the clothes hanger (5) number, and if not, the departure of the clothes hanger (5) is not performed; and after the departure of the clothes hanger (5) is performed, the departure actuator (306) stops operating. Further provided is a control system and a departure actuating mechanism control method for a hanging assembly line, being able to prevent two clothes hangers (5) from appearing in the same push rod (6).

No. of Pages : 23 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033647 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : MOULD PLATE

(51) International classification	:B22D0011055000, B29C0045730000, F02F0003220000, B22D0025020000, F21V0029710000
(31) Priority Document No	:10 2019 102 313.0
(32) Priority Date	:30/01/2019
(33) Name of priority country	:Germany
(86) International Application No	:PCT/DE2020/100005
Filing Date	:08/01/2020
(87) International Publication No	:WO 2020/156607
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)Name of Applicant :

**1)KME SPECIAL PRODUCTS GMBH & CO. KG**

Address of Applicant :Klosterstrae 29 49074 Osnabrück  
Germany

(72)Name of Inventor :

**1)HUGENSCHTT, Gerhard**

**2)ROLF, Thomas**

(57) Abstract :

The invention relates to a mould plate comprising a casting side (2) and a rear side (3) facing away from the casting side (2), wherein at least one cooling channel (5) open towards the rear side (3) is located in the rear side (3), and comprising a cooling surface (9) which is opposite the casting side (3), wherein an insert (6) is located in the cooling channel (4, 5) in order to form a cooling gap (4) between an inner surface (7) of the insert (6) and the cooling surface (9). The insert (6) is connected to fastening points (15) in the cooling surface (9) by means of fastening bolts (17).

No. of Pages : 14 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033648 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : NASAL DRUG DELIVERY DEVICE

(51) International classification	:A61M0015080000, A61K0031150000, A61K0047160000, A61M0011020000, A61M0011040000	(71) <b>Name of Applicant :</b> <b>1)IMPEL NEUROPHARMA, INC.</b> Address of Applicant :201 Elliott Avenue West, Suite 260 Seattle, WA 98119 U.S.A.
(31) Priority Document No	:62/788093	(72) <b>Name of Inventor :</b>
(32) Priority Date	:03/01/2019	<b>1)FULLER, Christopher William</b>
(33) Name of priority country	:U.S.A.	<b>2)KOHRING, Craig Frederick</b>
(86) International Application No	:PCT/US2019/066921	<b>3)LAVIN, Albert Kenneth</b>
Filing Date	:17/12/2019	<b>4)HOEKMAN, John D.</b>
(87) International Publication No	:WO 2020/142206	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A nasal drug delivery device for delivering a plume derived from a propellant and a drug compound. The drug compound is in an intranasal dosage form in the form of powder, suspension, dispersion, or liquid. The propelled intranasal dosage form is deposited within the upper nasal cavity such as the olfactory region. The drug deposited within the olfactory region is delivered to the brain avoiding the blood-brain-barrier. Hydrofluoroalkane propellant from a pressurized canister is channeled to a diffuser and drug-containing channel where the intranasal dosage form is aerosolized. The aerosolized intranasal dosage form passes through a nozzle thus delivering a plume to the user's upper nasal cavity.

No. of Pages : 20 No. of Claims : 38

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033649 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : GENE THERAPY CONSTRUCTS FOR TREATING WILSON DISEASE

(51) International classification	:C12N0015860000, A61K0048000000, C12Q0001688300, B41J0002140000, A61K0038180000	(71) <b>Name of Applicant :</b> <b>1)ULTRAGENYX PHARMACEUTICAL INC.</b> Address of Applicant :60 Leveroni Court Novato, CA 94949 U.S.A.
(31) Priority Document No	:62/788324	(72) <b>Name of Inventor :</b>
(32) Priority Date	:04/01/2019	<b>1)LIVINGSTON, Christine</b>
(33) Name of priority country	:U.S.A.	<b>2)WADSWORTH, Samuel</b>
(86) International Application No	:PCT/US2020/012131	
Filing Date	:03/01/2020	
(87) International Publication No	:WO 2020/142653	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

This application relates to adeno-associated viral vectors encoding a truncated yet functional ATP7B for use in gene therapy for treating Wilson disease (WD). The truncated ATP7B described herein has several advantages over the wild-type ATP7B such as higher efficacy and improved manufacturing yield.

No. of Pages : 33 No. of Claims : 77

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033650 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHODS OF PRODUCING HIGH DIVERSITY PEPTIDE LIBRARIES AND PROMOTING PROTEIN FOLDING

(51) International classification	:A61K0038000000, C12N0015100000, C07K0001107000, C12Q0001370000, C07K0007080000	(71)Name of Applicant : <b>1)REPERTOIRE IMMUNE MEDICINES, INC.</b> Address of Applicant :26 Landsdowne Street Cambridge, Massachusetts 02139 U.S.A.
(31) Priority Document No	:62/788673	(72)Name of Inventor : <b>1)SWAIN, Joanna Feltham</b>
(32) Priority Date	:04/01/2019	<b>2)AFZELIUS, Ellen Lovisa Larsdotter</b>
(33) Name of priority country	:U.S.A.	<b>3)YOSEFSON, Ohad</b>
(86) International Application No	:PCT/US2020/012231	<b>4)ROSCOE, Benjamin Peter</b>
Filing Date	:03/01/2020	<b>5)ROGOV, Peter Lyubomirov</b>
(87) International Publication No	:WO 2020/142720	<b>6)VAIDYA, Harsh Jayeshkumar</b>
(61) Patent of Addition to Application Number	:NA	<b>7)MABRY, George Robert III</b>
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The disclosure provides a peptide library with increased peptide diversity. The increase in peptide diversity can occur via cleavage of particular amino acids within a peptide. The disclosure further provides a method for promoting folding of a peptide into an active conformation.

