INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01\textsuperscript{st} 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.

( Om Prakash Gupta )
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

4\textsuperscript{TH} JANUARY, 2019
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The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:

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<th>No.</th>
<th>Office Address</th>
<th>Phone</th>
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<td>1</td>
<td>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</td>
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<td>2</td>
<td>The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office, S.M. Road, Antop Hill, Mumbai - 400 037</td>
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<td><a href="mailto:mumbai-patent@nic.in">mumbai-patent@nic.in</a></td>
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<td>The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32, Sector-14, Dwarka, New Delhi - 110075</td>
<td>(91)(11) 25300200 &amp; 28032253, (91)(11) 28034301 &amp; 28034302</td>
<td><a href="mailto:delhi-patent@nic.in">delhi-patent@nic.in</a></td>
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<td>The Patent Office, Government of India, Intellectual Property Rights Building, G.S.T. Road, Guindy, Chennai - 600 032.</td>
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<td>The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector –V, Salt Lake City, Kolkata - 700 091</td>
<td>(91)(33) 2367 1943/44/45/46/87, (91)(33) 2367 1988</td>
<td><a href="mailto:kolkata-patent@nic.in">kolkata-patent@nic.in</a></td>
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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.

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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.

(Om Prakash Gupta)
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 18th 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.
The following days have been declared as Holidays to be observed by the Patent Office Kolkata during the year 2019.

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<th>Sl. No.</th>
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<td>3.</td>
<td>Vaisakha(Bengal)</td>
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<td>Mahavir Jayanti</td>
<td>April 17</td>
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<td>Good Friday</td>
<td>April 19</td>
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<td>6.</td>
<td>Buddha Purnima</td>
<td>May 18</td>
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<td>7.</td>
<td>Idu’l Fitr</td>
<td>June 05</td>
<td>Wednesday</td>
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<td>8.</td>
<td>Id-uz-Zuha (Bakrid)</td>
<td>August 12</td>
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<td>9.</td>
<td>Independence Day</td>
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<td>Muharram</td>
<td>September 10</td>
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<td>11.</td>
<td>Mahatama Gandhi’s Birth Day</td>
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<td>16.</td>
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<td>17.</td>
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Note: Central Government Organizations, which include industrial, commercial & training establishments (i.e. other than doing work of Secretariat nature) would observe 16 holidays in a year out of which 3 namely Republic Day, Independence Day and Mahatma Gandhi’s Birthday will be compulsory. The remaining holidays/occasions may be determined by such Establishments/Organizations themselves on year to year basis.

In deciding whether a particular Deptt/Establishment/Organization an industrial, commercial or trading organizations (i.e. other than those doing work of Secretariat nature) the decision may be taken by the respective Ministry/Ministry of Home Affairs, New Delhi.

The date of Holidays for the Muslim festivals may be changed on sighting of the Moon and decision to be taken by the State Govt.
वर्ष 2019 में छट्टियों की सूची

वर्ष 2019 के दौरान पेटेंट कार्यालय, कोलकाता के लिए निम्नलिखित दिनों की छट्टी घोषित किया गया है।

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</tbody>
</table>

टिप्पणी: केन्द्र सरकार के संस्थानों में, जिनमें आंदोलन, वाणिज्यिक तथा प्रशिक्षण प्रतिष्ठान (यथा सचिवालय प्रबृत्ति में पूर्वक कार्य करने वाले) शामिल हैं, इस वर्ष 16 अक्षण होंगे जिनमें से 3 (तीन) यथा गणतंत्र दिवस, स्वतंत्रता दिवस तथा महाशय काँची जयंती अनिवार्य होंगे। शेष अक्षण/अन्य प्रतिष्ठानों/संस्थानों द्वारा प्रतिवर्ष मुक्तवर्ष निर्धारित किए जायें। कोई विशेष/प्रतिष्ठान/संस्थान आंदोलन, वाणिज्य एवं व्यापारिक प्रतिष्ठान (यथा सचिवालय प्रबृत्ति के कार्य करने वाले प्रतिष्ठानों के अतिरिक्त) हैं कि नहीं इसका निर्धारण संबंधित मंत्रालय/मंत्रालय, नहीं रित्यूली द्वारा किया जाएगा।

मुस्लिम तुषारों की छट्टी के दिन अपने के दिनों तथा राज्य सरकार द्वारा लिए गए निर्णय के आधार पर कर्मचारी को चाहिए है।

The Patent Office Journal No. 01/2019 Dated 04/01/2019
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:

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(54) Title of the invention : ABSORBENT ARTICLE

(51) International classification :A61F13/536
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :PCT/JP2017/037003
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(87) 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 :
An absorbent article (1) including an up-down direction, a right-left direction, and a front-rear direction, which intersect with each other, includes: a front-side waist part (20); and a rear-side waist part (30), at least one of the front-side waist part (20) and the rear-side waist part (30) including an elastic member(25, 35) that expands and contracts in the right-left direction and holes (50) penetrating in the front-rear direction, of the front-side waist part (20) and the rear-side waist part (30), a waist part to another side (20) with a greater contractile force in the right-left direction including more of the holes than a waist part to one side (30) with a smaller contractile force in the right-left direction.

No. of Pages : 39 No. of Claims : 11
An absorbent article (1) including an up-down direction, a right-left direction, and a front-rear direction, which intersect with each other, includes: a front-side waist part (20); and a rear-side waist part (30), at least one of the front-side waist part (20) and the rear-side waist part (30) including an elastic member (25, 35) that expands and contracts in the right-left direction and holes (50) penetrating in the front-rear direction, of the front-side waist part (20) and the rear-side waist part (30), a waist part to one side (30) with a smaller contractile force in the right-left direction including more of the holes (50) than a waist part to another side (20) with a greater contractile force in the right-left direction.
The embodiments of the present invention relates generally to a device for removing and installing light bulbs (which include any size of CFL, LED etc.). It will also be used for removing and installing of Tube lights, and any device which is lying on wall like watches, frames, Wi-Fi connector etc. Alternative function of the device include cleaning at a certain height like cleaning of ceiling, ceiling fan, Tube light etc.. More particularly this invention relates to an installation and removal tool for multiple types, shapes, light bulbs positioned in remote or inconvenient locations.

No. of Pages : 16 No. of Claims : 8
Title of the invention: ENHANCING THE PERFORMANCE OF BATTERY BY COATING ELECTRODES WITH FULLY UNZIPPED MULTIWALLED CARBON NANO TUBE OXIDE.

Abstract:
Disclosed is a coating for the electrodes of a battery to enhance its performance wherein the coating comprises unzipped multi-walled carbon nanotube oxide and at least one resin. Also provided is a method of manufacturing the coating. Figure 3

No. of Pages: 28 No. of Claims: 15
## Title of the Invention: MULTIPURPOSE SMART SAFETY HELMET

### International Classification
- A42B 3/00

### Priority Information
- Priority Document No: NA
- Priority Date: NA
- Name of Priority Country: NA

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- International Application No: NA
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- Patent of Addition to Application Number: NA
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- Filing Date: NA

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### Abstract:
This invention presents a safety helmet with integrated safety and smart communication mechanism. The conventional safety helmets can only protect the user’s head from heavy objects, while this invention covers all safety features for protecting multiple face organs. The visor has weld glass attached with flexible movement for operation which, when not required, is detachable. The invention consists of a gas mask incorporated with a visor for protection against hazardous environments. Specially designed gas mask does not create imbalance in the weight of the entire system. The vertical and horizontal movement of the gas mask improves the comfortability in operation. The protective fabric is incorporated on the back side within the helmet body for providing protection to the uncovered area of the neck against adverse environments. The smart communication system integrated with the safety helmet enables the local server to identify the current location of the user. The rotary encoder incorporated in the tightening knob makes the system sustainable by activating the smart system only when the user wears the helmet. All safety embodiments can be attached and removed as per the requirement. So, the scope of the present invention can be explored for all the areas where any of the mentioned safety gears are required.

No. of Pages: 23
No. of Claims: 8
(54) Title of the invention: AN EYEWEAR ADAPTED FOR DEFOGGING DURING SURGERY

(51) International classification: A61F 9/00

(31) Priority Document No: NA

(32) Priority Date: NA

(33) Name of priority country: NA

(86) International Application No: NA

(87) International Publication No: NA

(61) Patent of Addition to Application Number: NA

(62) Divisional to Application Number: NA

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(57) Abstract:
An Eyewear adapted for defogging in order to protect a users eyes during surgery application, the eyewear comprising a frame and a pair of ear pieces coupled to the frame, the ear pieces configured to assist in holding the eyewear on a users head, the eyewear further comprising a heating element characterized in that the eyewear comprises of a Nichrome 0.315/cm resistance wire (N80CR20) in a groove in an overhang, attached to the upper rim of the frame of eye glasses connected with a circuitry including a power source, a voltage regulator, a rocker/micro switch and a plurality of connection wires; wherein the said Nichrome wire is preferably of diameter and length of 0.2 mm and 15 cm respectively which is used as a heating element of glass surface as shown in FIG.1.

No. of Pages: 14 No. of Claims: 5
The presently invented system shown in Figure 1 consists of six basic subsystems: 1. Central Shaft 2. Hydraulic pipes fluid, pump(s) and actuators 3. Strain sensors 4. Impingers 5. Cutter blades. In conventional tunnel boring, boring is done using tunnel boring cutter cutting through the front material, using an impact loading. This not only reduces the speed of cutting but also causes extensive tool wear. Cutters with grinding blades, revolving ball type cutters or explosive boring are prevalently used in major projects. The proposed invention Tunnel boring cutter with crack initiating mechanism consists of conventional cutting blade with supplementary cracking of front material using a crack initiating mechanism. This crack initiating mechanism works alongside cutting. This reduces the strength of the front material, hence reducing the force to be applied for cutting, tool wear and improving speed. The hydraulic system consists of pump, piping™s, actuators and fluid. The pumps forces the fluid into the pipes with a pressure determined by the system. The pressure of the fluid, and hence, the force with which impingers hit the front material depends on the hardness of the material in this closed loop system. Each impinger consists of strain sensors which senses the displacement of impinge in respective impingement. This value is compared with the standard hardness of the material, data of which can be taken from the standard literature or can be measured experimentally. Once the impingers weakens the structure of front material, the cutter can easily remove the material and transfer it to the back, from where, it can be transferred to the opening end. This unique feature makes this method of tunnel boring very cost effective in term of cutting tool failure, speed and time. Also, with a closed loop system, which defines the pressure of fluid in loop, the proposed system is comparatively more energy efficient.

No. of Pages : 19 No. of Claims : 6
Title of the invention: A PROCESS FOR PREPARATION OF TERTIARY BUTYL HYDROQUINONE

Abstract:
A process for preparation of tertiary butyl hydroquinone. The present invention relates to a process for preparation of tertiary butyl hydroquinone. More particularly, it relates to a process for preparation of TBHQ by eradicating the consumption of hazardous solvents like toluene and eliminating hazardous impurities like hydroquinone, tertiary butyl-p-benzoquinone and also drastically reducing the presence of heavy metals like lead and arsenic. The present invention includes stages I-IV in which TBHQ is more purified and precipitated with a high scale purity results. TBHQ has application in food additives, animal feeds, as an antioxidant, emulsifier and in edible oils, effectively as antioxidant.
**Title of the invention:** AGRICULTURAL COMPOSITIONS

| (51) International classification | :A01N43/00 |
| (31) Priority Document No | :201721016449 |
| (32) Priority Date | :10/05/2017 |
| (33) Name of priority country | :India |
| (86) International Application No | :PCT/IB2018/053251 |
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| (61) Patent of Addition to Application Number | :NA |
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| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

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**Abstract:**
The invention relates to an agricultural water disintegrable granular composition. More particularly, the invention relates to a water disintegrable granular composition where the granules include at least one water insoluble crop nutrient or algae or pesticidal active ingredient and one or more agrochemically acceptable excipient whereby the granules have a bulk density of less than 1.5 gm/ml and hardness of at least 1 Newton. The present invention also provides a process of preparing the water disintegrable granular composition and a method of fortification of the plants or the soil or the plant propagation material or locus thereof with the water disintegrable granular composition.

No. of Pages : 121 No. of Claims : 27
Presently it has been noticed that there is a rise in purchasing cars worldwide. Even a middle-class family is looking for an automatic and advanced technology used cars. This requires the rapid improvement in automobile as well as entire vehicle systems.

Approximately there are 1.2 Billion cars on the road, and the figure is increasing day by day in the present scenario. Keeping in view the interest of the car users, there is further requirement of advanced technology in the Car Chassis, Body, Interiors, Doors, Visibility, and other frequently used parts. Recently we experience that we cannot turn the car/vehicle in sharp curved areas and at congested parking places in buildings and malls. Presently there is no rigid system to turn the vehicle in congested spaces in parking, to rescue bogged vehicle from sticky, muddy and sleepy areas, and to safeguard the tyre damages of the vehicle while static parking for long time. The IMPROVISING OF CAR USING CENTRALIZED HYDRAULIC JACKING SYSTEM can be developed which would help in system to turn the vehicle in congested space in parking, to rescue bogged vehicle from sticky, muddy and sleepy areas and to safeguard the tyre damages of the vehicle while static parking for long time. This system will provide ease to car drivers for the problems mentioned.

No. of Pages: 10 No. of Claims: 5
In this patent we discovered the phenomenon Sanal flow choking. An infallible closed-form analytical model is developed for predicting the 3D boundary layer displacement thickness at the Sanal flow choking condition for diabatic flows (flow involving the transfer of heat) for the validation, verification and calibration of various viscous flow solvers, which our scientific communities have been waiting for getting a solution for more than a century. The Sanalflow choking for diabatic flow is a unique condition of any real fluid flow problem at which both the thermal choking and the wall-friction induced flow choking occur at a single sonic fluid throat location. It plays a pivotal role in physical and biological sciences and makes apparent that any multiphase fluid flow solver with thermoviscoelastic interactive code with memory effect (stroke history) and biofluid rheology calibrated using the Sanalflow choking condition would be able to predict a priori the arterial aneurysm, hemorrhage and heart attack due to aerodynamic flow choking, cavitation and shock waves. At the choked-flow condition the systolic-to-diastolic blood pressure ratio (SBP/DBP) is a unique function of the heat capacity ratio of the blood. The 3D boundary layer thickness model presented herein is a useful tool for predicting the possibilities of myocardial infarction without any iota of symptom of plaque as it is evident that, at the boundary layer blockage induced Sanalflow choking condition, the blood pressure ratio and the heat capacity ratio of biofluid are the key risk factors for the arterial aneurysm, the hemorrhage and the heart attack due to the formation of shock waves in the downstream/bifurcation region of the artery. Furthermore, the exact prediction of the 3D boundary layer displacement thickness at the sonic-fluid-throat of any internal system at the Sanal flow choking condition provides a means to correctly pinpoint the causes of errors of various viscous flow solvers for a credible decision making on any real fluid problems.
Title: Elephant repellency system using parallel communication of laser and LDR system

The present invention relates to an Elephant Repellency System 100 comprising of a parallel laser source 110 emitting the light source which absorb the waves in the LDR Module 115 before setting up lasers. The output of LDR module 115 is connected with the RF transmitter 120. The RF module 120 transmits the signal which is received by the RF receiver 125. The frequency range of RF transmitter 120 is 433MHZ. The output of RF receiver 125 is connected to the Arduino microcontroller system 130. The pins are configured with the Arduino programming in the embedded system. The relay circuit 135 is thereby controlled by the Arduino microcontroller system 130 which is connected to the GSM modem 140. The relay circuit 135 is connected to the speaker 145, strong flash light 150 and the battery 155. The battery 155 is charged using the charge controller 160 and powered by the solar power 165.

No. of Pages : 12 No. of Claims : 4
Nowadays renewable energy plays an important role in producing electrical power. It has been found that by using solar panel, stepper motor and permanent magnet setup, one can generate DC voltage. Electrical power is the main consideration to meet the future load demand. In this work, a stepper motor gets supply from a solar panel through a regulator. Two 25mm diameter permanent magnets are fitted in the shaft of the stepper motor, which rotates the magnet mill through the force of repulsion and the magnet mill provides the required rotating torque to the DC generator. It is observed that a single DC dynamo produces 8V DC supply. So, it is a very simple technique with single mechanical input which can be used to produce more electrical outputs by using multiple arrangements which will meet the remote area industrial needs.
Title of the invention : WATER TANK CLEANING KIT

Abstract :
The invention discloses a cleaner device to clean inside of an overhead water tank. A siphoning action is adopted for thoroughly clean the overhead water tank. The device comprises a cleaning wand with a squeegee pad to clean the tank, a long flexible hose to connect the cleaning wand and a sucking container. Said sucking container is connected with a short flexible hose to start the syphoning action through to suck the water simply from water-tank to outside, gently moving the squeegee pad on the bottom and walls of the water-tank, this enables dirt and/or waste materials such as dirt, mud and sand to be sucked up together with water by a simple operation. The cleaning wand contains a locking knob to set the length the wand for easy cleaning.

No. of Pages : 30 No. of Claims : 8
An intelligent Print Device monitoring & manipulation method provided on a host computer that continually tracks in the connected / accessible print devices parameters like toner or ink cartridge / container along with identities & toner levels. As & when certain device statuses change, the invention will accordingly & progressively alter the density/ resolution and such allied print device setting to achieve higher page yield from the available toner /ink present in cartridge. The alteration activity can be initiated automatically on-site & /or manually from remote location, when it is added as part of system platform that bridges client sites having print devices and the host computer to external service providers.

No. of Pages: 26 No. of Claims: 7
TITLE: SECURE REMOTE ELECTRONIC VOTING SYSTEM

7. Abstract of the Invention
The present invention generally relates to electronic voting and, more particularly, to electronic voting in an election via a public data network. The electronic voting system comprises a plurality of primary and secondary devices authentication devices (110) using which a voter can perform the proofing of his identity by swiping his/her identification card and/or biometrics to gain access to a polling booth. The central hosting facility (100) further comprising a web server for hosting a home page enabling a secure voting process, a data storage device (105) for storing the information regarding the list of voters and their credentials, subjects to be elected etc., The system comprises an application processing segment (101) basically a computer to serve the voting process which is in turn connected to the plurality of polling side computers (202a) and (202b) wherein the application comprises a vote creation subsystem for creating a vote definition file by an official of the local election office, transforming the vote definition file to a standard format, validating the vote by the local election official, and providing the vote for use by a voter and a voter authentication subsystem that has information of the registered voters.

No. of Pages: 15 No. of Claims: 10
A liquid transport unit (5) that facilitates the detection of an appropriate time to change a dirty diaper, comprises a first core (7) that is enclosed in a first enclosure (8), said first core (7) being highly absorbent and having good wicking effect; and a first absorbent layer (9) made of a material with suitable thickness (typically less than 0.5 millimetres), said first absorbent layer (9) being sandwiched between a first pair of layers, namely a first layer (10) and a second layer (11), said first layer (10) and said second layer (11) not repulsing a liquid that is to be transported through the liquid transport unit (5), and said first layer (10) and said second layer (11) being made of a material that is less absorbent as compared to the sandwiched first absorbent layer (9). A system that comprises the liquid transport unit (5) and its method of functioning are also disclosed. Figure to be Included is Figure 1

No. of Pages : 37 No. of Claims : 57
Title of the invention: HYGENIC AUTOMATED FOOD PROCESSING MACHINE (HAFPM) USING PNEUMATICS THROUGH PLC

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Abstract:
The customary technique for cooking is non-hygienic and requires a lot of labor. Gazing from vegetables washing/cutting to flushing of rice. We are not guaranteed of same taste in manual cooking process. This work was taken up with a view to enhance the present arrangement of nourishment handling and keeping up a hygienic situation with same taste every time as made by the manual procedure. In the cooking process, all the vegetables should be washed, sliced and have to be mixed with the ingredients along with the oil at exact time in required proportion to get vegetable curries. If the same process has to be carried out for meat items, instead of vegetables meat can be used as the product. Rice should be washed and cooked for the predefined time to get plain boiled rice. If required the above two processes can be carried out in sequence to get different variety of rice items. The Programmable Logic Controller strategy implementations for a control task closely follow the development of an algorithm and produce the solution in a finite number of steps.

No. of Pages: 17 No. of Claims: 4
Disclosed herein is a method and system for monitoring a boom barrier at one or more level crossings (LCs). The method comprising displaying, by at least one of control cabin unit, at least one information associated with a plurality of trains crossing corresponding level crossings. Also, the method comprises transmitting information associated with a train which is about to cross a level crossing, to a level crossing control unit and receiving information corresponding to the level crossing control unit comprising at least one of acknowledgement, time of closure of the boom barrier from the level crossing control unit, private number associated with the level crossing, and open time of the boom barrier. Further, the method comprises displaying and storing the received information corresponding to the level crossing display unit. Figure 1

No. of Pages : 27 No. of Claims : 14
Title of the invention: UNIFIED MYOGRAPHY

Abstract:
ABSTRACT Title: UNIFIED MYOGRAPHY Unified Myography or UMG is an effective technical procedure to discern different physiological phenomena of superficial muscle activity. Said UMG System comprise of two different transducers placed at surface of the skin having single point of contact. The center point or axis of one transducer in UMG shared the axis of another transducer. This technique develops the superimposed waveform of both motor unit action potential and bio-mechanical deformation or radial force of single superficial muscle contraction. Said System also emanate two different Output Signals from voluntary or involuntary muscle contraction of Single targeted superficial muscle group.

No. of Pages: 11 No. of Claims: 10
ABSTRACT Anthropoidic Artificial Digit (AAD) provides biomimetic model of anthropoid digit motion in artificial digit. The built anthropoid motion gives artificial digit a compliance feature in-case of accidentally whacked from posterior side of artificial digit and such System also facilitates the artificial digit to prevent the overturn in counterclockwise direction, thus provides stable grasp force without the continuous power consumption of actuation unit. Said AAD is enabled with passive silicone pd at the tip of artificial digit to undergo anthropoid motion changes in accordance with contacting surface type to eliminate contact instability.
Exemplary embodiments of the present disclosure are directed towards a method for multivariate singular spectrum analysis comprising of: considering components of original GPS-TEC data set, solar cycle and geomagnetic time series which involve empirical TEC model, used for long-term prediction; embedding involves mapping a signal obtained in a 2-dimensional matrix, and the embedding involves: index of time series, length of time series; calculation of lagged covariance trajectory matrix by Vautard and Ghil (VG) approach where the calculation depends on the lagged covariance matrix with maximum lag and Ap and F10.7 variables are lumped into the large covariance matrix; and grouping the matrices post estimation of eigen values which involve projecting the time series of the principal components and the grouped matrices undergo reconstruction for mapping into time domain to obtain enhanced time series.

No. of Pages : 26 No. of Claims : 10
### Title of the invention: ABDOMINAL WALL LIFTING DEVICE FOR LAPAROSCOPIC SURGERY

### Abstract:

During Laparoscopic surgery, it is necessary to enter into abdominal cavity using a trocar or Veress needle. Until now there is no device to lift the anterior abdominal wall and is done manually. This method is prone for injuring internal organs and the blood vessels. I designed a device to facilitate lifting of the anterior abdominal wall for safe introduction of the trocar or Veress needle. The device is applied on the anterior abdominal wall of the anesthetized patient. Then negative pressure is created in the cuff by connecting cannula to a suction apparatus. Once the anterior abdominal wall sucked into the device, it is pulled upwards (anteriorly) so as to increase the distance between entry instrument and the vital organs.

No. of Pages: 4  No. of Claims: 1
Abstract:
Embodiments of the present invention relate to a system and method for task scheduling and load balancing in cloud computing based on user priority guidance. The system comprises, a memory for storing the data; a processor in communication with the memory for processing the data and wherein the processor processes the data based on the set priority defined by the user. According to the present system the data to be processed is divided into elastic group (EG) and non-elastic group (NEG). According to the present system, the resource allocation and classification of the tasks is done according to user priority based scheduling for load balancing computer program.

No. of Pages: 20 No. of Claims: 9
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201741042876 A
(19) INDIA
(22) Date of filing of Application :29/11/2017
(43) Publication Date : 04/01/2019

(54) Title of the invention : ANTI-BACTERIAL HETEROCYCLIC COMPOUNDS AND THEIR SYNTHESIS

(51) International classification : C07D 487/04
(31) Priority Document No : NA
(32) Priority Date : NA
(33) Name of priority country : NA
(36) 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 :
AS ATTACHED

No. of Pages : 127 No. of Claims : 23

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The present invention relates to voice recognition for generating a caller identification, specifically to a method for recognizing the incoming phone caller, and matching the caller’s voice audio sample to a pre-stored voice samples along with their identity, to identify the caller and display it on the mobile phone.

No. of Pages : 8 No. of Claims : 2
SYSTEM AND METHOD FOR AUTHENTICATION

Abstract:
System and method for authentication. The system comprises a label (015) comprising at least one pattern (016). The pattern (016) is used for computation of spatial orientation of the label (015) relative to at least one reference (200), which is external to the label (015). A comparison module is configured to generate an alert based on a comparison result. The comparison is based on the spatial orientation of the label (015), which is disposed on an object, determined during registration and examination of authenticity.

Reference figure: Diagram 12

No. of Pages: 27 No. of Claims: 12
Title of the invention: NOBON FOR PREVENTION OF TOXINS

Abstract:
The nobon is the filtering unit which in turn absorbs the toxins in the alcohol. This alcohol wouldn't affect the consumers and as well as the taste of the alcohol won't be changed. This could be given to the consumer that, they have used the filter. This adds value to the consumers in terms of healthy support and allows to reduce the use of alcohol in near future too.

No. of Pages: 3  No. of Claims: 4
Mator (1) focus towards the reduction in resource and effective utilization of resource for sustainable future in eco-friendly way. Mator (1) is a best alternative for revitalizing resource in very proficient arid economic way. This mator (1) also enriches the soil properties for various future needs like growth in irrigation, good basement for construction etc. The aim is not only to encourage the penetration of water in the arena also to promote the recharging ability of the terrain in cost-effective approach.

No. of Pages : 3 No. of Claims : 4
Abstract:
The conventional method of manufacturing mould is achieved through patterns. The accelerating, additive manufacturing technology has shown the unique way of developing mould without patterns. The other existing additive manufacturing technology is quiet unaffordable by most of the industries. To overcome these issue the alternative method of hybridization by combining (FDM and SDM) to different additive manufacturing techniques. This hybrid printer requires material synthesization to suit for this. Amongst the binder selection plays pivotal role in achieving the perfect compaction of the mould suitable for versatile metals.
The usage of renewable energy in the field of manufacturing is highly welcoming technology by most of the countries. Very specifically the solar energy usage for metal based product manufacturing is one of the remarkable requirements to the industry. Generally the metal based product development consumes hell lot of energy in the production during different phases of manufacturing. The present invention is the alternative solution for the industries to consume the green energy for the purpose of manufacturing high energy consuming industrial products.

No. of Pages : 3 No. of Claims : 4
The hand glove for the purpose of washing and bathing with minor enhancement in features providing much better solution for the uses; In the form of better cleaning or washing. This system also provides the liquid soap in much controlled manners, save water to little infant. The hand glove is embedded with liquid soap with container and supply unit to send the controlled liquid soap to all the fingers evenly. There is trigger to activate the purpose as well as this could be achieved by adopting better design and development of container unit. That is if the material of container is selected in such way that trigger could be replaced.

No. of Pages : 6 No. of Claims : 4
The invention is a product for accurately predicting the preterm birth using pathology report of the expectant mother. The product is a web based application that works on internet. The product has the provision to capture the historical data of the expectant mothers who in the past had either the Preterm Birth (PTB) or the Normal Birth (NB). This product helps the expectant mothers to avoid the complications of labor and it also helps to avoid the neonatal death due to PTB. The product saves the expectant mothers who are predicted to have NB, from going through unnecessary treatment. The product uses a novel algorithm called Multi-Layer Stacked Ensemble (MLSE) designed specifically for classifying the birth as PTB or NB. This product gives the flexibility of selecting the classifiers for constructing, the predictive model. The product has the feature to drag and drop the classifiers into each of the layers of MLSE. Thus the product builds the most suitable model for the given set of historical data. Due to this reason and also due to the efficiency of MLSE algorithm, the accuracy of the prediction is very high. The higher accuracy of prediction makes this product more reliable than the methods discussed in the prior art.

No. of Pages : 16 No. of Claims : 7
Abstract: Reduced graphene oxide@polystyrene (RGO-PS) composite was synthesized using reduced graphene oxide (RGO), styrene monomer and divinylbenzene through an in-situ polymerization process. The RGO-PS composite was functionalized with sulfonate and quaternary amine functionalities for making positive and negative integrated electro-adsorbent-ion exchange resins (EAIERs), respectively. These EAIERs “molecular constructs™ were used as CDI electrodes and desalination was performed for the removal of different ions. A high electro-adsorption capacity of 15.93 mg/g for Cl- using 802S NaCl solution was observed in laboratory batch experiments which was much higher than the adsorption capacity of RGO electrodes reported earlier (2-3 mg/g).
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.201711022956 A
(19) INDIA
(22) Date of filing of Application :30/06/2017
(43) Publication Date : 04/01/2019

(54) Title of the invention : BIODEGRADABLE NONISOCYANATE POLYURETHANE NANOCAPSULES AND PROCESS FOR PREPARATION THEREOF

(51) International classification :B01J13/14
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
(62) Divisional to Application Number :NA

(57) Abstract :
Present invention relates to a biodegradable non-isocyanate polyurethane nanocapsules and its method of preparation. The nanocapsules are hosts for suitable molecular cargos. The nanocapsules are adaptable for controlled release of encapsulated molecules

No. of Pages : 21 No. of Claims : 5
Title of the invention: PRODIGIOSIN-DIALDEHYDE-DIAMINE-IRON OXIDE COMPOSITE AS DISINFECTANT AND A PROCESS FOR THE PREPARATION THEREOF

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Abstract:
Prodigiosin-dialdehyde-diamine-iron oxide composite as disinfectant and a process for the preparation thereof. The unique feature of the composite is that it involves conjugation of prodigiosin with magnetic iron oxides through alkene diamine and alkanedial linkage formation. Prodigiosin-dialdehyde-diamine-iron oxide composite has effective matrix for the disinfection of pathogens from contaminated water, prodigiosin-dialdehyde-diamine-iron oxide composite is easy to recover from the disinfected water and recovered matrix can be reused for the disinfection of water.
The present innovation discloses a green process for converting highly acidic phosphogypsum waste to highly alkaline potassium-sulphur rich material and henceforth broadens the scope of alternative utilisation of phosphogypsum for its application in agriculture, especially for acidic soils like red and lateritic soil etc. Mixture of potassium rich waste biomass preferably banana peduncle and phosphogypsum undergoes thermal treatment to produce alkaline potassium-sulphur rich carbonaceous material. Application of alkaline potassium-sulphur rich material would be mostly suitable for cultivation of crops like peanut, which needs liming and high concentration of potassium, sulphur and calcium for its growth. Also, the pollution potential of phosphogypsum waste in terms of leaching of fluoride has reduced significantly through this process.
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201711022959 A
(19) INDIA
(22) Date of filing of Application : 30/06/2017
(43) Publication Date : 04/01/2019

(54) Title of the invention : A CARRYING DEVICE FOR ELECTRONIC HANDHELD MACHINES

(51) International classification :F21V33/00
(31) Priority Document No : NA
(32) Priority Date : NA
(33) Name of priority country : NA
(86) International Application No : NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number : NA
(62) Divisional to Application Number : NA
(63) Divisional to Application Filing Date : NA
(86) International Application No : NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number : NA
(62) Divisional to Application Number : NA
(63) Divisional to Application Filing Date : NA

(57) Abstract :
The present invention provides a carrying device for electronic handheld machine. The device includes a cushioned handgrip wrist strap to fit around the hand and stabilizes the machine; a mica guard to secure the screen of the machine; and a weight suspension system that reduces the strain acting on the neck region and thus reducing the overall weight. This carrying device has a huge Impact on the carrier of the handheld machines because of its ability to easily interact with the user without much hindrance. The greatest strength thereof is that it can be easily manipulated to all sectors like industrial as well as commercial purposes for making a carrying device to reduce human effort and work cycle time. The invention finds application among the personnel engaged in issuing ticket and includes operators such as Traffic Police, Petrol Station operators and Parking Ticket Personnel.

No. of Pages : 14
No. of Claims : 9
Title of the invention: ALL DIELECTRIC SELF SUPPORTING (ADSS) OPTICAL FIBER CABLE WITH HIGH FLEXIBILITY AND RESISTANCE TO TERMITE AND RODENT

ABSTRACT ALL DIELECTRIC SELF SUPPORTING (ADSS) OPTICAL FIBER CABLE WITH HIGH FLEXIBILITY AND RESISTANCE TO TERMITE AND RODENT

The present invention relates to an optical fiber cable provided with termite and rodent resistant properties and extremely flexible for usage in short and medium span networks up to a distance of 150 meters. The optical fiber cable comprises a central loose tube 3 that extends longitudinally along the length of cable. The said central loose tube 3 is filled with jelly 2, preventing water from penetrating into the central loose tube 3. The central loose tube 3 is surrounded by plurality of strength members 4 extending lengthwise adjacent to said central loose tube 3. Further, plurality of strengthening yarns 5 are positioned over the strength members 4. Fiber optic cable 8 also comprises one or more ripcords 6 that extend lengthwise along the respective strength members 5. Finally, the outer jacket 7 surrounds the central loose tube 3, strength members 4 and layer of strengthening yarns 5.

FIGURE 1

No. of Pages : 14 No. of Claims : 10
The present invention provides an animal cage with post-operative intensive care system. The cage is provided with intense care with regulating most of the metabolic parameter of post-operative animals. The cage includes a urine collecting device (5) which increases the applicability of the product as a metabolic cage. A weight sensitive device (19) below the base can regularly measure the animal weight or difference during the experimentation. A net of copper wires (8) as the floor of the animal cage makes it more resistant to bacterial infection in post-operative animals. Moreover, the sterilized medium can be achieved by air laminar (13) which is the prime requirement for the post-operative animal. The internal temperature of the cage can also be regulated by a heating cord which is necessary for the animal.

**Figure 1**

No. of Pages: 15  No. of Claims: 6
**Title of the invention**: HERBAL ANTI-ITCHING CREAM AND A PROCESS FOR THE PREPARATION THEREOF

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**Abstract**:
The anti-itching cream comprises 0.5 to 3% by weight Zincum, 0.02 to 1% by weight Magnolia Bark extract, 6 to 10% by weight Isopropyl Myristate, 4 to 8% by weight Ceto Steryl Alcohol, 4 to 8% by weight Glyceryl monostearate self-emulsifying, 2 to 6% by weight Pharmakaolin, 0.5 to 2% by weight Sorbitan monooleate, 0.2 to 0.8% by weight Acrylates/C10-30 Alkyl Acrylate Crosspolymer, 0.1 to 0.5% Controx KS C (Tocopherol, Hydrogenated palm glycerides citrate), 1 to 3% by weight Glycerin, 0.2 to 0.4% by weight Sodium benzoate, 0.2 to 0.4% by weight Minasolve Pentiol Green+, 0.1 to 0.3% by weight Aqua Sodium Phytate, 0.1 to 0.3% by weight Potassium sorbate, 0.5 to 2% by weight Calendula, 0.05 to 0.5% by weight Chandi vark (Micro silver), 1 to 3% by weight Isopropyl Alcohol, and sufficient quantity of DM Water (Purified water) with or without L-Arginin in the range of 0.01 to 1% by weight. The process comprises in mixing the selected ingredients to obtain first phase mixture and second phase mixture. The mixtures of the first phase and second phase are mixed with each other to obtain a homogenous mixture and then adding the remaining ingredient in the homogeneous mixture so as to obtain anti-itching cream.

No. of Pages : 15 No. of Claims : 9
(12) PATENT APPLICATION PUBLICATION  (21) Application No.201711023120 A
(19) INDIA
(22) Date of filing of Application: 30/06/2017  (43) Publication Date: 04/01/2019

(54) Title of the invention: AN ADJUNCT TO NON-SURGICAL PERIODONTAL THERAPY AND PREPARATION METHOD THEREOF

(51) International classification: a61k
(31) Priority Document No: NA
(32) Priority Date: NA
(33) Name of priority country: NA
(86) International Application No:
  Filing Date: NA
(87) International Publication 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 method for preparing a microsphere. The method comprises melting Polyethylene Glycol (PEG) and Chitin together to form a molten PEG-Chitin mixture. The method further comprises, adding propylene glycol in the molten PEG-Chitin mixture to form a PEG-Chitin-propylene glycol mixture. Further, the method comprises dispersing Ornidazole particles in the PEG-Chitin-propylene glycol mixture to form an Ornidazole-PEG-Chitin-propylene glycol mixture and forming a liquid paraffin mixture of a heavy liquid paraffin and a light liquid paraffin. Furthermore, the method comprises stirring a thin film of the Ornidazole-PEG-Chitin-propylene glycol mixture into the liquid paraffin mixture until a pre-defined time period for preparing a microsphere suspended in the liquid paraffin mixture.

No. of Pages: 45  No. of Claims: 8
Title of the invention: HERBAL NAPPY RASHES CURE CREAM AND A PROCESS FOR THE PREPARATION THEREOF

Abstract:
The cream comprises 0.3 to 3 % by weight Hamamelis Extract, 0.3 to 1.5 % by weight Blackcurrant seed oil, 0.3 to 1.5 % by weight Balloon vine extract, 0.378 to 1.77 % by weight Sunflower oil, 0.022 to 0.23 % Rosmarinus officinalis leaf extract, 0.05 to 2 % Magnolia Bark extract, 0.05 to 2 % Zincum, 5 to 11% by weight Isopropyl Myristate, 5 to 8% by weight Glyceryl monostearate self-emulsifying, 3 to 8% by weight Ceto Steryl Alcohol, 1 to 5% by weight Minasolve Pentiol Green+, 0.2 to 5% by weight Gslycerin, 0.5 to 5% by weight Isopropanol, 0.5 to 3% by weight Sorbitan monooleate, 0.01 to 3% by weight Acrylates/c10-30 alkyl acrylate crosspolymer, 0.2 to 0.2% by weight Sodium benzoate, 0.1 to 0.1% by weight Potassium sorbate, 0.01 to 1% by weight Vanillin, 0.01 to 1% by weight L-Arginin, 0.03 to 0.08% by weight Sodium phytate, and sufficient quantity of demineralized water (Purified water) with or without L-Arginin in the range of 0.01 to 1% by weight into the final homogenized mixture. The process comprises in mixing some ingredients to obtain first phase mixture and second phase mixture. The mixtures of the first phase and second phase are mixed with each other to obtain a homogenous mixture. Defensil Plus mixture comprising some ingredients is then prepared and is mixed with the homogenous mixture so as to obtain the cream for use to cure nappy rashes.
A friction material for a dry friction device, the friction material comprising: - friction material powder waste, - rubber, - metal addition, binded with a thermoset resin. Figure 1
The present invention relates to artificial intelligence, Data Mining, machine learning and predictive analytics in digital healthcare. It describes a novel artificial intelligence system that is readily deployable, efficient and easy to install and use evolving intelligent analysis of medical data. This system also provides for the networking of the patients, doctors, healthcare facilities, testing laboratories, hospitals, chemists and medical equipment and drugs manufacturing companies. Doctors can chat and refer cases to peers or specialists or to hospitals.
The present invention is a method and system thereof for performing secure multi-level electronic authentication techniques. The present invention proposes four such methods and system thereof of multi-level electronic authentication. The present invention provides a method of a general multi-level authentication based on unique pseudorandom code, which satisfies standard tests for statistical randomness. Also, present invention provides two level approach for authentication by using the DNA shuffle virtual keyboard and also by using electronic token which generates pseudorandom string of variable length at fixed as well as variable time intervals. Lastly, the present invention also proposes a method of authentication by using random hopping on multiple machines wherein the host is configured to randomly hop the pseudorandom code to multiple servers/machines. The said methods can work in synchronization if combined and works fine when used independently as well. Figure 1.

Figure 1

No. of Pages : 22 No. of Claims : 21
Title of the invention: A WELDING WORKSTATION

Abstract:
The welding workstation (200) comprises a perforated plate (210), a duct (220) and an electrostatic precipitator (230). Further, the perforated plate (210) is adapted to collect gases released during welding operation. Further the duct (220) is capable of transferring the collected gases from the perforated plate (210) to the electrostatic precipitator (230). Also, the electrostatic precipitator (230) is configured to filter out dust and fume particles from the collected gases. [Figure 2]

No. of Pages: 19 No. of Claims: 12
The present invention discloses a novel pharmaceutical excipient - processed neem gum, to enhance drug solubility. Enhancing water solubility of drugs has lot of therapeutic and commercial benefits - it reduces toxicity and drug dosage. Reduction in dosage makes the process economical. Crude neem gum which is available commercially cannot be used as a pharmaceutical excipient since it is sticky and not suitable for use as a pharmaceutical excipient. However, after processing in the specific manner disclosed in the invention, the same becomes free flowing and capable of being used as an excipient. The process involves taking crude gum, grinding it and hydrating it in water for about 24-48 hrs hours followed by precipitation with pure ethanol. The precipitate is then filtered, washed with acetone and dried in hot air oven for 3-4 days to obtain free flowing powder, which is the product of present invention.
The subject matter disclosed herein relates to a plastic part (403) having a plurality of metal plate doghouses (402) to decrease overall packaging space, i.e., gap between the styling surface and the vehicle body. The plastic part (403) has a plurality of doghouses at inner surface of the panel. Each doghouse from the plurality of doghouses has a metal plate with a centrally low raised profile (303) to receive head of clip fastener (401). To be published with Fig. 4

![Diagram](image-url)
The present invention discloses all-optical pumping of a semiconductor optical amplifier, comprising: a pump waveguide adjacently coupled with an active waveguide to obtain an optimum carrier profile along the length of said active waveguide, wherein design of said pump waveguide is non-identical to design of said active waveguide; an optical pump is transferred to said active waveguide through a transverse evanescent wave coupling from said pump waveguide; wherein, by suitably tailoring the width of said pump waveguide (WP(z)) and the inter-waveguide separation (S(z)) between said pump waveguide and said active waveguide, selective transfer of pump power from said pump waveguide is provided along the length of said active waveguide of the AOP-SOA.