No. of Pages : 19 No. of Claims : 80

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033651 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DEVICE TO ELECTROMAGNETICALLY STIMULATE NEW ORGANIC CELL PROLIFERATION

(51) International classification	:A61B0005000000, A61M0005172000, A61B0090000000, A61B0005024000, A61M0005142000	(71) <b>Name of Applicant :</b> <b>1)EMDA LIMITED</b> Address of Applicant :108-109 London Road Neath Castell- Nedd Port Talbot SA11 1HL U.K.
(31) Priority Document No	:1821315.7	(72) <b>Name of Inventor :</b>
(32) Priority Date	:31/12/2018	<b>1)HANCOCK, Colin</b>
(33) Name of priority country	:U.K.	<b>2)CLARK, Nigel, John</b>
(86) International Application No	:PCT/EP2019/087172	<b>3)PORTASS, Tim</b>
Filing Date	:30/12/2019	
(87) International Publication No	:WO 2020/141165	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An apparatus for proliferation of organic tissue by exposure to electromagnetic field is disclosed that comprises an electromagnetic patch 101 comprising one or a plurality of electromagnetic coils 103 each generating an electromagnetic field; and a battery powered drive unit 102 which supplies signals to the electromagnetic coils for applying a particular dosage of electromagnetic field to a target tissue region. The electromagnetic patch 101 is specifically customised to an individual subject user and to an individual body portion and tissue region of said individual user. The drive signal sequence is individually tailored to the electromagnetic patch for delivering a particular dosage programme of electromagnetic field for the particular subject user.

No. of Pages : 78 No. of Claims : 35

(54) Title of the invention : MEMORY REWRITE HISTORY RECORDING DEVICE

(51) International classification	:G06F0011070000, G06F0021730000, F04B0049080000, G11B0027360000, G01M0013000000	(71) <b>Name of Applicant :</b> <b>1)DENSO TRIM CORPORATION</b> Address of Applicant :2460 Akasaka, Ogohara, Komono-cho, Mie-gun, Mie-pref., 510-1222, Japan Japan
(31) Priority Document No	:2019-014671	(72) <b>Name of Inventor :</b> <b>1)MIYATA Hidetoshi</b>
(32) Priority Date	:30/01/2019	
(33) Name of priority country	:Japan	
(86) International Application No	:PCT/JP2019/041841	
Filing Date	:25/10/2019	
(87) International Publication No	:WO 2020/158075	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A system has a non-volatile memory which stores a control program and/or a control numerical value of a control device, and is externally rewritable. The system is provided with an inspection device for inspecting storage data of the memory, and determining whether the memory is normal or abnormal. The system is provided with a history recording device for recording a history of an external rewrite. The memory has an area in which an adjustment value SUM-ADJ is stored, the adjustment value SUM-ADJ being rewritten so as to stop a judgment that the memory is abnormal by the inspection device. The memory has an area in which a switch value INT-E/D is stored, the switch value INT-E/D setting the inspection by the inspection device to be valid or invalid. The history includes both of the adjustment value and the switch value. A memory rewrite history recording device capable of efficiently finding a rewrite action is provided.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033657 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SOLID PRECIPITATION DEVICE AND SOLID PRECIPITATION METHOD

(51) International classification	:A47J0031400000, C02F0001420000, B01D0021000000, B01D0021020000, B01F0001000000	(71)Name of Applicant : <b>1)CHINA PETROLEUM &amp; CHEMICAL CORPORATION</b> Address of Applicant :No. 22 Chaoyangmen North Street, Chaoyang District, Beijing 100728 China <b>2)DALIAN RESEARCH INSTITUTE OF PETROLEUM AND PETROCHEMICALS, SINOPEC CORP.</b>
(31) Priority Document No	:201811651664.9	(72)Name of Inventor : <b>1)ZHOU, Tong</b>
(32) Priority Date	:31/12/2018	<b>2)FANG, Xiangchen</b>
(33) Name of priority country	:China	<b>3)GUO, Hongshan</b>
(86) International Application No	:PCT/CN2019/129198	<b>4)YANG, Tao</b>
Filing Date	:27/12/2019	<b>5)JIANG, Guangan</b>
(87) International Publication No	:WO 2020/140841	<b>6)MENG, Zhaohui</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Disclosed is a solid precipitation device, comprising a device shell (5), a waste water inlet (1), a discharge port (10) and solid particles (4) arranged in an inner cavity of the device shell (5), wherein the structure of the solid particles (4) is suitable for solid matter to be deposited and adsorbed thereon; the inner cavity of the device shell (5) can also be provided with an inner member, a guide structure (7) surrounding an inner wall of the device shell (5), a heat agent inlet and an inner cylinder (12); the inner member comprises a hollow cylinder (8) substantially coaxial to a central axis of the device shell (5), and an umbrella-shaped cap (9) located above the hollow cylinder (8); the guide structure (7) is arranged at an upper part of the inner cavity of the device shell (5); and the inner cylinder (12) is located below the guide structure (7). Further disclosed is a solid precipitation method. A material containing a solute enters the solid precipitation device, and at least part of the solute is deposited and adsorbed on the solid particles (4) in the solid precipitation device.

No. of Pages : 59 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033658 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PHARMACEUTICAL COMPOSITIONS OF FUROSEMIDE AND USES THEREOF

(51) International classification	:A61K0009000000, C07D0413120000, A61K0031635000, A61K0047400000, C07D0231120000	(71) <b>Name of Applicant :</b> <b>1)SQ INNOVATION AG</b> Address of Applicant :Industriestrasse 47 6300 Zug Switzerland
(31) Priority Document No	:62/788244	(72) <b>Name of Inventor :</b>
(32) Priority Date	:04/01/2019	<b>1)MUNTENDAM, Pieter</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/EP2020/050098	
Filing Date	:03/01/2020	
(87) International Publication No	:WO 2020/141224	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A pharmaceutical composition and a method of administering the pharmaceutical composition to a patient suffering from edema, heart failure, kidney or liver disease or having symptoms thereof are disclosed. The pharmaceutical composition includes furosemide, or a pharmaceutically acceptable salt, hydrate or ester there of and a cyclodextrin.

No. of Pages : 36 No. of Claims : 28

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033659 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : BOTTLE CAP

(51) International classification	:B65D0041040000, H01L0021670000, B65D0047200000, B65D0051240000, B65D0047060000	(71) <b>Name of Applicant :</b> <b>1)GUALA CLOSURES DEUTSCHLAND GMBH</b> Address of Applicant :Mainzer Strae 185 67547 Worms Germany
(31) Priority Document No	:10 2019 102 213.4	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/01/2019	<b>1)MU'OZ, Javier</b>
(33) Name of priority country	:Germany	
(86) International Application No	:PCT/DE2020/100054	
Filing Date	:28/01/2020	
(87) International Publication No	:WO 2020/156616	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a closure cap to be placed on the neck of a drinks bottle. The invention has the object of providing a closure cap which bears as a closure seal against the top of the bottle neck. According to the invention, this is achieved by an upper breakthrough in the closure cap, into which an internally inserted disc-like decorative item engages, the closure cap having at least in part a retaining bead that runs parallel to the top of the closure cap and projects into the cap, into which retaining bead are inserted a liner plate also running parallel to the cap top and the decorative item engaging in the top. This liner plate secures the decorative item in the position in the top of the closure cap and bears as a closure seal against the top of the bottle neck.

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033661 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : HETEROCYCLIC COMPOUND INTERMEDIATE, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF

(51) International classification	:A61P0035000000, C07D0401140000, C07D0413140000, C07F0009400000, C07D0491056000	(71) <b>Name of Applicant :</b> <b>1)WUHAN LL SCIENCE AND TECHNOLOGY DEVELOPMENT CO., LTD.</b> Address of Applicant :Biolake C2-2, No. 666 High-Tech Road, East Lake High-Tech Development Zone Wuhan, Hubei 430075 China
(31) Priority Document No	:201811642319.9	(72) <b>Name of Inventor :</b>
(32) Priority Date	:29/12/2018	<b>1)LOU, Jun</b>
(33) Name of priority country	:China	<b>2)CHEN, Yongkai</b>
(86) International Application No	:PCT/CN2019/129382	<b>3)LIU, Junhua</b>
Filing Date	:27/12/2019	<b>4)ZHANG, Yihan</b>
(87) International Publication No	:WO 2020/135771	<b>5)GUO, Xiaodan</b>
(61) Patent of Addition to Application Number	:NA	<b>6)LIU, Li</b>
Filing Date	:NA	<b>7)QIAN, Lina</b>
(62) Divisional to Application Number	:NA	<b>8)WANG, Chaodong</b>
Filing Date	:NA	

(57) Abstract :

Disclosed by the present invention is a heterocyclic compound, an intermediate, a preparation method therefor and an application thereof. Provided by the present invention are a heterocyclic compound as shown in formula I, and a stereoisomer, a geometric isomer, a tautomer, a nitrogen oxide, a hydrate, a solvate, a metabolite, an ester, a pharmaceutically acceptable salt or a prodrug thereof. The heterocyclic compound has a high P2X3 antagonistic activity, and has good selectivity, low toxicity, good metabolic stability and little taste influence.

No. of Pages : 439 No. of Claims : 23

(54) Title of the invention : ROLLER COMPACTOR AND METHOD OF DRY GRANULATION USING A ROLLER COMPACTOR

(51) International classification	:A61K0009200000, A61K0009160000, B01J0002220000, B01J0002000000, B01J0002100000	(71) <b>Name of Applicant :</b> <b>1)NOVO NORDISK A/S</b> Address of Applicant :Novo All 2880 Bagsværd Denmark (72) <b>Name of Inventor :</b> <b>1)VILHELMSEN, Thomas</b> <b>2)SØRENSEN, Martin, Nobert</b>
(31) Priority Document No	:19153436.1	
(32) Priority Date	:24/01/2019	
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2020/051696	
Filing Date	:24/01/2020	
(87) International Publication No	:WO 2020/152304	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A continuous method of producing granules comprising a salt of N-(8-(2-hydroxybenzoyl)amino)caprylic acid or SNAC. The method comprises: (i) providing a powder comprising a salt of N-(8-(2-hydroxybenzoyl)amino)caprylic acid, (ii) dry granulating the powder by using a roller compactor, (iii) continuously during dry granulation removing material accumulating on roller rims and leading the material towards the outlet. The roller compactor comprises a pair of pressing rollers 212 comprising a first 212a and a second pressing roller 212b, and wherein the first pressing roller 212a comprises roller rims 213. The roller compactor may further comprise a granulator 216, a sieve 218, and an exit chute 203 mounted below the sieve 218. The roller compactor further comprises roller rim strippers 250 for removing material accumulating on the roller rims 213. The roller compactor can further comprise an agitator adapted for agitating product tending to accumulate or build-up below the sieve insert 218.

No. of Pages : 63 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033693 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : POLYETHYLENE FOAM COMPOSITION

(51) International classification	:C08L0023060000, C08L0023080000, B32B0027320000, C08J0009120000, C08L0023040000	(71)Name of Applicant : <b>1)SABIC GLOBAL TECHNOLOGIES B.V.</b> Address of Applicant :Plasticslaan 1 4612 PX Bergen op Zoom Netherlands
(31) Priority Document No	:18248118.4	(72)Name of Inventor :
(32) Priority Date	:28/12/2018	<b>1)KRIST, Johan Maria</b>
(33) Name of priority country	:EPO	<b>2)THEUNISSEN, Mark, Leo, Hendrik</b>
(86) International Application No	:PCT/EP2019/084766	<b>3)VAN DER MEER, Douwe Wiebe</b>
Filing Date	:11/12/2019	<b>4)WILLEMS, Maria Johanna</b>
(87) International Publication No	:WO 2020/136011	<b>5)VAN DER MEER, Emanuel, Joseph, Herman, Marie</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a polyethylene composition comprising a) a polyethylene blend comprising from 95.5% to 99.5 wt% low density polyethylene (LDPE) and from 0.5% to 4.5 wt% high density polyethylene (HDPE), wherein the wt% ( % by weight) is based the total amount of low density polyethylene and high density polyethylene in the blend, and b) a mixture of glycerol-mono-stearate and glycerol-mono-palmitate.