**FIGURE 2**

No. of Pages : 22 No. of Claims : 8
Title of the invention: CONTINUOUS PROCESS FOR THE PREPARATION OF 2-(1H-IMIDAZOL-4-YL)ETHANAMINE AND PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF

Abstract:
The invention relates to a commercially viable, cost effective and energy efficient process for the preparation of 2-(1H-Imidazol-4-yl)ethanamine or pharmaceutically acceptable salts thereof in high purity and yield via application of continuous flow technology.

No. of Pages: 11 No. of Claims: 9
Title of the invention: A METHOD OF ON-LINE MULTI-FIBER COLOURING

International classification: F01M9/10

Priority Document No: NA

Priority Date: NA

Name of priority country: NA

International Application No: NA

Filing Date: NA

International Publication No: NA

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Address of Applicant: 25, 2nd Floor, Mohan Cooperative Industrial Estate, Mathura Road, New Delhi-110044, India.

Name of Inventor: 1) GUPTA, Anil

Abstract:
The present invention relates to a method of On-Line Multi-fiber colouring with LED ink during loose tube production and curing process with UV LED light. Multiple fibers are coloured, cured and taken up for loose tube process simultaneously, thereby reducing the time taken to colour the fibers. In the present invention, the curing process of optical fiber cable is achieved by using silver coated quartz tube instead of metallic reflectors to cure the multiple optical fiber cables. The present invention uses UV LED instead of UV bulbs to cure the multiple optical fiber cables thereby reducing the power consumption and maximizing the utilization of UV radiations. The invention uses narrow beam of LED and increased reflecting surface area to achieve the curing efficiency. Figure 6
The present invention provides a process for producing super clean coal that includes the steps of forming a slurry of coal in N-Methyl-2-pyrrolidone (NMP) and diethylenetriamine (DETA). The slurry is extracted under refluxed pressure conditions and further purified. The process of the present invention produces a super clean coal with significantly reduced ash content content.
The present invention describes a fire retardant nanocomposite composition comprising a halloysite nanotube, an intumescent fire retardant and a blend of polymers selected from polyolefins wherein the nanocomposite composition has a limited oxygen index (LOI) in the range of 27 to 37. The blend of polymers described consists of a high-density polyethylene and a linear low-density polyethylene in 2:1 ratio. The fire retardants of the nanocomposite composition comprise EXOLIT APP, or a combination of ammonium polyphosphate, pentaerythritol, melamine and/or zinc borate. The nanocomposite composition has a UL-94 V-0 rating.

**Abstract:**

The present invention describes a fire retardant nanocomposite composition comprising a halloysite nanotube, an intumescent fire retardant and a blend of polymers selected from polyolefins wherein the nanocomposite composition has a limited oxygen index (LOI) in the range of 27 to 37. The blend of polymers described consists of a high-density polyethylene and a linear low-density polyethylene in 2:1 ratio. The fire retardants of the nanocomposite composition comprise EXOLIT APP, or a combination of ammonium polyphosphate, pentaerythritol, melamine and/or zinc borate. The nanocomposite composition has a UL-94 V-0 rating.
An air-jet spinning machine includes a draft device, a pneumatic spinning device, and an outlet sensor adapted to detect a presence or an absence of the yarn. The draft device includes a moving section (100) adapted to move a top roller (17b) between a contacting position and a separated position, the contacting position being a position where the top roller (17b) makes contact with a bottom roller (17a) and the separated position being a position where the top roller (17b) is located away from the bottom roller (17a) and an inlet of the pneumatic spinning device. The moving section (100) moves the top roller (17b) to the separated position at interruption of spinning operation.
This document describes systems, methods, devices, and other techniques for automatically identifying and extracting medical conditions and supporting evidences from electronic health records. In some implementations, formatted text extracted from an unstructured electronic health record is obtained. The formatted text is segmented into multiple documents, wherein each document comprises a respective document type and represents a respective document encounter. Medical condition entities and supporting evidence entities referenced in each of the multiple documents are extracted. Extracted supporting evidence entities within a same document are linked to respective extracted medical condition entities from the same document using one or more of i) medical ontologies, or ii) a medical knowledge base. Output data representing linked supporting evidence entities and medical condition entities within a same document is provided.
In order to allow for more flexible process control of a transport apparatus (1) in the form of a long stator linear motor, in particular in order to at least intermittently increase the maximum achievable speed (Vmax) of a transport unit (Tn) without changing the energy-related basic conditions (maximum current or maximum voltage) of the transport apparatus (I), according to the invention, in order to change a magnetic flux (V) in the magnetic circuit (21) during movement of the transport unit (Tn) along the transport route (2), a magnetic reluctance (Rm) of the magnetic circuit (21) is changed and/or a magnetomotive force (Um) of the magnetic circuit (21) is changed on the transport unit (Tn).
In order to simplify the transition of a transport unit of a long stator linear motor across control zones (RZk, RZk+l) comprising a number of drive coils (ASk.1, ..., ASk.m, ASk+l.1, ..., ASk+l.m), wherein each control zone (RZk, RZk+l) being controlled by a segment control unit (SRk, SRk+l), it is provided that, during the transition of the transport unit (Tn) from the first control zone (RZk), in the movement direction (x), to the following second control zone (RZk+l), initially the first segment control unit (SRk) remains responsible for controlling the movement of the transport unit (Tn) and the first control zone (RZk) is extended, in the movement direction (x), by a number (j) of virtual drive coils (ASk.m+j, ..., ASk+m+j), and the first segment control unit (SRk) that is assigned to the first control zone (RZk) also calculates the necessary manipulated variables for the required virtual drive coils (ASk.m+j, ..., ASk.m+j), the first segment control unit (SRk) transmits the necessary manipulated variables for the required virtual drive coils (ASk.m+j, ..., ASk.m+j) to the second segment control unit (SRk+l) that is assigned to the second control zone (RZk+l), and the second segment control unit (SRk+l) uses the transmitted manipulated variables for the required virtual drive coils (ASk.m+j, ..., ASk.m+j) in order to energize the drive coils (ASk+l.1, ..., ASk+l.m) of the second control zone (RZk+l) that are required for moving the transport unit (Tn).
Title of the invention: FULLY ENCLOSED ELECTRICAL ROTARY MACHINE

Abstract:
A fully enclosed electrical rotary machine comprises: a rotor (11); a stator (12); cooling tubes (21) extending parallel to each other so that an external cooling medium may flow therethrough; a casing (22) forming a closed space to contain the rotor core (14), the stator (12) and the cooling tubes filled with internal gas therein, so that the rotor shaft (13) penetrates therethrough; and an internal fan (25, 26) that is fixed to the rotor shaft (13) in the casing (22) to circulate the internal gas in the closed space so that the internal gas flows outside the cooling tubes (21) in a direction orthogonal to the direction of the cooling tubes (21), and a mesh (31, 31a, 31b) disposed at a downstream side of flow of the internal gas outside the cooling tubes (21) in the closed space so as to suppress generation of Karman vortexes due to the cooling tubes (21).
**Title of the invention:** CONVERTIBLE VEHICLE INTERIOR

| (51) International classification | F01K27/00 |
| (31) Priority Document No | 17 56019 |
| (32) Priority Date | 29/06/2017 |
| (33) Name of priority country | France |
| (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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3) DEVOULON, Thierry

**Abstract:**
The vehicle passenger compartment defines a vehicle interior delimited in part by a floor (1), the interior further comprising at least one front row of seats (2), comprising at least two front seats (4), and at least one rear row of seats (6), comprising at least two rear seats (8), the front (2) and rear (4) rows of seats being arranged behind one another in a longitudinal direction (X) of the vehicle passenger compartment on the floor (1), each front seat (4) being rotatable around a rotation axis (A) substantially perpendicular to the floor (1). Each rear seat (8) is translatable in a transverse direction (Y) substantially perpendicular to the longitudinal direction (X) and to the rotation axis (A) such that the rear seats (8) can be moved away from or closer to one another in said transverse direction (Y).

![FIG. 2](image)

No. of Pages: 12 No. of Claims: 10
Title of the invention: WEFT YARN OPERATING DEVICE WITHOUT FALSE SELVEDGE IN A GRIPPER WEAVING LOOM

Abstract:
Weft yarn operating device, in a gripper loom, of the type comprising: respective clamping grippers (P) for each one of the waiting weft yarns (T), said clamping grippers (P) being mounted on a same and single support (S) which is arranged at the edge of the fabric being woven; a first motor means (Ms) which moves said support (S) in order to bring the clamping gripper (P) of a weft yarn to be inserted into the shed near a work station (L); a second motor means (Mp) which opens said clamping gripper (P) in opposition to retaining means which maintain the clamping gripper (P) in a closed position; and weft yarn directing means (6, 7) which, during the beating step, convey the weft yarn into said open clamping gripper (P). Support (S) is pivoted about a rotation axis (C) and said gripping grippers (P) are mounted on said support (S) along a circumference arc whose centre lies on said rotation axis (C). Yarn guide means are provided which are integral with said support (S) for passing all said weft yarns clamped by said gripping grippers (P) in a convergence area arranged in close proximity to said rotation axis (C) of support (S).
A releasable pair of dual nested corrugated sheets comprises a top liner, a bottom liner and a combined web. The combined web comprises a first material coupled to a second material without an adhesive. The combined web further comprises a plurality of corrugations. The top liner is partially coupled to the combined web using an adhesive. The bottom liner is partially coupled to the combined web using an adhesive. The pair of dual nested corrugated sheets is releasable such that the top liner and the first material is separate from the bottom liner and the second material.
A shoe cover comprising: a body having a shoe-covering portion and an edge portion, the shoe-covering portion being used for covering a front part of a shoe, the edge portion extending along a lower edge of the shoe-covering portion and disposed below the shoe; and a cap extending along an upper edge of the shoe-covering portion of the body and disposed above the shoe, an upper surface of the cap having at least one water guiding slot used for directing water droplets to drip downwards.
Title of the invention: METHOD AND DEVICE FOR CUTTING GLASS TUBES

Abstract:
The invention relates to a method for cutting glass tubes (9) with a length L from a glass tubing (2) that moves at a feed rate v1, wherein the glass tubing (2) is investigated for defects (22) by means of an analytical device (21), and wherein it is determined whether a glass tube (9) to be separated is either defect-free (case 1) or contains defects (case 2), wherein in case 1, a defect-free glass tube (9) of the length L is separated from the glass tubing (2). In order to reduce rejects in the cutting of glass tubes (9) from a glass tubing (2), the following steps are provided in case 2 by the method according to the invention: a) determination of a distance LA in the lengthwise direction between the defect (22) and a free end (10) of the glass tube (9) to be separated, wherein the distance LA is determined from the portion of the defect (22) at the greatest distance from the free end (10) of the tube; and b) separation of a piece (11) of a glass tube or a glass tube (9) that contains defects from the glass tubing (2) at a distance LS from the free end (10) of the glass tube (9) as a function of LA.
Methods and systems for monitoring a dynamic compensation control system of an elevator system are provided. The methods and systems include monitoring a first motion state sensor signal generated by a first motion state sensor, the first motion state sensor associated with an elevator machine, monitoring a second motion state sensor signal generated by a second motion state sensor, the second motion state sensor located on an elevator car, determining an operational status of the second motion state sensor based on an analysis of the first motion state sensor signal and the second motion state sensor signal, and when it is determined that a failure status of the second motion state sensor is present, the method further comprises deactivating a dynamic compensation control mode of operation of the elevator system.
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201814023978 A
(19) INDIA
(22) Date of filing of Application: 27/06/2018
(43) Publication Date: 04/01/2019

(54) Title of the invention: RARE EARTH MAGNET AND PRODUCTION METHOD THEREOF

(51) International classification: H01F1/0558
(31) Priority Document No: 2017-129658
(32) Priority Date: 30/06/2017
(33) Name of priority country: Japan
(86) International Application No: NA
(87) International Publication No: NA
(61) Patent of Addition to Application Number: NA
(62) Divisional to Application Number: NA

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(72) Name of Inventor:
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(57) Abstract:
[PROBLEM TO BE SOLVED] To provide a rare earth magnet having excellent coercive force and a production method thereof.
[MEANS TO SOLVE THE PROBLEM] A rare earth magnet, wherein the rare earth magnet comprises a magnetic phase containing Sm, Fe, and N, a Zn phase present around the magnetic phase, and an intermediate phase present between the magnetic phase and the Zn phase, wherein the intermediate phase contains Zn and the oxygen content of the intermediate phase is higher than the oxygen content of the Zn phase; and a method for producing a rare earth magnet, including mixing a magnetic raw material powder having an oxygen content of 1.0 mass% or less and an improving agent powder containing metallic Zn and/or a Zn alloy, and heat-treating the mixed powder.

No. of Pages: 62 No. of Claims: 13
Biological indicators may be improperly activated. The disclosed subject matter is directed to methods of confirming that a biological indicator having an ampule containing a growth medium has been properly activated such that it may be assayed. The methods may include the steps of measuring a first fluorescence intensity of the biological indicator, heating the biological indicator; quenching the fluorescence intensity of the biological indicator from the first fluorescence intensity to a second fluorescence intensity, measuring the second fluorescence intensity; comparing the second fluorescence intensity and first fluorescence intensity to obtain a comparison value; and determining that the comparison value corresponds to a quenching metric of the liquid growth medium.
Title of the invention: QUICK CONNECTOR AND METHOD OF USE

Abstract:
A quick connector for connecting to a male end of a component includes a housing having a head portion and a body defining a central bore which receives a male end of a component therein. A latch and latch indicator are slidably mounted within the head portion for retaining the male end within the central bore. The latch indicator is offset relative to the latch to provide a visual indication that the component is coupled with the quick connector.
A method and system for facilitating payment card based financial transactions are provided. A server system associated with a payment network receives an input provided by a user using an electronic device. The input is capable of uniquely identifying the user. The server system is configured to retrieve information related to one or more payment cards linked with the user if the user is successfully identified using the input. Subsequent to successful identification of the user, a prompt is displayed on the electronic device for seeking selection of a payment card for executing a financial transaction from the user. The server system receives a user selection of a payment card from among the one or more payment cards and facilitates processing of the financial transaction based on the user selection of the payment card.
(54) Title of the invention: COMMERCIAL PRODUCT SIZE DETERMINATION DEVICE AND COMMERCIAL PRODUCT SIZE DETERMINATION METHOD

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(72) Name of Inventor:
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2) MALLICK, Satya
3) MISHRA, Pranav

(57) Abstract:
An image acquisition unit (10) that acquires a photographic image showing a hand on which a card of a known size is placed. A card detection unit (20) detects a size of the card in the photographic image. A finger joint measurement unit (34) measures a size of the joint of the finger for the ring in the photographic image. A finger size estimation unit (40) estimates an actual size of the joint of the finger for the ring from a measured value of the size of the joint of the finger of the ring in the photographic image, based on a ratio between the known size of the card and the size of the card in the photographic image detected. A ring size determination unit (50) determines a size of the ring based on an estimated actual size of the joint of the finger for the ring.
A ring type wearable terminal is provided with a ring and a communication unit that is housed in the ring. The communication unit is provided with a ring-shaped flexible substrate (30). The flexible substrate (30) is provided with a bonding portion (38) formed such that the bonding portion can be bonded at a plurality of different positions in a longitudinal direction in accordance with the size of the ring. By changing a bonding position of the bonding portion (38), the diameter of the flexible substrate (30) formed in a ring shape can match the size of the ring. Thereby, a single flexible substrate (30) can be used for a ring of multiple sizes, and an increase in the manufacturing cost when offering a size range of multiple sizes can thus be prevented.
The invention proposes a system (10) for wiping a vehicle window (12), comprising: - at least one windscreen wiper blade (14) adapted to be driven by a drive arm (16) of the wiper system (10) with alternating movements sweeping at least one portion of the exterior surface of a window to be wiped between two positions at which the sweeping direction is reversed; - a device (18) for spraying a liquid onto the exterior surface; - a pump for feeding the sprayer device (18) with liquid; - a circuit (CP) for controlling the feeding of the sprayer device (18) by the pump (38) as a function of the sweeping direction, characterized in that it includes a sensor (CA) of acceleration of the windscreen wiper that is carried by the windscreen wiper and that is connected to the control circuit (CP) in order to supply to the control circuit (CP) signals representing the value of the acceleration of the windscreen wiper (11).
Abstract:

Disclosed are a display apparatus with integrated touch screen and a method of manufacturing the display apparatus, which prevent short circuit between touch electrodes. The display apparatus with integrated touch screen including a light emitting layer disposed on a substrate, an encapsulation layer disposed on the light emitting layer, a plurality of touch electrodes disposed on the encapsulation layer spaced apart from each other, and an upper PAC layer disposed on the plurality of touch electrodes. The upper PAC layer is patterned to be disposed on the plurality of touch electrodes.

FIG. 1

No. of Pages : 35 No. of Claims : 20
The invention relates to a housing for example for switchgear, which housing comprises: - first and second parallel side walls connected by a frame, top wall and / or bottom wall; - a door extending between the first and second side walls and arranged hingedly to the first side wall, wherein the door hinge axis is parallel to the side walls; - an instrument panel comprising a front face and third and fourth parallel side walls extending perpendicular from the front face; wherein the door has an opening through which the third and fourth side walls of the instrument panel extend; and wherein the instrument panel is hingedly arranged to the door, wherein the instrument panel hinge axis is parallel to the door hinge axis and wherein the instrument panel hinge axis is positioned adjacent to the second side wall.
Title of the invention: SYSTEMS AND METHODS FOR DOWNLOADING DATA FROM A MONITORING DEVICE TO A MOBILE DEVICE

Abstract:
Systems and methods for downloading data from a monitoring device to a mobile device are provided. Such systems and methods can include the monitoring device transmitting, via an audio generating device, data to the mobile device in a non-audible, high frequency audio signal, a microphone of the mobile device receiving the non-audible, high frequency audio signal, and a processor of the mobile device decoding the data from the non-audible, high frequency audible signal.
### Patent Application Details

**Title of the Invention:** REFINERY ANTIFOULANT PROCESS

- **International Classification:** C10G35/00
- **Priority Date:** 30/06/2017
- **Priority Document No.:** 17179026.4
- **Priority Country:** EPO
- **Name of Applicant:**
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### Abstract

Fouling in a hydrocarbon refining process is reduced by adding to a crude hydrocarbon for a refining process, an additive combination comprising: (A) a polyalkenyl-substituted carboxylic acid or anhydride, and (B) an overbased metal hydrocarbyl-substituted hydroxy benzoate detergent, where the mass:mass ratio of (A) to (B) is in the range of 10:1 to 1:10, and the treat rate of the additive combination is in the range of 5 to 1000 ppm by mass.

### Claims

No. of Pages: 21
No. of Claims: 13
The invention relates to a trailer (20) to be attached to a cycle (1) such as a bicycle and to a trailer-cycle set. The trailer (20) comprises a device for controlling the steering and speed or deceleration of the trailer according to input control commands said controlling device being equipped with means for measuring signals representing the longitudinal force and transverse force applied by the cycle to the trailer said measuring means comprising sensors including at least one deformation sensor (6C) for measuring the signal representing the longitudinal force applied by the cycle to the trailer and two sensors on the wheels (4B) of the trailer for measuring the signals representing the transverse force applied by the cycle to the trailer.
(54) Title of the invention: PORTABLE ROLLER DEVICE

| (51) International classification | :A61H15/00 A61H7/00 A61H1/00 |
| (31) Priority Document No | :62/301095 |
| (32) Priority Date | :29/02/2016 |
| (33) Name of priority country | :U.S.A. |
| (86) International Application No | :PCT/US2017/019602 |
| Filing Date | :27/02/2017 |
| (87) International Publication No | :WO 2017/151468 |
| (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 roller device includes a plurality of segments wherein the plurality of segments is configured to form a tubular shape. In addition each of the plurality of segments are coupled to neighboring segments of the plurality of segments and each of the plurality of segments include a first edge and a second edge wherein the first edge is opposite the second edge. The roller device also includes a coupling mechanism for coupling the first edge of a segment to a second edge of a first neighboring segment and coupling the second edge of the segment to a first edge of a second neighboring segment wherein the coupling mechanism allows the plurality of segments to convert from a first position to a second position.

No. of Pages: 13 No. of Claims: 20
The present invention relates to an energy storage apparatus (10) comprising a compressible spring (11) wound around a main shaft (28) extending between a releasing means (20) and a compressing means (21) said compressing means (21) and releasing means (20) being in a fixedly attached relationship with said compressible spring (11) at two ends of the main shaft (28) said compressing means (21) and releasing means (20) being rotatable at different speeds so as to compress the compressible spring (11) at one longitudinal side of the main shaft (28) while simultaneously releasing the compressible spring (11) at the other longitudinal side said energy storage apparatus (10) further comprising a hydraulic jack (26) continuously driven by a hydraulic pump (13) in the manner that said compressible spring (11) is compressed by said compressing means (21) to which rotational movement is imparted by said hydraulic jack (26) and said hydraulic jack (26) is periodically released by a hydraulic valve (22) in constant intervals to provide continuous unidirectional rotary movement of constant speed to said compressing means (21).
Provided are a system and method for verifying a real-time time stamp created by a digital time stamp device. The digital time stamp device uses a real-time time notched by a machine. In the present invention a providing side presses a real-time digital time stamp onto digital contents using the digital time stamp device. In addition the providing side records as a stamping position and network address information the location of the digital content stamped with the real-time digital time stamp groups the digital content the real-time digital time stamp the stamping position and the network address information into a single set and saves the set as trusted digital content. A receiving side acquires the trusted digital content from any given side accesses the providing device confirms that the trusted digital content has the same real-time digital time stamp and stamping position as the providing side and is able to confirm the veracity of the digital content received by the receiving side.
Title of the invention: ORAL DOSAGE FORM OF BOTH CLOMIPHENE ISOMERS AND METHOD OF USING SAME TO TREAT SECONDARY HYPOGONADISM

Abstract:
The present invention relates to a pharmaceutical oral dosage form comprising both (A) trans-clomiphene or a pharmaceutically acceptable salt thereof and (B) cis-clomiphene or a pharmaceutically acceptable salt thereof wherein (i) the ratio of (A):(B) in the dosage form is about 70:30; (ii) the amount of (A) in the dosage form is about 12.5 mg or about 25 mg; and (iii) the amount of (B) in the dosage form is less than 15 mg. The pharmaceutical oral dosage form is useful to treat secondary hypogonadism in men and minimize certain antiestrogenic drug side effects such as impaired cognition, hot flashes, and bone loss, osteoporosis, and skeletal fractures.

No. of Pages : 14 No. of Claims : 12
Compositions and methods are disclosed for producing adeno-associated virus (AAV) in insect cells in vitro. Recombinant baculovirus vectors include an AAV Capsid gene expression cassette (Cap) an AAV Rep gene expression cassette (Rep) and a baculovirus homologous region (hr) located up to about 4 kb from a start codon in an AAV expression cassette. Production levels of baculovirus and AAV in insect cells harboring recombinant baculovirus comprising a Cap a Rep and an hr are higher compared to controls comprising a Cap and a Rep but no hr. Furthermore levels of baculovirus and AAV production in insect cells infected with recombinant baculovirus comprising a Cap a Rep and an hr are comparatively stable over serial passages of cells whereas levels of baculovirus and AAV production decline over serial passages of insect cells comprising recombinant baculovirus comprising a Cap and a Rep but no hr.
Title of the invention: ELECTROSTATIC DISCHARGE (ESD) ISOLATED INPUT/OUTPUT (I/O) CIRCUITS

Abstract:
A method of protecting a serializer/deserializer (SERDES) differential input/output (I/O) circuit includes detecting an electrostatic discharge event. The method also includes selectively disengaging a power supply terminal (102) from a pair of I/O transistors of the SERDES differential I/O circuit (120) in response to the detected electrostatic discharge event. The method further includes selectively disengaging a ground terminal (104) from the pair of I/O transistors of the SERDES differential I/O circuit (120) in response to the detected electrostatic discharge event.
Title of the invention : POLYESTER RESIN

Abstract:
The present invention relates to a polyester resin. The polyester resin has excellent heat resistance and transparency and thus is useful for a bottle a sheet a multi-sheet a stretching film and a fiber. Especially the polyester resin is advantageous in that the polyester resin shows less physical property degradation such as a yellowing phenomenon at the time of processing.

No. of Pages : 61  No. of Claims : 18
The invention relates to an inspection system (100 200 300 400) for detecting a particle in a transparent cylinder (10) having a longitudinal axis (A) and a diameter (D) the inspection system comprising: -a light source (120 220 320 420) able to illuminate a transparent cylinder (10) -a mask (110 210 310 410) able to block at least part of the light coming from the light source the light source (120 220 320 420) and the mask (110 210 310 410) being arranged such that when the transparent cylinder (10) is positioned in the system for inspection the light source the mask and the transparent cylinder are substantially aligned along an inspection axis (B) perpendicular to the longitudinal axis (A) of said transparent cylinder and the mask (110 210 310 410) is interposed between the light source (120 220 320 420) and the transparent cylinder (10) so as to prevent illumination of a first portion of the transparent cylinder having a width smaller than the diameter (D) of the transparent cylinder while allowing illumination of a second portion of the transparent cylinder the mask being configured to provide a contrast with a particle present in the first portion of the transparent cylinder and illuminated by light refracted by the second portion of the transparent cylinder.
Title of the invention: HALOALLYLAMINE INDOLE AND AZAINDOLE DERIVATIVE INHIBITORS OF LYSYL OXIDASES AND USES THEREOF

Abstract:
The present invention relates to novel compounds which are capable of inhibiting certain amine oxidase enzymes. These compounds are useful for treatment of a variety of indications e.g. fibrosis, cancer and/or angiogenesis in human subjects as well as in pets and livestock. In addition the present invention relates to pharmaceutical compositions containing these compounds as well as various uses thereof.

No. of Pages: 204
No. of Claims: 28
Title of the invention: INDOLE AND AZAINDOLE HALOALLYLAMINE DERIVATIVE INHIBITORS OF LYSYL OXIDASES AND USES THEREOF

Abstract:
The present invention relates to novel compounds which are capable of inhibiting certain amine oxidase enzymes. These compounds are useful for treatment of a variety of indications e.g. fibrosis, cancer and/or angiogenesis in human subjects as well as in pets and livestock. In addition the present invention relates to pharmaceutical compositions containing these compounds as well as various uses thereof.

No. of Pages : 151 No. of Claims : 29
A method apparatus and computer program products are provided for facilitating performing frictionless two-factor authentication. One example method includes receiving from a first entity an indication of a request received at the first entity to access an account from a device associated with a user the indication comprising at least one instance of first device identification information of at least one device having authorization to access the account receiving from a second entity second device identification information the second device identification information determined upon the device accessing to the network address performing a real-time comparison between the first device identification information and second device identification information and prompting the first entity to grant the device access to the account if a match is detected between the first device identification information and second device identification information.
The present disclosure relates to a composition comprising PIC for treatment of cancer. More particularly the present disclosure discloses a composition for treatment of cancer comprising polyinosinic-polycytidylic acid an antibiotic or polyamine compound a positive ion and optionally a virus and the use thereof in manufacture of a medicament for treatment of cancer. No figure for publication.
Apparatus for cooling bottled beverages the apparatus comprising: a hang-off structure surrounding an access opening for receiving a bottle in use; an open-topped vessel defining a bottle chamber accessible through the access opening the vessel comprising a tubular wall coupled to the hang-off structure and a closed base opposed to the access opening; a heat exchanger; and a cooling device having a heat input side in thermal communication with the base of the vessel and a heat output side in thermal communication with the heat exchanger; wherein the heat exchanger is suspended from the base of the vessel to define a load path extending from the hang-off structure to the heat exchanger via the wall and the base of the vessel. According to additional aspects of the invention there is provided apparatus that incorporates a fan for implementing an air flow path and apparatus incorporating a thermal bridge and insert that together separates the heat exchanger and vessel. A further embodiment of the invention incorporates a touch-sensitive bezel and control system for controlling the apparatus.
The present invention provides a method, a device and a user terminal for loading an application, and relates to the field of Internet technology. The method for loading an application is applied to a user terminal, and the method includes: in response to a function enabling instruction, matching independent functional components of a corresponding application program, where the application program is packaged in advance according to the implemented functions to include multiple functional components, and the functional components include an independent functional component; obtaining an executable file corresponding to the independent functional component; and loading the executable file corresponding to the independent functional component. According to the present invention, a corresponding executable file is loaded according to a users needs, such that the application is loaded in a way more flexible and quicker, the storage space occupied by the application for a long period of time is reduced, thereby improving the operating efficiency of the application and improving the user experience as well.
The invention relates to mutant forms of CsgG. The invention also relates to analyte detection and characterisation using CsgG.
Title of the invention: N-(CYANOBENZYL)-6-(CYCLOPROPYL-CARBONYLAMINO)-4-(PHENYL)-PYRIDINE-2-CARBOXAMIDE DERIVATIVES AND RELATED COMPOUNDS AS PESTICIDES AND PLANT PROTECTION AGENTS

Abstract:
The invention relates to novel substituted pyridine compounds of formula (I) in which R1 R2 R3 R4 R5 R6 V1 V2 and Q1 have the meanings given in the description and to their use as acaricides and insecticides for the control of animal pests above all arthropods particularly insects and arachnids and to methods and intermediate products for the production thereof.

No. of Pages : 237 No. of Claims : 11
The present invention relates to antibody molecules and functional fragments thereof capable of binding to tumor necrosis factor alpha (TNFα) to processes for their production and to their therapeutic uses.
Disclosed are a channel detection apparatus and method as well as a user equipment and a base station comprising the channel detection apparatus. The channel detection apparatus is used for performing channel detection over a plurality of carriers in an unlicensed frequency band and comprises at least one processing circuit. The plurality of carriers comprise a first carrier and a second carrier. The processing circuit is configured to: perform channel detection of whether a channel is idle on the first carrier; and trigger when it is detected that the channel is occupied during the channel detection on the first carrier channel detection of whether a channel is idle on the second carrier. (Fig. 14)
Provided is a mold 10 for transfer molding comprising a lower mold 11 and an upper mold 12. The lower mold 11 and the upper mold 12 are molds that when clamped to each other comprise a cavity 13 to mold resin and a gate 21 to supply the resin to the cavity 13. The gate 21 is formed on both sides across a parting surface 14 between the two clamped molds. The gate 21 is formed with plane-symmetry across the parting surface 14 and an upstream part of a flow path connected to the gate 21 is formed in only one of the two molds and is exposed at the parting surface 14.

No. of Pages : 12 No. of Claims : 5
A method of manufacturing an etched glass article (10) including the steps of: a) jetting an image (2) with a UV curable inkjet ink on a surface of a glass article; b) UV curing the image (2); c) etching the surface not covered by the UV cured image (3) to obtain an etched image (4); and d) removing the UV cured image (2); characterized in that a time between jetting and curing the image is at least 50 ms.

No. of Pages : 50 No. of Claims : 15
Title of the invention: TREATMENT OF PATIENTS WITH HOMOZYGOUS FAMILIAL HYPERCHOLESTEROLEMIA ON LIPID LOWERING THERAPY

Abstract:
Methods for the treatment of Homozygous Familial Hypercholesterolemia by administering gemcabene as an adjunct to other lipid lowering therapy and/or modified diet.
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<td>(21) Application No.201817031572 A</td>
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<td>(19)</td>
<td>INDIA</td>
<td>(22) Date of filing of Application :23/08/2018</td>
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<td>(21)</td>
<td>Application No.201817031572 A</td>
<td>(43) Publication Date : 04/01/2019</td>
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<td>(31)</td>
<td>Priority Document No</td>
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<td>(36)</td>
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<td>(52)</td>
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<td>11) HERBERT, John</td>
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<td>(54)</td>
<td>Title of the invention</td>
<td>MOLECULES HAVING PESTICIDAL UTILITY AND INTERMEDIATES COMPOSITIONS AND PROCESSES RELATED THERETO</td>
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<td>(57)</td>
<td>Abstract</td>
<td>This disclosure relates to the field of molecules having pesticidal utility against pests in Phyla Arthropoda Mollusca and Nematoda processes to produce such molecules intermediates used in such processes compositions containing such molecules and processes of using such molecules and compositions against such pests. These molecules and compositions may be used for example as acaricides insecticides miticides molluscicides and nematicides. This document discloses molecules having the following formula (Formula One).</td>
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No. of Pages : 173 No. of Claims : 15
A cathode busbar system for an electrolytic cell of substantially rectangular shape suitable for the Hall-Hroult electrolysis process said electrolytic cell comprising a cathode forming the bottom of said electrolytic cell and comprising a plurality of parallel cathode blocks each cathode block being provided with at least one current collector bar and two electrical connection points a lateral lining defining together with the cathode a volume containing the liquid electrolyte and the liquid metal resulting from the Hall-Hroult electrolysis process said cathode and lateral lining being contained in an outer metallic shell and said electrolytic cell further comprising a plurality of anode assemblies suspended above the cathode each anode assembly comprising at least one anode and at least one metallic anode rod connected to an anode bus bar said cathode busbar system comprising a so-called ring busbar surrounding said outer metallic shell viewed from above said ring busbar being substantially rectangular and defining a main plane (PR) a median longitudinal plane (PX) as well as a median transversal plane (PY) both orthogonal to said main plane (PR) said ring busbar comprising two opposite and parallel longitudinal parts (23) each extending along the long sides of the cell and two opposite and parallel transversal parts (45) extending along the ends of the cell said ring busbar being provided with connection means (2131) for connection with both electrical connection points of each cathode block of the cell said cathode busbar system being characterized in that said ring busbar is asymmetric with respect both to said median longitudinal plane (PX) and to said median transversal plane (PY).
In one aspect inks for use with a 3D printer are described herein. In some embodiments an ink described herein comprises a cyclic carbonate monomer and an amine monomer. Further in some instances an ink described herein also comprises an ethylenically unsaturated monomer such as a (meth)acrylate. Additionally an ink described herein in some cases further comprises a colorant such as a molecular dye a particulate inorganic pigment or a particulate organic colorant. An ink described herein may also comprise one or more additives selected from the group consisting of inhibitors stabilizing agents photoinitiators and photosensitizers.
Provided herein are methods for producing a mung bean protein isolate having high functionality for a broad range of food applications. In some embodiments the methods for producing the isolate comprise one or more steps selected from: (a) extracting one or more mung bean proteins from a mung bean protein source in an aqueous solution for example at a pH between about 6.5-10.0; (b) purifying protein from the extract using at least one of two methods: (i) precipitating protein from the extract at a pH near the isoelectric point of a globulin-rich fraction for example a pH between about 5.0-6.0; and/or (ii) fractionating and concentrating protein from the extract using filtration such as microfiltration ultrafiltration or ion-exchange chromatography; and (c) recovering purified protein isolate.
Title of the invention: G PROTEIN-COUPLED RECEPTOR (GPCR) MODULATION BY IMIPRIDONES

Abstract:
Imipridones has been found to selectively modulate Class A G protein-coupled receptors (GPCRs) such as the D2-like subfamily of dopamine receptors and to be useful for the treatment of conditions and disorders in need of such modulation such as cancers psychiatric disorders and bacterial infections. In addition methods of identifying whether a subject having these conditions is likely to be responsive to a treatment regimen such as administration of an imipridone are provided. Furthermore methods of assessing the effectiveness of a treatment regimen such as administration of an imipridone monitoring or providing a prognosis for a subject with these conditions are also provided.
A disc motor. A first magnetic component (51), a second magnetic component (52), a third magnetic component (61), and a fourth magnetic component (62) of a first magnetic disc set (50) and a second magnetic disc set (60) in a magnetic sets (5) are magnetized in the motion direction. A coil (71) of a coil set (70) of an induction set (7) is disposed perpendicular to the motion direction so as to form four magnetomechanical force effects; in design poles of the first magnetic component the second magnetic component the third magnetic component and the fourth magnetic component of the first magnetic disc set the second magnetic disc set are opposite to each other when the poles are different in polarity and the poles are adjacent when the poles are same in polarity; in cooperation with the switching of power supply of a forward circuit and a backward circuit of an induction switch circuit (80) magnetic resistant force can be avoided so that the magnetic aided force exists in the whole motion process so that the input power can be effectively reduced and the output power is enhanced.
A cleaning device (50) for cleaning a removable dental appliance (12) is described. The device (50) comprises a rotatable upper cleaning brush (14) comprising a plurality of downwardly protruding bristles (16) for cleaning an upper surface of a removable dental appliance. The device also comprises a lower dental appliance holder (18) for holding the dental appliance (12) and which is used in connection with the rotatable upper cleaning brush (14) to limit movement of the dental appliance (12) relative to the rotatable upper cleaning brush (14) wherein in use a cleaning action can be applied to the dental appliance (12) by rotating the rotatable upper cleaning brush (14) relative to the dental appliance. The cleaning device (50) further comprises a casing connector (30) for temporarily rotatably interconnecting the rotatable upper cleaning brush (14) and the lower dental appliance holder (18) so as to form a single integrated unit when assembled.
Provided is a fuel tank filling opening for a saddled vehicle the fuel tank filling opening comprising a communication hole for releasing pressure within a fuel tank wherein the fuel tank filling opening is configured so as to prevent during fuel filling operation fuel from rushing from the inside of the fuel tank into the fuel tank filling opening through the communication hole due to the momentum of the fuel being filled and therefore the operation of releasing pressure within the fuel tank can be maintained. A fuel tank filling opening for a saddled vehicle comprises a circular cylinder section 20 constituting the fuel tank filling opening 2 into which a fuel filling nozzle 6 for filling fuel into a fuel tank 1 is inserted the circular cylinder section 20 hanging down into the fuel tank the peripheral wall 20a of the circular cylinder section being provided with a communication hole 21 for providing communication between the inside of the circular cylinder section and the outside thereof. An extension section 32 32 facing the open face 21a of the communication hole is provided to the outer periphery of the circular cylinder section.
Title of the invention: SIDE-BY-SIDE CARTRIDGE ASSEMBLY FOR DISPENSING A FIRST FLUID AND A SECOND FLUID

Abstract:
A side-by-side cartridge assembly for dispensing a first fluid and a second fluid includes a first cartridge body and a second cartridge body having first and second cartridge coupling elements respectively. The first cartridge body extends along an axial direction and has a radial boundary or periphery transverse to the axial direction. The first cartridge has a first neck portion of a neck and the second cartridge has a second neck portion of the neck. The first neck portion projects from the first cartridge body such that the first neck portion is within the radial boundary or periphery of the first cartridge. As such the first cartridge coupling element operatively connects to the second cartridge coupling element to secure the first cartridge to the second cartridge and form the neck for discharging a first fluid and a second fluid.
(54) Title of the invention: WIRELESS COMMUNICATION SYSTEM AND APPARATUS AND METHOD IN WIRELESS COMMUNICATION SYSTEM

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(31) Priority Document No: 201610060087.0
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(33) Name of priority country: China
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(61) Patent of Addition to Application Number: NA
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(62) Divisional to Application Number: NA
Filing Date: NA

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(57) Abstract:
Provided are a wireless communication system and an apparatus and method in a wireless communication system. The apparatus comprises a processing circuit. The processing circuit is configured to: detect whether a pre-set power margin reporting trigger event is satisfied; and trigger if the pre-set power margin reporting trigger event is satisfied reporting of a power margin of a user equipment to a base station wherein the pre-set power margin reporting trigger event comprises at least one of the following events: a first event of having detected an idle channel on an unlicensed band; and a second event of having received uplink scheduling licensed signalling from the base station. According to embodiments of the present disclosure a power margin in an LAA system can be effectively reported.

Figure 1

No. of Pages: 32 No. of Claims: 12
The invention relates to a winding arrangement (1) for a transformer or an inductor comprising a winding formed by a winding conductor, a solid insulation surrounding the winding and a connecting unit embedded in the solid insulation. The aim of the invention is to obtain such a winding arrangement which provides the required dielectric strength even at higher operating voltages. In order to achieve said aim it is proposed that the connecting unit is a plug lead-through (5) and is designed to allow the connection of a cable connector.
The present invention addresses the problem in the extraction or analysis of metal fine particles (inclusions precipitate) in a metal material by means of electrolytic etching using a solvent electrolyte solution of suppressing surface substitution of the metal fine particles by Cu ions and the like and preventing the generation of artifact CuS and the like without significantly changing conventional extraction/analysis methods and causing a metal that has been precipitated on a cathode to actively adhere to the cathode so that the metal precipitate does not become a source of contamination. Provided are: an electrolytic etching device for separating and extracting metal compound particles in a metal material said device being provided with an electrolytic cell that has a cathode at least a portion of which is provided with a member comprising a metal M wherein as defined in the belowmentioned formula is 10 or more and accommodates an electrolyte solution that includes a non-aqueous solvent and an agent that forms a complex that includes the metal M; and an extraction method.  

\[ pK_{\text{sp}[MxAy]} = -\log_{10} K_{\text{sp}[MxAy]} \]

No. of Pages : 28 No. of Claims : 15
This shaped film production method includes: a step in which a thermoplastic resin film is arranged such that a space is divided by the thermoplastic resin film into a first space on one surface side of the film and a second space on the other surface side; a step in which the thermoplastic resin film is heated; a step in which the thermoplastic resin film is curved inside the space by using the pressure difference between inside the first space and inside the second space; a step in which the curving of the thermoplastic resin film is stopped in a state in which at least a convex curved surface out of both surfaces of the film is exposed inside the space; and a step in which the curved film is cooled.
There is provided a method of handling interference caused by intermodulation in a network node site comprising a set of network nodes for wireless communication capable of communication with a set of stations for wireless communication. The stations are wireless transceiver devices and communication from the network node to any of the stations is considered to be downlink communication and communication from any of the stations is considered to be uplink communication. The method comprises detecting likely passive intermodulation determining at least one station having an uplink resource being a likely to be affected by the detected likely passive intermodulation and limiting downlink transmission when the determined at least one station is scheduled or expected to transmit on the uplink resource on a downlink resource likely to be affecting the uplink resource by the detected likely passive intermodulation. A computer program a controller and a network node site are also disclosed.
(54) Title of the invention: ELECTRONIC DEVICE AND METHOD FOR OPERATING THE SAME

(57) Abstract:
An electronic device is provided. The electronic device includes at least one communication circuit, a display, a speaker, a memory, and a processor electrically connected to the communication circuit, the display, the memory, and the speaker. The processor is configured to receive a message that includes one or more items of a link or content through the at least one communication circuit, parse the message in order to recognize the one or more items, extract or receive content from the one or more items or from an external resource related to the one or more items, convert the message into at least one of a speech, a sound, an image, a video, and data according to at least one of the parsed message and the extracted or received content, and provide at least one of the speech, the sound, the image, the video, and the data to the speaker or the at least one communication circuit.
(54) Title of the invention: MULTIGENOME RETROVIRAL VECTOR PREPARATIONS AND METHODS AND SYSTEMS FOR PRODUCING AND USING SAME

(51) International classification: C12N15/86C12N5/10A61K39/00

(31) Priority Document No: 62/298948
(32) Priority Date: 23/02/2016
(33) Name of priority country: U.S.A.
(86) International Application No: PCT/US2017/018823
  Filing Date: 22/02/2017
(87) International Publication No: WO 2017/147119

(57) Abstract:
The present invention provides novel multigenome retroviral vectors methods and packaging systems for making such retroviral vectors and methods of use.

No. of Pages: 80 No. of Claims: 48
The Patent Office Journal No. 01/2019 Dated 04/01/2019

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| (19) INDIA | |
| (22) Date of filing of Application :28/08/2018 | (43) Publication Date : 04/01/2019 |

| (54) Title of the invention : GRAIN-ORIENTED ELECTRICAL STEEL SHEET |
| (51) International classification :C21D8/12C22C38/00C22C38/60 |
| (31) Priority Document No :2016-073151 |
| (32) Priority Date :31/03/2016 |
| (33) Name of priority country :Japan |
| (86) International Application No :PCT/JP2017/013622 |
| | Filing Date :31/03/2017 |
| (87) International Publication No :WO 2017/171013 |
| (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 : |
This grain-oriented electrical steel sheet is provided with a steel sheet having a steel sheet surface in which a groove is formed the extension direction of which intersects with the rolling direction and the depth direction of which is parallel to the sheet thickness direction. Melt coagulation continuous from and parallel to the groove is present on both sides of the groove on the surface of the steel sheet. Forming a virtual plane at a height having the greatest frequency in a height distribution of height data obtained by measuring the steel sheet surface at a constant interval in a specific region including the groove the value of V2/V1 is more than 0.10 and less than 0.80 where V1 is the spatial volume of a recess recessed from the virtual plane and V2 is the volume of a protrusion protruding from the virtual plane. A plurality of projections is formed in the specific region and the width of the projection closest to the groove among the plurality of projections is greater than the width of the other projections. When the region in which the greatest average height in the extension direction in the height distribution is viewed in a longitudinal cross section of the groove including the extension direction and the sheet thickness direction the average roughness Ra of a roughness curve forming the surface of the region is 0.30-2.00 µm and the average length RSm of a roughness curve element forming the surface of the region is 10-150 µm.

No. of Pages : 83 No. of Claims : 8
The invention relates to an adhesion promoting composition for an anti-corrosion product said composition comprising:
- approximately 20 wt.% to approximately 70 wt.% of at least one polyolefin selected from a group comprising polyethylenes and/or polypropylenes;
- approximately 20 wt.% to approximately 65 wt.% of at least one butyl rubber; and
- approximately 6 wt.% to approximately 35 wt.% of at least one elastomer selected from a group comprising ethylene-propylene rubber and/or ethylene-propylene-diene rubber, all in relation to the total quantity of the adhesion promoting composition.
Absorbent articles comprising material webs are disclosed herein. The material webs described herein can provide a bevy of benefits when utilized in the context of absorbent articles and such material webs can facilitate the manufacturing of absorbent article.
**Title of the invention:** ABSORBENT ARTICLE WITH ACTIVATABLE MATERIAL

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<td>Priority Document No</td>
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**Abstract:**
Material webs suitable for use in conjunction with disposable absorbent articles are disclosed herein. The material webs comprise a melt additive that when subjected to thermal energy may be encouraged to bloom across the entirety of the web or in localized areas of the web where localized thermal energy is applied.
The present invention provides means and methods for treating diabetic foot infections. In particular drug compounds are provided that combine a high therapeutic activity against Staphylococcus Spp. bacteria with a high degree of bone penetration and vasodilatory effects. This unique combination of properties allows to accomplish high local concentrations of the drug at the site of infection even in diabetic foot patients typically having poor blood perfusion at the site of infection.
The present invention relates to a foldable honeycomb structure widely used as an industrial material, a landscape material, and a building material and a manufacturing method therefor. More specifically, the present invention relates to a foldable honeycomb structure and a manufacturing method therefor wherein a foldable honeycomb capable of being folded and unfolded is easily produced using a readily foldable film or sheet made of a plastic material, paper, a metal material, or a non-metal material instead of prior art molding or extrusion methods.
An aspect of the present invention is related to nucleic acid constructs capable of expressing a Zika antigen that elicits an immune response in a mammal against Zika virus and methods of use thereof. Additionally there are DNA plasmid vaccines capable of generating in a mammal an immune response against a Zika virus comprising a DNA plasmid and a pharmaceutically acceptable excipient and methods of use thereof. The DNA plasmid is capable of expressing a Zika antigen in a cell of the mammal in a quantity effective to elicit an immune response in the mammal that is cross reactive against all Zika strains.
A security element comprising: a colourshifting film which when viewed in reflected or transmitted light exhibits different colours in dependence on the viewing angle and which when viewed at any one angle exhibits first and second colours when viewed in reflected and transmitted white light respectively the first and second colours being complementary the colourshifting film comprising a plurality of polymer layers arranged in a periodic stack including respective layers of at least first and second polymer materials having different refractive indices from one another; and a light absorbing material layer underlying the colourshifting film the light absorbing material layer having one or more gaps therein so as to define a pattern. At any one viewing angle the percentage of incident light reflected by the colourshifting film varies in dependence on its wavelength according to a function $R(\lambda)$ having a maximum at a peak wavelength $A=0$ and the colourshifting film is configured such that at least at a viewing position lying on the normal to the security element the percentage $R=0$ of incident light at the peak wavelength $A=0$ that is reflected by the colourshifting film is at least 60% and the maximum of the function $R(\lambda)$ has a bandwidth $ (=)$ of 150 nm or less. The security element is substantially transparent or translucent to at least some wavelengths of visible light at the locations corresponding to the one or more gaps in the light absorbing material layer such that in the locations corresponding to the one or more gaps in the light absorbing material layer the security element exhibits different respective colours when viewed in reflected white light and when viewed in transmitted white light at the same viewing angle.
The invention relates to a notification device comprising a main processing unit (40) at least a signaling sub-system (60 70) a power supply sub-system (30) an interface to a control and power circuit and an energy storage sub-system (20) wherein the notification device is adapted to receive commands and energy from a central control panel via the control and power circuit. In order to increase efficiency the energy storage sub-system (20) operates with low voltage.
| (12) | PATENT APPLICATION PUBLICATION | (21) Application No.201817032004 A |
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| (22) | Date of filing of Application: 27/08/2018 | (43) Publication Date: 04/01/2019 |

| (54) Title of the invention: PRINTING APPARATUS |

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| (57) Abstract: |
Possibilities of contaminating a recording head with foreign matter attached to a printed surface of a medium changing ink ejection performance of the recording head and reducing image printing quality are prevented. The printing apparatus is characterized by being provided with: a feeding unit 30 that feeds a medium M in a feeding direction F; a printing unit that performs printing on a printed surface M1 of the medium M; and a removing unit 60 that is provided on an upstream side in the feeding direction F with respect to the feeding unit 30 and provided so as to contact the printed surface M1.

No. of Pages: 49 No. of Claims: 7
**Title of the invention:** COAL GASIFICATION

**Abstract:**
A method of producing syngas wherein a carbonaceous feedstock is exposed to a plasma arc generated by a DC supply in a dry-steam environment.

| (31) Priority Document No | :2016/01209 |
| (32) Priority Date | :23/02/2016 |
| (33) Name of priority country | :South Africa |
| (86) International Application No | :PCT/ZA2017/050011 |
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| (87) International Publication No | :WO 2017/147627 |
| (61) Patent of Addition to Application | |
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| Number | :NA |
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No. of Pages: 9  No. of Claims: 11
(54) Title of the invention : ELECTRONIC SUBASSEMBLY FOR A PERSONAL CARE PRODUCT

(51) International classification : B26B21/40
(31) Priority Document No : 16160242.0
(32) Priority Date : 14/03/2016
(33) Name of priority country : EPO
(86) International Application No : PCT/US2017/021509
   Filing Date : 09/03/2017
(87) International Publication No : WO 2017/160575
(61) Patent of Addition to Application Number : NA
   Filing Date : NA
(62) Divisional to Application Number : NA
   Filing Date : NA

(57) Abstract :
An electronic subassembly for a personal care product with a housing defining a chamber. The housing has a tapered guide surface. A first circuit board having a rigid end is positioned within the chamber and a flexible portion positioned outside the chamber. A second circuit board is positioned within the chamber of the housing. The second circuit board has an electrical connector dimensioned to receive the rigid end. An adapter is secured to the first circuit board between the rigid end and the flexible portion. The adapter has a corresponding tapered guide surface that engages the tapered guide surface of the housing to align the rigid end with the electrical connector.
No. of Pages : 22 No. of Claims : 18
Title of the invention: EFFICIENT PROCESS FOR PREPARING CELL-BINDING AGENT-CYTOTOXIC AGENT CONJUGATES

Abstract:
The present invention provides a novel method for preparing a cell-binding agent cytotoxic agent conjugate. The method comprises the step of reacting a cell-binding agent with a cytotoxic agent or a cytotoxic agent-linker compound having a reactive group capable of forming a covalent bond with the cell-binding agent at a pH between 4 to 9 in the presence of a buffer solution with high ionic strength wherein the cell-binding agent comprises a lysine e-H2 group that forms a covalent bond with the cytotoxic agent or the cytotoxic agent-linker compound having an amine-reactive group. The cell-binding agent-cytotoxic agent conjugates prepared according to the methods described herein are also included in the present invention.
The invention provides methods of genetically engineering a C1-fixing bacterium using a Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)/CRISPR-associated (Cas) (CRISPR/Cas) system. Preferably the Cas protein is under the control of an inducible promoter.
A resealable opening device for a flexible package (21) of collapsible type having a compartment defined by flexible walls (24) comprising a thin-walled body (2) having a back surface (3) attachable on one of the flexible walls (24) of the package (21) in a dispensing portion (23) of the package a first hinge joint (5) extending in a first direction (P1) and connecting a first section (6) of the body (2) with a second section (7) of the body (2) the thin-wall body (2) being intended to be arranged such that the first hinge joint (5) is arranged transversely to a dispensing direction (P4) of the package and a second hinge joint (8) extending in a second direction (P2) crossing the first hinge joint (5) wherein a locking member (14) is arranged for locking the first section (6) to the second section (7) when the first and second sections (6 7) are folded towards each other about the first hinge joint (5). The thin-walled body (2) is further provided with a third hinge joint (9) extending in a third direction (P3) crossing the first hinge joint (5) and arranged at a distance from the second hinge joint (8). The thin-walled body is adaptable to an outwardly bulging shape change of the flexible wall (24) on which the device is intended to be attached. The invention also relates to a package provided with such a resealable opening device.
Title of the invention: PRIMER SET FOR NAT2 DIPLOTyping

Abstract:
A primer set for NAT2 diplootyping is selected from at least one of NAT24 primers NAT25B primers NAT26A primers NAT27B primers NAT212A primers and NAT213A primers. The primer set is applied to Polymerase chain reaction (PCR) for NAT2 diplootyping analysis. The PCR results are then used to interpret acetylator phenotype for assessment the metabolism of arylamine-related drugs in patients.

No. of Pages: 13 No. of Claims: 22
A phytochemical composition for treatment of sickle cell anemia has been developed. The composition is a solid mixture of inorganic salts and various organic compounds of herbal origin and obtained by extracting a mixture of five herbs namely Piper guineenses seeds Pterocarpus osum stem Eugenia carophyllum fruit Sorghum bicolor leaves and Curcuma longa tuber with aqueous solution of sodium/potassium bicarbonate and sodium/potassium carbonate and then concentrating the extract to obtain a powder. Also described are methods of preparation of extraction product and method of its use for treatment of sickle cell disease afflicted patients.
Title of the invention: DOOR HINGE HAVING DAMPING FUNCTION

Abstract:
A door hinge having a damping function comprising a housing (1) a first rotating shaft (2) a second rotating shaft (3) a U-shaped rotating shaft (4) a hinge cup (6) a linkage member (8) a torsion spring (5) a connector (7) a supporting structure (9) and a damping structure (10). One end of the linkage member (8) is rotatably provided in the housing (1) by means of the first rotating shaft (2) and the other end of the linkage member (8) is rotatably connected to the hinge cup (6) by means of one arm (42) of the U-shaped rotating shaft (4); one end of the connector (7) is rotatably provided in the housing (1) by means of the second rotating shaft (3) and the other end of the connector (7) is rotatably connected to the hinge cup (6) by means of the other arm (41) of the U-shaped rotating shaft (4); the torsion spring (5) is fitted over the second rotating shaft (3) one end of the torsion spring (5) is fixed to the linkage member (8) and the other end of the torsion spring (5) abuts against the linkage member (8); the supporting structure (9) is fixed to the linkage member (8); the damping structure (10) is supported by the supporting structure (9) and moves in the housing (1) along with the supporting structure (9); a piston rod (101) of the damping structure (10) can abut against the torsion spring (5) so as to increase the resetting resistance to the torsion spring (5). The door hinge features a simple structure a long service life easy maintenance and high precision.
A computer-implemented process system and computer readable medium are provided for administration and governance of fiat and cryptocurrency funds in a distributed computer system. In one example a process includes an electronic device with one or more processors and memory accessing a list of a plurality of participant nodes which may include a fund administrator receiving a list of participants or nodes. The method further includes transferring crypto-currency (e.g. that is pegged to U.S. dollars local currency or the like) to one or more of the participant nodes. Each of the participant nodes may include an interface portal (e.g. a web-portal) for viewing transferred crypto-currency and for transacting (e.g. bidding soliciting etc.) with other participant nodes of the list of participant nodes with the crypto-currency.
A system and method for automatically verifying requests based on electronic documents. The method includes analyzing a first electronic document to determine at least one transaction parameter the first electronic document indicating the request wherein the first electronic document includes at least partially unstructured data; creating a first template for the first electronic document wherein the first template is a structured dataset including the determined at least one transaction parameter; retrieving based on the first template a second electronic document wherein the second electronic document indicates evidence for verifying the request; and determining based on the first template and the second electronic document whether the request is verified.
The invention provides a composition comprising a three-dimensional amorphous trivalent network which reduces the number of modes within a particular frequency range (c±). The invention also extends to use of the composition as a structural colouration material and a paint dye or fabric comprising the structural colouration material. Additionally the invention extends to use of the composition as an optical filter or as a supporting matrix configured to define at least one optical component such as a frequency filter light-guiding structure for a telecommunications application an optical computer chip an optical micro-circuit or a laser comprising the supporting matrix.
Title of the invention: SURFACE-COATED CUTTING TOOL AND MANUFACTURING METHOD THEREFOR

Abstract:
The surface-coated cutting tool is equipped with a base material and a coating formed on a surface of the base material. The coating includes a first alternating layer and second alternating layer formed on the first alternating layer. The first alternating layer includes a first layer and a second layer and the second alternating layer includes a third layer and a fourth layer. One or more of each of the first layer and the second layer are alternately layered and one or more of each of the third layer and the fourth layer are alternately layered. The first layer is made of a nitride or a carbonitride of $\text{Al}_a\text{Cr}_b\text{M}_{11-a-b}$, the second layer is made of a nitride or a carbonitride of $\text{Al}_c\text{T}_{id}\text{M}_{21-c-d}$, the third layer is made of a nitride or a carbonitride of $\text{Al}_{e}\text{Ti}_{f}\text{M}_{31-e-f}$, and the fourth layer is made of a nitride or a carbonitride of $\text{Al}_{g}\text{Ti}_{h}\text{M}_{41-g-h}$. $\text{M}_{1}$, $\text{M}_{2}$, $\text{M}_{3}$, and $\text{M}_{4}$ are one or more kinds of elements selected from the group consisting of Si B group 4, group 5, group 6, and elements of the periodic table except for Cr and Ti.
### Title of the invention
DISPOSABLE CONTAINER BLENDING APPARATUS AND METHODS

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#### Abstract
Blending devices can be used to blend material in a disposable container such as a paper or plastic cup. A blending device may have a jar or container portion that is insertable into a disposable container and that seals its opening. A space within the jar or container portion contains a blending blade assembly that is rotatable to blend material in the disposable container. A shelf or overhanging structure may extend partially over the bottom surface of the jar or container portion to limit movement of material out of the space in the jar or container portion in a vertical and lateral direction to reduce stresses on the container during blending. After blending the disposable container may be removed from the blending device and the blended material may be served directly in the container. Ducted blending and other flow control devices are also disclosed.

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No. of Pages : 34
No. of Claims : 35
(54) Title of the invention: FILTERING SYRINGE AND FILTERING NEEDLE HAVING TWIST-OPEN SUCTION PART


(12) PATENT APPLICATION PUBLICATION
(21) Application No. 20181703163 A

(19) INDIA

(22) Date of filing of Application: 23/08/2018

(36) No. of Pages: 21 No. of Claims: 9

(43) Publication Date: 04/01/2019

(57) Abstract:
Disclosed are a filtering syringe and a filtering needle having a suction part which needs not be cut but is twisted open around the same axis as a needle. The present invention relates to a filtering needle wherein a suction tube has a needle accommodating groove which partially surrounds the outer circumferential surface of a needle so that a part thereof is exposed and a needle protecting protrusion which covers the tip of the needle.

(61) Patent of Addition to Application Number: NA

(62) Divisional to Application Number: NA

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(32) Priority Date: 22/02/2016

(33) Name of priority country: Republic of Korea

(31) Priority Document No: 10-2016-0020295

(36) International Application No: PCT/KR2017/001831
Filing Date: 20/02/2017

(36) International Publication No: WO 2017/146427


(87) International Publication No: WO 2017/146427

(86) International Application No: PCT/KR2017/001831
Filing Date: 20/02/2017

(87) International Publication No: WO 2017/146427
Title of the invention: UNDERBODY PANEL HAVING MOUNTING POINTS

Abstract:
Moulded underbody panel for shielding the underside of a motor vehicle comprising a consolidated fibrous layer comprising at least one mounting point for mounting the moulded underbody panel to the vehicle by means for mounting the means for mounting comprising at least a rod shape element and a fixing element whereby the mounting point consists at least of a through-hole extending through the moulded underbody panel for hosting the rod shape element and a contact area on the moulded underbody panel surface provided around the through-hole for contacting and supporting the fixing element in the mounting position wherein the mounting point further comprises a blocking element which is formed integrally with the moulded underbody panel whereby the blocking element is raised above at least the plane of the contact area and formed around the through-hole and whereby the distance between the foot of the blocking element facing the through hole and the centre of through-hole is 5 to 20 mm.

No. of Pages : 10 No. of Claims : 11
### Title of the invention: INFECTION DETECTION AND DIFFERENTIATION SYSTEMS AND METHODS

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2) CAREAGA, Diana B.
3) CHAVES, Fernando P.
4) TEJIDOR, Liliana M.

### Abstract:
Embodiments may include an automated method for evaluating an infection status associated with a blood sample obtained from an individual. Methods may include determining using a first module a white blood cell concentration associated with the blood sample. In addition methods may include determining using a second module a monocyte volume measure associated with the blood sample. Methods may include evaluating using a data processing module the infection status associated with the blood sample. The data processing module may include a processor and a computer readable medium. The computer readable medium may be programmed with a computer application. This computer application when executed by the processor may cause the processor to calculate a parameter using a function comprising the white blood cell concentration and the monocyte volume measure. The computer application may also cause the processor to evaluate the infection status associated with the blood sample based on the parameter.
The invention relates to a new and efficient process for the preparation of a class of molecules namely bicyclo[1.1.1]pentanes and derivatives thereof by reaction of [1.1.1]propellane with a variety of reagents under irradiation and/or in the presence of radical initiators to obtain bicyclo[1.1.1]pentanes asymmetrically substituted at position 1 and 3 which are useful as intermediates for the preparation of asymmetrically 13-disubstituted bicyclo[1.1.1]pentane derivatives and various physiologically active substances or materials containing these structures.
(12) PATENT APPLICATION PUBLICATION

(21) Application No.201817032194 A

(19) INDIA

(22) Date of filing of Application: 28/08/2018

(43) Publication Date: 04/01/2019

| (54) Title of the invention: AMINO ACID AND PEPTIDE CONJUGATES AND CONJUGATION PROCESS |
| (51) International classification: C07C229/02C07C227/16C07C321/12 |
| (31) Priority Document No: 2016900701 |
| (32) Priority Date: 26/02/2016 |
| (33) Name of priority country: Australia |
| (86) International Application No: PCT/IB2017/051054 |
| Filing Date: 24/02/2017 |
| (87) International Publication No: WO 2017/145097 |
| (61) Patent of Addition to Application Number: NA |
| Filing Date: NA |
| (62) Divisional to Application Number: NA |
| Filing Date: NA |

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2) WILLIAMS, Geoffrey Martyn
3) DUNBAR, Peter Roderick
4) VERDON, Daniel

(57) Abstract:
The invention relates to amino acid and peptide conjugates methods for making amino acid and peptide conjugates conjugates produced by the methods and pharmaceutical compositions comprising the conjugates. Methods of eliciting immune responses in a subject and methods of vaccinating a subject uses of the conjugates for the same and uses of the conjugates in the manufacture of medicaments for the same are also contemplated.

No. of Pages: 157 No. of Claims: 120
An unmanned aerial vehicle (UAV) (100) may comprise a central body (102) and a plurality of arms (104) extendable from the central body. Each arm (104) may be configured to support one or more propulsion units (108). Each arm (104) may be configured to transform between a flight configuration wherein the arm (104) is extending away from the central body (102) and a compact configuration wherein the arm (104) is folded against the central body (102). At least one arm (104) may be arranged such that its propulsion unit (108) carries one or more rotor blades (110) facing a first direction when the arm (104) is in the flight configuration and the one or more rotor blades (110) facing a second direction when the arm (104) is in the compact configuration wherein the second direction is different from the first direction. Systems methods and assembly kits relating to a foldable multi-rotor aerial vehicle are provided. The unmanned aerial vehicle is easy folding and portable to be carried.
Title of the invention: PREFORM EXTENDED FINISH FOR PROCESSING LIGHT WEIGHT ECOLOGICALLY BENEFICIAL BOTTLES

Abstract:
Disclosed are preforms which incorporate improvements in the region of the neck and upper segment of the body to allow the production of lightweight containers such as bottles suitable for containing water or other beverages. In accordance with certain embodiments the improvements include a thinner neck finish area than conventional bottles where the thinner area is extended into the upper segment of the body portion below the support ring. Reducing the thickness in these areas of the bottle allows for less resin to be used in forming the preform and bottle.
An apparatus and a method are provided for a container cap comprising a plurality of tamper evidence bridges configured to provide evidence that the container cap has been removed from a container by other than a manufacturer of the container. The tamper evidence bridges comprise a small tab of material that extends from a bottom-most edge of the container cap to a neck ring of the container. The tamper evidence bridges are configured to break or snap when the container cap is rotated relative to the neck ring. Broken tamper evidence bridges provide readily visible evidence to an end-user of the container that the container cap has been removed by other than the manufacturer of the container. The high visibility of the tamper evidence bridges serves to discourage vendors from attempting to refill and resale of the used containers.
(54) Title of the invention : SERVICE TRANSMISSION METHOD AND APPARATUS

(51) International classification : H04L5/00 H04W72/00
(31) Priority Document No : PCT/CN2016/073668
(32) Priority Date : 05/02/2016
(33) Name of priority country : China
(86) International Application No : PCT/CN2016/112212
   Filing Date : 26/12/2016
(87) International Publication No : WO 2017/133352
(61) Patent of Addition to Application Number : NA
   Filing Date : NA
(62) Divisional to Application Number : NA
   Filing Date : NA

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2) LIN, Yanan
3) TANG, Hai
4) FENG, Bin

(57) Abstract :
Provided are a service transmission method and apparatus. The method comprises: a first mobile station acquiring N resource allocation parameter sets from a network device; the first mobile station sending first indication information to the network device wherein the first indication information is used to indicate service information about a first service needing to be transmitted by the first mobile station; the first mobile station receiving second indication information sent by the network device wherein the second indication information is used to indicate a first target resource; and the first mobile station determining from the N resource allocation parameter sets a first resource allocation parameter set adapted to the service information about the first service and the first mobile station transmitting according to the first resource allocation parameter set the first service using the first target resource. Accordingly different requirements of different services for semi-persistent scheduling can be coped with flexibly and rapidly.

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No. of Pages : 87 No. of Claims : 15
According to an embodiment of the present invention a waste heat recovering heat exchanger which heats water by recovering the thermal energy of exhaust gas combusted in a boiler can comprise: a lower plate having an exhaust gas inlet; an upper plate having an exhaust gas outlet formed at a position facing the exhaust gas inlet; a first side plate having a plurality of one side through-holes; a second side plate which is a plate opposite to and facing the first side plate having a plurality of other side through-holes formed at the positions facing the one side through-holes; a third side plate and a fourth side plate for connecting the first side plate and the second side plate; and a plurality of heat exchange tubes which are titanium tube pipes in which fluid flows and respectively connect in parallel the one side through-holes and the other side through-holes facing the one side through-holes.
Disclosed are methods for determining copy number variation (CNV) known or suspected to be associated with a variety of medical conditions. In some embodiments methods are provided for determining copy number variation of fetuses using maternal samples comprising maternal and fetal cell free DNA. In some embodiments methods are provided for determining CNVs known or suspected to be associated with a variety of medical conditions. Some embodiments disclosed herein provide methods to improve the sensitivity and/or specificity of sequence data analysis by deriving a fragment size parameter. In some implementations information from fragments of different sizes are used to evaluate copy number variations. In some implementations one or more t-statistics obtained from coverage information of the sequence of interest is used to evaluate copy number variations. In some implementations one or more fetal fraction estimates are combined with one or more t-statistics to determine copy number variations.
Pulps in accordance with certain embodiments include crosslinked cellulose fibers and have high brightness reactivity and intrinsic viscosity and therefore can be well suited for use as a precursor in the production of low-color high-viscosity cellulose derivatives. A method in accordance with the present technology includes forming a pulp from a cellulosic feedstock, bleaching the pulp, crosslinking cellulose fibers within the pulp while the pulp has a high consistency and drying the pulp. Crosslinking the cellulose fibers can include exposing the fibers to a glycidyl ether crosslinker having two or more glycidyl groups and a molecular weight per epoxide within a range from 140 to 175. Another method in accordance with the present technology includes providing an aqueous suspension of pulp that includes chemical wood pulp fibers that were previously bleached and dried crosslinking the fibers with such a glycidal ether crosslinker and drying the pulp.
A method of assembling an electronic subassembly for a personal care product by providing an adapter having a body with a tapered guide surface. A first circuit board is positioned within the adapter. A flexible portion of the first circuit board extends from one end of the adapter and a rigid end of the first circuit board extends from the other end of the adapter. A housing is provided with a first opening and a second opening and a chamber (between the first and second openings. A second circuit board having an electrical connector into the chamber thru the first opening. The tapered surface of the adapter engages a corresponding tapered guide surface of the housing. The rigid end of the first circuit board is connected to the electrical connector.
Title of the invention: RAZOR CARTRIDGE WITH FLUID MANAGEMENT

Abstract:
A razor cartridge comprising a housing (20) having elongated skin contacting elements (60) having a plurality of channels (62) extending there through to facilitate fluid flow.

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No. of Pages: 16 No. of Claims: 17
Title of the invention : MICROBICIDAL COMPOSITION

Abstract:
A synergistic microbicidal composition comprising a non-ionic surfactant and glutaraldehyde and a method for inhibiting the growth of microorganisms in an aqueous medium.

No. of Pages : 8 No. of Claims : 4
(54) Title of the invention: METHOD OF DETERMINING THE STABILITY RESERVE AND SOLUBILITY PARAMETERS OF A PROCESS STREAM CONTAINING ASPHALTENES BY JOINT USE OF TURBIDIMETRIC METHOD AND REFRACTIVE INDEX

(51) International classification: G01N33/28G01N21/83
(31) Priority Document No: 62/292010
(32) Priority Date: 05/02/2016
(33) Name of priority country: U.S.A.
(86) International Application No: PCT/US2017/016493
  Filing Date: 03/02/2017
(87) International Publication No: WO 2017/136716
(61) Patent of Addition to Application Number: NA
  Filing Date: NA
(62) Divisional to Application Number: NA
  Filing Date: NA

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2) DELLA SALA, Giuseppe
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4) MEDINE, Gavin, Mark
5) PINAPPU, Sai, Reddy

(57) Abstract:
A method is provided for determining the solubility parameters for a process stream via the joint use of turbidimetric detection of asphaltene flocculation which is used to determine and detect the onset flocculation of asphaltenes of the process stream and a refractive index to determine the process stream solubility parameters such as the solubility blending number and insolubility number.

No. of Pages: 15
No. of Claims: 16
A synergistic microbicidal composition comprising a non-ionic surfactant and glutaraldehyde and a method for inhibiting the growth of microorganisms in an aqueous medium.
Title of the invention: RAZOR CARTRIDGE WITH FLUID MANAGEMENT SYSTEM

Abstract:
A razor cartridge comprising a housing (20) having an elongated skin contacting element (60) having a plurality of tunnels (62) extending there through to facilitate fluid flow to the blades.
(12) PATENT APPLICATION PUBLICATION

(21) Application No.201817031785 A

(19) INDIA

(22) Date of filing of Application: 24/08/2018

(43) Publication Date: 04/01/2019

(54) Title of the invention: DERIVATIVES OF AMANITA TOXINS AND THEIR CONJUGATION TO A CELL BINDING MOLECULE

(51) International classification:
A61K47/50
C07K7/64
A61P35/00

(31) Priority Document No:
PCT/IB2016/052246

(32) Priority Date:
20/04/2016

(33) Name of priority country:
INDIA

(86) International Application No:
PCT/IB2016/052246

Filing Date:
20/04/2016

(87) International Publication No:
WO 2017/046658

(61) Patent of Addition to Application Number:
NA

Filing Date:
NA

(62) Divisional to Application Number:
NA

Filing Date:
NA

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10) TONG, Qianqian
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12) ZHAO, Linyao
13) JIA, Junxian
14) LI, Wenjun
15) ZOU, Xiaotao
16) LIN, Chen
17) XU, Yifang
18) GUO, Zixiang

(57) Abstract:
Derivatives of Amanita toxins of Formula (I) wherein formula (a) \( R_1 R_2 R_3 R_4 R_5 R_6 R_7 R_8 R_9 R_{10} X L_m n \) and Q are defined herein. The preparation of the derivatives. The therapeutic use of the derivatives in the targeted treatment of cancers autoimmune disorders and infectious diseases.

No. of Pages: 163 No. of Claims: 21
The invention relates to a sliding element in particular a piston ring having a coating which comprises the following layers from the inside to the outside: a polycrystalline metal-containing adhesive layer an intermediate layer and at least one amorphous carbon layer wherein the intermediate layer comprises at least the following sub-layers from the inside to the outside: an AxCy layer wherein C is carbon A is a metal preferably a metal from the metal-containing adhesive layer and x and y are each values of 1-99; and a crystalline-containing or crystal-containing carbon layer.
The present disclosure describes effector deployment systems and devices that can be coupled adjunctively to a shaft of a concentric cylinder system to provide additional functionality during intravascular procedures.
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**Abstract:**
Sound absorbing liner for the engine bay of a vehicle comprising at least one fibrous layer consisting of fibers and a thermoset binder thermally moulded to form the liner characterised in that the fibers comprises thermoplastic side by side bicomponent fibers and wherein the sides differ such that the fiber has a frizzy or curved shape.

![Fig. 1](image-url)
Certain example embodiments relate to techniques for improving the uniformity of and/or conformance to a desired pattern for metal island layers (MILs) formed on a substrate (e.g. a glass or other substrate) and/or associated products. Certain example embodiments form MILs using a laser or other energy source or magnetic field assisted technique e.g. to compensate for non-uniformities that otherwise likely would result in the MIL diverging from its desired configuration. For example a laser or other energy source may introduce heat onto a substrate enable pulsed laser deposition raster a target including the MIL metal to be deposited raster a substrate where the MIL is to be formed etc. These and/or other techniques may be used to enable the MIL to be formed on the substrate in a desired pattern e.g. by compensating for implicit non-uniformities of the substrate and/or by selectively creating non-uniformities in how the MIL is formed.
The Patent Office Journal No. 01/2019 Dated 04/01/2019

(12) PATENT APPLICATION PUBLICATION (21) Application No.201817031641 A
(19) INDIA (43) Publication Date : 04/01/2019
(22) Date of filing of Application : 23/08/2018

(54) Title of the invention : COATED ARTICLE INCLUDING METAL ISLAND LAYER(S) FORMED USING STOICHIOMETRY CONTROL AND/OR METHOD OF MAKING THE SAME

(51) International classification : C03C17/00C03C17/09C03C17/36
(31) Priority Document No : 15/051927
(32) Priority Date : 24/02/2016
(33) Name of priority country : U.S.A.
(36) Publication Date : 04/01/2019
(43) Title of the invention : COATED ARTICLE INCLUDING METAL ISLAND LAYER(S) FORMED USING STOICHIOMETRY CONTROL AND/OR METHOD OF MAKING THE SAME

(31) Priority Document No : 15/051927
(32) Priority Date : 24/02/2016
(33) Name of priority country : U.S.A.
(86) International Application No : PCT/US2017/017851
(87) International Publication No : WO 2017/146944
(61) Patent of Addition to Application Number : NA
(62) Divisional to Application Number : NA

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3) LU, Yiwei

(72) Name of Inventor :
1) BOYCE, Brent
2) LU, Yiwei

(57) Abstract :
Certain example embodiments relate to techniques for improving the uniformity of and/or conformance to a desired pattern for metal island layers (MILs) formed on a substrate (e.g. a glass or other substrate) and/or associated products. Certain example embodiments form MILs using a laser or other energy source or magnetic field assisted technique e.g. to compensate for non-uniformities that otherwise likely would result in the MIL diverging from its desired configuration. For example a laser or other energy source may introduce heat onto a substrate enable pulsed laser deposition raster a target including the MIL metal to be deposited raster a substrate where the MIL is to be formed etc. These and/or other techniques may be used to enable the MIL to be formed on the substrate in a desired pattern e.g. by compensating for implicit non-uniformities of the substrate and/or by selectively creating non-uniformities in how the MIL is formed.

![Fig. 1](image-url)

No. of Pages : 15 No. of Claims : 20
Title of the invention: COMBINATION THERAPY WITH SORAFENIB OR REGORAFENIB AND A PHOSPHORAMIDATE PRODRUG OF TROXACITABINE

Abstract:
Combination therapy with sorafenib or regorafenib and a phosphoramidate prodrug of troxacitabine with the formula: where Y is C1-C8 straight or branched chain alkyl X is H halo C3-C4cycloalkyl or C1-C4alkyl and Z is H or fluoro or a pharmaceutically acceptable salt thereof shows surprising utility in the treatment of liver cancer or liver metastasis.
The invention relates to a slave cylinder comprising a housing in which a piston is displaceably guided back and forth between a rest position and a working position and wherein an interface between the piston and the housing is surrounded radially outside by a dirt protection device. The invention is characterized in that the dirt protection device has at one end radially outwardly extending projections which engage into at least one housing receptacle in order to retain the dirt protection device in an axial direction on the housing.
A method and apparatus for the detection of Acrylamide precursors in raw potatoes comprising: illuminating at least one region of a raw potato surface with an illumination beam from a light source (1); measuring the intensity of light scattered by the potato (6) using a spectrum analyzer (11); generating a detection signal based on the measured intensity of scattered light; comparing the detection signal to a predefined threshold; and classifying the potato as having a high Acrylamide precursor concentration if the detection signal exceeds the predefined threshold the apparatus also may comprise a diverging lens (2) an edge filter (3) a lens (4) diaphragms (5) and (7) a lens (8) automated translation stages (9) and optical fibres (10)
**Title of the invention:** METHOD AND APPARATUS FOR SCHEDULING UPLINK TRANSMISSIONS WITH REDUCED LATENCY

**Abstract:**
A method and apparatus schedule uplink transmissions with reduced latency. A first downlink transmission can be received (1010) at a device in a first downlink TTI of a first duration in a first downlink subframe. A second downlink transmission can be received (1020) in a second downlink TTI of a second duration in a second downlink subframe. The first downlink TTI and second downlink TTI may not overlap. A first HARQ-ACK feedback and first HARQ-ACK PUCCH resource can be determined (1030) in response to receiving the first downlink transmission in the first downlink TTI. The first HARQ-ACK PUCCH resource can be mapped to REs in a first uplink TTI of a third duration in a first uplink subframe. A second HARQ-ACK feedback and second HARQ-ACK PUCCH resource can be determined (1040) in response to receiving the second downlink transmission in the second downlink TTI. The second HARQ-ACK PUCCH resource can be mapped to REs in a second uplink TTI of a fourth duration in the first uplink subframe. The first UL TTI can include a temporal portion that overlaps the second UL TTI. The first HARQ-ACK PUCCH resource or the second HARQ-ACK PUCCH resource can be selected (1050) based on at least the determined second HARQ-ACK feedback. A signal can be transmitted (1060) in response to the determined first HARQ-ACK feedback and second HARQ-ACK feedback on the selected HARQ-ACK PUCCH resource on the overlapped portion of first uplink TTI and second uplink TTI in the first uplink subframe.
METHODS FOR MAKING L-GLUFOSINATE

Methods for the production of L-glufosinate (also known as phosphinothricin or (S)-2-amino-4-(hydroxy(methyl)phosphonoyl)butanoic acid) are provided. The methods comprise a two-step process. The first step involves the oxidative deamination of D-glufosinate to PPO (2-oxo-4-(hydroxy(methyl)phosphinoyl)butyric acid). The second step involves the specific amination of PPO to L-glufosinate using an amine group from one or more amine donors. By combining these two reactions, the proportion of L-glufosinate in a mixture of L-glufosinate and D-glufosinate can be substantially increased.
The present invention relates to a roulette wheel apparatus and in particular to a ball launcher for use in a gaming system such as a roulette wheel apparatus and roulette wheel apparatus comprising the ball launcher. The airflow generator for generating the airstream through the launch tube is controlled by an airflow controller adapted to reverse airflow direction and/or to cause airflow in a direction opposite to the ball moving direction when a detected ball speed is higher than a desired ball speed and/or the ball speed is to be decreased.
The present invention relates to an eyelash application practice apparatus. The practice apparatus comprises a head with a face section and a base for supporting the head. The face section has a plurality of eye zones; wherein the eye zones include a plurality of displaceable parts including at least one eyelid with a closure mechanism that allows the at least one eyelid to be displaced to one of a plurality of discrete positions between a first open eye position and a second closed eye position.