No. of Pages : 16 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033772 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DOUBLE-SIDED COMB FOR A HAIR-CUTTING DEVICE

(51) International classification	:B26B0019200000, H01Q0013100000, B26B0019060000, B26B0019420000, B26B0013240000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19153003.9	(72) <b>Name of Inventor :</b>
(32) Priority Date	:22/01/2019	<b>1)VAN VELDHUIZEN, Gijsbert, Hendrik</b>
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2020/050620	
Filing Date	:13/01/2020	
(87) International Publication No	:WO 2020/151967	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a comb (100) for being attached to a hair-cutting device (115). The comb comprises two surfaces (103, 104) configured to be in contact with the skin of the user. Each surface comprises a slot (105, 106) for attaching the comb to the hair-cutting device, and both surfaces have a common edge (107). When the hair-cutting device is attached to the slot of the first surface, the second surface is in contact with the skin, and when the hair-cutting device is attached to the slot of the second surface, the first surface is in contact with the skin. An asymmetric arrangement of the two slots allows for two cutting lengths of hair with one double-sided comb.

No. of Pages : 10 No. of Claims : 12

(54) Title of the invention : ANTI-BIOFOULING ARRANGEMENT AND METHOD OF DESIGNING SUCH AN ARRANGEMENT

(51) International classification	:F21Y0115100000, F21V0005000000, F21Y0105120000, F21Y0115150000, B08B0017020000	(71)Name of Applicant : <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19152510.4	(72)Name of Inventor :
(32) Priority Date	:18/01/2019	<b>1)HIETBRINK, Roelant, Boudewijn</b>
(33) Name of priority country	:EPO	<b>2)NIESSEN, Eduard, Matheus, Johannes</b>
(86) International Application No	:PCT/EP2020/051013	<b>3)SCHUDELARO, Antonius, Adrianus, Petrus</b>
Filing Date	:16/01/2020	
(87) International Publication No	:WO 2020/148377	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

In an anti-biofouling context, an arrangement (1) is provided which comprises an object (10) and a light-emitting system (20) arranged on at least a main surface (11a) of the object (10). The light-emitting system (20) includes a plurality of light sources (21) for emitting anti-biofouling light and is configured to emit the light in a direction away from the object (10). The light sources (21) are arranged in the light-emitting system (20) in at least two different light-emitting groups (22) having respective main directions of emission (23) of the anti-biofouling light, the main directions of emission (23) of at least two light-emitting groups (22) having different spatial orientations when viewed on an unfolded and flattened area of the main surface (11a) where the light-emitting groups (22) are located. Consequently, the area that is reached by the anti-biofouling light during operation of the arrangement (1) can be adjusted to particular requirements.

No. of Pages : 18 No. of Claims : 16

(54) Title of the invention : COMB ATTACHMENT AND HAIR CUTTING APPLIANCE

(51) International classification	:B26B0019380000, B26B0019200000, G02F0001133300, A45D0024360000, A45D0020120000	(71) <b>Name of Applicant :</b> <b>1)KONINKLIJKE PHILIPS N.V.</b> Address of Applicant :High Tech Campus 52 5656 AG Eindhoven Netherlands
(31) Priority Document No	:19153214.2	(72) <b>Name of Inventor :</b>
(32) Priority Date	:23/01/2019	<b>1)IACCARINO, Luca</b>
(33) Name of priority country	:EPO	<b>2)HIN, Theodoor, Ren, Maria</b>
(86) International Application No	:PCT/EP2020/050977	
Filing Date	:16/01/2020	
(87) International Publication No	:WO 2020/152016	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

The present disclosure relates to a comb attachment (130) for a hair cutting appliance (100) as well as a hair cutting appliance (100). The comb attachment (130) comprises: a frame portion (131) enclosing a cutting area (A) that is adapted to at least partially receive a cutting unit (120) of the hair cutting appliance (100), an attachment means (132) extending from the frame portion (131) away from the cutting area (A), the attachment means (132) having at least one attachment point adapted to attach the comb attachment (130) to the hair cutting appliance (100), a sidewall (133) extending from the frame portion (131) in a common direction with the attachment means (132), a set of first teeth (134) at least partially extending along the cutting area (A) from the frame portion (131) in a first teeth extending direction that at least partially corresponds to a cutting direction (C) during hair cutting, the first teeth (134) are spaced from each other in a teeth spacing direction that is perpendicular to the first teeth extending direction, thereby forming a respective gap (G) between the individual first teeth (134), a gap cover (135) extending in sections from the sidewall (133) and adapted to cover the respective gap (G) of the first teeth (134), the sidewall (133) and the gap cover (135) forming an enclosed space (136) adapted to at least temporarily collect cut hair debris during hair cutting, wherein the sidewall (133) extends over a height that overlaps with the at least one attachment point of the attachment means (132), the at least one attachment point being arranged so that the sidewall (133) overlaps with a section of the hair cutting appliance (100) when the comb attachment (130) is attached thereto via the attachment means (132), and wherein the gap cover (135) and the sidewall (133), with respect to the cutting direction (C), are arranged at a rear of the frame portion (131).