![Diagram of an apparatus for practising the application of eyelash extensions](image)

No. of Pages : 11 No. of Claims : 13
Systems devices and methods manage surgical instruments throughout their lifecycle by reprogramming a device to account for operational displacement of ultrasonic components based upon a diagnostic test. A diagnostic test tip is used with a surgical instrument to simulate device usage and capture capacitance and phase margin of the device. This information is used to calculate an optimal current to supply to the device during future procedures.
Title of the invention: HYDROGEL CONDOM

Abstract:
A hydrogel condom containing an antioxidant can provide increased sexual pleasure thus improving usage and resulting in prevention of disease and prevention of unwanted pregnancies.
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(57) Abstract:
The present invention relates to a process for making a laser coded fold wrapped food concentrate tablet. Further aspect of the invention is a laser coded fold wrapped food concentrate tablet.

No. of Pages : 10  No. of Claims : 14
Title of the invention: METHODS AND COMPOUNDS FOR RESTORING MUTANT P53 FUNCTION

Abstract:
Mutations in oncogenes and tumor suppressors contribute to the development and progression of cancer. The present disclosure describes compounds and methods to recover wild-type function to p53 mutants. The compounds of the present invention can bind to mutant p53 and restore the ability of the p53 mutant to bind DNA and activate downstream effectors involved in tumor suppression. The disclosed compounds can be used to reduce the progression of cancers that contain a p53 mutation.
**Title of the invention:** COMPOUNDS AND METHODS FOR THE SYNTHESIS OF 5-(N-PROTECTED-TRYPTAMINOCARBOXYAMIDE)-2’-DEOXYURIDINE PHOSPHORAMIDATE FOR INCORPORATION INTO A NUCLEIC SEQUENCE

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**Abstract:**
Modified Tryptamine Tryptamine-2-deoxy-uridine (TrpdU) and TrpdU-phosphoramidites for oligonucleotide synthesis are provided as well as improved methods of their synthesis and oligonucleotides comprising at least one modified TrpdU nucleotide.
Title of the invention: IN-PLANE ACTIVE COOLING DEVICE FOR MOBILE ELECTRONICS

Abstract:
An active heat transfer device is proposed for heat management in apparatuses such as mobile devices. The proposed heat transfer device may include a thermoelectric (TE) layer and first and second electrodes both on lateral surfaces of the TE layer. When there is a voltage differential between the first and second electrodes heat from a heat source may be transferred laterally within the TE layer from the first electrode to the second electrode.
(54) Title of the invention : DOLLY

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(57) Abstract:
A dolly for transporting products thereon the dolly comprising a top with a product support surface and an opposing underside a plurality of casters provided on the underside two of the casters being swivel casters configured to rotate relative to the product support surface; biasing means configured to bias a wheel of each swivel caster towards a first equilibrium position. A plurality of reinforcing ribs provided on the underside; wherein at least one of the reinforcing ribs is a curved reinforcing rib and; the at least one curved reinforcing rib extends from a first caster mounting area to a second caster mounting area. Further including a dolly carrier pallet comprising a pallet provided with a dolly receiving layer wherein the dolly receiving layer is provided with generally rectangular wheel receiving recesses for receiving swivel casters and is provided with generally rectangular wheel receiving recesses for receiving fixed casters.

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No. of Pages : 35 No. of Claims : 27
Techniques for determining a Round Trip Time (RTT) calibration value are disclosed. An example of a method according to the disclosure includes receiving a fine timing measurement (FTM) exchange between an initiating station and a responding station calculating a plurality of differential round trip time (RTT) measurements based on the FTM exchange calculating a responding station calibration value based on the plurality of differential RTT measurements and transmitting the responding station calibration value to the responding station.
**Title of the invention**: SURFACE-COATED CUTTING TOOL AND MANUFACTURING METHOD THEREFOR

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<td><strong>Name of Inventor</strong></td>
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<td><strong>2) KANAOKA, Hideaki</strong></td>
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<td><strong>4) ONO, Satoshi</strong></td>
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**Abstract**:
This surface-coated cutting tool is provided with a base material and a coating formed on the surface of the base material. The coating contains a first hard coating layer containing crystal grains having a sodium chloride crystal structure. The crystal grains have a laminated structure in which at least one layer of a first layer comprising Al\(_x\)Ti\(_{1-x}\) nitride or carbonitride and a second layer comprising AlyTi\(_{1-y}\) nitride or carbonitride are alternately laminated. The atomic ratios x of Al in the first layer each vary within the range of 0.6 to less than 1. The atomic ratios y of Al in the second layer each vary within the range of 0.45 to less than 0.6. The maximum difference between an atomic ratio x and an atomic ratio y is 0.05 = x - y = 0.5. The total thickness of an adjacent first layer and second layer is 5-40 nm.

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**FIG. 1A**

**FIG. 1B**

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No. of Pages: 42 No. of Claims: 8
Provided is a pharmaceutical composition for the treatment or prevention of a cognitive disease or disorder the composition comprising a compound represented by formula (1) an enantiomer thereof or diastereomer thereof or a pharmaceutically acceptable salt thereof.

Kir6.2 overexpressed in Neuro2A cells

M: Memantine
9-53: novel adamantane derivative

No. of Pages : 54 No. of Claims : 13
The present invention provides an information reporting method and device and a discontinuous transmission method. In the present invention at least one piece of the following information is added to an uplink message of a random access procedure or an RRC connection-related procedure: information about the amount of data to be transmitted and power headroom information, information indicating that either SingleTone or MultiTone is supported and information indicating that either a CP transmission mode or a UP transmission mode is configured wherein the RRC connection-related procedure comprises but is not limited to one of an RRC connection establishment procedure an RRC connection reestablishment procedure and an RRC connection restoration procedure; and reporting an uplink message. Whereby the present invention resolves the problem in the related art of being unable to reporting information about the amount of data to be transmitted and/or power headroom information by means of an uplink message of a random access procedure or an RRC connection-related procedure thereby effectively transmitting data by using control plane signaling.
Title of the invention: METHOD AND APPARATUS FOR UPLINK POWER CONTROL WHEN UPLINK TRANSMISSIONS OVERLAP IN TIME FOR AT LEAST ONE SYMBOL DURATION

Abstract:
A method and apparatus schedule uplink transmissions with reduced latency. A first transmission power of a first uplink transmission can be determined (1030) at a device based on a first set of higher layer configured power control parameters associated with a first TTI length. The first uplink transmission can span the first TTI length. The first TTI length can include a first number of symbols. A second transmission power of a second uplink transmission can be determined (1040) based on a second set of higher layer configured power control parameters associated with a second TTI length. The second uplink transmission can span the second TTI length. The second TTI length can include a second number of symbols. The first uplink transmission can be transmitted (1050) in a subframe using the first transmission power. At least the second uplink transmission can be transmitted (1060) in the subframe using the second transmission power. The first uplink transmission and the second uplink transmission can overlap in time for at least one symbol duration.
A method and apparatus schedule uplink transmissions with reduced latency. A first type of Power Headroom Report (PHR) can be computed (1010) based on transmissions of a first TTI length only being present in a subframe. A second type of PHR can be computed (1020) based on transmissions of both the first TTI length and a second TTI length being present in the subframe. The first type of PHR and at least the second type of PHR can be transmitted (1030).

FIG. 10
The invention provides cyclodextrin inclusion complex delivery vehicles in which the cyclodextrin inclusion complex is provided together with enzyme having a cyclodextrin-degrading activity capable of digesting the cyclodextrin so that upon delivery of the vehicle to a target the enzyme is activated and releases the guest molecule from the cyclodextrin cavity. In alternative aspects these cyclodextrin inclusion complex delivery vehicles are for example provided in the form of medicaments food ingredients medical food ingredients nutritional supplement ingredients dietary supplement ingredients herbicides insecticides fungicides animal repellents pheromones plant growth regulators fragrances fabrics or packaging materials.
Carbogel anode materials and method for their preparation are disclosed. The described carbogels exhibit at a temperature of 20°C an electrical conductance of at least 0.5 S/cm and a reversible electrochemical capacity in relation to lithium of at least 350 mAh/g under a C/2 discharge current enabling their use for preparation of anode materials particularly those intended for preparation of lithium-ion cells.
The invention relates to a rolling mill (1) for a metal strip comprising: a holding cage (2); an assembly of superimposed rolls with substantially parallel axes including two working rolls (3 4) lower and upper defining the gap for passage therethrough and two respectively lower and upper supporting rolls (5 6) which are respectively applied to the working rolls on the opposite side to that of the gap each roll having two rotatably mounted ends each one on a bearing carried by a chock; and a system for clamping the chocks of the working rolls which ensures that the chocks are locked in relation to the holding cage along the axis of the roll while allowing the chocks to slide along the guiding means following the clamping plane comprising mechanical means using the closing movements of the holding cage in order to switch from a first retracted position allowing the withdrawal along the axis thereof of the working rolls out of the holding cage (2) into a second locking position ensuring the locking of the chocks in relation to the holding cage along the axis of the roll.
The invention relates to a modular multi-sensor fire detector (300). According to the invention the detector (300) has an evaluation unit (200) and a number of sensor heads (100) spatially remote from the evaluation unit (200) and signal-connected to the latter (200). The evaluation unit (200) can be signal-connected to a spatially remote alarm signal receiver (301) such that the evaluation unit (200) and the sensor heads (100) and the alarm signal receiver (301) are not integrated into a common housing or into a number of housings assembled together. The invention further relates to a fire detection system comprising a fire detector of this type.
Title of the invention: SHOCK ABSORBING FEED WHEEL ASSEMBLY

Abstract:
A strapping machine of the type that feeds retracts tensions and seals strap to itself to form a loop of strap around a load has a shock absorbing feed wheel assembly. The machine includes a frame a feed head having a motor a tension head a sealing head and a strap chute mounted to the frame. The feed wheel assembly has a friction engaging surface and at least one pocket formed therein. A spring hub is engaged with the feed wheel and has at least one pocket formed therein corresponding to the feed wheel pocket. The spring hub is operably connected to the feed head motor. At least one spring is positioned in the feed wheel pocket and the spring hub pocket and is sandwiched between the feed wheel and the spring hub. The feed wheel is driven by rotation of the spring hub and engagement of the spring with the feed wheel pocket and spring hub pocket. The shock absorbing feed wheel assembly dampens the forces on the feed head motor and drive when the feed wheel comes to an abrupt stop and prevents strap slippage.
Title of the invention: SURFACE-COATED CUTTING TOOL AND METHOD FOR PRODUCING SAME

Abstract:
This surface-coated cutting tool is provided with a base material and a coating that is formed on the surface of the base material wherein the coating includes a first hard coating layer that includes crystal grains having a sodium chloride crystalline structure said crystal grains have a laminate structure whereby one or more first layers which comprise an AlxTi1-x nitride or carbonitride and second layers which comprise an AlyTi1-y nitride or carbonitride are laminated alternately the atomic ratio x of Al in the first layer varies in the range of at least 0.76 but less than 1 and the atomic ratio y of Al in the second layer varies in the range of at least 0.45 but less than 0.76 the maximum value for the difference between atomic ratio x and atomic ratio y is 0.05 = x - y = 0.5 and the sum of the thicknesses of adjacent first and second layers is 3-30 nm.
Disclosed in embodiments of the present invention are an ONU state transition method an ONU and a computer storage medium the method comprising: when an ONU is at a total sleep state and only downlink data are detected controlling the ONU to transit from the total sleep state to a free active state and then transit from the free active state to a semi-sleep state; and when the ONU is at the semi-sleep state and no downlink data is detected controlling the ONU to transit from the semi-sleep state to the free active state and then transit from the free active state to the total sleep state.
Abstract:
Compositions and methods of use are provided to boost a primed immune response to HIV. More specifically, the present invention relates to vaccine compositions comprising an HIV-protein boost or an MVA-expressed Env protein and methods of use. Exemplary HIV proteins for protein boosts include proteins such as gp120 proteins B.6352111mutC and full-length single chain (FLSC) which has been modified to stabilize a CD4-induced Env structure. Exemplary MVAs expressing secreted Methods of administration and dosing regimens are also provided.
An electronic device and an operating method therefor according to various examples can be configured to: detect an activation signal generated by the electronic device; activate a predetermined communication function in response to the activation signal; and receive a reference signal through the activated communication function.
A method for performing a random access is provided. The method includes identifying a first downlink (DL) reception (RX) beam based on a measurement on a beam measurement signal identifying a first uplink (UL) transmission (TX) beam corresponding to the identified first DL RX beam and transmitting at least one random access preamble for an RX sweeping at a base station using the identified first UL TX beam based on a first power.
Apparatuses methods and systems are disclosed for mobility management among multiple network slices. One apparatus (300) includes a processor (325) that receives (855) an indication of an attached mobile unit (405) attaching to a secondary network slice (435) of the mobile communication network. The processor (325) also receives (860) a mobility management request from the mobile unit (405) and forwards (865) the mobility management request to the secondary network slice (435). In various embodiments the apparatus (300) may include a network interface (330) for communicating over a mobile communication network.
Apparatuses methods and systems are disclosed for scheduling of transmission time intervals. One apparatus (300) includes a processor (302) that determines (1002) a first semi-persistent scheduling resource assignment indicating a set of resources including multiple time domain resources. Each time domain resource of the multiple time domain resources has a first transmission time interval length. The processor (302) also determines (1004) a second semi-persistent scheduling resource assignment indicating a set of resources including multiple time domain resources. Each time domain resource of the multiple time domain resources has a second transmission time interval length and the first transmission time interval length is different from the second transmission time interval length. The apparatus (300) includes a transmitter (310) that transmits (1006) the first semi-persistent scheduling resource assignment using a first semi-persistent scheduling identifier and transmits (1008) the second semi-persistent scheduling resource assignment using a second semi-persistent scheduling identifier.
The present invention relates to the field of diagnostics and more particularly to the detection of beta-hemolytic pathogens. More specifically the present invention relates to the rapid and accurate detection of beta-hemolytic pathogens using sterically-stabilized liposomes.
Abstract:
Apparatuses methods and systems are disclosed for providing data connectivity with various types of data session continuity. One apparatus (200) includes a processor (205) that receives a data session request identifies a required continuity type based on the data session request and establishes a PDU session having the required continuity type. The required continuity type may be selected from a plurality of continuity type supported by a mobile communication network (312). In various embodiments the apparatus (200) includes a transceiver (225) that communicates with the mobile communication network (312).
This molding mold is characterized by the following: being provided with a first die having a through hole a second die that is inserted in the through hole and is capable of relative movement with respect to the first die and a first punch and a second punch that can each be inserted in the through hole; an undercut forming part being provided to the second die; and an object to be molded being compression-molded in a cavity surrounded by an inner side surface of the through hole the second die the first punch and the second punch.
APPARATUS AND METHOD FOR EMULATING TRANSACTIONAL INFRASTRUCTURE WITH A DIGITAL TRANSACTION PROCESSING UNIT (DTPU)

Abstract:
Digital transaction apparatus including a Data Assistance Device (DAD) including a user interface that is operable to at least select data and a DAD transmitter a Digital Transaction Card (DTC) including a Digital Transaction Processing Unit (DTPU) and a DTC receiver wherein the DAD and DTC are operable to transfer data from the DAD to the DTC and when subsequently using the DTC to effect a digital transaction the DTC operates in accordance with data selected and transferred from the DAD to the DTC wherein the DTPU is configured to enable data communication with a digital transaction device during a digital transaction the DTPU operable to receive and execute one or more commands that emulate commands received from the digital transaction device.

No. of Pages: 78 No. of Claims: 43
(21) Application No. 201817032053 A
(19) INDIA
(22) Date of filing of Application: 27/08/2018
(43) Publication Date: 04/01/2019

(54) Title of the invention: BIOMETRIC READER IN CARD

(51) International classification: G06Q20/34
(31) Priority Document No: 2016900276
(32) Priority Date: 29/01/2016
(33) Name of priority country: Australia
(86) International Application No: PCT/AU2017/000017
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(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:
Digital transaction apparatus including a Data Assistance Device (DAD) including a user interface that is operable to at least select data and a DAD transmitter a Digital Transaction Card (DTC) including a Digital Transaction Processing Unit (DTPU) and a DTC receiver wherein the DAD and DTC are operable to transfer data from the DAD to the DTC and when subsequently using the DTC to effect a digital transaction the DTC operates in accordance with the data selected and transferred from the DAD to the DTC the DTC including a biometric reader operable to obtain biometric data of at least one physical characteristic of a user wherein the biometric reader is connected to the processor for data transfer therebetween wherein reference biometric data of an authorised user is stored on the processor and wherein the DTC is operable to compare the obtained biometric data with at least a section of the reference biometric data such that the authorisation of the user is determined.

Figure 4

No. of Pages: 79 No. of Claims: 46
An elevator car (4) comprises at least two maintenance openings (14 16): an overhead maintenance opening (14) provided in the ceiling of the elevator car (4) for providing access to at least one component arranged on top of and/or above the elevator car (4) and a lateral maintenance opening (16) provided in one sidewall (18) of the car for providing access to at least one component arranged besides the elevator car (4).
An apparatus includes a connector assembly having an elongated strap assembly and configured to selectively connect with a chin-strap assembly of a motorcycle helmet. The connector assembly is also configured to selectively connect with a motorcycle device of a motorcycle. A method includes connecting the connector assembly to the chin-strap assembly of the motorcycle helmet and wrapping the elongated strap assembly around at least in part the motorcycle device in such a way that the elongated strap assembly securely attaches the motorcycle helmet to the motorcycle device when the connector assembly is connected with the chin-strap assembly.
Disclosed in an embodiment of the present invention is a network hotspot control method for use in enriching control modes of a shared hotspot. The method in the embodiment of the present invention comprises: a first mobile terminal receives a hotspot setting operation and sets a control policy for a network hotspot the control policy at least comprising a file type control policy; the first mobile terminal receives a network service request sent by a second mobile terminal that has established a connection; and the first mobile terminal controls the network service request according to the control policy. An embodiment of the present invention also provides a mobile terminal. By means of embodiments of the present invention the control modes of a network hotspot can be enriched.

No. of Pages : 33 No. of Claims : 18
The present disclosure proposes indicating to the UE a set of CSI reference subframes that may be used in performing a CSI measurement. The set of CSI reference subframes may be measured over multiple frequencies when frequency hopping occurs. In an aspect of the disclosure a method a computer-readable medium and an apparatus are provided. The apparatus may receive information associated with a number of CSI reference subframes to use in performing CSI measurements in a narrowband communication. In addition the apparatus may monitor subframes on at least two frequency channels including a PDCCH. Further the apparatus may perform a CSI measurement across the at least two frequency channels based on the information associated with the number of CSI reference subframes.
Physiological monitoring systems apparatuses and methods are disclosed. In an embodiment a system includes an umbilical cord clamp having a sensor and a base station. The clamp is moveable between an open position and a clamped position in which the sensor contacts the umbilical cord to sense a physiological parameter of a neonate. The base station is operable to transmit an interrogation signal wirelessly to the sensor and in response to the interrogation signal receive a response signal wirelessly that is indicative of the sensed physiological parameter.

**Fig. 1**
A method and apparatus for detecting the presence of mycotoxins in cereals the method comprising: capturing at least one diffuse-light absorption spectrum of a collection of cereal grains; capturing at least one diffuse-light absorption spectrum of at least one individual cereal grain from the collection of cereal grains; and classifying the level of mycotoxin contamination in at least one cereal grain by performing multivariate data analysis on the at least one diffuse-light absorption spectrum of the collection of cereal grains and the at least one diffuse-light absorption spectrum of the at least one individual cereal grain.
An algorithmic matching pipelined compiler and a reusable algorithmic pipelined core comprise a system. The reusable algorithmic pipelined core is a reconfigurable processing core with a pipelined structure comprising a processor with a setup interface for programming any of a plurality of operations as determined by setup data, a logic decision processor for programming a look up table, a loop counter and a constant register and a block of memory. This can be used to perform functions. A reconfigurable programmable circuit routes data and results from one core to another core and/or a controller and/or interrupt generator as required to complete an algorithm without further intervention from a central or peripheral processor during processing of an algorithm.
A method for filtering-out results of a search comprising obtaining representations of objects of a computerized system identified in the computerized system in a search conducted in the computerized system by a party and responsive to the search applying by the computerized system an at least one condition constructed in the computerized system and related to access of the party with respect to the objects thereby filtering-out the representations of the objects that correspondingly comply with the at least one condition and an apparatus configured to carry out the method.
(54) Title of the invention : SITE SPECIFICATION FOR DIRECTIONAL GUIDED SURFACE WAVE TRANSMISSION IN A LOSSY MEDIA

(51) International classification : H01P3/00 G01S13/02 G01S17/02

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    Filing Date : 09/03/2017
(87) International Publication No : WO 2017/156305

(61) Patent of Addition to Application Number : NA
    Filing Date : NA
(62) Divisional to Application Number : NA
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(57) Abstract :
Various examples are provided for site specification for directional guided surface wave transmission in a lossy media. In one example a probe site includes a propagation interface including first and second regions comprising different lossy conducting mediums. A guided surface waveguide probe positioned adjacent to the first and second regions can generate at least one electric field to launch a guided surface wave along the propagation interface in a radial direction defined by the first region and restricted by the second region. The propagation interface can also include additional regions comprising the same or different lossy conducting mediums. One or more of the regions can be prepared regions. In some cases the regions can correspond to a terrestrial medium (e.g. a shoreline) and water (e.g. seawater along the shoreline).

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No. of Pages : 94 No. of Claims : 18
The Patent Office Journal No. 01/2019 Dated 04/01/2019

(54) Title of the invention: MAGNETIC MEASURING DEVICE

(57) Abstract:
This magnetic measuring device has: an inclined table provided with an installation surface and an inclined surface inclined with respect to the installation surface; a low-temperature container installed on the inclined surface; a cooling mechanism connected to the low-temperature container; a sensor tube that is connected to the low-temperature container and is provided with a curved surface that does not curve in a prescribed direction but curves so that the center thereof protrudes from both ends in a direction orthogonal to the prescribed direction; and a magnetic sensor that measures biomagnetism and is housed in the sensor tube so that a sensor surface of the magnetic sensor faces the curved surface side. The sensor surface is inclined in the same direction as the inclined surface with respect to the installation surface.

No. of Pages: 32 No. of Claims: 10
A synergistic microbicidal composition comprising a non-ionic surfactant and glutaraldehyde and a method for inhibiting the growth of microorganisms in an aqueous medium.
Title of the invention: CHROMIUM OXIDE REFRACTORY OBJECT AND METHODS OF FORMING THEREOF

Abstract:
A refractory object may include a Cr2O3 content of at least about 80 wt.% of a total weight of the refractory object and an Al2O3 content of at least about 0.7 wt.% and not greater than about 10.0 wt.% of the total weight of the refractory object a SiO2 content of at least about 0.3 wt.% and not greater than about 5.0 wt.% of the total weight of the refractory object and a TiO2 content of at least about 1.0 wt.% and not greater than about 5.6 wt.% TiO2 of the total weight of the refractory object. The refractory object may further include an MOR of at least about 37 MPa as measured at 1200 C.
Embodiments of the present invention relate to processes for converting olefins to alcohols ethers or combinations thereof that are suitable for use as a gasoline additive. In one embodiment the process comprises (a) receiving a feed stream wherein the feed stream comprises one or more olefins having 2 to 5 carbon atoms in an amount of up to 80% by weight based on the weight of the feed stream; (b) hydroformylating the feed stream in the presence of a catalyst to convert at least 80% of the olefins from the feed stream to oxygenates; (c) separating a product stream from step (b) into an oxygenate stream and a stream comprising unreacted olefins inerts the catalyst and the remaining oxygenates; and (d) treating the oxygenate stream to convert a plurality of the oxygenates into at least one of an alcohol an ether or combinations thereof having at least 3 carbon atoms wherein at least 25 weight percent of the alcohols and ethers having at least 3 carbon atoms are branched based on the total weight of the alcohols and ethers having at least 3 carbon atoms and wherein the alcohols ethers or combination thereof is suitable for use as a gasoline additive.
According to certain embodiments a method (1200) by a wireless device (1106) is provided for mapping of application data packets onto bearers. The method includes associating at least one tag value with a bearer upon establishment of the bearer. A tag is attached to a packet when passing the packet to a lower layer. The packet is mapped onto the bearer and a path to transmit the packet is selected.
A radio network node may operate in a normal or restricted operating state. In the restricted operating state the radio network node may have just enough activity to enable UEs to detect the cell. The radio access node may transition to the normal operating state in response to messaging from a wireless communication device such as reception of a random access preamble.
Title of the invention: FORMING A THREE-DIMENSIONAL OBJECT

Abstract:
A method of forming a three-dimensional object includes detecting with a thermographic camera a temperature of a control point within at least one zone of the build material bed and adjusting a power level supplied to at least one of the lamps of the array of lamps if the detected temperature of the control point of the at least one zone of the build material bed is not equal to a set temperature.

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No. of Pages: 25 No. of Claims: 15
The invention relates to a solenoid valve having an actuator body (17) in which a magnet coil (15) that interacts with a magnet core (16) is arranged and which interacts with an armature (14) that can be moved relative to the magnet core between two end positions and is acted upon by the spring force of an armature spring (13) in a movement direction pointing away from the magnet core (16). The magnet core and the armature have stop surfaces (18a 18b) which are interrupted by a recess (29) that receives the armature spring. According to the invention a solenoid valve is provided which is improved with respect to the function of the solenoid valve and the stress on the stop surfaces (18a 18b) that causes wear. This is achieved in that the magnet core (16) and/or the armature (14) have/has a design (30 31) in particular a spherical or toroidal design which reduces the stress on the edges in the region of the stop surfaces (18a 18b).
(54) Title of the invention: COMBINING ELECTRONIC MONITORING WITH INHALED PHARMACOLOGICAL THERAPY TO MANAGE CARDIAC ARRHYTHMIAS INCLUDING ATRIAL FIBRILLATION

(57) Abstract:
Disclosed herein are methods of treating cardiac arrhythmia with electronic monitoring in a timely manner. Also disclosed herein are systems for electronic monitoring of cardiac arrhythmia.

No. of Pages : 36 No. of Claims : 81
**Title of the invention:** REGULATION OF GENE EXPRESSION THROUGH APTAMER-MODULATED POLYADENYLATION

- **Abstract:**
  The invention provides polynucleotide constructs for the regulation of gene expression by aptamer-based modulation of U1 small nuclear ribonucleoprotein (snRNP)-mediated suppression of polyadenylation and methods of using the constructs to regulate gene expression in response to the presence or absence of a ligand that binds the aptamer. The polynucleotide construct contains a U1 binding site in the context of a riboswitch comprising an effector region and an aptamer such that when the aptamer binds a ligand target gene expression occurs.

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- **No. of Pages:** 34
- **No. of Claims:** 25
**Title of the invention:** MOBILE BODY MANAGEMENT DEVICE MOBILE BODY MANAGEMENT METHOD AND STORAGE MEDIUM

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**Abstract:**
Provided is a mobile body management device that manages the moving state of a mobile body and that includes: an acquisition means for acquiring image data obtained by imaging a subject with an imaging means; a recognition means for recognizing on the basis of the image data first traffic information indicated by the subject; a receiving means for receiving from a transmission device second traffic information indicated by the subject; and an evaluation means for evaluating if the second traffic information is not received the driving characteristics of a driver of the mobile body on the basis of the first traffic information and moving state information indicating the moving state of the mobile body when the image data was acquired and for evaluating if the second traffic information was received the driving characteristics of a driver of the mobile body on the basis of the second traffic information and moving state information indicating the moving state of the mobile body when the second traffic information was received.

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The Patent Office Journal No. 01/2019 Dated 04/01/2019
The present teaching relates to a multi-level content platform. In one example an interface corresponding to an application eco-space is presented to a user. The application eco-space comprises one or more applications. First information associated with the user is obtained via the interface. The first information characterizes interest of the user. At least one of the one or more applications is identified to be recommended to the user based on the first information. The at least one of the one or more applications is deployed within the application eco-space in a manner consistent with the interest of the user based on the first information.
The aim of the invention is to provide a bellows (10) in which the formation of an internal pressure in the interior of the bellows can be avoided during assembly. This aim is achieved by such a bellows having a first fastening region (12) and a first diameter and having a second fastening region (40) having a second diameter wherein the first diameter is smaller than the second diameter and wherein the first fastening region (12) comprises a binder seat region (14) on the outer periphery thereof wherein on an inner periphery (24) of the first fastening region (12) at least one first and at least one second aerating means (20, 22) are arranged at an axial distance from each other on the inner periphery (24) which is formed with a flat surface (25) and protrude from said surface (25) of the inner periphery (24).
A weather modification system that includes both systems and vehicles capable of modifying the weather. The systems may include devices capable of utilizing compositions to create dispersants that can modify weather. The system is capable of autonomous weather modification where the vehicles may operate for long periods of time in the air and may be directed by a control station. The vehicles may include an airplane, a UAV, a balloon, a satellite, an airship such as a lenticular airship, a helicopter, or a lighter than air vehicle. The vehicles are capable of multiple functions including weather modification, weather monitoring, and coordination between different vehicles.
The invention relates to a joint (2 3) that is fixable in a plurality of joint positions that are selectable in accordance with a first position pitch subdivided into equal spacing steps in a direction of joint movement said joint (2 3) having two joint parts (4 5 6) that are displaceable relative to one another and bear against one another by way of joint faces (7 11; 13 16). Formed on a first joint part (5) is a first joint face (7 13) which is provided with structuring (8 14) that has a second position pitch subdivided into equal spacing steps in the direction of joint movement said structuring (8 14) creating latch engagement points that are distributed at the second position pitch. Also provided is a second joint part (4 6) which has a second joint face (11 16) and is provided with latch receptacles (12 17) which interrupt the second joint face (11 16) at latch positions that are arranged at a third position pitch subdivided into equal spacing steps in the direction of the direction of joint movement. Furthermore the second and the third position pitch are each larger than the first position pitch wherein the first position pitch is determined by the amount of the difference between the second and the third position pitch. A locking element is introducible selectively into one of the latch receptacles (12 17) in a joint position taken up along the direction of joint movement of the joint (2 3) such that from the latch position belonging to the latch receptacle (12 17) said locking element acts in such a way on a latch engagement point positioned with respect to the latch position in the joint position taken up that said locking element locks the joint (2 3) in the joint position taken up. Such a joint (2 3) allows a joint position to be set in a regular subdivision with equal but nevertheless sufficiently narrow spacing steps using simple and robust means and is easy for the user to operate. It can be used in particular also in connection with component parts or component assemblies for building clamping devices for workpieces.
System methods apparatus and computer-readable storage media are described which respond to a request to verify the age of a cardholder wherein said response is based on biometric information of the cardholder.
Systems and methods are provided for use in facilitating fund transfers between source accounts and destination accounts based on source account identifiers included in computer-readable indicia. One exemplary method includes capturing by a computing device at least one symbol representative of a destination account identifier associated with the destination: account and identifying by the computing device a source account. The method further includes receiving by the computing device at least one payment parameter and causing by the computing device a fund transfer transaction based on the destination account identifier the source account identifier and the at least one payment parameter whereby a payment from the source account to the destination account is initiated.
The present invention relates to a shackle comprising: a shackle body having holes respectively formed through two end parts which are formed due to the opening of one side having a lifting ring formed due to the closing of the other side and additionally having an auxiliary lifting ring on the lifting ring; and a shackle pin sequentially passing through and spirally coupled to the holes formed on one side of the shackle body. According to the present invention apart from the lifting ring the auxiliary lifting ring is additionally formed on the shackle body thereby enabling strength reinforcement and preventing two end parts of the lifting ring from transforming inwardly. And since a rope and the like come in contact with multiple points when connected with the lifting ring and the auxiliary lifting ring wobbling of the shackle is minimized. Also loosening of the shackle pin is prevented by means of elasticity bolt or the like. And the end part through which the front end of the shackle pin is inserted first of the two end parts of the shackle body is expanded and thus the tensile strength can be increased due to the reinforcement.
A composite includes a first layer of a first fluoropolymer; a second layer of at least one ply of a reinforcing fabric overlying the first layer; and a third layer of a second fluoropolymer overlying the second layer opposite to the first layer wherein the first layer the third layer or combination thereof have an outer surface that is defect free; wherein the composite has a continuous length of at least about 3 meters. Embodiments of such composites can find applications for example as processing aids for an electronic device a food a polymer insulating an electrical device or heat sealing a polymer.
The invention relates to a vehicle (1) comprising a container (2) that is connected to a chassis (3) comprising at least two longitudinal beams (4) bearing mobility means (5) and at least one mechanical member (6) arranged below a floor (7) of the container. This vehicle is characterized in that it comprises at least two abutment means (16) arranged on either side of the mechanical member (6) each means being arranged in a transverse direction of the vehicle between the mechanical member (6) and a beam (4) the abutment means being arranged at a distance (d) from the mechanical member (6) that is less than the distance (D) between the mechanical member (6) and the floor (7).

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No. of Pages: 8 No. of Claims: 5
The present invention relates to an invention for an electric park brake (EPB) and more particularly to a detection device and a detection method for detecting a number of revolutions of an EPB motor without a sensor other than a conventional EPB motor equipped with a built-in sensor. According to an embodiment of the present invention provided is a detection device for detecting a number of revolutions of a sensorless motor comprising: an actuator driving motor used to set and release a parking brake of an EPB system; an electronic control module for controlling the motor; a vehicle battery for supplying power to the motor and the electronic control module; and a main processing unit for receiving an output signal of the electronic control module and estimating the number of revolutions of the motor wherein the electronic control module further comprises a ripple measuring unit for receiving the output signal of the motor and measuring a ripple of the motor.
Title of the invention: ATR BASED AMMONIA PROCESS AND PLANT

Abstract:
A process for producing an ammonia synthesis gas said process comprising the steps of: - Reforming a hydrocarbon feed in a reforming step thereby obtaining a synthesis gas comprising CH4 CO CO2 H2 and H2O - Shifting said synthesis gas in a high temperature shift step over a promoted zinc-aluminum oxide based high temperature shift catalyst wherein The steam/carbon ratio in the reforming step is less than 2.6.

No. of Pages: 14 No. of Claims: 17
**Title of the invention:** NOVEL ALPHA-1-MICROGLOBULIN DERIVED PROTEINS AND THEIR USE

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**Abstract:**
This invention relates to an alpha-1-microglobulin derived protein for medical use.

No. of Pages: 107  No. of Claims: 19
In one aspect the invention relates to a crystalline form of the structure: or a pharmaceutically acceptable salt thereof having neprilysin inhibition activity. In another aspect the invention relates to pharmaceutical compositions comprising this crystalline form; methods of using this crystalline form and its soluble form (I); and processes for preparing soluble (I) and crystalline (I) forms.
The present invention relates to an opening and liquid supplying system (100) for pre-filled containers (10 30) equipped with a supplying end comprising a coupling element (20) connecting means (6) movable from a first position to a second position and movable protection means (9); the coupling element (20) has an end (27) closed and suitable for being punched and first guiding means (21) for guiding the movement of the connecting means (6) movable from the first position close to the closed end (27) to the second position apart from such end and vice versa; the connecting means (6) have engaging means (7) for engaging with the protection means (9) so as to move integrally along a second degree of freedom different than the first degree of freedom and first matches (11) for the first guiding means (21). The invention relates also to a respective pre-filled container equipped with such system and the method for realize them.

![Fig. 1](image_url)
(54) Title of the invention: ROLLING BEARING BEARING UNIT FOR AIR TURBINE AND AIR TURBINE HANDPIECE FOR DENTAL USE

(57) Abstract:
An axial end of the outer peripheral surface of the inner ring of a rolling bearing of a bearing unit for an air turbine has a sloped surface the diameter of which changes from large to small toward the downstream side in the direction in which compressed air is supplied. A seal member does not have a metallic core consists only of an elastic material and has a base which extends radially and an elastically deformable lip section which extends from the radially inner end of the base and which is sloped to the downstream side in the direction in which the compressed air is supplied. When the compressed air does not act the sloped surface of the lip section which is located on the upstream side in the direction in which the compressed air is supplied is in contact with the sloped surface of the inner ring. When the compressed air acts the area of contact between the sloped surface of the lip section which is located on the upstream side in the direction in which the compressed air is supplied and the sloped surface of the inner ring is smaller than in the case in which the compressed air does not act.
Title of the invention: METHOD FOR EXTRACTING METAL COMPOUND PARTICLES METHOD FOR ANALYZING METAL COMPOUND PARTICLES AND ELECTROLYTE SOLUTION USED IN SAID METHODS

Abstract:
The present invention addresses the problem in the extraction and analysis of metal fine particles (inclusions precipitate) in a metal material by means of electrolytic etching using a solvent electrolyte solution of suppressing surface substitution of the metal fine particles by Cu ions and the like and preventing the generation of artifact CuS and the like without significantly changing conventional extraction/analysis methods. Provided are: a method for extracting metal compound particles in a metal material by etching the metal material in an electrolyte solution said method using an electrolyte solution that comprises an agent that forms a complex that includes a metal M wherein if the solubility product of a metal compound MxAy is defined as $K_{sp}[MxAy]$ and the solubility product of a metal compound MxAy to be extracted which is included in the metal material is defined as $K_{sp}[MxAy]$ as defined in the belowmentioned formula is 10 or more; and said electrolyte solution. $= pK_{sp}[MxAy]-pK_{sp}[MxAy] = (-log10K_{sp}[MxAy])-(log10K_{sp}[MxAy])$
The present invention relates to a lifting fastener comprising: a body through which a mounting hole is formed; a lifting ring which is connected to the body such that a hook of a crane or a rope is latched; and a coupling nut which is provided inside the lifting ring and if an object to be lifted has a bolt is coupled to the bolt. According to the present invention in addition to the basic function of a transformation preventing portion which supports the structure of the lifting ring so as to increase the tensile strength of the lifting ring considering that the tensile force increases due to the force of lifting the lifting ring and the weight of the object to be lifted during the lifting the lifting ring can be prevented from transforming due to the pull toward the coupling nut and a space for the rotation of the coupling nut can be acquired. Moreover if a coupling hole is provided on the object to be lifted the object to be lifted is coupled by means of a coupling nut mounted on the lifting fastener. And if a bolt is provided on the object to be lifted the object to be lifted is coupled by means of the coupling nut while the coupling bolt is separated from the lifting fastener. And if the coupling bolt mounted on the lifting fastener or the bolt provided on the object to be lifted is long the interfering transformation preventing portion is omitted for effective use.
Title of the invention: METHOD OF MANUFACTURING AN ETCHED GLASS ARTICLE

Abstract:
A method of manufacturing an etched glass article (5) including the steps of: a) jetting an image (2) with a UV curable inkjet ink on a surface of the glass article; b) UV curing the image (2); c) etching the surface not covered by the UV cured image (3) to obtain an etched image (4); and d) solubilising the UV cured image (2) in an aqueous alkaline solution.
**Title of the invention:** PHOSPHOR-CONTAINING DRUG ACTIVATOR SUSPENSION THEREOF SYSTEM CONTAINING THE SUSPENSION AND METHODS FOR USE

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**Abstract:**
A phosphor-containing drug activator and suspension thereof are provided. The suspension at least includes two or more phosphors capable of emitting ultraviolet and visible light upon interaction with x-rays. The two or more phosphors include Zn2SiO4:M12+ and (3Ca3 (PO4)2Ca(F CI)2:Sb3 Mn2+) at a ratio NP - 200:GTP - 4300 of from 1:10 to 10:1 and each of the two phosphors have an ethylene cellulose coating and/or a diamond-like carbon coating. The suspension further includes a pharmaceutically acceptable carrier. A system for treating a disease in a subject in need thereof includes a) the above-noted suspension b) a photoactivatable drug containing 8-methoxypsoralen (8-MOP or UVADEX) untethered from the two or more phosphors c) one or more devices which infuse the photoactivatable drug and the suspension including the pharmaceutically acceptable carrier into a diseased site in the subject and d) an x-ray source which is controlled to deliver a dose of x-rays to the subject for production of the ultraviolet light.
An ignition device (1) is provided with: an ignition switching element (2); a capacitor (3); a pre-drive switching element (5); and a turn-off constant current circuit (4OFF). The ignition switching element (2) is connected to a primary winding (11) of an ignition coil (10). The capacitor (3) is connected to a control terminal (21) of the ignition switching element (2). The pre-drive switching element (5) is connected in parallel with the capacitor (3). The turn-off constant current circuit (4OFF) is electrically connected between the control terminal (21) and the capacitor (3). The turn-off constant current circuit (4OFF) discharges, at constant current, electric charge accumulated in the capacitor (3).

FIG. 1

No. of Pages : 25 No. of Claims : 4
Title of the invention: MICROORGANISMS AND ARTIFICIAL ECOSYSTEMS FOR THE PRODUCTION OF PROTEIN, FOOD, AND USEFUL CO-PRODUCTS FROM C1 SUBSTRATES

Abstract:
Microorganisms and bioprocesses are provided that convert gaseous C1 containing substrates, such as syngas, producer gas, and renewable H2 combined with CO2, into nutritional and other useful bioproducts.