No. of Pages : 17 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033778 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : SCALABLE SYSTEM AND ENGINE FOR FORECASTING WIND TURBINE FAILURE

(51) International classification	:G06Q0010060000, G06N0020000000, G06N0005020000, G05D0001000000, G06Q0010100000	(71)Name of Applicant : <b>1)WANG, Yajuan</b> Address of Applicant :54 Greenville Circle White Plains, California 10607 U.S.A. <b>2)SOLYMOSI, Gabor</b> <b>3)SZARKA, Ede</b> <b>4)KIM, Younghun</b>
(31) Priority Document No	:16/234455	(72)Name of Inventor : <b>1)WANG, Yajuan</b> <b>2)SOLYMOSI, Gabor</b> <b>3)SZARKA, Ede</b> <b>4)KIM, Younghun</b>
(32) Priority Date	:27/12/2018	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/068842	
Filing Date	:27/12/2019	
(87) International Publication No	:WO 2020/140103	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

An example method utilizing different pipelines of a prediction system, comprises receiving event and alarm data from event logs, failure data, and asset data from SCADA system(s), retrieve patterns of events, receiving historical sensor data from sensors of components of wind turbines, training a set of models to predict faults for each component using the patterns of events and historical sensor data, each model of a set having different observation time windows and lead time windows, evaluating each model of a set using standardized metrics, comparing evaluations of each model of a set to select a model with preferred lead time and accuracy, receive current sensor data from the sensors of the components, apply the selected model(s) to the current sensor data to generate a component failure prediction, compare the component failure prediction to a threshold, and generate an alert and report based on the comparison to the threshold.

No. of Pages : 57 No. of Claims : 10

(54) Title of the invention : SYSTEM AND METHOD FOR EVALUATING MODELS FOR PREDICTIVE FAILURE OF RENEWABLE ENERGY ASSETS

(51) International classification	:G05D0001000000, G05B0015020000, G06Q0010060000, G06N0020000000, G06F0011000000	(71)Name of Applicant : <b>1)WANG, Yajuan</b> Address of Applicant :54 Greenvale Circle White Plains, New York 10607 U.S.A. <b>2)SOLYMOSI, Gabor</b> <b>3)KIM, Younghun</b>
(31) Priority Document No	:16/234329	(72)Name of Inventor : <b>1)WANG, Yajuan</b> <b>2)SOLYMOSI, Gabor</b> <b>3)KIM, Younghun</b>
(32) Priority Date	:27/12/2018	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/068840	
Filing Date	:27/12/2019	
(87) International Publication No	:WO 2020/140102	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

## (57) Abstract :

An example method comprises receiving historical sensor data from sensors of components of wind turbines, training a set of models to predict faults for each component using the historical sensor data, each model of a set having different observation time windows and lead time windows, evaluating each model of a set using standardized metrics, comparing evaluations of each model of a set to select a model with preferred lead time and accuracy, receive current sensor data from the sensors of the components, apply the selected model(s) to the current sensor data to generate a component failure prediction, compare the component failure prediction to a threshold, and generate an alert and report based on the comparison to the threshold.

No. of Pages : 33 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202147033812 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMBINATION OF ANTIVIRAL AGENTS

(51) International classification :A61K0031513000,  
A61K0045060000,  
A61K0039000000,  
A61K0038200000,  
C12N0015113000  
(31) Priority Document No :2018147078  
(32) Priority Date :27/12/2018  
(33) Name of priority country :Russia  
(86) International Application No :PCT/RU2019/001031  
Filing Date :26/12/2019  
(87) International Publication No :WO 2020/139163  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)OBSHESTVO S OGRANICHENNOI  
OTVETSTVENNOSTYU PROLONGIROVANNYE  
LEKARSTVA**

Address of Applicant :ter. Skolkovo innovatsionnogo tsentra  
ul. Lugovaya, 4, str. 1, etazh 1, chat pom 4. Moscow, 143026  
Russia

(72)Name of Inventor :

**1)BIBILASHVILI, Robert Shalvovich  
2)KONONOV, Alexandr Vasilievich  
3)KRAVCHENKO, Alexei Viktorovich  
4)KHANDAZHINSKAYA, Anastasia Lvovna  
5)SIMONYAN, Alina Ruslanovna**

(57) Abstract :

The group of inventions relates to the field of medicine and the pharmaceutical industry, and specifically to a combination for treatment of an HIV infection, comprising (i) an ammonia salt of 5-aminocarbonylphosphonate-3-azido-3-desoxythymidine and (ii) an analogue of cytidine selected from emtricitabine and lamivudine in a mass ratio of agent (i) to agent (ii) of from 250:1 to 1:250; to a kit which includes said combination and instructions for use thereof; and also to a method for treating an HIV infection in a mammal, including a human, by administering a therapeutically effective amount of the proposed combination to the mammal in need thereof. The group of inventions broadens the range of combined antiviral preparations for treating HIV infections and also increases the effectiveness of such treatment.

No. of Pages : 16 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148032771 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : FLEXIBLE TIME DIVISION DUPLEXING (TDD) SUBFRAME STRUCTURE WITH LATENCY REDUCTION

(51) International classification	:H04L0005140000, H04L0005000000, H04W0072040000, H04L0027260000, H04W0072120000	(71) <b>Name of Applicant :</b> <b>1)QUALCOMM INCORPORATED</b> Address of Applicant :a Delaware corporation, USA of Attn: International IP Administration, 5775 Morehouse Drive, San Diego, California 92121-1714, USA U.S.A.
(31) Priority Document No	:62/243,631	(72) <b>Name of Inventor :</b>
(32) Priority Date	:19/10/2015	<b>1)CHEN, Wanshi</b>
(33) Name of priority country	:U.S.A.	<b>2)PATEL, Shimman, Arvind</b>
(86) International Application No	:PCT/US2016/048617	<b>3)MONTJOJO, Juan</b>
Filing Date	:25/08/2016	<b>4)XU, Hao</b>
(87) International Publication No	: NA	<b>5)DAMNJANOVIC, Aleksandar</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201847009501	
Filed on	:15/03/2018	

(57) Abstract :  
ENCLOSED

No. of Pages : 66 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148032795 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : IMAGE PROCESSING DEVICE, IMAGING DEVICE, IMAGE PROCESSING METHOD, IMAGING METHOD, AND IMAGE PROCESSING PROGRAM

(51) International classification	:H04N0005232000, H04N0009040000, H04N0005357000, G06T0005000000, H04N0001000000	(71) <b>Name of Applicant :</b> <b>1)INTEL CORPORATION</b> Address of Applicant :2200 Mission College Boulevard, Santa Clara, CA 95054 U.S.A.
(31) Priority Document No	:2007-184969	(72) <b>Name of Inventor :</b>
(32) Priority Date	:13/07/2017	<b>1)YASUHIRO SAWADA</b>
(33) Name of priority country	:Japan	
(86) International Application No	:PCT/JP2008/062584	
Filing Date	:11/07/2008	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:553/CHENP/2010	
Filed on	:29/01/2010	