Figure 1

| Figure 1

No. of Pages: 124 No. of Claims: 35
A piston capable of reducing undesirable knock, reducing hydrocarbon emissions, and providing more complete combustion, is provided. The piston includes a multilayer coating having a thickness of 500 microns or less disposed on an upper combustion surface. The coating includes a bond layer including nickel disposed on the upper combustion surface. A thermal barrier layer including a ceramic composition is disposed on the bond layer. A sealant layer formed of metal is disposed on the thermal barrier layer. A catalytic layer including at least one of platinum, ruthenium, rhodium, palladium, osmium, and iridium is disposed on the sealant layer. The catalytic layer can be disposed on select regions or the entire upper combustion surface to promote combustion through a catalyzed reaction.
Title of the invention: JOURNAL BEARING AND ROTARY MACHINE

Abstract:
This journal bearing is equipped with a carrier ring formed in a ring shape, a first bearing pad configured so as to support a rotor shaft from below and provided on the inner-circumferential side of the carrier ring in the bottom-half region thereof, a first oil supply unit positioned upstream from and immediately in front of the first bearing pad, and a pair of side plates mounted along the outer circumference of the rotor shaft to one end of the carrier ring in the axial direction thereof and to the other end thereof. Each of the side plates includes a first region, and a second region which is positioned above the first region and exhibits a narrower gap between the inner-circumferential surface of the side plates and the outer-circumferential surface of the rotor shaft than does the first region.

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The Patent Office Journal No. 01/2019 Dated 04/01/2019 251
METHOD FOR MANUFACTURING A FIELD EFFECT TRANSISTOR

Provided is a method for manufacturing a field effect transistor having a front channel or a back channel in a region in which a first oxide layer and a second oxide layer are adjacent, said method comprising an oxide layer forming step for forming a second precursor layer, which is a precursor to the second oxide layer, so as to be adjacent to a first precursor layer, which is a precursor to the first oxide layer, and converting the first precursor layer and the second precursor layer into the first oxide layer and the second oxide layer, respectively, wherein the oxide layer forming step includes at least either process (I) or (II), defined as follows. (I) A process for applying a coating that is capable of forming the first oxide layer precursor and contains a solvent, removing the solvent, and thus forming the first precursor layer. (II) A process for applying a coating that is capable of forming the second oxide layer precursor and contains a solvent, removing the solvent, and thus forming the first precursor layer.
A bearing device equipped with: a carrier ring; a first bearing part provided along the outer circumference of a rotor shaft on the inner-circumferential side of the carrier ring; a second bearing part provided along the outer circumference of the rotor shaft on the inner-circumferential side of the carrier ring and on the downstream side relative to the first bearing part in the direction of rotation of the rotor shaft; a pair of side plates positioned along the outer circumference of the rotor shaft on both sides of the carrier ring in the axial direction; a first oil-guiding part provided on the downstream side of the first bearing part and the upstream side of the second bearing part, and configured so as to guide oil passing through the space between the inner-circumferential surface of the first bearing part and the outer-circumferential surface of the rotor shaft by changing the direction of flow thereof; and an oil discharge port provided in the carrier ring or each of the side plates, and configured so as to externally discharge oil guided by the first oil-guiding part.
Title of the invention: POLYSACCHARIDE DIGESTION INHIBITOR

Abstract:
The purpose of the present invention is to provide a novel plant-derived polysaccharide digestion inhibitor. The polysaccharide digestion inhibitor uses an extract of Astilbe thunbergii as the active component thereof.

No. of Pages: 25 No. of Claims: 5
A bearing device equipped with a carrier ring, a first bearing part provided along the outer circumference of a rotor shaft on the inner-circumferential side of the carrier ring and on the downstream side relative to the first bearing part in the direction of rotation of the rotor shaft, and a pair of side plates positioned along the outer circumference of the rotor shaft on both sides of the carrier ring in the axial direction, wherein a groove extending in the circumferential direction along the lateral surface of the first bearing part in at least part of the range across which the first bearing part extends is formed in a region of the inner-circumferential surface of each of the side plates on the carrier ring sides thereof. The bearing device is further equipped with an oil-guiding part which guides oil that has flowed into the groove from the gap between the inner-circumferential surface of the first bearing part and the outer-circumferential surface of the rotor shaft, and returns this oil to a location between the downstream-side end section of the first bearing part and the upstream-side end section of the second bearing part.
The invention discloses a concrete pavement structure (1) comprising a base layer (3) directly coated by a wearing layer (2), wherein the base layer (3) is a concrete base layer and the wearing layer (2) is an elastomer modified pervious concrete layer, having a thickness below to 4cm, a void content in volume ranging from 5% to 20%, more preferentially from 5% to 10%, and the maximal diameter of the aggregates present in said polymer modified pervious concrete layer is 10 mm. The invention also discloses its manufacturing process, a road comprising it and the use of an elastomer in an elastomer modified pervious concrete layer to improve skid resistance of the pervious concrete layer.

![Diagram of concrete pavement structure](image-url)

No. of Pages: 19  No. of Claims: 17
This disclosure relates to methods and compositions for addressing conditions of dysbiosis and/or inflammation, such as enteropathy, associated with administration of non-steroidal anti-inflammatory drug (NSAID). The disclosure includes methods comprising administering an effective amount of a tryptophan derived microbiota metabolite (TDMM) to a subject that has also been administered, or is expected to have administered, a NSAID.
**Title of the invention**: INTERLACE DETERMINATION FOR DEVICE

**Abstract**: Apparatuses, methods, and systems are disclosed for interlace determination. One apparatus includes a processor that determines a system bandwidth including multiple interlaces. Each interlace of the multiple interlaces includes a set of physical resource blocks (PRBs) that are uniformly spaced in frequency. The processor also determines a first set of interlaces of the multiple interlaces for a first device. The first set of interlaces includes one or more interlaces. The apparatus includes a transmitter that transmits a first signal to the first device. The first signal indicates the first set of interlaces, and a number of bits of the first signal is less than a number of interlaces of the multiple interlaces.

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No. of Pages : 35
No. of Claims : 54
(54) Title of the invention: CHIMERIC ANTIGEN RECEPTORS TARGETING CANCER

(51) International classification: A61K39/395C07K14/705C07K14/725
(31) Priority Document No: 62/314864
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(33) Name of priority country: U.S.A.
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(61) Patent of Addition to Application Number: NA
   Filing Date: NA
(62) Divisional to Application Number: NA
   Filing Date: NA

(57) Abstract:
Provided herein is a composition comprising, a cell, comprising nucleic acids encoding a chimeric antigen receptor (CAR) and one or more of signaling proteins selected from K13-vFLIP, MC159-vFLIP, cFLIP-L, cFLIP-p22, HTLV1-Tax and HTLV2-Tax, wherein the CAR comprises an a) extracellular antigen specific domain, b) a transmembrane domain and c) an intracellular signaling domain comprising an immunoreceptor tyrosine-based activation motif (ITAM); wherein c) is located at the C-terminus of the chimeric receptor. In some embodiments, the CAR further comprises one or more co-stimulatory domains. Also provided herein are methods for treating diseases using the compositions described herein.
A field effect transistor has: a gate electrode for applying a gate voltage; a source electrode and a drain electrode for transmitting electrical signals; an active layer formed between the source electrode and the drain electrode; and a gate insulating layer formed between the gate electrode and the active layer, the field effect transistor being characterized in that the active layer includes at least two types of oxide layer, an A layer and a B layer; and the active layer satisfies condition (1) and/or (2) noted below. Condition (1): The active layer is composed of three or more oxide layers, including two or more of the A layer. Condition (2): The bandgap of the A layer is smaller than the bandgap of the B layer, and the oxygen affinity of the A layer is equal to or greater than the oxygen affinity of the B layer.
## Title of the invention: ELECTRIC VALVE AND CONTROL METHOD THEREFOR

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### Name of Inventor:
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### Abstract:
An electric valve and a control method therefor. The electric valve comprises a mechanical valve body, a motor (1), a valve switch state detection apparatus, a control line (9) and a control circuit (80). The motor and the mechanical valve body are in transmission connection; the control line is electrically connected to the control circuit; the control circuit comprises a drive module (2) and a power supply module (5); and the motor, the valve switch state detection apparatus and the power supply module are respectively connected to the drive module. The control circuit further comprises a backup power supply (90) electrically connected thereto. Besides a power supply module which supplies power from the outside, the electric valve is additionally provided with a backup power supply; and after the power supply module has powered down, the backup power supply, in combination with a control circuit, can provide an operation power for the drive module and motor of the electric valve, thus automatically controlling the closing of the mechanical valve body.

![Diagram of electric valve and control method](image)

No. of Pages : 12 No. of Claims : 10
Process for manufacturing a milk of lime of great fineness comprising at least the steps of providing one lime compound and forming said milk of lime with a process water and said lime compound.
An electrosurgical cutting tool comprising a pair of pivotable blades that are mechanically operable as scissors or pliers. The blades have electrodes capable of delivery RF and/or microwave energy to cut or coagulate tissue between them. The tool combines the actuation and energy delivery mechanisms in a compact arrangement that enables the tool to be inserted through an instrument channel of a surgical scoping device, such as an endoscope, gastroscope or laparoscope. Each blade may comprise a planar body made of dielectric material that separates a first conductive element from a second conductive element. The blades may rotate relative to each other in the plane of the blades.
Title of the invention: WATER CONTROL GATE

A water control gate pivotable about a horizontal axis. Control may be by a combination of inflatable actuators and ballast chambers in combination with means for preventing over-rotation. Sealing between gate panels and between gate panels and abutments may be by means of seals inflated hydrostatically. The present invention is bottom hinged water control gate actuated by a combination of ballast chambers and inflatable actuators. The invention further includes an inflatable sealing means. The invention is particularly suited for use as a navigation lock gate system or as a flood control gate in a watercourse such as a navigation canal.
Title of the invention: DEOXIDIZER COMPOSITION

Abstract:
The present invention provides a deoxidizer composition that includes granules having an α layer that includes a water retaining agent, a swelling agent, a metal salt, and water, a β layer that includes iron, and a γ layer that includes a porous carrier. The granules are formed in a layered structure in the order of the α layer, β layer, and γ layer from the inside of the granules to the outside.
A novel alkoxy magnesium which, when used as a constituent of a solid catalyst component for olefin polymerization use to polymerize an olefin, the formation of a fine powder can be reduced and a polymer having an excellent grain size distribution can be formed under a high polymerization activity. An alkoxy magnesium characterized by being composed of secondary particles each of which is an aggregate of primary particles having an average particle diameter of less than 1 μm, and also characterized in that the ratio expressed by (the average particle diameter of the primary particles)/(the average particle diameter of the secondary particles) is 0.1 or less, the total pore volume is 0.5 to 1 cm³/g, the specific surface area is less than 50 m²/g and the grain size distribution index (SPAN) is 1 or less.
The invention relates to a crane (2), in particular a tower slewing crane, comprising a load-receiving means (208) mounted to a hoist rope (207), drive devices for moving a plurality of crane elements, and for moving the load receiving means, a control unit (3) for controlling the drive devices such that the load receiving means travels along a travel path, and a pendulum damping device (340) for damping swinging movements of the load receiving means. Said pendulum damping device has a control module (341) for influencing the actuation of the drive devices as a function of the actual swinging movement of the rope and the deformations and/or movements of the structural components as a result of dynamic loads.

No. of Pages : 16 No. of Claims : 16
An electronic device includes a tray comprising a first external storage medium and a second external storage medium, a connection circuit comprising a plurality of first contacts configured to be electrically connected to the first external storage medium and a plurality of second contacts configured to be electrically connected to the second external storage medium when the tray is attached to the electronic device, a power management circuit configured to be electrically connected to at least one part of the connection circuit, a detector configured to detect that the tray is moved to be attached to or detached from the electronic device, and a processor electrically connected to the detector and the power management circuit, wherein the processor is configured to adjust the power management circuit to control power provided to at least one part of the plurality of first contacts or second contacts when the tray is moved to be attached to or detached from the electronic device.
**Title of the invention:** MEDICAL DEVICE WITH ANTI-ROTATION PUSH TAB

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<td>Divisional to Application Number</td>
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**Abstract:**
A medical device (100), comprising a hub (102) or housing (118) having a push tab (112) including a main portion extending radially from an upper surface of the hub (102) or housing (118), and at least one anti-rotation feature (114, 116) for resisting rotation of the hub (102) or housing (118). A cannula (103) is directly or indirectly connected to the hub (102) or housing (118). The medical device (100) may be a catheter, the cannula (103) may be a catheter tube, and the hub (102) or housing (118) may be a catheter hub or an introducer needle tip shield of the catheter (100).
The present invention provides compounds of the formula: (I) wherein: X is O or S; Q1 and Q2 are independently CR5 or N, provided at least one of Q1 and Q2 is N; Y is a direct bond or CH2; R1 is H, optionally substituted alkyl, alkenyl, alkynyl, cycloalkylalkyl, benzyl or oxetan-3-yl-CH2-; R2 is optionally substituted phenyl, pyridine, pyrimidine, pyrazine or pyridazine; R3 is alkyl or haloalkyl; R4 is optionally substituted pyridine, pyrimidine, pyrazine or pyridazine; R5 is H, alkyl, haloalkyl, cycloalkyl, alkoxy, alkoxyC(O)- or (alkoxy) 2CH2-; or a salt thereof. The compounds are useful for controlling ectoparasites on animals.
### Title of the invention: IN-FLOW PACKET PRIORITIZATION AND DATA-DEPENDENT FLEXIBLE QOS POLICY

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### Abstract:
A method, operational at a device, includes receiving at least one packet belonging to a first set of packets of a packet flow marked with an identification value, determining that the at least one packet is marked with the identification value, determining to change a quality of service (QoS) treatment of packets belonging to the first set of packets marked with the identification value that are yet to be received, and sending a request to change the QoS treatment of packets belonging to the first set of packets marked with the identification value that are yet to be received to trigger a different QoS treatment of packets within the packet flow, responsive to determining to change the QoS treatment. Other aspects, embodiments, and features are also claimed and described.
Contemplated within the scope of the invention are Yankauer suction systems having clog removal functionality and related methods. Specifically, the system, for use with a Yankauer suction tip, includes a medial tube that is hollow and has a coupling end and a distal outlet. The coupling end is connectable to a Yankauer suction tip and the distal outlet is in fluid communication with each of a flow pump and a suction source. Also included are systems having a medial tube that is hollow and comprises a coupling end, wherein the coupling end is connectable to a Yankauer suction tip; a suction conduit that extends distally from the medial tube to a suction source, wherein the suction conduit is in fluid communication with the suction source and the coupling end; and a flow conduit that extends distally from the medial tube and is in fluid communication with a flow pump and the coupling end.
The present invention relates to a method for providing payment information, for example, to a device for providing payment information by using a sensor, and a method therefor. To this end, an electronic device, of the present invention, comprising a first communication circuit, a second communication circuit, a sensor, and a processor, can comprise the operations of: receiving a user input by using the sensor; performing authentication on the user input; receiving payment information from an external electronic device by using the first communication circuit when the authentication has been successful; and outputting the payment information through the second communication circuit when a complete event for the user input has been received from the sensor by using the processor.
The invention relates to display panel (100) and electroluminescence display using the same. The display panel (100) includes: a sub-pixel (101), which comprises a light-emitting element (EL) and a driving element (DT) for driving the light-emitting element (EL), the light-emitting element (EL) emitting light by a current in the driving element (DT) during a driving phase (DRV); and a power switching circuit (140) configured to supply a first driving voltage (VDD1) to the sub-pixel (101) during the driving phase (DRV) in an active period and a blanking interval, and supply a second driving voltage (VDD2) to the sub-pixel (101) during a data writing phase (WRV) of the active period and during resetting, sensing, and data writing phases (WRV) of the blanking interval.
The invention relates to a railway braking system (1) comprising a first pneumatic distribution device (51) formed by a first distributor provided with a single inlet opening (54a,b) connected to a source for supplying pneumatic pressure mediums (73) and with a single outlet opening (55a,b) connected to a parking brake chamber (25) in order to optionally supply a parking brake (7) with a second pneumatic pressure medium so as to place said brake in either of inoperative and operative configurations, and a second pneumatic distribution device (61) formed by a second distributor provided with a single inlet opening (64a,b) connected to said supply source and with a single outlet opening (65a,b) connected to a service pressure chamber (13) in order to supply a service brake (6) with a third pneumatic pressure medium of which the pressure value is predetermined, so as to apply a predetermined braking force when said parking brake is in the operative configuration thereof.

No. of Pages : 31 No. of Claims : 21
The present art relates to a sound tube and a sound producing device, which are capable of generating evanescent waves at a lower cost. This sound tube has a sound path that is longer than the exterior dimensions of said sound tube, and further has a plurality of openings or a slit-shaped opening. As sound waves progress within the sound tube, sound waves are output from the plurality of openings or from a plurality of locations in the slit-shaped opening, and said sound waves are synthesized into evanescent waves. The present art can be applied to a sound tube, a sound producing device having a sound tube, and the like.
A drive mechanism for a wheelchair may include a hand grip having a continuous track that moves over a drive rotator. The hand grip may have a flat, top surface that extends ventrally from the wheelchair. The drive mechanism may include a drivetrain connected to the drive rotator, such that movement of the hand grip in a dorsal or a ventral direction causes the drive rotator to rotate, and such rotation actuates the drivetrain. The drive mechanism may further comprise a switch. When the switch is in a first position, actuation of the drivetrain drives the wheels of the wheelchair. When the switch is in a second position, actuation of the drivetrain drives a mechanism that lifts the wheelchair into a standing position.
Title of the invention : OPEN EMISSION ANALYSIS METHOD AND DEVICE

Abstract:

[Problem] To simply and reliably prevent the leak of an exhaust gas when carrying out an open emission analysis of the exhaust gas.

[Solution] A filter 40 that is made from sponge and is air-permeable and elastic is interposed between a collection port 11 and an exhaust port 7a of an exhaust gas collection unit 10, such that the gap formed between the collection port 11 and the exhaust port 7a is closed. In such a state, when the interior of the exhaust gas collection unit 10 suctions at a fixed flow-rate, the exhaust gas and outside air surrounding the exhaust port 7a is taken into the interior of the exhaust gas collection unit 10 from the collection port 11. At such time, the flow-rate of outside air taken in via the filter 40 is restrained by the ventilation resistance of the filter 40, and therefore the total flow-rate of the exhaust gas and outside air taken into the exhaust gas collection unit 10 is caused to be smaller than the suction flow-rate, such that the exhaust gas is prevented from leaking out.
A method for distributing controlled tokens to a secondary mobile device includes: storing account profiles, each including an account identifier, set of token credentials, and an associated mobile device identifier; receiving a token distribution request from, a first mobile device including a first mobile device identifier, recipient mobile device identifier, specific account identifier, and account controls; identifying a specific account profile including the specific account identifier and first mobile device identifier; generating a single use identification value and reservation identifier; transmitting the single use identification value to the first mobile device; transmitting the reservation identifier to a second mobile device associated with the recipient mobile device identifier; receiving the reservation identifier and the single use identification value from the second mobile device; verifying the reservation identifier and single use identification value received from the second mobile device; and transmitting a new set of token credentials to the second mobile device.
Provided is an infrared-absorbing material which comprises at least one transition metal and at least one element selected from among B, C, N, O, etc. as a ligand for the transition metal, wherein the infrared-absorbing material forms conduction bands that include a lower conduction band which is either a band occupied by a d orbital of the transition metal or a band of a hybrid of a d orbital of the transition metal and a p orbital of the ligand, the infrared-absorbing material forms valence bands that include an upper valence band which is either a band occupied by a p orbital of the ligand or a band of a hybrid of a p orbital of the ligand and a d orbital of the transition metal, the lower conduction band is close to the upper valence band with a gap less than 3.0 eV along the direction of smaller wavenumbers from wavenumber 2, which is a highly symmetric point in the Brillouin zone, and the infrared-absorbing material has a wide-gap band structure in which the band gap between the lower conduction band and the upper valence band is 3.0 eV or greater, along the wavenumber directions other than the wavenumber direction along which the band gap is close to less than 3.0 eV, the infrared-absorbing material having a plasma frequency of 2.5-10.0 eV.
Battery impedance testing devices, circuits, systems, and related methods are disclosed. An impedance measurement device includes a current driver configured to generate an excitation current signal to be applied to a test battery responsive to a control signal, and a processor operably coupled with the current driver. The processor is configured to generate the control signal during an auto ranging mode and a measuring mode. The auto ranging mode applies the excitation current signal to the test battery over a plurality of different amplitudes to measure a response to the excitation current signal at each amplitude. The measuring mode applies the excitation current signal to the test battery for an amplitude responsive to the results of the auto ranging mode. Improved sensitivity and resolution may be achieved for low impedance batteries with a rapid measurement time.
The invention relates to a plug-in connector part (5) for connecting to a mating plug-in connector part (3), comprising a housing (50) which has a plug-in section (500, 501) for the plug-in connection to the mating plug-in connector part (3), and at least one contact element (51A, 51B) comprising a shaft section (510), arranged on the plug-in section (500, 501), and designed to electrically contact an associated mating contact element (31) of the mating plug-in connector part (3). The invention also relates to a heat capacity element (54A, 54B) which is arranged on the shaft section (510) of the at least one contact element (51A, 51B), is secured to said shaft section (510), and receives heat from the at least one contact element (51A, 51B). In this way, a plug-in connector part with a contact element is provided, which can have a high current-carrying capacity, for example for use in a charging system for charging an electric vehicle.

![Diagram](image)

No. of Pages : 12 No. of Claims : 10
The invention relates to a plug connector part (1) for plug-in connection to a mating plug connector part (3), which plug connector part comprises a housing part (12), which is produced from a first material, at least one plugging element (120, 121) arranged on the housing part (12) for bringing into electrical contact with the mating plug connector part (3), and additionally an attachment part (12), which is placed against the housing part (12) and detachably connected to the housing part (12) and has at least one plugging section (110, 111) having an opening (112, 113), in which the at least one plugging element (120, 121) is arranged, and is produced from a second material different from the first material. In this way, a plug connector part is provided which has a simple design, is economical to produce, and additionally is protected against wear and improper handling.
The present invention provides a cosmetic composition that improves skin slipperiness and hair slipperiness. The cosmetic composition according to the present invention comprises an ester compound represented by general formula (1). In general formula (1): R1 and R3 independently represent a hydrocarbon group having 6-30 carbon atoms; R2 represents a hydrocarbon group having 1-4 carbon atoms; and m and n independently represent an integer of 0-16, provided that m+n+p [wherein p represents the number of carbon atoms in R2] is an integer of 9-17. R1OOC-(CH2)m-(CHR2)-(CH2)n-COOR3 (1).

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5) NODA Mie
This thermoplastic resin composition contains a thermoplastic resin (A) and carbon black (B). The thermoplastic resin (A) contains a graft copolymer (C) in which a vinyl polymer is grafted to a rubbery polymer. The carbon black (B) has a volume-average particle size of secondary particles of 200 nm or higher, and a proportion of secondary particles having a particle size of 800 nm or higher with respect to the total of the secondary particles of less than 20% by volume. The carbon black (B) content is 0.1-3.0 parts by mass per 100 parts by mass of the thermoplastic resin (A).
The present invention relates to a novel photovoltaic module installation roof renewal method using a portable roll foaming machine, and a roof renewal structure obtained thereby, the method and structure allowing for no concern for water leaks, excellent structural safety, a simple construction, and a reduced construction period. According to the present invention, provided are a photovoltaic module installation roof renewal method using a portable roll foaming machine, and a roof renewal structure, and the roof renewal method for installing a photovoltaic module on the roof of a building constructed with a roof frame (1) having a repeatedly formed crest (2) and root (3) comprises the steps of: interposing an insulator (4) at the root (3) of the roof frame (1); producing a photovoltaic module installation roof panel (100) in a length corresponding to the length of the roof at a roof renewal site by using a portable roll foaming machine (10), so as to transport the photovoltaic module installation roof panel (100) onto the roof; installing the photovoltaic module installation roof panel (100) on the roof frame (1) at which the insulator (40) is interposed; fastening a bracket (40) for installing a photovoltaic module (30) on the photovoltaic module installation roof panel (100); and installing the photovoltaic module (30) on the bracket (40).
A data processing system provides a loop-end instruction for use at the end of a program loop body specifying an address of a beginning instruction of said program loop body. Loop control circuitry (1000) serves to control repeated execution of the program loop body upon second and subsequent passes through the program loop body using loop control data provided by the loop-end instruction without requiring the loop-end instruction to be explicitly executed upon each pass.
Abstract:
Provided is an image processing device, comprising: an image storage unit which stores a first image which has been affected by an aberration of an optical system; a position information generating unit which, on the basis of position information of pixels of interest which have been scanned in a prescribed order to generate pixel values of each pixel of a second image in which the effect of the aberration has been removed, and a distortion table which denotes a correspondence between the position information of each pixel of the first image and the position information of each pixel of the second image, generates, each time the pixels of interest are scanned upon the second image in the prescribed order, position information of the pixel of the first image which corresponds to the scanned pixel of interest; an image output unit which, on the basis of integer information of the position information which has been generated by the position information generating unit, outputs the first image whereupon a distortion correction has been carried out per pixel, by reading out the first image from the image storage unit; a first aberration correction unit which, using decimal information of the position information which has been generated by the position information generating unit, corrects a phase shift resulting from the distortion with respect to each pixel of the first image which has been outputted from the image output unit; and a second aberration correction unit which generates the second image by correcting an aberration other than the distortion with respect to the first image which has been corrected by the first aberration correction unit.
A data processing system supports a predicated-loop instruction that controls vectorised execution of a program loop body in respect of a plurality of vector elements. When the number of elements to be processed is not a whole number multiple of the number of lanes of processing supported for that element size, then the predicated-loop instruction controls suppression of processing in one or more lanes not required.
Provided are a compound that is bioapplicable and amyloid-selective, and is useful as an amyloid oxidation catalyst applicable not only to $\alpha\beta$ peptides but to other amyloids as well, and a preventive/therapeutic agent for amyloid-related diseases using the same. A curcumin-boron complex represented by general formula (1) (wherein: $X_1$ and $X_2$ are identical or different, and represent a halogenoalkyl group or an halogen atom; $X_3$ represents a bromine atom, an iodine atom, or a selenium atom; $R_1$ and $R_2$ are identical or different, and represent a hydrogen atom or an optionally substituted alkyl group; $R_3$ and $R_4$ are identical or different, and represent a hydrogen atom, a halogen atom, an alkoxy group, or an optionally substituted alkyl group, or $R_1$ and $R_3$ or $R_2$ and $R_4$ together may form an optionally substituted alkylene group or alkenylene group; $R_5$ and $R_6$ are identical or different, and represent a hydrogen atom or an optionally substituted alkyl group; $R_7$ and $R_8$ are identical or different, and represent a hydrogen atom, a halogen atom, an alkoxy group, or an optionally substituted alkyl group, or $R_5$ and $R_7$ or $R_6$ and $R_8$ together may form an optionally substituted alkylene group or alkenylene group; and $m$ and $n$ represent integers from 1 to 3), or a salt thereof.
The Patent Office Journal No. 01/2019 Dated 04/01/2019

| (12) PATENT APPLICATION PUBLICATION | (21) Application No.201817035095 A |
| (19) INDIA | |
| (22) Date of filing of Application :18/09/2018 | (43) Publication Date : 04/01/2019 |

| (54) Title of the invention | RECOVERY OF METALS FROM CALCIUM-RICH MATERIALS |
| (51) International classification | C22B3/04C22B7/04C22B7/00 |
| (31) Priority Document No | NA |
| (32) Priority Date | NA |
| (33) Name of priority country | NA |
| (36) Name of Applicant | OUTOTEC (FINLAND) OY |
| | Address of Applicant: Rauhalanpuisto 9 02230 Espoo Finland |
| (38) Name of Inventor | KOTIRANTA, Tuukka |
| | PALOVAARA, Petri |
| | PISILSN, Sauli |
| (37) Name of Inventor | |
| | |
| (43) Publication Date | 04/01/2019 |
| (44) Identification Numbers | |
| (57) Abstract | Provided herein is a process for recovering metal(s) from calcium rich iron containing material (8), comprising (a) leaching calcium one or more times from said calcium rich iron containing material (8) to obtain a calcium depleted iron containing material (13); and (b) subjecting the calcium depleted iron containing material (13) to pyrometallurgical treatment (3) to recover metal(s) (17) from said calcium depleted iron containing material (13). |

| No. of Pages | 14 |
| No. of Claims | 15 |
The refrigeration device can suppress increases in the viscosity resistance of sliding parts of a compressor and improve performance. The refrigeration device is provided with a refrigeration cycle in which the compressor, a condenser, an expansion mechanism, and an evaporator are connected in a circular manner. In this refrigeration device, the condensation temperature can be 46°C or higher. The condensation temperature is the temperature at which a refrigerant circulating through the refrigeration cycle condenses in the condenser. A refrigerator oil for lubrication of the compressor is put into the refrigeration cycle. The refrigerator oil is an oil with a separation temperature greater than the condensation temperature. The separation temperature is the temperature at which a mixture of the refrigerator oil and the refrigerant separates into the refrigerator oil and the refrigerant. Because the separation temperature is higher than the condensation temperature, separation of the refrigerant circulating through the refrigeration cycle from the refrigerator oil is suppressed.
Title of the invention: A SECURITY DOCUMENT

Abstract:
The present disclosure is directed towards a security document (10) comprising a first leaf (54) comprising a first polymer substrate (20) and a first reinforcement layer (57) attached or formed with the first leaf (54). An outer leaf (60) is attached to the first leaf along a fold line (14) and is located between the first leaf (54) and a cover (13). The first reinforcement layer (57) extends along the first leaf (54) at least partially along the fold line (14) and at least partially away from the fold line (14) on both sides of the fold line (14). The present disclosure is further directed towards methods of manufacturing such a security document (10) and a plurality of such security documents (10).
A SECURITY DOCUMENT COMPRISING A POLYMER SUBSTRATE

The present disclosure is directed towards a security document (10, 70) comprising a first polymer page (11) adjacent to a second polymer page (71). The first polymer page (11) comprises a first polymer substrate (20) and the second polymer page (71) comprises a second polymer substrate (72). The first polymer substrate (20) is of a different structure and/or material to the second polymer substrate (72). The second polymer page (71) is thicker than the first polymer page (11). The present disclosure is further directed towards a security document (10, 70) comprising a polymer page (11) attached adjacent to at least one further page (12). The further page (12) may comprise a fibrous substrate or a polymer. The present disclosure is further directed towards methods of manufacturing such security documents (10, 70) and a plurality of such security documents (10, 70).
Method for zone coating of monolithic substrates by using different sol-solution containing different catalyst carrier precursors and metal catalyst precursors and suction of one of the sol-solution up into pores in the walls of the zone to be coated, solely by capillary forces and another different sol-solution into the walls of another zone to be coated by capillary forces.
Method for the preparation of a catalysed monolithic body or a catalysed particulate filter by capillary suction of sol-solution containing catalytically active material and metal oxide catalyst carriers or precursors thereof into pores of monolithic substrate.
**Title of the invention:** METHOD FOR MANUFACTURING PRESS MOLDED PRODUCT

| (51) International classification | :B21D22/26B21D22/20B21D53/88 |
| (31) Priority Document No | :2016-039383 |
| (32) Priority Date | :01/03/2016 |
| (33) Name of priority country | :Japan |
| (36) Priority Date | :20/09/2018 |
| (43) Publication Date | :04/01/2019 |
| (54) Title of the invention | :METHOD FOR MANUFACTURING PRESS MOLDED PRODUCT |
| (51) International classification | :B21D22/26B21D22/20B21D53/88 |
| (31) Priority Document No | :2016-039383 |
| (32) Priority Date | :01/03/2016 |
| (33) Name of priority country | :Japan |
| (36) Priority Date | :20/09/2018 |
| (43) Publication Date | :04/01/2019 |
| (57) Abstract | Provided is a method for manufacturing a press molded product that can greatly reduce spring-back in a side view, that is, camber-back and material strength sensitivity of camber-back without requiring complex mold designs even when high tensile steel is used. For manufacturing a metal plate by press molding into a product shape having a top plate part (1) and flange part (2) continuous in the direction of width via a side wall part (3) and having a hat-shaped cross-section wherein the top plate part (1) and the flange part (2) are curved convexly or concavely on the top plate part (1) side along the longitudinal direction, the method has a first step for manufacturing an intermediate component by press molding into a component shape having a hat-shaped cross-section with the curvature along the longitudinal direction of each of the top plate part (1) and the flange part (2) having a second radius of curvature smaller than the radius of curvature in the product shape, and a second step for press molding the intermediate component into the product shape. |

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No. of Pages: 21  No. of Claims: 7
A method of operating a vehicle door includes the step of pushing an unlatched door to an ajar position. The unlatched door is mechanically held in the ajar position. In one embodiment, the method is performed using a door presenting system that includes a door checker that is configured to hold a door in the ajar position. A presenting actuator is movable between retracted and extended positions. The extended position corresponds to the ajar position. A controller is configured to move the presenting actuator between the retracted and extended positions in response to a presenting signal.
**Abstract:**

To simply and reliably detect exhaust gas leaks when carrying out an open emission analysis of exhaust gas.

**Solution:** An exhaust gas discharged from a discharge port 7a is taken into the interior of an exhaust gas collection unit 10 together with outside air from the surroundings. A leak detection mechanism 50 for detecting an exhaust gas leaking out from a collection port 11 is provided. The leak detection mechanism 50 is equipped with: a temperature sensor, which is a pair comprising an outer temperature sensor 51 and an inner temperature sensor 52; and a temperature measurement unit 55 that measures the temperature difference between the inner and outer temperatures detected by the temperature sensor. A plurality of the inner/outer paired temperature sensors are disposed at regular intervals in the circumferential direction of the collection port 11. When a leak occurs, the temperature at the inner temperature sensor 52 rises and the temperature difference with the outer temperature sensor 51 increases, and thus the leak is detected by detecting said temperature difference via the temperature measurement unit 55. If the leak occurs in a portion of the peripheral direction, only the temperature difference of the section where the leak is occurring increases, and so the location of the leak is identified.
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<th>(21) Application No. 201817035126 A</th>
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<td>(22) Date of filing of Application: 18/09/2018</td>
<td>(43) Publication Date: 04/01/2019</td>
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**Title of the Invention:** SYMMETRIC RECEIVER SWITCH FOR BIPOLAR PULSER

**International Classification:** A61B 8/00 H01L 41/00 H02N 4/00

**Priority Document No:** 15/087943

**Priority Date:** 31/03/2016

**Name of Priority Country:** U.S.A.

**International Application No:** PCT/US2017/025269

**Filing Date:** 31/03/2017

**International Publication No:** WO 2017/173211

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2. RALSTON, Tyler, S.
3. FIFE, Keith, G.

**Abstract:**
Circuitry for ultrasound devices is described. A multilevel pulser is described, which can provide bipolar pulses of multiple levels. The multilevel pulser includes a pulsing circuit and pulser and feedback circuit. Symmetric switches are also described. The symmetric switches can be positioned as inputs to ultrasound receiving circuitry to block signals from the receiving circuitry.

No. of Pages: 23
No. of Claims: 20
Circuitry for ultrasound devices is described. A multilevel pulser is described, which can provide bipolar pulses of multiple levels. The multilevel pulser includes a pulsing circuit and pulser and feedback circuit. Symmetric switches are also described. The symmetric switches can be positioned as inputs to ultrasound receiving circuitry to block signals from the receiving circuitry.
Disclosed are a rotary isolator switch (100) and a contact module (10, 20, 30) for the rotary isolator switch (100). The contact module (10, 20, 30) comprises: a housing (11), provided with a central base (111) and a peripheral base (112); a fixed contact (13), mounted in the peripheral base (112) and comprising a static contact portion (131) and a connecting portion (132) accessible from outside the housing (11); and a rotatable contact (12), mounted in the central base (111) and comprising a moving contact portion (122) corresponding to the static contact portion (131), the rotatable contact (12) being rotatable relative to the fixed contact (13), so as to cause the moving contact portion (122) to engage with or disengage from the corresponding static contact portion (131). The contact module (10, 20, 30) further comprises at least one magnet (14), and the polarities (14) of the at least one magnet (14) are aligned in the same direction, such that an electric arc generated between the moving contact portion (122) and the static contact portion (131) can be interrupted in a direction away from the moving contact portion (122) and the static contact portion (131).
The present invention provides stable pre-fusion respiratory syncitial virus (RSV) F proteins (or fragment thereof), compositions comprising said proteins and uses thereof for the prevention and/or treatment of RSV infection.
The present invention relates to a door frame, particularly a door frame for a pre-hung door assembly, which is foldable to minimize storage space and to allow for enhanced logistic efficiencies. The door frame contains parallel, spaced apart, vertical jambs and a horizontal header connecting the top ends of the jambs. Each of the jambs and the horizontal header contains a front section and back section that are hingedly joined so that then can be folded on to each other. The hingedly joined front and back sections allow the door frame to be foldable to minimize space occupied during storage.
The aim of the invention is to increase the adhesion of an insulating coating (2) to an electric conductor (1), preferably made of copper or aluminum. According to the invention, this is achieved by an insulated electric conductor comprising an electric conductor (1), preferably made of copper or aluminum, with an insulating coating (2). The insulating coating (2) comprises either at least one insulating layer (3) made of thermoplastic or the insulating layer (3) and a plastic-containing intermediate layer (4, 5). The insulated electric conductor can be obtained by using a method in which ions of a protective gas are fired at the electric conductor (1) in a protective gas atmosphere in a gas plasma in order to remove an oxide layer formed on a surface of the electric conductor (1) and/or to increase the surface energy of the electric conductor (1) and subsequently either the at least one insulating layer (3) or, in the event that the coating (2) comprises the plastic-containing intermediate layer (4, 5), at least the plastic-containing intermediate layer (4, 5) is applied directly onto the surface of the electric conductor (1) in the protective gas atmosphere.
Title of the invention: PROCESSES FOR THE PREPARATION OF HETEROARYL CARBOXYLIC ACIDS

Abstract:
Provided herein are processes for the preparation of heteroaryl carboxylic acids.

No. of Pages: 69  No. of Claims: 22
(54) Title of the invention : CRYSTAL GROWTH APPARATUS AND RELATED METHODS

(51) International classification : C30B15/00 C30B15/10 C30B15/14
(31) Priority Document No : 62/314562
(32) Priority Date : 29/03/2016
(33) Name of priority country : U.S.A.
(86) International Application No : PCT/US2017/024091
    Filing Date : 24/03/2017
(87) International Publication No : WO 2017/172530
(61) Patent of Addition to Application Number : NA
    Filing Date : NA
(62) Divisional to Application Number : NA
    Filing Date : NA

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(72) Name of Inventor :
    1) LUTER, William Lynn

(57) Abstract :
Crystal pulling apparatus for continuous pulling of silicon ingots in which an oxygen-containing crucible may be eliminated are disclosed. A solid silicon support having three indentations is used to hold pools of molten silicon. Silicon is added to a melting pool and weirs over into a stabilization pool and further weirs over into a growth pool from which a silicon ingot is grown.
Abstract:
The present invention relates to a polynucleotide configured for the treatment of a retinal degeneration disease, such as retinitis pigmentosa (RP), a nucleic acid vector comprising said polynucleotide, a pharmaceutical composition comprising said nucleic acid vector, a kit comprising said polynucleotide or said nucleic acid vector, a method of making said nucleic acid vector, and a method for treating a retinal degeneration disease.
A method for determining rebate eligibility of a transaction account is described. The method includes receiving a real-time message including a reason code; identifying a specific account profile from a plurality of profiles; validating the reason code based on a plurality of predetermined valid reason codes; and validating a transaction account related to the identified specific account profile for eligibility of a rebate based on at least the included account balance and a cost value included in the real-time message.

No. of Pages: 68 No. of Claims: 20
In a rotating machine having a fluidic rotor, the rotor comprises at least one blade mounted on an arm rotating about a rotor shaft forming a main axis of the rotor, the rotor being held by a supporting structure in an orientation such that said axis is substantially perpendicular to the direction of flow of the fluid, the blade being mounted so as to pivot about an axis of rotation of the blade parallel to the main axis. The machine comprises means for generating a relative oscillation movement of the blade with respect to the arm at the axis of rotation of the blade, in order in this way to vary the inclination of the blade during the rotation of the rotor. Said means comprise, at the arm end, a mechanism comprising a first rotating element (A; B) known as the drive element and a second rotating element (B; A) known as the driven element, the elements being mounted on mutually parallel axes of rotation and separated by an inter-axis distance, the orientation of the drive element being controlled depending on the orientation of the rotor shaft while the orientation of the driven element determines the orientation of the blade, one of the rotating elements comprising a finger (D) spaced apart from its axis of rotation and the other rotating element comprising a groove (C) which receives the finger and in which the finger can slide. Application notably to wind turbines, to marine turbines and to nautical and aircraft propellers.
Abstract:
According to a first aspect of the invention, a method for the generation of a cell line is provided, comprising the steps of (a) providing a plurality of mammalian B cells, wherein each of the plurality of B cells comprises a transgenic genomic DNA sequence encoding a marker protein inserted into an endogenous immunoglobulin locus comprised in said B cell, and wherein the transgenic genomic DNA sequence is amenable to cleavage by a site directed nuclease, particularly Cas9; (b) replacing the transgenic genomic DNA sequence encoding a marker protein with a second transgenic DNA sequence encoding a protein of interest; (c) sorting B cells based on the presence or absence of the marker protein; and (d) collecting B cells in which the marker protein is absent.
**Title of the invention:** RADIATIVE COOLING STRUCTURES AND SYSTEMS

<table>
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<th>Name of Applicant</th>
<th>Address of Applicant</th>
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<tr>
<td>1) THE REGENTS OF THE UNIVERSITY OF COLORADO, A BODY CORPORATE</td>
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<td>2) UNIVERSITY OF WYOMING</td>
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<tr>
<td>1) YANG, Ronggui</td>
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<td>2) YIN, Xiaobo</td>
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<td>3) TAN, Gang</td>
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<td>4) ZHAO, Dongliang</td>
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<td>5) MA, Yaoguang</td>
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<td>6) ZHAI, Yao</td>
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**Abstract:**
Polymer-based selective radiative cooling structures are provided which include a selectively emissive layer of a polymer or a polymer matrix composite material. Exemplary selective radiative cooling structures are in the form of a sheet, film or coating. Also provided are methods for removing heat from a body by selective thermal radiation using polymer-based selective radiative cooling structures.
The present invention relates to devices that pre-warm topical preparation intended for application to skin. Specifically, the present invention relates to devices that pre-warm a premeasured amount of a topical preparation from a larger source without warming the full source.
Title of the invention: APPARATUS, SYSTEM AND METHODS FOR PROVIDING ACCESSORIES ON A SUPPORT SURFACE

| (51) International classification | :E01C9/00E01C5/00 |
| (31) Priority Document No | :62/322458 |
| (32) Priority Date | :14/04/2016 |
| (33) Name of priority country | :U.S.A. |
| (36) International Application No | :PCT/US2017/027171 |
| Filing Date | :12/04/2017 |
| (87) International Publication No | :WO 2017/180722 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

Abstract:
Apparatus, systems and methods for providing one or more accessories on a support surface include a base releasably engageable with the support surface, a housing configured to carry at least a first accessory and be releasably engaged with the base and an elongated carrier rod configured to carry at least a second accessory and be releasably engaged with the base.

No. of Pages: 37 No. of Claims: 20
# Patent Application Publication

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<th>(21) Application No.201817035476 A</th>
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<td>(22) Date of filing of Application :20/09/2018</td>
<td>(43) Publication Date : 04/01/2019</td>
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## Title of the invention: CENTRIFUGE ROTOR WITH STAGGERED NOZZLES FOR USE IN A DISC NOZZLE CENTRIFUGE

| (51) International classification : B04B1/10F01D1/02F01D5/02 |
| (31) Priority Document No : 62/312782 |
| (32) Priority Date : 24/03/2016 |
| (33) Name of priority country : U.S.A. |
| (86) International Application No : PCT/US2017/023785 |
| (87) International Publication No : WO 2017/165631 |

| (57) Abstract : |
| This invention is directed to a centrifuge rotor, such as for use in a disc nozzle centrifuge, having a bowl including an improved positioning and orientation of discharge nozzles for facilitating tangential flow of fluid discharged therefrom relative to the rotor bowl. |

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| (72) Name of Inventor : |
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| (61) Patent of Addition to Application Number : NA |
| Filing Date : NA |

| (62) Divisional to Application Number : NA |
| Filing Date : NA |

No. of Pages : 14 No. of Claims : 25
A biometric system may include an ultrasonic sensor array, a light source system and a control system. Some implementations may include an ultrasonic transmitter. The control system may be capable of controlling the light source system to emit light and of receiving signals from the ultrasonic sensor array corresponding to acoustic waves emitted from portions of a target object in response to being illuminated with the light emitted by the light source system. The control system may be capable of performing a user authentication process that is based, at least in part, on the signals from the ultrasonic sensor array.
Title of the invention: MICROWAVE-ASSISTED MEDICAL TECHNOLOGIES AND APPARATUS THEREFOR

There is disclosed a method of treating affected external or surface tissue comprising the steps of providing a source of affected external or surface tissue; generating a source of microwave energy; transmitting said microwave energy into said affected external or surface tissues; exposing said affected external and surface tissues to said microwave energy to raise the local temperature to thereby ablate, remove, coagulate or otherwise alter said affected external and surface tissues. There is also disclosed an apparatus for the treatment of affected external and surface tissues comprising a microwave energy source generator, a means to transmit said microwave energy into said affected external or surface tissues, a means to control the exposure of said affected external and surface tissues to said microwave energy to raise the local temperature to thereby ablate, remove, coagulate or otherwise alter said affected external and surface tissues; and optionally a means to control the repetition of steps a) to d) multiple times until the ablation, removal, coagulation or otherwise alteration is complete, the period between each sequence of steps a) to d) being optionally cooled, and the location of said concentrated electric field being varied.

No. of Pages: 62 No. of Claims: 21
**Title of the invention:** APPARATUS AND METHOD FOR SIMULATING INTERACTION WITH ELECTRONIC DEVICE

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**Abstract:**
An apparatus and a method for displaying an image on an electronic device are provided. The method includes detecting an object based on a first input received from a detection unit, the first input indicating a marker associated with the object, determining a configuration of the object based on the first input, generating a first image corresponding to the object based on the configuration of the object, and displaying the first image on a display of the electronic device.

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2) LI, Xiaoguang

No. of Pages : 23  No. of Claims : 15
Circuitry for ultrasound devices is described. A multilevel pulser is described, which can provide bipolar pulses of multiple levels. The multilevel pulser includes a pulsing circuit and pulser and feedback circuit. Symmetric switches are also described. The symmetric switches can be positioned as inputs to ultrasound receiving circuitry to block signals from the receiving circuitry.
The invention relates to an apparatus for loading a cargo space. The apparatus includes a conveyor (10) and stacker (11) for stacking goods (12) in the cargo space (13). The stacker (11) is before the conveyor (10). In addition, between the stacker (11) and conveyor (10) there is a buffer conveyor (21) to permit the uninterrupted operation of the stacker (11). Between the buffer conveyor (21) and the conveyor (10) there is a transfer conveyor (23) for moving a stack (22) from the buffer conveyor (21) to the conveyor (10).
Abstract:
The present disclosure provides pyrimidine compounds of Formula 1 and uses thereof, for example, for the potential treatment of diseases associated with P2X purinergic receptors. In certain aspects, the present disclosure provides P2X3 and/or P2X2/3 antagonists which are useful, for example, for the potential treatment of visceral organ, cardiovascular and pain-related diseases, conditions and disorders.
## Patent Application Details

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<th>(12) Patent Application Publication</th>
<th>(21) Application No. 201817035320 A</th>
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<td>(22) Date of filing of Application: 19/09/2018</td>
<td>(43) Publication Date: 04/01/2019</td>
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| (54) Title of the invention: UNIT DOSES FOR IMMEDIATE RELEASE OF GHB OR OF ONE OF THE THERAPEUTICALLY ACCEPTABLE SALTS THEREOF, ADMINISTERED ORALLY, AND THE USE THEREOF TO MAINTAIN ALCOHOL ABSTINENCE. |
| (51) International classification: A61K31/19A61K9/50 |
| (31) Priority Document No: 16/00554 |
| (32) Priority Date: 01/04/2016 |
| (33) Name of priority country: France |
| (86) International Application No: PCT/FR2017/000060 |
| Filing Date: 30/03/2017 |
| (87) International Publication No: WO 2017/168059 |

| (31) Name of priority country: France |
| (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 unit doses for immediate release of GHB or of one of the therapeutically acceptable salts thereof, administered orally. These doses contain from 0.37 to 1.75 g of GHB, and more particularly sodium oxybate; when they are present in the form of granules, the latter have the following composition (% relative to the total weight of the granule): - active principle (sodium oxybate): 50 to 60%; - effervescent agent: 5 to 15%; - diluent: 2 to 18%; - binder: 3 to 10%; - support (solid core of the granule): 15 to 25%; - coating agent/ flavouring agent/ sweetening agent/ lubricant: 3 to 6%. Application in the maintenance of alcohol abstinence for patients having a low, moderate, high or very high blood alcohol level, with or without liver failure. |

No. of Pages: 15 No. of Claims: 19
The present disclosure provides pyrimidine compounds and uses thereof, for example, for the treatment of diseases associated with P2X purinergic receptors. In certain aspects, the present disclosure provides P2X3 and/or P2X2/3 antagonists which are useful, for example, for the treatment of visceral organ, cardiovascular and pain-related diseases, conditions and disorders.
The present invention provides for compounds of formula (I) wherein R1, R2, R3, R4, R6, X1, and X2 have any of the values defined in the specification, and pharmaceutically acceptable salts thereof, that are useful as agents in the treatment of diseases and conditions, including inflammatory diseases, cancer, and AIDS. Also provided are pharmaceutical compositions comprising compounds of formula (I).
Title of the invention: METHOD FOR PROTEIN PURIFICATION

Abstract:
The present invention provides a method for manufacturing antibodies or a fragment thereof with reduced levels of antibody reduction related impurities.

No. of Pages: 19  No. of Claims: 15
The present invention provides: a method for producing an α-fluoro acrylic acid ester; a composition containing a highly-pure fluorocyclopropane derivative; and a composition containing a highly-pure α-fluoro acrylic acid ester. The present invention relates to: a method for producing a compound represented by formula (F), wherein a composition containing a compound represented by formula (A) is purified by distillation and then washing with an alkaline solution into a purified substance containing the compound represented by formula (A), and then the obtained purified substance is then subjected to a pyrolysis reaction; a composition containing a highly-pure compound represented by formula (A); and a composition containing a highly-pure compound represented by formula (F) (where R may be the same as or different from each other, and represent monovalent hydrocarbon groups, and X represents halogen atoms.)
(12) PATENT APPLICATION PUBLICATION  (21) Application No. 201817035156 A
(19) INDIA  (43) Publication Date: 04/01/2019
(22) Date of filing of Application: 18/09/2018

(54) Title of the invention: CELLS EXPRESSING MULTIPLE CHIMERIC ANTIGEN RECEPTOR (CAR) MOLECULES AND USES THEREFORE

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<td>Filing Date</td>
<td>:NA</td>
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</table>

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2) THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA

(72) Name of Inventor:
1) DRANOFF, Glenn

(57) Abstract:
The invention provides compositions and methods for treating diseases associated with expression of a tumor antigen as described herein by administration of a cell comprising a chimeric antigen receptor that binds a B-Cell antigen and a chimeric antigen receptor which binds a tumor antigen.

No. of Pages: 305  No. of Claims: 85
The present disclosure provides for compounds that inhibit the activity of an anti-apoptotic Bcl-2 family member Myeloid cell leukemia-1 (Mcl-1) protein. The present disclosure also provides for pharmaceutical compositions as well as methods for using compounds for treatment of diseases and conditions (e.g., cancer) characterized by the over-expression or dysregulation of Mcl-1 protein.
Title of the invention: ENGINEERED TRAIL FOR CANCER THERAPY

Abstract:
Engineered single chain trail molecules are provided, as are particular mutations and combinations of mutations that improve the stability and manufacturability of such molecules. These molecules are provided for use as anti-cancer therapeutics.

No. of Pages: 105  No. of Claims: 28
A synchronization method and device between base stations. The method comprises the following steps: a source base station sending a time synchronization request to a target base station, so that the target base station feeds back an acknowledgement message for the time synchronization request; the source base station receiving the acknowledgement message fed back by the target base station; the source base station sending a specific sequence to a target user terminal located in a specific region, so that the target user terminal sends the specific sequence; and the source base station detecting the specific sequence, and performing time synchronization between the source base station and the target base station. By adopting the present invention, a specific sequence is forwarded by a user terminal located in a specific region, and time synchronization between base stations is realized by means of base stations to be synchronized detecting the specific sequence. Since the determination of the user terminal is simple and convenient, the shortening of a synchronization period between the base stations is facilitated, thereby improving the synchronization accuracy.
The objective of the present invention is to provide a scroll-type fluid machine, and a method for assembling this scroll-type fluid machine, with which an eccentric shaft and a non-eccentric part can be positioned easily in the same step, while allowing a main body unit and a motor unit to be separated and connected without being disassembled. To achieve this objective, this scroll-type fluid machine is equipped with a main body unit having a main body casing, a fixed scroll, and an orbiting scroll, and a motor unit having a drive shaft for driving the main body unit, and a motor casing, wherein the drive shaft protrudes from the motor casing and is attached to a slewing bearing of the main body unit, positioning holes into which a positioning member is inserted are formed on their respective opposing mating surfaces of the motor casing and the main body casing, and the dimensional difference between main-body-casing-side insertion opening of the positioning hole and the motor-casing-side end surface of the slewing bearing in the axial direction is less than the dimensional difference between the main-body-unit-side tip ends of the drive shaft and the positioning member in the axial direction.

No. of Pages : 23 No. of Claims : 17
The invention relates to a connection element (300, 400), a wind turbine tower ring segment (210), a wind turbine tower section (200), a wind turbine tower (102) and a wind turbine (100), as well as a method for producing a wind turbine tower ring segment and for connecting two wind turbine tower ring segments (210, 220). In particular, the invention relates to a connection element, namely a first connection element (300, 400) for introducing into a wind turbine tower ring segment (210), comprising an anchoring bar (310, 410) having a first (311, 411) and a second end (312, 412), a connection flange (430) arranged at the first end (311, 411) of the anchoring bar (310, 410) for connecting the connection element (300, 400) to a second connection element (301, 401), which is introduced into a further wind turbine tower ring segment (220), in order to thereby connect the two wind turbine tower ring segments (210, 220), at least in order to support the connection thereof, as well as two, three or more anchoring elements (313, 413) arranged in a section of the anchoring bar (310, 410) adjacent to the second end (312, 412).
**Title of the invention:** GENERATOR ROTOR FOR A GENERATOR OF A WIND TURBINE OR A HYDROELECTRIC POWER PLANT, GENERATOR, AND WIND TURBINE AND HYDROELECTRIC POWER PLANT COMPRISING SAME

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**Abstract:**
The invention relates to a generator rotor (5) for a generator (1), in particular a slow rotating generator, of a wind turbine (100) or a hydroelectric power plant (200). According to the invention, the generator rotor (5) has a rotor belt (15) for holding multiple pole shoes, a hub flange (19) for securing the generator rotor (5) to a shaft, in particular a main shaft or a transmission shaft, of the wind turbine (100) or for securing to a number of turbine blades of the hydroelectric power plant (200), and a support structure (17) which is connected to the rotor belt (15) on one side and to the hub flange (19) on the other side in a rotationally fixed manner on both sides. The rotor belt (15) consists of a metal material with a first damping ratio (D1), and at least one of the components consisting of the support structure (17) or the hub flange (19) partly or completely consists of a material with a second damping ratio (D2), wherein the second damping ratio (D2) is greater than the first damping ratio (D1).

No. of Pages : 11  No. of Claims : 15
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201817035322 A
(19) INDIA
(22) Date of filing of Application :19/09/2018
(43) Publication Date : 04/01/2019

(54) Title of the invention : METHOD FOR PRODUCING 5-(BROMOMETHYL)-1-BENZOTHIOPHENE

(51) International classification :C07D333/54
(31) Priority Document No :2016-071574
(32) Priority Date :31/03/2016
(33) Name of priority country :Japan
(86) International Application No :PCT/JP2017/013206
    Filing Date :30/03/2017
(87) International Publication No :WO 2017/170850
(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 method for industrially producing 5-(bromomethyl)-1-benzothiophene. The production method according to the present invention comprises: (1) a step for introducing 5-methyl-1-benzothiophene, a brominating agent, and a solvent into a reactor; (2) a step for emitting light having a wavelength range of 200-780 nm inside the reactor; and (3) a step for recovering 5-(bromomethyl)-1-benzothiophene from the reactor.

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2) FUJIFILM CORPORATION

(72)Name of Inventor :
1) ISHIHARA Kentaro
2) ARAI Tsuyoshi

No. of Pages : 20 No. of Claims : 7
This displacement measurement device is provided with: a probe having a telescopic structure which is entirely extendable and contractible; and a measurement unit that measures the displacement amount of a tip end with respect to a base end of the probe. The probe is formed of: one cylindrical body or multiple cylindrical bodies having different diameters; and a columnar or cylindrical tip end member which is inserted into the cylindrical body having the smallest diameter among the one cylindrical body or multiple cylindrical bodies, so as to be freely movable forward and backward, and an end of which is fixedly attached to an object the displacement of which is to be measured. The one cylindrical body or multiple cylindrical bodies and the tip end member have a rotation providing mechanism for providing, when an inner side cylindrical body or the tip end member moves forward and backward in an extendable/contractible direction with respect to an outer cylindrical body, a rotary operation interlocking with the forward and backward movement.
(71) Name of Applicant:
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(72) Name of Inventor:
1) HASEGAWA Yohei

(57) Abstract:
In order to enable a decrease in delay before retransmission data are output, a transmission method comprises: transferring data input from a data input unit to a first transfer unit; determining the need for retransmission of the data; if it is determined that the retransmission is necessary, transferring to a second transfer unit retransmission data to be retransmitted; and outputting, before at least any one item of the data that remain in the first transfer unit at the point in time of the transfer of the retransmission data to the second transfer unit, the retransmission data in the second transfer unit to the same address as the data in the first transfer unit.
The invention relates to a method for determining a position and to a method for aligning at least one virtual reality headset (10) in amusement rides (20). The virtual reality headset (10) is a mobile virtual reality headset and has at least one receiver (40) or at least one apparatus (60). The receiver (40) receives a position signal (31) of a position transmitter (30) as a received signal (41), and the apparatus (60) receives an alignment signal (51) of an alignment transmitter (50). The invention additionally relates to an amusement ride with which a method according to the invention can be carried out.
The present disclosure generally relates to lyophilized pharmaceutical compositions comprising polymeric nanoparticles which, upon reconstitution, have low levels of greater than 0 micron size particles. Other aspects of the invention include methods of making such nanoparticles.
Systems and methods for delivering fluid within a lumen. A device (10) can include an elongated tubular structure (20) having a central opening (50) through which fluid flow. The central opening can be defined by an open proximal end (30) and an open distal end (40). The elongated tubular structure can have an elastic section toward the open distal end. The device can also include a blocking device (80) such as a balloon within the central opening of the elongated tubular structure that can help or be configured to prevent the flow of fluid through the central opening between the open proximal end and the open distal end. The device can further include a balloon (90) disposed on an outer surface of the elongated tubular structure. The balloon can be affixed to the outer surface of the elongated tubular structure at a proximal and/or distal attachment site (100, 110).
Compositions for controlled release of active ingredients and methods of making same are generally provided. In some embodiments, the composition comprises an active ingredient and a delivery material. In some embodiments, the composition comprises a volatile or gaseous active ingredient useful for applications in at least one of agriculture, pest control, odor control, and food preservation. In some embodiments, the active ingredient is a cyclopropene. In some embodiments, the active ingredient is an essential oil, a terpene, or a terpenoid. In some embodiments, the delivery material is a carbon material or a silicate material.
The Patent Office Journal No. 01/2019 Dated 04/01/2019

(12) PATENT APPLICATION PUBLICATION (21) Application No.201817035177 A
(19) INDIA (43) Publication Date : 04/01/2019
(22) Date of filing of Application :18/09/2018

(54) Title of the invention : APPARATUS AND METHOD FOR CONVERTING A SHEET INTO A CONTINUOUS STRIP

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(71) Name of Applicant :
1) VMI HOLLAND B.V.
   Address of Applicant : Gelriaweg 16 8161 RK EPE Netherlands

(72) Name of Inventor :
1) MULDER, Gerben

(57) Abstract :
The invention relates to an apparatus and a method for converting a sheet into a continuous strip, wherein the sheet has a sequence of cuts extending in a cutting direction transversely across the sheet with respect to the longitudinal direction to form a plurality of interconnected sheet sections, wherein the continuous strip has zig-zag sections, wherein the sheet sections are arranged to be pulled apart in a feeding direction to form the zig-zag sections, wherein the apparatus comprises a separator device with a retaining device for retaining an upstream sheet section with respect to a consecutive downstream sheet section in the feeding direction and a sensor device for detecting the pulling apart of the downstream sheet section from the upstream sheet section.

No. of Pages : 29 No. of Claims : 22
Title of the Invention: INDOLE REGULATION OF ANTIGEN PRESENTING CELLS

Abstract:
The disclosure provides methods and compositions for affecting the development of antigen presenting cell (APC, e.g., a macrophage or dendritic cell). The methods include maturing an APC, promoting anti-inflammatory phenotype, promoting development of a T regulatory cell (Treg) from a naive T cell. The methods generally include exposing an APC to a tryptophan derived microbiota metabolite (TDMM), such as an anti-inflammatory or pro-mucosal TDMM, and permitting the APC to mature. In some embodiments, the conditioned APC is exposed to a naive T cell to further promote development of a T regulatory cell (Treg). In some embodiments, the TDMM is selected from the group consisting of indole, indole-3-acetate, 5-hydroxyindole, and indole-3-pyruvate.

No. of Pages: 53 No. of Claims: 31
Title of the invention: POWER CONVERSION DEVICE, MOTOR DRIVE DEVICE, AND REFRIGERATOR USING SAME

Abstract:
The purpose of the present invention is to suppress current distortion due to load-side AC voltage, magnetic saturation (nonlinear) characteristics of a motor, etc., in a power conversion device and a motor drive device. A power conversion device for performing power conversion between an AC power supply and a DC load or between DC power supplies is provided with: an inverter circuit; a current detection means for detecting the AC current of the AC power supply; a voltage controller for generating a command voltage for the inverter circuit on the basis of an AC current signal detected by the current detection means; and a correction unit having a gain with respect to a specific frequency and correcting the command voltage on the basis of the AC current signal. The correction unit is configured to correct the command voltage that has been output from the voltage controller.
**Title of the invention:** SERVER AND METHOD OF CONTROLLING USER ENVIRONMENT BY SERVER

**Abstract:**
Disclosed is a server including a communication module and a control module. The communication module is configured to acquire first activity information of at least one user activity from an electronic device or a smart device outside the server. The communication module may then acquire device information corresponding to the at least one user activity based on the acquired first activity information. The control module is configured to generate environment control information corresponding to the at least one user activity and to acquire second activity information of a new user activity after the at least one user activity is acquired. The control module further configured to detect environment control information corresponding to the user activity in the generated environment control information, and to control the smart device based on device information corresponding to the detected environment control information among the acquired device information through the communication module.

No. of Pages : 48  No. of Claims : 15
In some aspects, the present disclosure provides vaccine compositions comprising an antigen and a diblock copolymer wherein the diblock copolymer is pH responsive. In some embodiments, these compositions activate the STING and/or the interferon receptor pathways. In some embodiments, the diblock copolymer has a pKa from about 6 to about 7.5. Also provided herein are methods of treatment using these compositions to treat an infectious disease or cancer.
The patent application provides a food package (100). In an embodiment, the food package includes a microcapillary sheet (11) having a first end and a second end and opposing surfaces. The microcapillary sheet includes a matrix composed of a polymeric material and a plurality of channels (15). The channels are disposed in parallel in the matrix and between the opposing surfaces. The channels (15) extend from the first end to the second end of the microcapillary sheet. The microcapillary sheet includes a perforation (16) traversing at least two channels. The perforation extends from a surface of the microcapillary sheet and through a wall of the at least two channels (15).
**Abstract:**

This surface-coated cutting tool is provided with a base material and a coating formed on the surface of the base material. The coating contains a hard layer. The hard layer contains a plurality of crystal grains having a sodium chloride crystal structure. The crystal grains have a laminated structure in which a first layer comprising AlxTi1-x nitride or carbonitride and a second layer comprising AlyTi1-y nitride or carbonitride are alternately laminated. The total thickness of an adjacent first layer and second layer is 3 nm to 40 nm. In relation to a plane within the hard layer that is parallel to the surface of the base material, when the angle of intersection between the direction normal to the surface of the base material and the direction normal to a face (111) that is a crystalline plane of the crystal grains is measured by analyzing each crystal orientation of the crystal grains using an electron backscatter diffraction device, the area ratio of crystal grains for which the angle of intersection is at least 0 degrees but less than 10 degrees is at least 40%.

**Title of the invention:** SURFACE-COATED CUTTING TOOL AND MANUFACTURING METHOD THEREFOR

**Abstract:**

This surface-coated cutting tool is provided with a base material and a coating formed on the surface of the base material. The coating contains a hard layer. The hard layer contains a plurality of crystal grains having a sodium chloride crystal structure. The crystal grains have a laminated structure in which a first layer comprising AlxTi1-x nitride or carbonitride and a second layer comprising AlyTi1-y nitride or carbonitride are alternately laminated. The total thickness of an adjacent first layer and second layer is 3 nm to 40 nm. In relation to a plane within the hard layer that is parallel to the surface of the base material, when the angle of intersection between the direction normal to the surface of the base material and the direction normal to a face (111) that is a crystalline plane of the crystal grains is measured by analyzing each crystal orientation of the crystal grains using an electron backscatter diffraction device, the area ratio of crystal grains for which the angle of intersection is at least 0 degrees but less than 10 degrees is at least 40%.

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**Name of Inventor:**

1) PASEUTH, Anongsack
2) KANAOKA, Hideaki
3) IMAMURA, Shinya
4) ONO, Satoshi

**Abstract:**

This surface-coated cutting tool is provided with a base material and a coating formed on the surface of the base material. The coating contains a hard layer. The hard layer contains a plurality of crystal grains having a sodium chloride crystal structure. The crystal grains have a laminated structure in which a first layer comprising AlxTi1-x nitride or carbonitride and a second layer comprising AlyTi1-y nitride or carbonitride are alternately laminated. The total thickness of an adjacent first layer and second layer is 3 nm to 40 nm. In relation to a plane within the hard layer that is parallel to the surface of the base material, when the angle of intersection between the direction normal to the surface of the base material and the direction normal to a face (111) that is a crystalline plane of the crystal grains is measured by analyzing each crystal orientation of the crystal grains using an electron backscatter diffraction device, the area ratio of crystal grains for which the angle of intersection is at least 0 degrees but less than 10 degrees is at least 40%.

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**Abstract:**

This surface-coated cutting tool is provided with a base material and a coating formed on the surface of the base material. The coating contains a hard layer. The hard layer contains a plurality of crystal grains having a sodium chloride crystal structure. The crystal grains have a laminated structure in which a first layer comprising AlxTi1-x nitride or carbonitride and a second layer comprising AlyTi1-y nitride or carbonitride are alternately laminated. The total thickness of an adjacent first layer and second layer is 3 nm to 40 nm. In relation to a plane within the hard layer that is parallel to the surface of the base material, when the angle of intersection between the direction normal to the surface of the base material and the direction normal to a face (111) that is a crystalline plane of the crystal grains is measured by analyzing each crystal orientation of the crystal grains using an electron backscatter diffraction device, the area ratio of crystal grains for which the angle of intersection is at least 0 degrees but less than 10 degrees is at least 40%.
The invention provides an inflatable insertion device (10) capable of being percutaneously introduced into a patient's body. The insertion device (10) comprises an inflatable element (12) having a distal end (18) and a proximal end (16) and which is operable between a collapsed condition and an inflated condition by introducing an inflating fluid therein. An elongate member (22) extends internally of the inflatable element (12) from its distal end (18). The internal member (22) is capable of being withdrawn towards the proximal end (16) of the inflatable element (12) to result in the distal end (18) of the element (12) being withdrawn towards the proximal end (16) internally of the element (12). The invention further provides a locating device comprising a catheter having a catheter tube fitted with one or more inflatable insertion devices at a distal end thereof.
(54) Title of the invention: ELECTRICITY GENERATION METHOD AND DEVICE USING COMBUSTION OF FOSSIL FUELS AND HAVING ZERO-CARBON EMISSION

(51) International classification: F01D15/10, F02C3/22, E21B43/00

(31) Priority Document No: 2016100982964
(32) Priority Date: 23/02/2016
(33) Name of priority country: China
(86) International Application No: PCT/CN2016/079626
Filing Date: 19/04/2016

(87) International Publication No: WO 2017/143652

(61) Patent of Addition to Application Number: NA
Filing Date: NA

(62) Divisional to Application Number: NA
Filing Date: NA

(57) Abstract:
A electricity generation method and device using combustion of fossil fuels and having zero-carbon emission provide a complete technical solution of carbon capture and storage (CCS): electricity is generated by carrying out oxygen-enriched combustion of coal and other fossil fuels in an electricity plant at a carbon dioxide sequestration location, and the produced carbon dioxide is introduced, in an onsite manner, into a saline aquifer at the carbon dioxide sequestration location, and the generated electricity is outputted outside. By means of the method, the whole transportation process comprising loading, long-distance transportation and unloading of coal is omitted, so that the difficulty and cost for implementing the complete CCS technical solution are greatly reduced, the feasibility of the CCS technical solution is improved, the implementation of the large-scale carbon capture and storage during electricity generation based on combustion of coal and other fossil fuels is facilitated, electricity is generated by means of combustion of the fossil fuels while zero-carbon emission is achieved, a technical path is added for breaking through difficulties in CCS, so as to finally implement large-scale comprehensive utilization of a great quantity of coal, oil, gas and other fossil fuels and a large quantity of saline aquifer geological resources.

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No. of Pages: 16 No. of Claims: 9
(54) Title of the invention : MICROFLUIDIC NETWORK DEVICE

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(57) Abstract :
Microfluidic network device (2) configured to supply reagents to a biological tissue sampling device (1), comprising a plurality of microfluidic inlet channels (12) connected to respective sources of said reagents, at least one common outlet channel (22), and a plurality of valves (36) interconnecting an outlet end (14) of each of said plurality of inlet channels to said at least one common outlet channel.

No. of Pages : 15 No. of Claims : 21
A flexible electrical connector (10) for connecting one end (3, 4) of a cathode collector bar (11) to a cathodic busbar (5) of an electrolytic cell, suitable for the Hall-Hroult electrolysis process, said connector comprising a flexible elongated body (12) comprising aluminium sheets or strips, means (14, 16) for attaching a first end (12) of said body to a respective end (4) of said cathode collector bar (11), means for attaching a second end (12) of said body to said busbar (5), said connector being characterized in that said means for attaching said second end of this body to said cathodic busbar comprise a first interface member (20) which comprises: - an electrical connection member (22; 122; 222; 322; 422) made of aluminium, permanently attached to said second end (12) of the body (12), - a mechanical fixation member (24; 124; 222; 322; 422) adapted to be fixed in a removable way on said cathodic busbar.
**Title of the invention:** CONNECTING ELEMENT AND METHODS FOR CONNECTING PARTIAL RING SEGMENTS

| (51) International classification | F03D13/20E04H12/12E04B1/21 |
| (31) Priority Document No | :10 2016 106 526.9 |
| (32) Priority Date | :08/04/2016 |
| (33) Name of priority country | :Germany |
| | :03/04/2017 |
| (86) International Application No | :WO 2017/174480 |
| (87) International Publication No | :NA |
| (61) Patent of Addition to Application Number | :NA |
| | :NA |
| (62) Divisional to Application Number | :NA |
| | :NA |
| (57) Abstract: | The invention relates to a connecting element (300, 300, 300) for use in a wind turbine tower section (200). The invention further relates to a wind turbine tower section (200) and to a wind turbine tower. The invention further relates to a wind turbine (100) and to methods for connecting partial ring segments (210, 220). The connecting element (300, 300, 300) comprises a first side wall (310, 310, 310) having a first opening (312, 312, 312) that can be penetrated by a fastening element, a second side wall (320, 320, 320) lying opposite the first side wall and having a second opening (322, 322, 322) that can be penetrated by a fastening element, an upper transverse wall (330, 330, 330) having two upper openings (332, 332, 334), each of which can be penetrated by an assembly fastening element, and a lower transverse wall (340, 340, 340) lying opposite the upper transverse wall and having two lower openings (342, 344, 344), each of which can be penetrated by an assembly fastening element, wherein the upper and lower transverse walls (330, 330, 340, 340, 340) are arranged substantially orthogonal to the first and second side walls (310, 310, 310, 320, 320, 320) and connect the first and second side walls. |

No. of Pages : 30 No. of Claims : 18
A gun safe (10) has a container body (20), a hinged door (40) and a locking assembly (60). The container body (20) has a number of apertures (29) formed in a bolt receiving side (28) of the jam (27) to receive a corresponding number of door bolts (61) extendable from a free end (41) of the door (40). The locking assembly (60) has a barrier panel (72) spaced from the jam (26) whereby to define a narrow longitudinal slot (73). The slot (73) is adapted to receive a guard member (43) welded to an internal surface of the door (40) adjacent the free end (41), and is reinforced by a barrier panel (72) against later flexing or distortion. The closure (140) optionally is mounted to a multi-hinge device (137) that permits the closure to reciprocally translate in a plane P corresponding to the opening (126). The barrier member (170) is optionally widely spaced from the second edge (128) of the jam (127) to accommodate the lateral travel of the guard member (143) corresponding to the travel of the closure (140). A handle mechanism (148) controls the lateral movement of the closure (140) and the retraction or extension of the locking bolts (161).
The embodiments of the invention disclose a data transmission method comprising: a base station receives terminal information transmitted by terminal equipment; the base station determines, according to the terminal information, that the terminal equipment is able to communicate with the base station via a first relay node; and the base station transmits to the terminal equipment a first notification message to instruct the terminal equipment to communicate with the base station via the first relay node. In the embodiment of the invention, the base station can instruct the terminal equipment to switch from a cellular link to a sidelink passing through the first relay node, thereby ensuring communication quality between the terminal equipment and the base station.
A display imaging system, a display imaging method, and a heads-up display are disclosed. The display imaging system comprises: an imaging window (2) comprising a transflective membrane (3), and an image source (1) for emitting s-polarized light incident to the transflective membrane (3). The transflective membrane (3) has an average reflectivity greater than 50% for use with s-polarized light. The imaging window (2) is also used for transmitting ambient light. The display imaging system of the present invention can lower the required brightness for the image source (1) and eliminate duplicate images, thereby obtaining better visual results and lowering production costs.
(57) Abstract:
There is described a process of measuring print-to-print register of a multicolour print (A-D) provided in an effective printed area (EPA) of the surface of printed material, which multicolour print (A-D) is formed on the printed material by means of one or more printing presses and includes at least a first pattern (A) and a second pattern (B) distinguishable from the first pattern (A), the effective printed area (EPA) being provided with a matrix arrangement of individual imprints (P) which are each provided with the multicolour print (A-D) and are repeated over the surface of the effective printed area (EPA) along a pattern of rows and columns. Measurement of an actual print-to-print register between the first and second patterns (A, B), as reflected on the printed material, is derived from processing and finding a correspondence between (i) at least one sample image (SIA, SIB) of the printed material covering at least a portion of the first and second patterns (A, B), and (ii) at least one corresponding reference image (RIA, RIB) generated using prepress design data of the first and second patterns (A, B). Furthermore, the process is repeated for multiple ones of the individual imprints (P) so as to derive a set of multiple measurements of the actual print-to-print register between the first and second patterns (A, B) at various imprint locations over the effective printed area (EPA), which set of multiple measurements is mapped into a corresponding print-to-print register map (MB-A, MC-A, MD-A,...) that is representative of print-to-print register deviations at the various imprint locations. Also described is a measuring device for carrying out this process and a process of measuring and correcting print-to-print register of a multicolour print.
An end effector for use with a surgical stapler is disclosed, the end effector comprises a cartridge body comprising a longitudinal axis and a plurality of staple cavities defined in the cartridge body. The staple cavities comprise a first annular row of staple cavities extending around the longitudinal axis and a second annular row of staple cavities extending around the longitudinal axis. The end effector further comprises staples removably stored in the staple cavities and a ramp rotatable about the longitudinal axis to sequentially eject the staples from the staple cavities. The end effector further comprises a cutting member which is deployed after the staples are ejected from the staple cavities.
Title of the invention: SURGICAL STAPLING SYSTEM COMPRISING A CONTOURABLE SHAFT

Abstract:
A surgical instrument configured to deploy an array of circular staples is disclosed which comprises a contourable frame.

No. of Pages: 73
No. of Claims: 18
A surgical end effector for use with a surgical instrument that includes an elongate shaft assembly that includes a rotary output drive shaft is disclosed. An elongate channel is attached to the elongate shaft assembly. An anvil frame that comprises a proximal end and a distal end is selectively movable between open and closed positions relative to the elongate channel. An anvil concentric drive member is rotatably supported by the anvil frame and is configured to receive rotary drive motions from the rotary output drive shaft of the surgical instrument when the anvil frame is in the closed position. A firing member is in driving engagement with the anvil concentric drive member for linear travel through the end effector.
The invention relates to a composition containing an acetal of an aldehydic tanning agent for tanning hides and/or pelts and to a method for tanning hides and/or pelts in order to produce leather, wherein an acetal of an aldehydic tanning agent is used. By lowering the pH value, the aldehydic tanning agent can be released, whereby a tanning step is initiated. The composition and the method according to the invention are characterized by a lower toxicity compared to conventional compositions and tanning methods based on aldehydic tanning agents. Furthermore, an improved penetration of the tanning agents into deeper layers of the hide and/or the pelt is facilitated such that a particularly homogeneous tanning is achieved.

No. of Pages : 19  No. of Claims : 26
Title of the invention: SURGICAL STAPLING SYSTEM CONFIGURED TO PROVIDE SELECTIVE CUTTING OF TISSUE

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Abstract:
A surgical instrument assembly is disclosed which comprises a shaft, an articulation joint, and an end effector rotatably connected to the shaft about the articulation joint. The end effector comprises a first jaw, a second jaw movable relative to the first jaw, a staple cartridge comprising a plurality of staples removably stored therein, and an anvil configured to deform the staples. The end effector further comprises a drive input, a closure system configured to move the second jaw between an open position and a closed position, a staple firing system configured to eject the staples from the staple cartridge, and a transmission positioned in the end effector, wherein the transmission is configurable in three operating states for operably coupling the closure system and the staple firing system with the drive shaft.

No. of Pages: 73 No. of Claims: 19
The purpose of the present invention is to achieve appropriate communication in a next-generation communication system to which multiple numerologies are introduced. Thus, a user terminal having a control unit for controlling communication by using one or more of the multiple numerologies which have different subcarrier intervals, and also having a receiving unit for receiving information pertaining to the numerologies used in communication, wherein the length of the transmission time interval (TTI) or the number of symbols in each TTI differs for the multiple numerologies which have different subcarrier intervals.
The present invention presents a contactor provided between a conductor, which can be contacted by a user, of an electronic device and an inner circuit thereof, the conductor comprising: a contact portion and an electric shock preventing portion provided to face each other and configured to at least partially contact the conductor and the inner circuit, respectively, wherein the electric shock preventing portion comprises a laminate having a plurality of insulating sheets vertically laminated between the inner circuit and the conductor and an outer electrode formed on a side surface of the laminate; at least a part of the outer electrode extends to a surface of the laminate and is connected to a grounded terminal or to the conductor; and at least another part of the outer electrode extends to another surface of the laminate and can contact the contact portion.
The objective of the present invention is to achieve appropriate communication in a next-generation communication system. A user terminal according to the present invention includes: a control unit which controls communications using a radio frame including a plurality of transmission time intervals (TTIs) capable of switching between a downlink and an uplink, and a prescribed TTI for DL transmission set at predetermined intervals; and a receiving unit which receives a synchronization signal and a notification signal in the prescribed TTI.
Title of the invention: METHODS OF VITAMIN D TREATMENT

Abstract:
Methods for treating vitamin D insufficiency and secondary hyperparathyroidism in patients having CKD comprising administering repeat doses of 25-hydroxyvitamin D are disclosed. The methods comprise administering 25-hydroxyvitamin D in an amount effective to safely raise the patients serum 25-hydroxyvitamin D level to greater than 90 ng/ml and/or to control the patients serum ratio of 25-hydroxyvitamin D to 24,25-dihydroxyvitamin D to less than 20.

No. of Pages: 41 No. of Claims: 22
Disclosed in the present application are a method and a device for unlocking terminals. The method comprises: when receiving a start instruction used to start an application, displaying a masking image layer on a terminal screen; receiving an unlock instruction input based on the masking image layer; if the unlock instruction matches a preset instruction, starting the application. The present application solves the technical problem in the prior art of relatively low terminal unlock method security.
(54) Title of the invention : MEDICAMENT

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| (31) Priority Document No | :NA |
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| (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 belongs to the fields of pharmaceuticals and cosmetics, and concerns on the one hand a medicament for the inhibition of and refers also on the cosmetic, non-therapeutic use for the treatment of hyperpigmentation, particularly induced by sun light radiation, preferably induced by visible light radiation.