(57) Abstract :  
as uploaded

No. of Pages : 48 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148032868 A

(19) INDIA

(22) Date of filing of Application :21/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : METHODS, DEVICES AND SYSTEMS FOR PARALLEL VIDEO ENCODING AND DECODING

(51) International classification	:H04N0019436000, H04N0019700000, H04N0019172000, H04N0019170000, H04N0019460000	(71) <b>Name of Applicant :</b> <b>1)DOLBY INTERNATIONAL AB</b> Address of Applicant :Apollo Building, 3E, Herikerbergweg 1-35 NL-1101 CN, Amsterdam Zuidoost, Netherlands Netherlands
(31) Priority Document No	:12/058,301	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/03/2008	<b>1)ZHAO, Jie</b>
(33) Name of priority country	:U.S.A.	<b>2)SEGALL, Christopher, A.</b>
(86) International Application No	:PCT/JP2009/056778	<b>3)KEROFSKY, Louis, J.</b>
Filing Date	:25/03/2009	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:6312/CHENP/2010	
Filed on	:05/10/2010	

(57) Abstract :  
AS ATTACHED

No. of Pages : 39 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033071 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : DUAL COMPOSITE LIGHT FIELD DEVICE

(51) International classification	:G02B0030270000, G01D0005260000, G05B0019042000, B32B0005020000, F21V0005040000	(71) <b>Name of Applicant :</b> <b>1)MAGIC LEAP, INC.</b> Address of Applicant :7500 W. Sunrise Blvd, Plantation, FL 33322, United States of America U.S.A.
(31) Priority Document No	:62/163,733	(72) <b>Name of Inventor :</b>
(32) Priority Date	:19/05/2015	<b>1)KAEHLER, Adrian</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2016/033343	
Filing Date	:19/05/2016	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201747040493	
Filed on	:14/11/2017	

(57) Abstract :  
As attached

No. of Pages : 0 No. of Claims : 0

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033086 A

(19) INDIA

(22) Date of filing of Application :22/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : IMPROVED YEAST FOR ETHANOL PRODUCTION

(51) International classification	:C12P0007060000, C12P0007100000, C12G0003020000, C12N0015810000, C12N0001160000	(71) <b>Name of Applicant :</b> <b>1)Novozymes A/S</b> Address of Applicant :36 Krogshoejvej Bagsvaerd Denmark Denmark
(31) Priority Document No	:62/514,636	(72) <b>Name of Inventor :</b> <b>1)HOGSETT, David</b>
(32) Priority Date	:02/06/2017	<b>2)TASSONE, Monica</b>
(33) Name of priority country	:U.S.A.	<b>3)HARRIS, Paul Vincent</b>
(86) International Application No	:PCT/US2018/035596	<b>4)SOONG, Chee-Leong</b>
Filing Date	:01/06/2018	<b>5)CATLETT, Michael Glenn</b>
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947054300	
Filed on	:26/12/2019	

(57) Abstract :  
As Attached

No. of Pages : 433 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033155 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : RRM MEASUREMENT AND REPORTING FOR LICENSE ASSISTED ACCESS

(51) International classification	:H04W0024100000, H04W0016140000, H04W0074080000, H04L0005000000, H04B0017318000	(71) <b>Name of Applicant :</b> <b>1)QUALCOMM INCORPORATED</b> Address of Applicant :a Delaware corporation, ATTN: International IP Administration, 5775 Morehouse Drive, San Diego, California 92121-1714, USA, U.S.A.
(31) Priority Document No	:62/161,167	(72) <b>Name of Inventor :</b>
(32) Priority Date	:13/05/2015	<b>1)VAJAPEYAM, Madhavan, Srinivasan</b>
(33) Name of priority country	:U.S.A.	<b>2)DAMNJANOVIC, Aleksandar</b>
(86) International Application No	:PCT/US2016/029516	<b>3)GAAL, Peter</b>
Filing Date	:27/04/2016	<b>4)LUO, Tao</b>
(87) International Publication No	: NA	<b>5)AMINZADEH GOHARI, Amir</b>
(61) Patent of Addition to Application Number	:NA	<b>6)KITAZOE, Masato</b>
Filing Date	:NA	
(62) Divisional to Application Number	:201747033938	
Filed on	:25/09/2017	

(57) Abstract :  
AS ATTACHED

No. of Pages : 66 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033183 A

(19) INDIA

(22) Date of filing of Application :23/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : ELECTRONIC DEVICE INCLUDING THIN HOUSING, AND MANUFACTURING METHOD THEREFOR

(51) International classification	:G06F0001160000, H04M0001020000, H05K0005040000, H04M0001725000, C25D0011000000	(71)Name of Applicant : <b>1)SAMSUNG ELECTRONICS CO., LTD.</b> Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677, Republic of Korea Republic of Korea
(31) Priority Document No	:10-2017-0031395	(72)Name of Inventor :
(32) Priority Date	:13/03/2017	<b>1)BAEK, Seung Chang</b>
(33) Name of priority country	:Republic of Korea	<b>2)SON, Hyeong Sam</b>
(86) International Application No	:PCT/KR2018/002622	<b>3)SONG, Chang Jin</b>
Filing Date	:06/03/2018	<b>4)SHIN, Chang Hyeok</b>
(87) International Publication No	: NA	<b>5)CHO, Sung Ho</b>
(61) Patent of Addition to Application Number	:NA	<b>6)CHO, Chong Kun</b>
Filing Date	:NA	<b>7)HWANG, Han Gyu</b>
(62) Divisional to Application Number	:201947003856	<b>8)YOO, Min Woo</b>
Filed on	:31/01/2019	

(57) Abstract :

As attached

No. of Pages : 56 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033427 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : A METHOD OF WASHING AUTOMOBILES USING AN AEROSOL DETERGENT COMPOSITION