No. of Pages : 44 No. of Claims : 15

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2) MEYER, Imke
3) JOHNCOCK, William
A service providing system that provides service to a communication terminal manages terminal identifying information, which includes user identifying information as an authentication target part used to authenticate the user of a communication terminal and which is used for identifying the communication terminal, as terminal identifying information for identifying a log-in requesting communication terminal in association with communication state information representing the communication state of the communication terminal, manages terminal identifying information relating to a plurality of terminals, as terminal identifying information relating to a communication source and a communication destination capable of communicating with the communication source, in association with one another, receives a log-in request from a communication terminal and terminal identifying information for identifying the communication terminal, searches for communication state information representing an on-line state from among communication state information associated with identifying information relating to other terminals including the same user identifying information as the user identifying information included in the terminal identifying information, and manages individual terminal identifying information, which is associated with the communication state information representing the on-line state on the basis of the search result, as individual terminal identifying information relating to a communication source and a communication destinations in association with one another.
A method for manufacturing a cellulose product, comprising the steps: dry forming a cellulose blank in a dry forming unit; arranging the cellulose blank in a forming mould; heating the cellulose blank to a forming temperature in the range of 100°C to 200°C; and pressing the cellulose blank in the forming mould with a forming pressure of at least 1 MPa.
In a steam turbine equipped with a rotor (12) a free-end part of which is secured in the radial direction by means of a journal bearing (not shown in the figures) and a secured-end part of which is secured in the axial direction by a thrust bearing (16), and a casing (11) a secured-end part of which is secured in the axial direction (rotor axial direction) by means of the thrust bearing (16), this casing position adjustment device, which adjusts the radial position of the casing 11 with respect to the rotor (12) due to thermal elongation, is equipped with: diaphragm-shaped low-pressure casing end plates (11a), which are end plates of the low-pressure casing of the casing (11) that face the free side in the axial direction, and are capable of being deformed in the axial direction; and an actuator (17) that causes the low-pressure casing end plates (11a) to deform so as to elongate toward the free side in the axial direction.
This journal bearing is equipped with a cylindrical carrier ring, two or more bearing pads configured so as to support a rotor shaft and provided on the inner-circumferential side of the carrier ring, one or more oil supply units which supply lubricating oil between the bearing pads and the rotor shaft, and are provided on the inner-circumferential side of the carrier ring, and a pair of side plates mounted along the outer circumference of the rotor shaft to one end of the carrier ring in the axial direction and to the other end thereof. The journal bearing also has at least one opening which is configured so as to open the interior bearing space surrounded by the two or more bearing pads and the pair of side plates to outside air, and to discharge the lubricating oil from the interior bearing space to the exterior.

No. of Pages : 17 No. of Claims : 10
**Title of the invention:** CATALYST FOR METAL MERCURY OXIDATION REACTIONS AND NITROGEN OXIDE REDUCTION REACTIONS, AND EXHAUST GAS PURIFICATION METHOD

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<td>Titanium dioxide, ammonium molybdate, ammonium metavanadate, phosphoric acid, gypsum dehydrate, and water are mixed in a kneader to obtain a paste, and the paste is applied to a metal lath substrate, then dried and fired, to form a catalyst for metal mercury oxidation reactions and nitrogen oxide reduction reactions, the catalyst containing gypsum and oxides of titanium, molybdenum, vanadium, phosphorus.</td>
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Title of the invention : D2D COMMUNICATION METHOD AND DEVICE

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Abstract:
Discloses in the present invention are a D2D communication method and a device, comprising: a user equipment UE receiving resource pool configuration information which includes frequency domain resource positional information and time domain resource positional information, the frequency domain resource positional information including a frequency domain resource pool indication and a frequency domain interval of two consecutive Device to Device D2D resource; the UE determining available frequency domain resources according to the resource pool configuration information; the UE performing D2D communication on the available frequency domain resources, thereby reducing the power consumption of the user equipment and detection complexity.

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Name of Inventor: 1) ZHAO, Zhenshan

No. of Pages: 21 No. of Claims: 44
Title of the invention: ACTIVE COMPRESSION APPARATUS, METHODS OF ASSEMBLY AND METHODS OF USE

Abstract:
Compression devices for joining tissue and methods for using and fabricating the same.

No. of Pages: 79 No. of Claims: 25
A dynamic train platform located security system comprises a single expanse of interconnectable and longitudinally displaceable, vertical barriers for isolating a passenger waiting area at a train station from a platform edge area, including at least two longitudinally spaced and openable portal modules for permitting passage through a corresponding central opening; and a control system for causing the single expanse to be longitudinally displaced in unison, in response to a detected stop position of a train that has arrived at the station, until each portal module central opening is aligned with corresponding doors of the arrived train. In one embodiment, the system further comprises, in conjunction with a drive unit for initiating controlled and aligned movement, a passageway directly extending from a corresponding portal module central opening to a door of the arrived train and over which elderly and handicapped passengers are able to walk without having to climb stairs.

No. of Pages : 22 No. of Claims : 13
The present invention relates to a method for activating a segment for enabling electrical power delivery to vehicles, the segment being one of a plurality of segments consecutively arranged along a single track line of an electric road system that further comprises a base station, the method comprising: receiving, at the base station, identification data transmitted from a vehicle, the identification data identifying the vehicle; associating an activation key with the identification data with each other; transmitting the activation key from the base station to the segment; receiving, at the segment and via short range radio communication, an activation request sent from the vehicle, wherein the activation request comprises an identification key associated with the identification data; confirming, at the segment, that the received identification key is associated with the received activation key; and upon positive confirmation, activating the segment for enabling power delivery to the vehicle.
Title of the invention: **ASSEMBLED NOTE-ISSUING APPARATUS, AND FINANCIAL SELF-SERVICE APPARATUS**

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**Abstract:**
An assembled note-issuing apparatus (100), and financial self-service apparatus. The assembled note-issuing apparatus comprises a base (10), and a note container (20), a paper delivery assembly (30), a printing assembly (40), and a temporary storage assembly (50) sequentially arranged on the base (10). The paper delivery assembly (30), the printing assembly (40), and the temporary storage assembly (50) are in communication with the note container (20) via a note channel, and the paper delivery assembly (30) delivers, via the note channel, a note in the note container (20) to the printing assembly (40) to print. The printing assembly (40) transports to the temporary storage assembly (50) the printed note for temporary storage. The assembled note-issuing apparatus (100) achieves functions of storage, delivery, printing, and temporary storage and recycling respectively by means of the note container (20), the paper delivery assembly (30), and the printing assembly (40). In this way, when a user desires to operate a service related to a note, the assembled note-issuing apparatus (100) of the present invention enables the operation, thus facilitating the operation, reducing time spent by the user on waiting for a bank teller, and improving working efficiency of bank tellers. In addition, the assembled note-issuing apparatus (100) has advantages of a compact overall structure and small occupied space.
Disclosed are an octahydroanthracene compound as represented by formula (I) or (II), a preparation method for same, and uses of same, which provides great therapeutic effects for tumors and neurodegenerative diseases and is prepared mainly with benzene that serves as the starting material and undergoes reactions such as Friedel-Crafts reactions, nitration, reduction, sulfonamide formation, reduction, urea formation or amide formation to produce the target compound.

No. of Pages : 31 No. of Claims : 14
**Title of the invention:** ANTI-SKIMMING ELECTROMAGNETIC INTERFERENCE DETECTION METHOD AND DEVICE

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|                                  | 2) GONG, Wenchuan |
|                                  | 3) JIN, Xiaofeng |

**Abstract:**
Provided are an anti-skimming electromagnetic interference detection method and device. The detection method comprises: generating an original magnetic stripe signal, and acquiring a composite interfered magnetic stripe signal (S1), wherein the interfered magnetic stripe signal is formed by combining the original magnetic stripe signal and an interference signal from an electromagnetic interference source to undergo detection; performing decoding on the interfered magnetic stripe signal to obtain decoded parameters (S2); and determining whether original magnetic stripe parameters corresponding to the original magnetic stripe signal are consistent with the decoded parameters (S3), if so, a detection result indicates that the electromagnetic interference source cannot satisfy a requirement of a magnetic card reader with respect to the electromagnetic interference; otherwise, a detection result indicates that the electromagnetic interference source can satisfy a requirement of a magnetic card reader with respect to electromagnetic interference. The anti-skimming electromagnetic interference detection method and device of the present invention can accurately determine whether an electromagnetic interference source can satisfy a requirement of a magnetic card reader with respect to electromagnetic interference, thus enhancing the safety of the magnetic card reader and avoiding skimming of magnetic card information.

No. of Pages : 14 No. of Claims : 4
The invention relates to a novel method for the diagnosis of non-alcoholic steatohepatitis (NASH) and for classifying a subject as a potential receiver of a treatment for NASH.
The present invention is directed to ILT7 binding molecules e.g. anti-ILT7 antibodies and methods for treating or preventing conditions and diseases associated with ILT7-expressing cells such as autoimmune diseases.
The present invention relates to a hybrid catalyst composition comprising: a first transition metal compound represented by chemical formula 1 and a second transition metal compound represented by chemical formula 2 the chemical formulas being different from each other. The hybrid catalyst composition comprising the first and second transition metal compounds exhibits high catalytic activity and can prepare a polyolefin having processability and mechanical properties.
A device comprises a structure (100.0) for conducting a first fluid the structure (100.0) having in addition an interface for conducting a second fluid wherein the first fluid can be brought into contact with the second fluid at the interface of the structure. A flow interrupter (120.0) for interrupting a flow of the second fluid is situated at the interface of the structure (100.0).
A process for converting post-industrial or post-consumer waste leather materials to leather fibers is disclosed. The process involves obtaining post-industrial or post-consumer waste leather materials with a surface finish removing the surface finish reduced the size of the materials to a size between about 0.5 and about 3 inches in length and in width and adding a surfactant. After the surfactant has been added the waste leather materials are again reduced in size to between 3mm and 9mm in length to form leather fibers and a humectant and/or lubricant is added to the fibers optionally after first opening up with steam. FTIR or other analytical chemistry can be used to identify the surface finishes before they are removed which allows for selection of the most appropriate treatment to remove the finish.

No. of Pages : 22 No. of Claims : 10
The present invention relates to an apparatus for quality deconstruction of textile waste materials which comprises an initial feedbox or hopper, a feedbox conveyor, one or more than one serially-connected treatment/deconstruction groups, an outlet conveyor, and a centralized computer controller. The apparatus described herein can produce fibers with one or more enhanced qualities relative to those fibers produced by tearing drums.

No. of Pages : 26 No. of Claims : 36
**Title of the invention:** PROCESS AND DEVICE FOR IN-AIR PRODUCTION OF SINGLE DROPLETS COMPOUND DROPLETS AND SHAPE-CONTROLLED (COMPOUND) PARTICLES OR FIBERS

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**Abstract:**
The invention provides a production process comprising a formation process the formation process comprising: contacting a first liquid material and a second liquid material with each other at a contact point in a gas atmosphere wherein at the contact point at least one of the first liquid material and the second liquid material is provided as a liquid jet propagating in a direction to provide at the contact point a third jet of a coalesced third material propagating in a third direction. The invention further relates to a device for a production process comprising a formation process.

No. of Pages : 67 No. of Claims : 26
The invention concerns a device for bending glass sheets comprising an upper bending shape and a bending support said upper bending shape and/or said bending support being laterally movable relative to each other said bending support comprising a blank mould for bending a glass sheet by gravity and a pressing mould configured to press the glass sheet against said upper shape one of said two moulds of the bending support being surrounded by the other when viewed from above at least one of said two moulds of the bending support being movable in a vertical direction relative to the other. The invention further relates to a bending method using said device.
### Title of the invention

PLASMA DEPOSITION METHOD

### International classification

C23C16/30, C23C16/44, C23C16/50

### Patent of Addition

No. of Pages: 16
No. of Claims: 17

### Priority Document No.

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### Priority Date

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### International Application

No. of Pages: 16
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### Publication Date

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### Abstract

A plasma deposition method in which a cover layer is deposited onto the internal walls of an empty plasma chamber by plasma deposition of a precursor mixture comprising (i) one or more hydrocarbon compounds of formula (A) or (ii) one or more C1-C3 alkane C2-C3 alkene or C2-C3 alkyne compounds: (Formula (A)) wherein: Z1 represents C1-C3 alkyl or C2-C3 alkenyl; Z2 represents hydrogen C1-C3 alkyl or C2-C3 alkenyl; Z3 represents hydrogen C1-C3 alkyl or C2-C3 alkenyl; Z4 represents hydrogen C1-C3 alkyl or C2-C3 alkenyl; Z5 represents hydrogen C1-C3 alkyl or C2-C3 alkenyl; and Z6 represents hydrogen C1-C3 alkyl or C2-C3 alkenyl.
The present invention relates to a recombinant bacterium based on a non-pathogenic bacterium that has a modified genome containing a nucleic acid of interest from a pathogen that is detected by a molecular diagnostic assay and that mimics the diagnostic profile of the pathogen. The invention further relates to a diagnostic control composition comprising the recombinant bacterium and to methods for producing the recombinant bacterium. The recombinant bacterium is a safe reliable quality control for the detection of pathogens such as Mycobacterium tuberculosis and Staphylococcus aureus. The invention also relates to a kit comprising either the recombinant bacterium compositions containing the recombinant bacterium or bacteria produced according to the method of the invention.
A method of treating a substrate with a solid particulate material and a treatment liquor comprising: agitating the substrate with said solid particulate material and said treatment liquor; and (a) separating the substrate from effluent comprising solid waste fragments derived from the substrate said solid particulate material and the treatment liquor; (b) transferring said effluent to a hydrocyclone separator comprising an inlet a first outlet and a second outlet wherein the effluent is fed into the hydrocyclone separator via the inlet; (c) separating the effluent in the hydrocyclone separator to produce a first stream and a second stream wherein the first stream comprises said solid particulate material and exits the hydrocyclone separator via the first outlet and wherein the second stream comprises treatment liquor and solid waste fragments and exits the hydrocyclone separator via the second outlet; and (d) collecting the first stream after it exits the hydrocyclone separator via the first outlet.
The present disclosure provides a non-conventional energy based micro-climate controlled shelter for rough and rugged terrains with extreme climatic conditions including high altitude areas. The present disclosure particularly relates to a self-sufficient shelter in terms of energy generation and the shelter also have the flexibility of installation at any surface including ice / snow and uneven and rugged terrain surfaces. The shelter comprises of an airlock area to prevent temperature dissipation at thermal junction between outside of the shelter and the entrance. The airlock area leads to a green house based passage that gets heated during sun shine and creates tunneling effect by which hot air moves inside the shelter. Space heating inside the shelter is done through layout of PEX pipes and circulation of thermic fluid which is heated in evacuated tube collectors. The heat is absorbed in PCM material during day and released at night to decrease day and night temperature variations. The roof also acts as a heat trap and buffers heat loss from the shelter during night. All the electrical fitments in the shelter are run through photovoltaic cells that generate electricity from solar energy. Melting of snow to meet water requirements of the shelter is achieved by concentrating solar energy through Fresnel lens and freezing of water in underground tank is prevented by utilizing geothermal heat as well as harnessing the phase change property of water. Figure 1
The present disclosure provides alert implants that comprise a medical device and an implantable reporting processor (IRP) where one example of such a medical device includes a component for a total knee arthroplasty (TKA) such as a tibial extension a femoral component for hip replacements a breast implant a distal rod for arm or leg breakage repair a scoliosis rod a dynamic hip screw a spinal interbody spacer and tooling and methods that may be used to form the alert implant and uses of such alert implants in the health maintenance of patients who receive the implant.
The invention is directed to a multiple-component composition that can be used for producing a corrosion inhibiting (meth)acrylic hydrogel. The multiple-component composition comprises at least one water soluble (meth)acrylic compound at least one free radical initiator at least one benzoate and optionally at least one catalyst for free radical formation. The invention is also directed to a method for producing a hydrogel to a hydrogel obtainable by the method to a (meth)acrylic injection material and to a method for sealing cracks voids flaws and cavities in building structures.

No. of Pages : 31 No. of Claims : 15
**Title of the invention**: TORIC INTRAOCULAR LENS AND INTRAOCULAR-LENS INSERTION INSTRUMENT

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**Abstract**:
Provided is a toric intraocular lens whereby pushing out of the toric intraocular lens by an intraocular-lens insertion instrument can be further stabilized. The toric intraocular lens according to the present invention is configured having a lens body having a flattest meridian and a steepest meridian a pair of support parts for positioning the lens body inside an eye and joining parts for joining the lens body and the support parts the toric intraocular lens being accommodated in an intraocular-lens insertion instrument having a substantially cylindrical instrument body having at a distal end thereof an insertion cylinder for inserting the toric intraocular lens into the eye and a plunger for moving the toric intraocular lens to the distal end of the insertion cylinder the joining parts being provided in positions at which the joining parts face each other with the optical axis center of the lens body interposed therebetween one end of the flattest meridian of the lens body being positioned on the opposite side of an axis connecting the joining parts through the optical axis center of the lens body from the position at which the distal end of the plunger comes in contact on the periphery of the lens body and an acute angle formed by the flattest meridian of the lens body and an axis on which the plunger pushes out the toric intraocular lens being greater than 0° and no greater than 90°.

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The invention relates to a device (1) for conveying and retaining a glass sheet (2) comprising conveying and retaining means for retaining a glass sheet in position in particular in a horizontal position characterised in that the conveying means comprise: at least two parallel conveyor systems (10A 10B) known as the lateral conveyor systems which are spaced apart from one another and a plurality of wires (11A; 11B) spaced apart from one another extending transversely to the lateral conveyor systems and supported by the latter whereby the glass sheet is intended to be applied locally along either all or part of the lateral sides thereof against the wires; and pressurised water and/or air jet supply means (5) said pressurised jets being intended to be directed towards the upper surface of the glass sheet i.e. the surface opposite that supported by the wires in order to retain the glass sheet pressed against the wires.
Abstract:
A client computing device (115) determines a desired adjustment to a transmission rate of a media stream (245) received from the content server device (110) and encodes the desired adjustment to the transmission rate in an object ordering priority (255) field of a request (250) for a media portion (215). The client computing device (115) sends the request (250) to the content server device (110) to adjust the transmission rate of the media stream (245) with respect to the media portion (215). The content server device (110) receives the request (25) for the media portion (215) from the client computing device (115) and adjusts the transmission rate of the media stream (245) based on the object ordering priority (255). The content server device (110) transmits the media portion (215) to the client computing device (115) via the media stream (245) at the adjusted transmission rate.
Title of the invention: DEUTERATED KETAMINE DERIVATIVES

Abstract:
The present disclosure provides compounds of Formula I and/or Formula II or pharmaceutically acceptable salts thereof: wherein D is deuterium and each deuterium has deuterium enrichment of no less than about 10% compositions containing these compounds and methods of using these compounds.
A UE may receive a beam modification command that indicates a set of transmit beam indexes corresponding to a set of transmit beams of a base station and each transmit beam index of the set of transmit beam indexes may indicate at least a transmit direction for transmitting a transmit beam by the base station. The UE may determine a set of receive beam indexes corresponding to receive beams of the UE based on the set of transmit beam indexes and each receive beam index of the set of receive beam indexes may indicate at least a receive direction for receiving a receive beam by the UE. The UE may receive from the base station a signal through at least one receive beam corresponding to at least one receive beam index included in the set of receive beam indexes.
The present invention relates to a slim-type stator using a multilayer substrate which can maximize torque generated in a rotor opposite thereto and achieve an increase in air volume and a single phase motor and a cooling fan using the same. The slim-type stator of the present invention comprises: a multilayer substrate; and a plurality of coil patterns patterned on each substrate layer of the multilayer substrate and connected to each other by a through hole wherein the multilayer substrate comprises at least one protrusion part corresponding to the plurality of coil patterns and at least one groove part disposed between the coil patterns.
Title of the invention: VIDEO CODING METHOD AND APPARATUS

Abstract:
The present invention relates to the encoding and decoding of a quantization coefficient group among video compression techniques and more particularly to a method for performing encoding and decoding by using a variable-sized quantization coefficient group. A video decoding method according to the present invention comprises the steps of: obtaining information of a quantization coefficient group for current inverse quantization; obtaining quantization coefficients through entropy decoding on the current quantization coefficient group; obtaining transform coefficients through an inverse quantization process for the obtained quantization coefficients; and obtaining differential signals through an inverse transform process for the obtained transform coefficients.
Title of the invention: GLASS-BASED ARTICLES INCLUDING A METAL OXIDE CONCENTRATION GRADIENT

Abstract:
Embodiments of a glass-based article including a first surface and a second surface opposing the first surface defining a thickness (t) of about 3 millimeters or less (e.g. about 1 millimeter or less) and a stress profile wherein all points of the stress profile between a thickness range from about 0·t up to 0.3·t and from greater than about 0.7·t up to t comprise a tangent with a slope having an absolute value greater than about 0.1 MPa/micrometer are disclosed. In some embodiments the glass-based article includes a non-zero metal oxide concentration that varies along at least a portion of the thickness (e.g. 0·t to about 0.3·t) and a maximum central tension in the range from about 80 MPa to about 100 MPa. In some embodiments the concentration of metal oxide or alkali metal oxide decreases from the first surface to a value at a point between the first surface and the second surface and increases from the value to the second surface. The concentration of the metal oxide may be about 0.05 mol% or greater or about 0.5 mol% or greater throughout the thickness. Methods for forming such glass-based articles are also disclosed.
A traceable cable assembly includes a traceable cable having at least one data transmission element a jacket at least partially surrounding the data transmission element and first and second tracing optical fibers extending along at least a portion of a length of the traceable cable. The traceable cable assembly also includes a connector provided at each end of the traceable cable. The first and second tracing optical fibers each have a light launch end and a light emission end. The light launch ends of the first and second tracing optical fibers each include a bend. The bend allows for launching of light into the light launch ends without disengaging the first or second connectors from corresponding connector receptacles.
Title of the invention: IMPROVED SEPARATORS FOR ENHANCED FLOODED BATTERIES AND RELATED METHODS

Abstract:
Disclosed are improved separators battery separators enhanced flooded battery separators batteries cells and/or methods of manufacture and/or use thereof; battery separators for enhanced flooded batteries; methods systems and battery separators for enhancing battery life reducing internal electrical resistance increasing cold cranking amps and/or improving uniformity in at least enhanced flooded batteries; a separator for enhanced flooded batteries having performance enhancing additives or coatings improved fillers and/or fillers with increased friability having increased ionic diffusion decreased tortuosity increased wettability reduced oil content reduced thickness decreased electrical resistance and/or increased porosity and where the use thereof reduces the water loss lowers acid stratification lowers the voltage drop and/or increases the CCA of the battery; and/or separators that include or exhibit performance enhancing additives or coatings increased porosity increased void volume amorphous silica higher oil absorption silica higher silanol group silica reduced electrical resistance and/or a shish-kebab structure or morphology.
Pharmaceutical composition comprising antibodies or antigen binding fragments thereof that bind to stage-specific embryonic antigen 4 (SSEA-4) are disclosed herein as well as methods of use thereof. Methods of use include without limitation cancer therapies and diagnostics. The antibodies of the disclosure can bind to certain cancer cell surfaces. Exemplary targets of the antibodies disclosed herein can include carcinomas such as breast cancer lung cancer esophageal cancer rectal cancer biliary cancer liver cancer buccal cancer gastric cancer colon cancer nasopharyngeal cancer kidney cancer prostate cancer ovarian cancer cervical cancer endometrial cancer pancreatic cancer testicular cancer bladder cancer head and neck cancer oral cancer neuroendocrine cancer adrenal cancer thyroid cancer bone cancer skin cancer basal cell carcinoma squamous cell carcinoma melanoma and/or brain tumor.
The invention relates to compounds of general formula (I) where Q V T W Y L1 L2 L3 and A have the meanings given in the description and also to a method for producing same and to the use of same for controlling animal pests.
The present invention enables downsizing of a ventilation shoe and enables sufficient ventilation of the interior of the shoe. The present invention has: an upper (31); a sole (32) obtained by stacking a plurality of sole sheets; and a ventilation device for taking air into a shoe interior (34) and discharging air outside the shoe interior (34). The ventilation device is provided with: an air intake passage (L1) for taking in air; an air discharge passage (L2) for discharging air; and a pump chamber (P) for feeding the air taken in through the air intake passage (L1) to the air discharge passage (L2). The sole (32) is configured from a plurality of sole sheets being stacked on one another and the pump chamber (P) is formed in a flattened shape between the sole sheets and valve installation holes (152 157) are formed in an intermediate sole sheet that is sandwiched between other sole sheets from above and below and check valves (V1 V2) are respectively provided in said valve installation holes (152 157) in such a manner as to be integrated therewith via a support member.

No. of Pages : 27 No. of Claims : 7
A traceable fiber optic cable assembly with an illumination structure and tracing optical fibers for carrying light received from a light launch device is disclosed herein. The traceable fiber optic cable assembly and light launch device provide easy tracing of the traceable fiber optic cable assembly using fiber optic tracing signals. Further, the launch connector is easily attached to and removed from the fiber optic connector with repeatable and reliable alignment of optic fibers even when the fiber optic connector is mechanically and/or optically engaged with a network component. The fiber optic connectors are configured to efficiently illuminate an exterior of the connector for effective visibility for a user to quickly locate the fiber optic connector.
(54) Title of the invention : INDUCTION CURING OF CELL-BASED STRUCTURAL ARRAYS

(51) International classification : B32B37/00
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(62) Divisional to Application Number
   Filing Date : NA

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(57) Abstract :
Adhesive bondlines in a cell-based structural array are thermally cured using tooling blocks inserted into the cells. The tooling blocks have embedded susceptors that are inductively heated by an alternating electromagnetic field generated by an electromagnet.

No. of Pages : 37 No. of Claims : 15
A cannula locator device is described herein. The cannula locator device may include a cannula. The cannula may include a distal tip an elongated tubular shaft and an inner lumen formed by the elongated tubular shaft. The cannula locator device may also include a first optical fiber configured to emit light and a second optical fiber configured to receive reflected light. The first and second optical fibers may be disposed within the inner lumen of the cannula. The first optical fiber may include a first distal end and a first proximal end. The second optical fiber may include a first proximal end and first distal end.
This manufacturing method includes: an arrangement step; a first press step; and a second press step. In the arrangement step a blank is arranged in a mold. In the first press step a recessed ridge line (6a) a recessed region (2a) and a region adjacent to the recessed ridge line (6a) of a recess-corresponding vertical wall region adjacent are formed by bending. In the second press step a projected ridge line (6b) a projected region (2b) and a region adjacent to the projected ridge line (6b) of a projection-corresponding vertical wall region are formed by drawing. Thus the generation of wrinkles can be suppressed during the manufacturing of a press-formed article (1) in which a top plate (2) undulates in the longitudinal direction.
A lens configured for implantation into an eye of a human can include an optic including transparent material. The optic can have an anterior surface and a posterior surface. Each of the anterior surface and the posterior surface can have a surface vertex. The optic can have an optical axis through the surface vertices. The lens can also include at least one haptic disposed with respect to the optic to affix the optic in the eye when implanted therein. The anterior and posterior surfaces can include aspheric surfaces. The posterior surface can have an aspheric shape that comprises a biconic offset by perturbations comprising an aspheric higher order function of radial distance from the optical axis. The posterior surface can have an absolute value of ratio Rx/Ry between 0 and 100 and an absolute value of ratio kx/ky between 0 and 100.
The present invention is directed to compounds compositions and methods for preventing treating or curing Hepatitis B (HBV) infection in human subjects or other animal hosts. The compounds are also pharmaceutically acceptable salts prodrugs and other derivatives thereof as pharmaceutical compositions and methods for treatment prevention or eradication of HBV infection.
The invention relates to a self-climbing system (10) with a self-climbing unit (12) in which the climbing brackets (26) and the working brackets (20) each have anchor receptacles which each correspond with one another in their pattern with respect to their relative positions with the result that after freeing the anchor holes (32) which are used by the working brackets (28) of an anchor point (34 36 38) of a concrete wall section (14 16) of a concrete building structure (18) the climbing brackets (26) can be anchored in precisely these freed anchor holes (32) of the anchor point (34 36 38). Moreover the invention relates to a self-climbing unit (12) for an aforementioned self-climbing system (10) and to a method for moving such a self-climbing unit (12) on a concrete building structure (18).

No. of Pages : 22 No. of Claims : 15
A liquid formulation of (S)-N-(5-((R)-2-(25-difluorophenyl)pyrrolidin-1-yl)-pyrazolo[15A]pyrimidin-3-yl)-3-hydroxy pyrrolidine-1-carboxamide pharmaceutically acceptable salts thereof or a combination thereof and the use of the liquid formulation in the treatment of pain, cancer inflammation and certain infectious diseases are disclosed.
The invention is a polymer composition for film layer comprising less than 50 wt% of a copolymer of ethylene with silane group(s) containing units and at least 50 wt% of a thermoplastic polyolefine free from silane group(s) wherein the polymer composition has creep of less than 1 mm at 90 °C and an adhesion above 20 N/cm. The invention relates to a laminated article with at least one film layer of the polymer composition and a substrate.
A device for diagnosing a tissue is insertable into a patient's cavity. The device comprises (a) a housing; (b) sensors configured for diagnosing tissues within the cavity; (c) light sources having emission spectrum effective for diagnosing the tissue within the cavity; (d) means for manipulating light sources and sensors; (e) displaying means configured for presenting data obtained by said at least one sensor. The manipulating means further comprises a first member rotatable within said housing around a first axis and a second member rotatable within the first member around a second axis. The second axis is parallel displaced relative to the first axis. The first and second rotatable members are mounted flush with each other and form a front surface which carries the light sources and sensors facing the tissue to be diagnosed.
The present invention relates to a culture or kit-of-part comprising a Lactobacillus delbrueckii subsp lactis strain and uses thereof to manufacture a cereal-based lactic acid-fermented product in particular a maize-based lactic acid-fermented product such as mahewu.
Title of the invention: ENDOSCOPIC IMAGING APPARATUS AND METHOD

Abstract:
An endoscopic imaging apparatus comprises at least one light source (1 2 3) configured to provide excitation signals to an imaging region via a common transmission path. Each excitation signal has one of a plurality of different colours. A controller (100) is configured to control the at least one light source (1 2 3) to provide the excitation signals as a repeating time-interleaved sequence that comprises at least an excitation signal of a first one of the colours and a subsequent excitation signal of a second one of the colours. A monochrome detector (80) is configured for each of at least some of the excitation signals to receive at least part of a respective response signal emitted from the imaging region in response to the excitation signal and to generate image data based on the at least part of the response signal.

No. of Pages: 64  No. of Claims: 49
The present invention relates to a brush product in particular a toothbrush having a base body with a head part (2) with a front and a rear side which comprises a bristle carrier (5) with a longitudinal axis (XLT) and a transverse axis (XQT) and a bristle field (19) protruding therefrom wherein the bristle field (19) is formed by at least one group of cleaning elements (A1 A2 A3 A4 A5 A6); a handle part (4); and a neck part (3) connecting the head part (2) and the handle part (4); wherein the bristle carrier (5) is provided with bristles which are mounted without being anchored and wherein the bristle carrier (5) comprises substantially a central support area (B1) an upper support area (B2) a lower support area (B3) a right support area (B4) and a left support area (B5) in which the groups of cleaning elements (A1 A2 A3 A4 A5 A6) are arranged. The invention also relates to a corresponding method and tool.
Title of the invention: ANGULATED DENTAL IMPLANT

Abstract:
A dental implant includes a generally cylindrical body an interior bore and a non-rotational feature. The generally cylindrical body has a main-central axis and is formed from cold-worked high strength commercially pure titanium having an ultimate tensile strength of at least about 900 MPa. The generally cylindrical body has a proximal portion and an opposing distal portion for anchoring the dental implant in bone of a patient. The interior bore is formed in the generally cylindrical body and has (i) a bore-central axis and (ii) a threaded portion for receiving a screw that is configured to removable hold an abutment in engagement with the dental implant. The non-rotational feature is configured to engage the abutment in a non-rotational fashion.
The Patent Office Journal No. 01/2019 Dated 04/01/2019

**Title of the invention**: SURGICAL INSTRUMENT WITH DETECTION SENSORS

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**Abstract**:
Aspects of the present disclosure are presented for a surgical instrument having one or more sensors at or near an end effector and configured to aid in the detection of tissues and other materials and structures at a surgical site. The detections may then be used to aid in the placement of the end effector and to confirm which objects to operate on or alternatively to avoid. Examples of sensors include laser sensors used to employ Doppler shift principles to detect movement of objects at the surgical site such as blood cells; resistance sensors to detect the presence of metal; monochromatic light sources that allow for different levels of absorption from different types of substances present at the surgical site and near infrared spectrometers with small form factors.

No. of Pages : 101 No. of Claims : 20
A surgical instrument. The surgical instrument includes an elongated channel configured to support a staple cartridge an anvil pivotably connected to the elongated channel a knife mechanically coupled to the staple cartridge an electric motor mechanically coupled to the knife and a control circuit electrically connected to the electric motor. The control circuit is configured to ignore an occurrence of a first predefined event based on a position of the knife automatically stop an advancement of the knife after an occurrence of a second predefined event and automatically restart the closing action of the knife after an occurrence of a third predefined event.
A surgical instrument. The surgical instrument includes an elongated channel configured to support a staple cartridge an anvil pivotably connected to the elongated channel a knife mechanically coupled to the staple cartridge an electric motor and a control circuit electrically connected to the electric motor. The control circuit is configured to change a firing motion of the surgical instrument based on a combination of events.

No. of Pages : 124 No. of Claims : 22
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<th>MANAGEMENT OF MULTIPLE COIL BRAKE FOR ELEVATOR SYSTEM</th>
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The Patent Office Journal No. 01/2019 Dated 04/01/2019

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<tr>
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<tr>
<th>(72) Name of Inventor</th>
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<td>2) BOHN, Daniel M.</td>
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| (57) Abstract | An elevator system includes an elevator car; a machine to impart motion to the elevator car; a brake to stop rotation of the machine the brake comprising a first coil and a second coil wherein removing power from the first coil and the second coil applies the brake to the machine; and a controller in communication with the brake the controller configured to connect the first coil and the second coil in one of a first electrical configuration and a second electrical configuration. |

No. of Pages: 8 No. of Claims: 11
The present invention pertains to a pulley structure (1) equipped with an outer rotating body (2) an inner rotating body (3) and a coil spring (4) said pulley structure 1 characterized in that a cross section of the spring wire of the coil spring (4) along a direction running along the rotational axis and parallel to the rotational axis is a trapezoidal shape the length Ti [mm] of an inner-diameter-side portion in the rotational axis direction in the cross section is greater than the length To [mm] of an outer-diameter-side portion in the rotational axis direction in the cross section and when the number of windings of the coil spring (4) is N expression (1) is satisfied. 

\[ N - (T_i - T_o)/2 < 1 \] (1)
Techniques to store graph information in a database are disclosed. In various embodiments each node in a graph may be modeled as a micro b-tree. Node identity attribute edge and edge attribute data may be stored in one or more pages modeled on page formats typically used to store index data for a relational database index. Data associated with a plurality of nodes and edges each of said edges representing a relationship between two or more of said nodes may be received. For each node one or more pages of data may be created each corresponding to a prescribed page size associated with a storage device in which said one or more pages are to be stored and each page having a data structure that includes a variable-sized set of fixed length data slots and a variable-sized variable length data region.
The present disclosure relates to keratoprosthesis apparatuses and methods of manufacturing keratoprosthesis apparatuses. The keratoprosthesis apparatus includes a circular backplate including a central aperture extending through the backplate from a face of the backplate to a posterior surface of the backplate. The circular backplate has a dome shape and comprises a plurality of spaced apart elongated slits extending radially outwardly from a central portion of the backplate. The plurality of spaced apart elongated slits surround the central aperture and extending through the backplate from the face of the backplate to the posterior of the backplate.

No. of Pages : 21 No. of Claims : 15
A steel for a hydrogen sulfide stress corrosion cracking resistant martensitic stainless steel oil casing pipe and an oil casing pipe and production method therefor. The steel comprises in mass percent chemical elements: 0<C<0.05% Si: 0.1-0.2% Mn: 0.20-1.0% Cr: 11.0-14.0% Ni: 4.0-7.0% Mo: 1.5-2.5% N: 0.001-0.10% V: 0.03-0.6% and Al: 0.01-0.04% with the balance being Fe and other inevitable impurities.
A method for manufacturing railcar coupler headcores includes providing a first corebox having internal walls defining at least in part perimeter boundaries of at least one rotor core cavity. The method further comprises at least partially filling the at least one rotor core cavity with a first sand resin to form at least one rotor core. The method also includes providing a second corebox having internal walls defining at least in part perimeter boundaries of at least one headcore cavity. The at least one rotor core is positioned within the second corebox. The method also comprises at least partially filling the at least one headcore cavity with a second sand resin to form at least one headcore.
**Title of the invention:** VINORELBINE MONOTARTRATE AND ITS PHARMACEUTICAL USE

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5) MATVIENKO, Iaroslav
6) SYCHENKO, Volodymyr

(57) **Abstract:**
The present invention is directed to crystalline vinorelbine monotartrate and its use for the prevention and treatment of cancer particularly non-small cell lung cancer or breast cancer. The present invention also relates to a corresponding method for the manufacture of crystalline vinorelbine monotartrate.

No. of Pages : 52 No. of Claims : 27
The present application discloses new approaches to providing passive-off protection for a B-TRAN-like device. Even if the control circuitry is inactive AC coupling uses transient voltage on the external terminals to prevent forward biasing an emitter junction. Preferably the same switches which implement diode-mode and pre-turnoff operation are used as part of the passive-off circuit operation.
The invention provides improved compositions for adoptive immune effector cell therapies for treatment prevention or amelioration of numerous conditions including but not limited to cancer, infectious disease, autoimmune disease, inflammatory disease, and immunodeficiency.

No. of Pages : 166 No. of Claims : 162
Title of the invention: VACUUM CONTAINER SYSTEM AND METHOD

Abstract:

A vacuum container and a system which includes a complementary base including a three-part airway a sealing lid and a lid release button. The three-part airway features an internal air chamber an extraction airway and a one-way check-valve preventing ambient air from penetrating the internal air chamber through the extraction airway when vacuum sealed. The extraction airway extends between the top and the bottom of the container and includes an internal air extraction outlet disposed at the top of and within the internal air chamber and an external air extraction outlet outside the container disposed at the bottom of the container and configured to be coupled to an external air pump. A complementary method is also provided.
Compositions useful in the controlled delivery of therapeutic agents and their methods of preparation and use are provided. The compositions comprise an optionally oxidized porous silicon core a layer on the surface of the porous silicon core that comprises a metal silicate and a therapeutic agent. The compositions optionally further comprise one or more targeting agents and/or cell-penetrating agents to enable the particles to target and enter cells or tissues of interest in a treated subject.

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The present invention provides components assays and methods for evaluating antibacterial effectiveness and determining minimal inhibitory concentration (MIC) of polypeptides including lysin polypeptides that kill bacteria. Modified broth microdilution components and methods are provided including supplements to enable accurate MIC determination mimicking lysin polypeptide activity in human matrices including serum and blood.
Title of the invention: MEDICINE OBTAINED BY COMBINING FXR AGONIST AND ARB

Abstract:
The present invention provides an NASH therapeutic agent including: an FXR agonist preferably obeticholic acid or a pharmaceutically acceptable salt thereof; and an ARB or a pharmaceutically acceptable salt thereof.
Title of the invention: SPIDER BUSHING ASSEMBLY FOR A GYRATORY CRUSHER

Abstract:
A gyratory crusher and a spider bushing assembly for supporting a spider bushing within the central hub of a gyratory crusher. The spider bushing assembly includes a spider bushing and a means for adjusting the distance between the outer flange of the spider bushing and a support shoulder formed within the central hub of the spider. The means for adjusting allows the position of the spider bushing within the internal bore of the central hub to change while maintaining an interference fit as a result of wear following use of the gyratory crusher. In one embodiment one or more annular shims are positioned between the bearing support shoulder of the central hub and the outer flange of the spider bushing. Upon wear one or more of the shims can be removed to improve the interference fit between the spider bushing and the internal bore formed within the central hub.

No. of Pages: 9 No. of Claims: 19
**Title of the invention:** REFRACTORY BASED SIDEWALL MEMBER FOR PALLET CAR

**Abstract:**
A pallet car for conveying material to be processed is disclosed. The pallet car includes first and second sidewalls formed from sidewall members that each include a metal frame and a heat-resistant liner such as formed from refractory. The refractory formed on the metal frame of the sidewall members provides insulation for the metal frame without the need for a hearth layer of pre-processed material in the material bed of the pallet car. The sidewall member including the refractory layer increases the effective volume of the pallet car which increases the overall efficiency of the furnace and material processing procedure.
Title of the invention: METHODS FOR PROMOTING PLANT HEALTH USING FREE ENZYMES AND MICROORGANISMS THAT OVEREXPRESS ENZYMES

Abstract:
Methods for stimulating plant growth and/or promoting plant health using free enzymes or recombinant microorganisms that overexpress enzymes are provided. Plant seeds coated with free enzymes or recombinant microorganisms that overexpress enzymes are also provided. Compositions comprising a fertilizer and an enzyme or a recombinant microorganism that overexpresses an enzyme are provided. Modified enzymes having ACC deaminase activity recombinant microorganisms expressing the modified enzymes plant seeds treated with the modified enzymes or recombinant microorganisms and methods for stimulating plant growth and/or promoting plant health using the modified enzymes or recombinant microorganisms are also provided.