(51) International classification	:C11D0007500000, C11D0007300000, C23G0005000000, C11D0017080000, C09K0003300000	(71) <b>Name of Applicant :</b> <b>1)KOBEGOSEI CO.,LTD.</b> Address of Applicant :10 Takumidai, Ono-shi Hyogo 6751322 Japan Japan
(31) Priority Document No	:2017-108838	(72) <b>Name of Inventor :</b>
(32) Priority Date	:31/05/2017	<b>1)MIYAOKA Masanobu</b>
(33) Name of priority country	:Japan	<b>2)MIYAOKA Yuuji</b>
(86) International Application No	:PCT/2018/021096	
Filing Date	:31/05/2018	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947051701	
Filed on	:13/12/2019	

(57) Abstract :

A METHOD OF WASHING AUTOMOBILES USING AN AEROSOL DETERGENT COMPOSITION To provide a method of washing automobiles, two-wheeled vehicles, bicycles, construction equipment, farm equipment, aircraft, railroad cars, ships, and/or various other types of car/vehicle/transportation means by spraying an aerosol composition, which is nonflammable, which is of low toxicity, which has little environmental impact in terms of depletion of the ozone layer and so forth, and which, while preventing erosion of rubbers and resins, causes dirt components to be moistened and washed off and away therefrom by the detergent composition, and which permits accommodation of mechanization by virtue of its being capable of being sprayed thereonto from a roughly constant distance therefrom, said aerosol composition for washing is made to contain (Z)-1-chloro-3,3,3-trifluoropropene and gas propellant which is N<sub>2</sub>, compressed air, CO<sub>2</sub>, argon, or a mixture of two or more thereof.

No. of Pages : 41 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033570 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : EYELID SHAPE ESTIMATION USING EYE POSE MEASUREMENT

(51) International classification	:G06K0009000000, G06F0003010000, G06T0007593000, A61B0034200000, G02B0023240000	(71) <b>Name of Applicant :</b> <b>1)MAGIC LEAP, INC.</b> Address of Applicant :7500 W. Sunrise Blvd, Plantation, FL 33322, United States of America U.S.A.
(31) Priority Document No	:62/208,519	(72) <b>Name of Inventor :</b>
(32) Priority Date	:21/08/2015	<b>1)KAEHLER, Adrian</b>
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2016/047177	
Filing Date	:16/08/2016	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201847009021	
Filed on	:12/03/2018	

(57) Abstract :  
As attached

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(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033654 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : PLEASE SEE THE ATTACHMENT

(51) International classification	:C09B0067220000, E02D0033000000, B22F0003040000, C07H0015203000, C09K0008584000	(71) <b>Name of Applicant :</b> <b>1)Daikin Industries, Ltd.</b> Address of Applicant :Umeda Center Building, 4-12 Nakazaki-Nishi 2-Chome, Kita-ku, Osaka-shi, Osaka 530-8323, Japan Japan
(31) Priority Document No	:2016-179979	(72) <b>Name of Inventor :</b>
(32) Priority Date	:14/09/2016	<b>1)HIGASHI, Masahiro</b>
(33) Name of priority country	:Japan	<b>2)HOSOKAWA, Moe</b>
(86) International Application No	:PCT/JP2017/033115	<b>3)YAMAUCHI, Akiyoshi</b>
Filing Date	:13/09/2017	<b>4)ISHIHARA, Sumi</b>
(87) International Publication No	: NA	<b>5)KISHIKAWA, Yosuke</b>
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947014791	
Filed on	:13/09/2017	

(57) Abstract :

Please see the attachment

No. of Pages : 43 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033680 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS

(51) International classification	:A61K0009000000, C07D0233620000, C07D0233600000, C07D0239360000, C07D0249080000	(71) <b>Name of Applicant :</b> <b>1)CELLIX BIO PRIVATE LIMITED</b> Address of Applicant :Plot No. 1177 B, Road No. 56, Jubilee Hills, Hyderabad. Telangana India
(31) Priority Document No	:201641040639	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/11/2016	<b>1)KANDULA, Mahesh</b>
(33) Name of priority country	:India	
(86) International Application No	:PCT/IB2017/057388	
Filing Date	:24/11/2017	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947021083	
Filed on	:28/05/2019	

(57) Abstract :

**ABSTRACT COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS** The invention relates to the compounds or its pharmaceutical acceptable polymorphs, solvates, enantiomers, stereoisomers and hydrates thereof. The pharmaceutical compositions comprising an effective amount of compounds of formula I, formula II, formula III, formula IV, formula V, formula VI, formula VII, formula VIII, formula IX or Formula X and, the methods for the treatment of fungal infections may be formulated for oral, buccal, rectal, topical, transdermal, transmucosal, lozenge, spray, intravenous, oral solution, buccal mucosal layer tablet, parenteral administration, syrup, or injection. Such compositions may be used to treatment of fungal infections.

No. of Pages : 86 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033681 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS

(51) International classification	:A61K0009000000, C07D0233620000, C07D0233600000, C07D0239360000, C07D0249080000	(71) <b>Name of Applicant :</b> <b>1)CELLIX BIO PRIVATE LIMITED</b> Address of Applicant :Plot No. 1177 B, Road No. 56, Jubilee Hills, Hyderabad. Telangana India
(31) Priority Document No	:201641040639	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/11/2016	<b>1)KANDULA, Mahesh</b>
(33) Name of priority country	:India	
(86) International Application No	:PCT/IB2017/057388	
Filing Date	:24/11/2017	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947021083	
Filed on	:28/05/2019	

(57) Abstract :

**ABSTRACT COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS** The invention relates to the compounds or its pharmaceutical acceptable polymorphs, solvates, enantiomers, stereoisomers and hydrates thereof. The pharmaceutical compositions comprising an effective amount of compounds of formula I, formula II, formula III, formula IV, formula V, formula VI, formula VII, formula VIII, formula IX or Formula X and, the methods for the treatment of fungal infections may be formulated for oral, buccal, rectal, topical, transdermal, transmucosal, lozenge, spray, intravenous, oral solution, buccal mucosal layer tablet, parenteral administration, syrup, or injection. Such compositions may be used to treatment of fungal infections.

No. of Pages : 86 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033682 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS

(51) International classification	:A61K0009000000, C07D0233620000, C07D0233600000, C07D0239360000, C07D0249080000	(71) <b>Name of Applicant :</b> <b>1)CELLIX BIO PRIVATE LIMITED</b> Address of Applicant :Plot No. 1177 B, Road No. 56, Jubilee Hills, Hyderabad. Telangana India
(31) Priority Document No	:201641040639	(72) <b>Name of Inventor :</b>
(32) Priority Date	:28/11/2016	<b>1)KANDULA, Mahesh</b>
(33) Name of priority country	:India	
(86) International Application No	:PCT/IB2017/057388	
Filing Date	:24/11/2017	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947021083	
Filed on	:28/05/2019	

(57) Abstract :

**ABSTRACT COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS** The invention relates to the compounds or its pharmaceutical acceptable polymorphs, solvates, enantiomers, stereoisomers and hydrates thereof. The pharmaceutical compositions comprising an effective amount of compounds of formula I, formula II, formula III, formula IV, formula V, formula VI, formula VII, formula VIII, formula IX or Formula X and, the methods for the treatment of fungal infections may be formulated for oral, buccal, rectal, topical, transdermal, transmucosal, lozenge, spray, intravenous, oral solution, buccal mucosal layer tablet, parenteral administration, syrup, or injection. Such compositions may be used to treatment of fungal infections.

No. of Pages : 86 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033683 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS

(51) International classification	:A61K0009000000, C07D0233620000, C07D0233600000, C07D0239360000, C07D0249080000	(71) <b>Name of Applicant :</b> <b>1)CELLIX BIO PRIVATE LIMITED</b> Address of Applicant :Plot No. 1177 B, Road No. 56, Jubilee Hills, Hyderabad. Telangana India
(31) Priority Document No	:201641040639	(72) <b>Name of Inventor :</b> <b>1)KANDULA, Mahesh</b>
(32) Priority Date	:28/11/2016	
(33) Name of priority country	:India	
(86) International Application No	:PCT/IB2017/057388	
Filing Date	:24/11/2017	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947021083	
Filed on	:28/05/2019	

(57) Abstract :

ABSTRACT COMPOSITIONS AND METHODS FOR THE TREATMENT OF FUNGAL INFECTIONS The invention relates to the compounds or its pharmaceutical acceptable polymorphs, solvates, enantiomers, stereoisomers and hydrates thereof. The pharmaceutical compositions comprising an effective amount of compounds of formula I, formula II, formula III, formula IV, formula V, formula VI, formula VII, formula VIII, formula IX or Formula X and, the methods for the treatment of fungal infections may be formulated for oral, buccal, rectal, topical, transdermal, transmucosal, lozenge, spray, intravenous, oral solution, buccal mucosal layer tablet, parenteral administration, syrup, or injection. Such compositions may be used to treatment of fungal infections.

No. of Pages : 86 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202148033689 A

(19) INDIA

(22) Date of filing of Application :27/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : NUMEROLOGY-DEPENDENT DOWNLINK CONTROL CHANNEL MAPPING

(51) International classification	:H04W0072040000, H04L0005000000, H03M0013000000, H04L0012460000, H03M0013270000	(71) <b>Name of Applicant :</b> <b>1)TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)</b> Address of Applicant :SE-164 83, Stockholm, Sweden Sweden
(31) Priority Document No	:62/423,254	(72) <b>Name of Inventor :</b>
(32) Priority Date	:17/11/2016	<b>1)PARKVALL, Stefan</b>
(33) Name of priority country	:U.S.A.	<b>2)BALDEMAIR, Robert</b>
(86) International Application No	:PCT/SE2017/051140	
Filing Date	:17/11/2017	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201947019344	
Filed on	:17/11/2017	

(57) Abstract :

Please refer to the attachment

No. of Pages : 24 No. of Claims : 20

(54) Title of the invention : METHODS AND DEVICES FOR VEHICULAR RADIO COMMUNICATIONS

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No</p> <p>Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application Number</p> <p>Filing Date</p> <p>(62) Divisional to Application Number</p> <p>Filed on</p>	<p>(71)Name of Applicant :</p> <p><b>1)INTEL CORPORATION</b></p> <p>Address of Applicant :2200 Mission College Boulevard, Santa Clara, California, 95054, USA U.S.A.</p> <p>(72)Name of Inventor :</p> <p><b>1)ALDANA, Carlos</b></p> <p><b>2)BADIC, Biljana</b></p> <p><b>3)CAVALCANTI, Dave</b></p> <p><b>4)CHOUDHURY, Debabani</b></p> <p><b>5)DREWES, Christian</b></p> <p><b>6)FWU, Jong-Kae</b></p> <p><b>7)GUNZELMANN, Bertram</b></p> <p><b>8)HIMAYAT, Nageen</b></p> <p><b>9)KARLS, Ingolf</b></p> <p><b>10)KITCHIN, Duncan</b></p> <p><b>11)MUECK, Markus, Dominik</b></p> <p><b>12)RAAF, Bernhard</b></p> <p><b>13)SIPRAK, Domagoj</b></p> <p><b>14)SKINNER, Harry</b></p> <p><b>15)STOBART, Christopher</b></p> <p><b>16)TALWAR, Shilpa</b></p> <p><b>17)YU, Zhibin</b></p>
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(57) Abstract :

A communication device for a vehicular radio communications includes one or more processors configured to identify a plurality of vehicular communication devices that form a cluster of cooperating vehicular communication devices, determine channel resource allocations for the plurality of vehicular communication devices that includes channel resources allocated for a first vehicular radio communication technology and channel resources allocated for a second vehicular radio communication technology, and transmit the channel resource allocation to the plurality of vehicular communication devices.

No. of Pages : 761 No. of Claims : 17

***CONTINUED TO PART- 2***