No. of Pages: 170  No. of Claims: 227
A system for liquefying production gas from a gas source containing a fluid having C1-C12 entrained gases includes a first phase separator for separating the C1-C12 gases from the fluid from the gas source. The first phase separator has an inlet in fluid communication with the gas source a gas outlet and at least one alternative outlet. A first cryogenic liquefaction vessel has an inlet and an outlet. The inlet is in fluid communication with the gas outlet of the first phase separator. The first cryogenic liquefaction vessel cools the C1-C12 gases to liquefy the C3-C12 petroleum gases. A second phase separator is provided for separating the C3-C12 liquefied gases from the C1-C2 gases. The second phase separator has an inlet a liquid outlet and a gas outlet. The inlet is in fluid communication with the outlet of the first cryogenic liquefaction vessel. At least one storage vessel is provided in fluid communication with the liquid outlet of the second phase separator for collection of the liquefied C3-C12 petroleum gases.
The present invention relates to a composition for preventing hair loss and more specifically to a compound having a structure in which finasteride and a peptide are linked through a covalent bond and a pharmaceutical composition or a cosmetic composition for preventing hair loss or promoting hair growth comprising the same. The compound of the present invention having a structure in which finasteride and a peptide are linked through a covalent bond is excellent in physiological activities such as hair loss improvement, hair growth promotion, cell growth promotion, etc. is excellent in stability in water and skin permeation and thus can be effectively used as a composition for preventing hair loss and promoting hair growth.

No. of Pages : 42 No. of Claims : 15
Title of the invention: N-[3-[2-AMINO-5-(11-DIFLUOROETHYL)-44A57-TETRAHYDROFURO[34-D][13]OXAZIN-7A-YL]-4-FLUORO-PHENYL]-5-(TRIFLUOROMETHYL)PYRIDINE-2-CARBOXAMIDE AND ITS (4AR5S7AS) ISOMER AS A SELECTIVE BACE1 INHIBITOR FOR TREATING E.G. ALZHEIMER'S DISEASE

Abstract:
The present invention provides N-[3-[2-Amino-5-(11-difluoroethyl)-44a57-tetrahydrofuro[34-d][13]oxazin-7a-yl]-4-fluoro-phenyl]-5-(trifluoromethyl)pyridine-2-carboxamide i.e. the compound of Formula I: [Formula should be inserted here] or a pharmaceutically acceptable salt thereof and in particular its (4aR5S7aS) isomer as a selective BACE1 inhibitor for treating e.g. Alzheimers disease and the progression of mild cognitive impairment to Alzheimers disease.

No. of Pages: 46 No. of Claims: 14
Title of the invention: RING-FUSED THIAZOLINO 2-PYRIDONES METHODS FOR PREPARATION THEREOF AND THEIR USE IN THE TREATMENT AND/OR PREVENTION OF TUBERCULOSIS

Abstract:
The present disclosure provides a combination comprising: (i) a drug against tuberculosis or a pharmaceutically acceptable salt thereof and (ii) a compound of Formula (II) or a pharmaceutically acceptable combination thereof. The combination may be used in the treatment and/or prevention of tuberculosis.

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3) FLENTIE, Kelly
4) GOOD, James Arthur Dudley
5) PONT‰N, Fritiof

No. of Pages: 69 No. of Claims: 61
The invention involves a slide assembly for a zipper. The slider assembly is formed in a single die cast operation to include the slide (12) and the pull member (14) being formed simultaneously. At least one side shifting slide (46) is incorporated into the die which allows the bridge (16) and pull loop (38) to be formed with their full geometric shape and without converging flat surfaces.
Title of the invention: CONTAINER FOR TRANSPORT AND STORAGE OF FOOD PRODUCTS

Abstract:
Systems and methods for providing compostable food containers which preserve the quality of a food product for an extended duration of time and which optionally allow for cooking of the food product therein. In some implementations the food containers are sturdy stackable insulating and require minimal or no manual labor to assemble. In some implementations the food container includes a base and a cover which cooperate to form a closed chamber for supporting protecting insulating and optionally cooking a food product such as a pizza. The base and cover may each be formed of a single layer of material including but not limited to molded sugarcane fiber (bagasse) molded wood fiber molded bamboo fiber molded paper or plastic.

No. of Pages: 32 No. of Claims: 58
Title of the invention: BRIDGED BICYCLIC INHIBITORS OF MENIN-MLL AND METHODS OF USE

Abstract:
The present disclosure provides methods of inhibiting the interaction of menin with MLL1 MLL2 and MLL-fusion oncoproteins. The methods are useful for the treatment of leukemia solid cancers diabetes and other diseases dependent on activity of MLL1 MLL2 MLL fusion proteins and/or menin. Compositions for use in these methods are also provided.

No. of Pages: 86 No. of Claims: 57
An anti-microbial composition is provided. The anti-microbial composition comprises an active component A and an active component B. The active component A is a compound represented by formula (I) and the active component B is a mancozeb. The weight ratio of the two components is 1:1-400. A method for preparing the composition and uses thereof are also provided. Experimental results showed that the anti-microbial composition has a significantly improved performance and more importantly a reduced application volume thereby lowering application costs. The anti-microbial composition can effectively prevent and treat certain fungal diseases in a crop plant. The invention compounds anti-microbial agents with different mechanisms and modes of actions to significantly lower the application volume of each of the agents. The invention also provides excellent effects to broadening an anti-microbial spectrum inhibiting fungal growth improving fungal resistance enhancing crop disease prevention and treatment and the like.
According to an example a three-dimensional (3D) printer may include a delivery device to selectively deliver liquid droplets onto a layer of build materials and a controller to determine a preselected area on the layer of build materials at which the delivery device is to deliver liquid droplets to determine a distribution at which gaps are to be formed in the delivery of the liquid droplets within the preselected area and to control the delivery device to deliver the liquid droplets across the preselected area while forming the gaps at the determined distribution in which the gaps are to form heat sinks in the build materials that are to prevent heat spikes from occurring across the build materials in the preselected area.
The present disclosure provides methods of inhibiting the interaction of menin with MLL1, MLL2, and MLL-fusion oncoproteins. The methods are useful for the treatment of leukemia, solid cancers, diabetes, and other diseases dependent on activity of MLL1, MLL2, MLL fusion proteins and/or menin. Compositions for use in these methods are also provided.
A method of enabling an electronic payment for a visually impaired user may be disclosed. The visually impaired user may proceed to use the payment device and enter the braille code which may be communicated to an authority using a first channel to begin a transaction. The system may communicate a verification code to the portable computing device using a second communication channel. The user may enter the verification code which may be communicated to an authority via the first communication channel.
Title of the invention: OPTICAL PUMPING TECHNIQUE

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Abstract:
A Raman amplifier having an optical pump configured to generate pump bands each of which is spectrally aligned with a respective wavelength channel of a frequency grid in a manner that enables the pump bands to coexist in an optical fiber with data-carrying signals of other wavelength channels of the frequency grid without causing unworkable levels of inter-channel interference. In an example embodiment the optical pump comprises a laser whose single-mode output is modulated to sufficiently suppresses stimulated Brillouin scattering in the optical fiber while still keeping the optical power of each of the resulting pump bands spectrally compact e.g. substantially contained within the slot width of the respective wavelength channel. In some embodiments at least some pump bands can be spectrally interleaved with some of the data-carrying signals to increase the data-throughput capacity of the corresponding optical transport system.
The invention relates to a method for detecting agricultural field work performed by a vehicle (1) comprising: a) carrying a satellite navigation receiver (4) on the vehicle (1) and recording a sequence (FG) of position fixes (pi) and associated time stamps (ti); b) for a position fix (pi): determining a group (Gi) of position fixes that lie in a range (B); c) dividing the group (Gi) into sub-groups on the basis of a minimum time interval; d) determining trajectory sections (trj) on the basis of the sub-groups; e) determining an attribute vector (Mi) for the considered position fix (pi) comprising at least an angle (ai) between two trajectory sections (trj); and f) if the attribute vector (Mi) satisfies a specified threshold value criterion (K) detecting the position fix (pi) as a location of field work (F).
The invention involves a locking slide assembly for a zipper. The locking slider assembly is formed in a single die cast operation to include the locking slider (12) and the pull member (14) being formed simultaneously. At least one side shifting slide (46) is incorporated into the die which allows the bridge (16) and pull loop (38) to be formed with their full geometric shape and without the converging flat surfaces.
# Title of the invention: A PROCESS FOR MANUFACTURING ISOCYANATES AND/OR POLYCARBONATES

| (51) International classification | :C01B32/176 |
| (31) Priority Document No | :16168911.2 |
| (32) Priority Date | :10/05/2016 |
| (33) Name of priority country | :EPO |
| (86) International Application No | :PCT/EP2017/059612 |
| Filing Date | :24/04/2017 |
| (87) International Publication No | :WO 2017/194293 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

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## Abstract:

A process for manufacturing isocyanates or polycarbonates comprising the steps of: providing a chlorine stream and carbon monoxide stream; reacting said chlorine stream and said carbon monoxide stream for providing a phosgene stream; cooling the phosgene stream to a temperature at which the phosgene in the phosgene stream is liquid preferably to a temperature that is 4°C less or more than 4°C less than the boiling point of phosgene to form a liquid phosgene stream and a gas stream; separating the gas stream and the liquid phosgene stream; removing residual chlorine from the liquid phosgene stream to form a chlorine depleted phosgene stream and reacting the chlorine depleted phosgene stream to form an isocyanate or a polycarbonate.

No. of Pages: 15 No. of Claims: 9
The present invention provides a refrigerating machine oil which comprises a lube base oil and a polymer having a structural unit represented by the following formula (I) and having a weight-average molecular weight of 500-100000, the amount of the polymer being 40 mass% or less with respect to the whole refrigerating machine oil. [In formula (I) Ra, Rb, and Rc each independently represent a hydrogen atom or a hydrocarbon group and Rd represents an oxygen-containing organic group or a C1-18 hydrocarbon group.]
(54) Title of the invention: ONLINE ARTWORK GALLERY SYSTEMS AND METHODS

(51) International classification: G06F17/30
(31) Priority Document No: 2016900881
(32) Priority Date: 09/03/2016
(33) Name of priority country: Australia
(86) International Application No: PCT/AU2017/050183
   Filing Date: 02/03/2017
(87) International Publication No: WO 2017/152218

(61) Patent of Addition to Application Number: NA
   Filing Date: NA

(62) Divisional to Application Number: NA
   Filing Date: NA

(57) Abstract:
In one preferred form of the present invention there is provided a computer implemented art gallery system (10) for use by a community of users (12) the system (10) comprising: a data collector (14) for storing representations (16) of artworks (18) that have been created by artists; and a timeline facility (20) configured for attempting to ensure that upon user requests (22) for representations (16) of the artworks (18) each representation (16) corresponding with a respective one of the artworks (18) is able to be used to provide a time line reveal (26) of a special component (28) of the corresponding artwork (18); the special component (28) of each artwork (18) comprising a hidden or inconspicuous component of the artwork (18).

No. of Pages: 32 No. of Claims: 33
Title of the invention: CONVEYOR BELT SUSPENDED VIA MAGNETIC LEVITATION

Abstract:

One of the types of equipment most frequently used for the transportation of bulk materials in large-scale industry is the conveyor belt. These belts basically consist of a continuous rubber belt that moves the material from one point to another and is generally actuated by a motor unit formed by an electric motor and a gearbox. The energy consumed by the belt motor/s is basically used to lift the material if the unloading point is higher than the loading point and to control the resisting forces provided by the mechanical elements of which the belt is composed such as the rollers pulleys covers etc.. Rollers are used both on the loading side and the return side in order to support the belt their function being to shape the belt in the form of a channel in order to contain the material support the weight of the transported material and the belt and to permit movement in the desired direction. The rollers are rolling elements in the form of tubes or pipes with bearings inserted at the ends to allow them to rotate on their axes. The roller stations are disposed below the belt at a distance that can vary between 1 and 2 metres on the loading side and between 2 and 3 metres on the return side. Although the rollers allow the belt to move they each generate small forces which act against the movement and which can become substantial as the length of the belt increases given that more rollers are required to support the belt. The magnetic levitation conveyor belt according to the invention does not use idlers to support the rubber belt while in operation which eliminates the effects of the friction forces associated with the idlers thereby reducing the energy required for the movement of the belt and the material positioned thereon.
Title of the invention : CAMERA OPTICAL ELEMENT HAVING TACTILE INDICATOR

Abstract:
An apparatus including a camera optical element and a tactile indicator associated with the camera optical element for indicating a property of the camera optical element.

No. of Pages : 13 No. of Claims : 29
This disclosure describes new high temperature radiation-resistant ferritic-martensitic steel compositions. The new steels generally contain 9.0-12.0 wt. % Cr 0.001-1.0 wt. % Mn 0.001-2.0 wt. % Mo 0.001-2.5 wt. % W and 0.1-0.3 wt. % C with the balance being primarily Fe. More specifically steels having from 10.0-12.0 wt. % Cr are considered particularly advantageous. Small amounts of Nb V Ta Ti Zr and B may or may not also be present depending on the particular embodiment. Impurities may be present in any embodiment in particular impurities of less than 0.01 wt. % S less than 0.04 wt. % P less than 0.04 wt. % Cu less than 0.05 wt. % Co and less than 0.03 wt. % As are contemplated. Examples of these steels exhibit improved fracture toughness and reduced thermal creep and swelling.
Provided is a latex of a carboxyl group-containing nitrile rubber latex that contains an a-ethylenic unsaturated nitrile monomer unit at a ratio of 8-60wt% and has an iodine value of 120 or less said latex being characterized in that the total content of potassium and sodium included therein is 2300-10000ppm (wt) in relation to the entire latex.
The present invention relates to a wind tower (10) for delivering wind flow to a turbine. The wind tower (10) includes a support structure (12) mounted to a support surface (14) and a wind intake section (16) rotatably mounted to the support structure (12) and elevated with respect to the support surface (14). The intake section (16) includes a plurality of internal passageways (32) extending between a plurality of wind-facing inlets (22) and a plurality of outlets (34). The plurality of inlets (22) are orientated for concurrently receiving an oncoming wind-flow W. Each of the inlets (22) is in fluid communication with one of the outlets (34) via one of the passageways (32). The wind tower (10) further includes an output passageway (42) for collecting wind flow W from the plurality of outlets (34). The output passageway (42) is in fluid communication with the outlets (34) and extends downwardly from the intake section (16) toward the support surface (14) for delivering wind flow W to a turbine located at or proximate to the support surface (14).
Title of the invention: CONTAINER FOR HOLDING CRYSTALLINE L-CARNOSINE ZINC COMPLEX AND METHOD FOR HOLDING SAME

International classification: B65D81/24 B65D85/00 A61K31/4172

Abstract:
The present invention provides a container for holding a crystalline L-carnosine zinc complex wherein the container for holding the crystalline L-carnosine zinc complex is characterized in that a portion for contacting the crystalline L-carnosine zinc complex is formed from a resin having at least one polar group selected from the group consisting of a cyano group, a hydroxyl group, and an ester group in the molecule.

No. of Pages: 20 No. of Claims: 6
The invention relates to aqueous compositions containing volatile insecticides which have improved long term stability and are therefore also biologically active for a longer period. The invention also relates to the use of such formulations for lasting control of animal pests (arthropods) on different surfaces.
A Thick Wall Hollow Fiber Tangential Flow Filter (TWHFTFF) (10) for perfusion and harvest of mammalian cell culture or cultures (74). The TWHFTFF (10) includes at least one thick wall hollow fiber (60) reaching from an inlet (32a) to an outlet (32b). The thick wall hollow fiber (60) including thick walls (70) having tortuous paths (71) between an interior surface and an exterior surface of the thick wall hollow fiber (60). The tortuous paths (71) include settling zones (73) and narrowed zones (75) which capture larger particles (72b). The walls may (70) be made of HDPE or plastic materials including PES PVDF and may be coated with PVDF.
Provided is a device management system for suppressing any decrease in productivity. A device management system (100) is the device management system (100) for managing a plurality of production line component devices (112) constituting a part of a production line for producing products (P) and is provided with a device status data storage unit (90d) an analyzer (90i) and a server output unit (90k). The production line component devices (112) include a combination weighing machine (10) for weighing products (P); a form-fill-seal machine (20) for packaging the products (P); and a boxing device (40) for boxing the packaged products (P). The device status data storage unit (90d) accumulates device status data (DT) which is information relating to parts included in the production line component devices (112). The analyzer (90i) performs the analysis process for analyzing the device status data (DT) accumulated in the device status data storage unit (90d). The server output unit (90k) outputs maintenance information (IF) relating to parts maintenance on the basis of the results of the analysis process.
The purpose of the present disclosure is to provide a nonwoven fabric for an absorbent article which if used in an absorbent article enables highly viscous excrement to be separated from the wearer's skin when worn and causes the separated highly viscous excrement to penetrate from a first surface to a second surface. This nonwoven fabric is configured as follows. The nonwoven fabric (1) for an absorbent article (101) is characterized in that: the nonwoven fabric (1) has a plurality of first ridges (7) and a plurality of first grooves (13) on a first surface (3) each of the first ridges (7) extending in a first direction (D1) and being provided with a first top surface (9) including a first top section (8) and first side surfaces (10) and each of the first grooves (13) extending in the first direction (D1); each of the first grooves (13) of the nonwoven fabric (1) has a plurality of second ridges (15) and a plurality of bottom sections (19) on the first surface (3) each of the second grooves (15) being contiguous with two adjacent first ridges (7) among the plurality of first ridges (7) and having a second top section (16); the nonwoven fabric (1) is provided with a plurality of predetermined recess units (21); and in each of the plurality of recess units (21) the fiber density of the first surface (10) is lower than the fiber density of the first top surface (9).
This absorbent article (1) has a folding line (FL1) along which the absorbent article is to be folded such that skin-facing surfaces thereof face each other. An absorbent body includes a low-weight-per-unit-area part (41) that is provided at the boundary between a center region and a rear-side region and that extends in the widthwise direction. The absorbent article includes a first joining part (61) positioned at a front portion relative to the low-weight-per-unit-area part and a second joining part (62) positioned at a rear portion relative to the low-weight-per-unit-area part. An elastic member (91) ranges across the low-weight-per-unit-area part or a region extending outward in the widthwise direction from the low-weight-per-unit-area part. The folding line is provided to the low-weight-per-unit-area part such that the low-weight-per-unit-area part is raised toward the wearer side due to shrinkage of the elastic member in a stretched state where the absorbent article is stretched.
An electric vehicle includes a stem and a base with wheels. The base is at a first end of the stem with symmetrical elements of the base opposed across a stem axis. Elements on each side include a wheel a drive motor a platform and pivot joints. The wheel has an axis of rotation. The drive motor is connected to the wheel. The platform is between the wheel and the stem. A first pivot joint connects the stem and the platform. A second pivot joint connects the platform and the wheel. In a first orientation the platforms are substantially perpendicular to the stem and in a second orientation the platforms are substantially parallel to the stem. The wheel axes are substantially parallel to each other and are substantially perpendicular to the stem axis in the first orientation and the second orientation.
A two part moisture cure organosiloxane composition that may be used as a sealant in insulation systems in building facades or the like and which exhibits low thermal conductivity. The two part moisture curing composition has a Part A and a Part B in which Part A comprises either 1) A siloxane polymer (I) having at least two terminal hydroxyl or hydrolysable groups having a viscosity of from 20000 to 40000 mPa.s at 25°C; or 2) A mixture of polymer (i) and polymer (ii) wherein Polymer (i) is a siloxane polymer having at least two terminal hydroxyl or hydrolysable groups and a viscosity = 25000 mPa.s at 25°C and Polymer (ii) a siloxane polymer having at least two terminal hydroxyl or hydrolysable groups and a viscosity of between 1000 and 20000 mPa.s at 25°C together with a reinforcing filler and a low density filler with the total filler content being between 30 and 45 % in volume of the total formulation; and Part B comprises a moisture curing agent formulation comprising a suitable amount of a tin based catalyst and one or more crosslinkers. Part A and/or the composition of Part A + Part B after mixing has a thermal conductivity = 0.20 W/mK.
Title of the invention: BUFFER TUBES FOR FIBER OPTIC CABLES

Abstract:
Buffer tubes made from a composition comprising: (A) polypropylene (B) high density polyethylene (HDPE) (C) propylene-ethylene copolymer (PE copolymer) (D) olefin block composite and (E) optionally one or more of a nucleating agent filler and additive exhibit reduced stress whitening as compared to buffer tubes made from conventional polypropylene compositions.
A surgical stapling system is disclosed. The system comprises a distal end an unspent staple cartridge comprising a plurality of staples removably stored therein a channel configured to receive the unspent staple cartridge and an anvil configured to deform said staples. The system further comprises a firing drive movable through a firing stroke and a primary lockout configured to prevent the firing member from being moved through the firing stroke if the unspent staple cartridge is not positioned in the channel. The system further comprises a secondary lockout actutable to prevent the firing member from being moved through the firing stroke wherein the secondary lockout is actuated in response to the firing stroke being prevented by the primary lockout.
A surgical instrument is configured to compensate for battery pack and drivetrain failures. One method includes generating a firing sequence determining whether a subset of rechargeable battery cells is damaged during the firing sequence and stepping-up an output voltage of the battery pack to complete the firing sequence in response to a determination that a subset of the rechargeable battery cells is damaged. Another method includes generating a mechanical output to motivate a drivetrain to transmit a motion to a jaw assembly of the surgical instrument activating a safe mode in response to an acute failure of the drivetrain and activating a bailout mode in response to a catastrophic failure of the drivetrain. Another method includes driving a drivetrain sensing and recording vibration information from the drivetrain generating an output signal based on the vibration information and determining a status of the surgical instrument based on the output signal.
The present invention provides a tissue expander (10) comprising: a self-inflating core (12) having a non-inflated state and an inflated state a top surface (14) a bottom surface (16) and a side surface (18); a circumference (C) and having a longitudinal axis X and a coating (20) covering said surfaces (14 16 18) and surrounding said core (12) in which said coating (20) comprises a top portion (22) a bottom portion (24) and a side portion (26); wherein said side portion (26) comprises a concertinaed structure comprising one or more axially spaced circumferentially extending interconnected rings (28) each extending around said axis X and each being spaced from each other along said axis X.
The present invention describes a method for the production of a spinning dope composition said method comprising a homogenization involving vigorous mixing of a cellulosic pulp material in alkali solution vigorous mixing implying supplying a power density to agitators used in the homogenization step of at least 150 kW/m³ (k W supplied to agitators per mixed unit of liquid volume) and thereafter a dissolution involving mixing of the cellulosic pulp material in the alkali solution to obtain a spinning dope composition wherein the power density supplied to agitators used in the dissolution step is maximum 75 kW/m³ (k W supplied to agitators per mixed unit of liquid volume); and wherein the cellulosic pulp material in alkali solution is kept at a temperature of less than 0º C during the homogenization and during at least part of the dissolution. The present invention is also directed to a system intended for the production of a spinning dope composition.
An electrically conductive flat filament arrangement for a fluid permeable heater assembly for aerosol-generating systems and a heater assembly for aerosol-generating systems. The flat filament arrangement comprises a center portion (3) and two side portions (2 4) wherein the two side portions (2 4) are arranged on opposite sides of the center portion (3). The center portion (3) defines a heating region of the filament arrangement and the side portions (2 4) define electrical contact regions of the filament arrangement. The center portion (3) and the two side portions (2 4) each comprise a plurality of openings each plurality of openings defining an open area of the center portion (3) and an open area of each of the two side portions (2 4). The percentage of the total area of the center portion (3) comprising the open area of the center portion (3) is greater than the percentage of the total area of one of the side portions (2 4) comprising the open area of the side portion (2 4).
The Patent Office Journal No. 01/2019 Dated 04/01/2019

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| (19) INDIA | |
| (22) Date of filing of Application :09/10/2018 | (43) Publication Date : 04/01/2019 |

(54) Title of the invention : CENTRIFUGAL CLUTCH HAVING FRICTION-MINIMISED COUPLING BOLT AND DRIVE TRAIN

| (51) International classification | :F16D43/08 |
| (31) Priority Document No | :10 2016 211 217.1 |
| (32) Priority Date | :23/06/2016 |
| (33) Name of priority country | :Germany |
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| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
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| Filing Date | :NA |

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(57) Abstract :
The invention relates to a centrifugal clutch (1) for a drive train of a motor vehicle comprising a centrifugal mass (2) that is coupled to an angular plate (3) in such a way that a radial movement of the centrifugal mass (2) brought about by a centrifugal force brings about an axial movement of the angular plate (3) and comprising a pre-tensioning element (4) that is associated with a coupling bolt (5) wherein the coupling bolt (5) is provided to transfer the axial movement of the angular plate (3) at least partially onto an inner cage (7) designed for retaining lamellae (24) wherein the coupling bolt (5) is inserted in a slot (6) of the angular plate (3) in such a way that in an intermediate operating position a relative movement between the angular plate (3) and the coupling bolt (5) is possible with a rotation of the inner cage (7) relative to the angular plate (3) wherein in the intermediate operating position an application section (8) of the angular plate (3) provided for transmitting force to the pre-tensioning element (4) a stop (9) secured to the coupling bolt and a stop (10) secured to the pre-tensioning element are coordinated with one another in such a way that the angular plate (3) has a contact region for force transmission on the application section (8) max. on one side. The invention also relates to a drive train of a motor vehicle having an engine a clutch (1) and a transmission wherein the clutch is of the type according to the invention.

No. of Pages : 11 No. of Claims : 10
Title of the invention: PIPE-MAKING APPARATUS AND PIPE-MAKING METHOD

Provided are a pipe-making apparatus and pipe-making method with which pipe-making is possible while variably adjusting the diameter or circumference of a helix tube even without an internal circumference-regulating body. A pipe-making unit 3a of a pipe-making apparatus 3 interlocks an edge 94 of a following band section 92 which has not been made into a pipe and continues from a preceding pipe section 91 that has been made helically into a pipe in a band-shaped member 90 with the corresponding edge 93 of the one round previous preceding pipe section 91. Along with the interlocking the pipe-making apparatus 3a is propelled along the helical winding direction. By an interlocking height-adjusting means such as an operation lever 30 the position 9q at which the interlocking is performed is variably adjusted in the apparatus height direction HD or the pipe inside-outside direction VD.

No. of Pages: 26  No. of Claims: 16
**Title of the invention:** ASPIRATION AND INJECTION DEVICE

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**Abstract:**

An aspiration and injection device is provided that can allow for ergonomic safe and precise aspiration of a target site and ejection of a medicament to the target site. The device can include a syringe barrel a flange extender couplable to the barrel and plunger that can be engaged by a hand and/or one or more finger of a user to perform aspiration and injection at a target site.

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No. of Pages: 34  No. of Claims: 25
The invention provides antagonistic and agonistic anti-human VISTA antibodies and antibody fragments. These antagonist antibodies and antibody fragments may be used to inhibit or block VISTAs suppressive effects on T cell immunity and thereby promote T cell immunity. These agonist antibodies and antibody fragments may be used to potentiate or enhance or mimic VISTAs suppressive effects on T cell immunity and thereby suppress T cell immunity. These antagonist antibodies and antibody fragments are especially useful in the treatment of cancer and infectious conditions. These agonist antibodies and antibody fragments are especially useful in the treatment of autoimmunity allergy inflammatory conditions GVHD sepsis and transplant recipients. Screening assays for identifying these agonists are also provided.
The invention relates to a method for producing a ceramic insulator for a high-voltage or medium-voltage switching system wherein at least two axially symmetrical ceramic structural elements are joined along their axis of symmetry and an electrically conductive equipotential layer is arranged between the structural elements characterized in that a base material is already fixed between the ceramic structural elements before a sintering process of said structural elements.
THE PATENT OFFICE JOURNAL NO. 01/2019 DATED 04/01/2019

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application : 12/11/2018
(21) Application No. 201817042470 A
(43) Publication Date : 04/01/2019

(54) Title of the invention : AGONISTIC ANTIBODIES THAT BIND HUMAN CD40 AND USES THEREOF

(51) International classification : C07K16/28
(31) Priority Document No : 62/324170
(32) Priority Date : 18/04/2016
(33) Name of priority country : U.S.A.
(86) International Application No : PCT/US2017/028162
   Filing Date : 18/04/2017
(87) International Publication No : WO 2017/184619
(61) Patent of Addition to Application Number : NA
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(62) Divisional to Application Number : NA
   Filing Date : NA

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(57) Abstract :
Isolated monoclonal agonistic antibodies which bind to human CD40 and related antibody-based compositions and molecules are disclosed. Also disclosed are therapeutic and diagnostic methods for using the antibodies.

No. of Pages : 115 No. of Claims : 55
The present invention relates to satellite systems and more particularly to the provision of a satellite system and method for communications applications with global coverage. An optimal method of providing global broadband connectivity has been discovered which uses two different LEO constellations with inter-satellite links among the satellites in each constellation and inter-satellite links between the constellations. The first constellation is deployed in a polar LEO orbit with a preferred inclination of 99.5 degrees and a preferred altitude of 1000 km. The second constellation is deployed in an inclined LEO orbit with a preferred inclination of 37.4 degrees and a preferred altitude of 1250 km.
Abstract:
Systems devices and methods are operable to track usage of a surgical instrument and modify the performance of the surgical instrument based on the prior usage of the surgical instrument. Some surgical instruments are designed to have a limited service life beginning at their first use or a limit to their overall usage in order to ensure safe use of the sensitive instruments. However, a lack of ability to track usage characteristics when the instrument is separated from an external power supply allows for user abuse and avoidance of such safety mechanisms. Adding a battery or capacitor to the instrument may allow for an ability to track usage when the instrument is separated from an external power supply. Implementing special user prompts device use ratios and device use half-life upon powering down of an instrument may additionally be used to prevent circumvention of safety features.
An apparatus for operating on tissue includes a body assembly a shaft an acoustic waveguide and an end effector. The end effector includes an ultrasonic blade a clamp arm and a blade guard. The ultrasonic blade is in acoustic communication with the waveguide. The clamp arm is configured to pivot toward and away from the ultrasonic blade. The clamp arm has a first tine. The blade guard extends from the shaft. The blade guard has a longitudinally extending arm defining a concave pathway and a second tine located distal to the longitudinally extending arm. The ultrasonic blade is partially housed within the concave pathway. The first tine and the second tine are configured to grasp tissue when the clamp arm pivots toward the ultrasonic blade.
The Patent Office Journal No. 01/2019 Dated 04/01/2019

A transmission method of a base station is provided. The base station sets a first resource for a physical downlink control channel (PDCCH). The base station includes setting information of the first resource in a first physical broadcast channel (PBCH). Then the base station transmits the first PBCH.
Title of the invention : GRANTING RESOURCES TO A WIRELESS DEVICE

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Abstract:
There is provided mechanisms for granting resources to a wireless device operating with a short Transmission Time Interval (sTTI). A method is performed by a network node. The method comprises transmitting to the wireless device a first control information message for a downlink channel. The method comprises transmitting to the wireless device a second control information message wherein the second control information message is decodable based on a parameter of the first control information message or based on signalled information.
No. of Pages : 84 No. of Claims : 39
LKMNO cathode materials based on a lithium-manganese spinel modified synergetically with potassium and nickel and a method of production thereof are disclosed. The LKMNO cathode materials are characterised by a reversible gravimetric capacity in relation to lithium of at least 250 mAh/g after 80 operation cycles under a current load of 1C so that they are suitable for application in lithium-ion batteries with a high energy density.
The first numerology has a first subcarrier spacing and the second numerology has a second subcarrier spacing. A method is further included in which a wireless device receives a downlink subframe according to a first numerology and receives in a second downlink subframe a second OFDM transmission formatted according to a second numerology. Variants of this method corresponding apparatuses and corresponding network elements are also disclosed.
The present invention discloses a cooking method and a digester system wherein partly digested cellulosic fiber source is compressed during cooking to provide high molecular weight lignin and pulp.
The present invention relates to novel freeze-resistant bakers yeast (Saccharomyces cerevisiae) strains and uses thereof for example for the preparation of fresh or frozen dough products e.g. bread. It provides freeze-resistant bakers yeast strains which are e.g. obtainable from specific deposited strains e.g. by breeding these strains with each other or with other Saccharomyces cerevisiae strains. The invention also relates to methods of using said strains or methods of preparing a dough or dough product or yeast product as well as such products.
Abstract:
Disclosed are a base station clustering method and base station control method and device relating to the field of communications. The base station clustering method comprises: performing clustering on each base station in a base station set managed by a cluster server so as to obtain at least one cluster; determining a cluster with the number of base stations in the cluster being 1; determining an adjacent base station of the base station in the cluster; when the adjacent base station is a cluster head base station, adding the base station serving as a cluster member base station into the cluster having the adjacent base station so that the independently clustered base station can be added into the other clusters wherein cluster head base stations in the other clusters can control a working state of the base station. The problems that a working state of an independent base station cannot be controlled and energy consumption of the base station cannot be reduced when a cluster server clusters a base station set are solved and the effect of reducing energy consumption of the independently clustered base station is achieved.
**Title of the invention:** ABSORBENT ARTICLE

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**Abstract:**

[Problem] To improve air permeability as well as softness and bulkiness of an external non-woven fabric. [Solution] The problem above is solved by the present invention which includes: an absorber (56); a liquid impermeable sheet (11) that has air permeability and covers the back of the absorber (56); and a cover non-woven fabric (20) that covers the back of the liquid impermeable sheet (11). The cover non-woven fabric (20) has multiple holes (14) penetrating from the front to the back and provided spaced apart in at least a region that overlaps the liquid impermeable sheet (11). The edge (14e) of each hole (14) curls up toward the front side and in the region of the cover non-woven fabric (20) that includes the holes (14) rows of the holes (14) are repeatedly formed at a predetermined spacing in a width direction (WD) the holes (14) being aligned in a front-to-back direction at a front-to-back spacing (14y) which is smaller than a front-to-back dimension (14L) of each hole and a widthwise spacing (14x) of the holes (14) being larger than the front-to-back dimension (14L) of each hole.
The present invention relates to methods of using surface active compounds(s) in the preparation process for powders comprising beta-cyclodextrin and omega-3 fatty acids and derivatives thereof and to the dry powders and tablets comprising surface active compounds(s) preferably diglycerides, beta-cyclodextrin and omega-3 fatty acids and derivatives thereof.
Provided is a physical vapor deposition (PVD) method in which a thick, hard carbon film having excellent durability can be formed, and chipping resistance and abrasion resistance can be achieved while improving the low friction properties and peeling resistance of the formed hard carbon film. Provided is a coating film having a total film thickness of greater than 1 μm and less than or equal to 50 μm, wherein, when observed using a bright field TEM image, the cross section of the coating film reveals a region consisting of relatively white hard carbon layers and relatively black hard carbon layers alternately stacked in the thickness direction, and the white hard carbon layers have a region having a columnar microstructure which has grown in the thickness direction. Provided is a method for manufacturing a coating film formed on the surface of a substrate by using a PVD method, wherein the substrate is alternately heated and cooled between a low temperature region above 50°C and below 250°C, and a high temperature region of 250-400°C.
The present disclosure relates to a fluid actuator arrangement (100) and a method for control of a fluid actuator arrangement. The fluid actuator arrangement comprises a piston rod member (101) at least two cylinders (105 106) each said cylinder having a piston body and a clamping mechanism (102 103) associated to each cylinder. Each clamping mechanism is arranged to engage and disengage the piston body of the cylinder to the piston rod member (101). The fluid actuator arrangement comprises further a control element (104) arranged to control a back and forward movement of the respective piston body (107 108) so that forward movement is slower than the backward movement and to control the movement of the respective piston bodies in relation to each other such that at least one piston body is always moving forward and such that an overlap exists wherein at least two of the piston bodies are moving forward simultaneously during a cycle. Further the piston body (107 108) is engaged to the piston rod member in the forward movement and disengaged from the piston rod member in the backward movement.
(54) Title of the invention: CELL WALL/CELL MEMBRANE DISRUPTION DEVICE AND METHOD FOR USING DEVICE

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(57) Abstract:
Provided is a device for disrupting cell walls and/or cell membranes of microorganisms algae etc. included in organic sludge etc. the cell wall/cell membrane disruption device comprising fixed disks rotary disks a rotary shaft for driving said rotary disks a depressurizing means and a housing wherein: at least one set of said fixed disk and said rotary disk is arranged so as to oppose one another; a central section of said fixed disk has a hollow section that is larger than the outer diameter of the rotary shaft passing through the central section; a shearing force produced between said rotary disks and said fixed disks is applied to a target fluid introduced inside the device and having a water content of 89% or higher; and the pressure inside the cell wall/cell membrane disruption device is reduced to -0.08 MPa or less by the depressurizing means. This device can contribute to an increase in the amount of biogas a reduction in the amount of sludge culturing of algae plant cultivation culturing of aquatic products etc. and can separate for example CH4 and CO2 and make them into resources.

No. of Pages: 27 No. of Claims: 16
Systems and methods for dynamically managing power consumption in an ultrasound device are provided herein. A transducer in an ultrasound device may have transmit and receive elements for respectively transmitting and receiving ultrasound signals. In at least one embodiment the method includes sensing a motion of the transducer by a motion sensor that is coupled to the transducer. An amount of power consumed by the ultrasound device is then reduced based on the sensed motion of the transducer. Reducing an amount of power consumption may include adjusting one or more operational parameters of the ultrasound device such as but not limited to reducing the display frame rate the receive aperture or the transmit amplitude or by decoupling power to one or more components of the ultrasound device. Alternatively or in addition power consumption may be reduced based on signals received from a capacitive sensor and/or a patient contact sensor.
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application: 12/11/2018
(43) Publication Date: 04/01/2019

(54) Title of the invention: TERMINAL DEVICE BASE STATION DEVICE COMMUNICATION METHOD AND INTEGRATED CIRCUIT

| (51) International classification | H04W72/04 |
| (31) Priority Document No | 2016-096499 |
| (32) Priority Date | 12/05/2016 |
| (33) Name of priority country | Japan |
| (36) International Application No | PCT/JP2017/016955 |
| Filing Date | 28/04/2017 |
| (86) International Publication No | WO 2017/195660 |
| Number | NA |
| Filing Date | NA |
| (61) Patent of Addition to Application Number | NA |
| Filing Date | NA |
| (62) Divisional to Application Number | NA |
| Filing Date | NA |

(57) Abstract:
A terminal device equipped with a receiving unit for receiving sTTI pattern information expressing sTTI length and a decoding unit which subjects a short physical downlink control channel to decoding according to a transmission scheme and subjects a short physical downlink shared channel to decoding according to a transmission scheme wherein the transmission scheme for the short physical downlink control channel and the transmission scheme for the short physical downlink shared channel are applied on the basis of the sTTI pattern information.

No. of Pages: 48 No. of Claims: 8
The embodiment of the invention provides a method of configuring a cell-specific common control reference signal resource for detecting common control information and/or a broadcast message. The method comprises: a base station determines according to generated parameters such as a number of antenna ports and a used time-frequency resource transmitting common control information a sequence and a location of an employed cell-specific common control reference signal.
Disclosed are a data transmission method device and system which relate to the technical field of communications and can solve the problem in the prior art that a transmission quality target cannot simultaneously satisfy the requirement of a service with a low delay and a high reliability and the requirement of a system efficiency. The specific solution is: a first communication device acquiring a first transmission quality target and first channel quality information; according to the first transmission quality target and the first channel quality information determining a modulation coding scheme (MCS) of data to be transmitted; according to the MCS of the data to be transmitted performing modulation coding on the data to be transmitted; and sending the MCS of the data to be transmitted and the data to be transmitted after the modulation coding to a second communication device. The present invention is used for data transmission.
Provided are a timing method for time division duplexing (TDD) communication a base station and a user equipment unit. The invention determines whether there is a need to perform grouping on uplink/downlink short transmission time intervals (sTTIs) and determines according to a determination result of whether to group or not whether additional instruction information needs to be added to control signaling to indicate a sequence number of an uplink sTTI in an uplink sTTI group to be used by a user equipment unit to upload data or feedback downlink data scheduling. If no additional instruction information needs to be added to the control signaling and the data is to be uploaded or the downlink data scheduling is to be fed back at an uplink sTTI determined according to a default rule an uplink data scheduling or the downlink data scheduling is performed at any downlink sTTI. In the invention an uplink scheduling sequence and/or a downlink acknowledgement sequence can meet a sequencing requirement after a new TDD frame structure and an sTTI have been combined.
A core lifter having lifter bar with an elongate blade which carries a coupling head received in an elongate lifter bar coupling receiver formed in the base configured to permit pivotable swiveling and/or translational misalignment or tolerance compensation during core lifter assembly installation and operation in a plastic formable material molding apparatus including during mold cycling advantageously preventing core lifter binding and extending core lifter life. A preferred lifter has a lifter bar formed of a blade to which a lifter bar coupling ball is attached that is received in an elongate longitudinally extending channel having a transverse cross section complementary to the ball defining a bearing race in which the ball is received enabling slidable pivoting swiveling and slidable movement of the ball and blade relative thereto including while the ball and blade are slidably moving along the race in a longitudinal or lengthwise direction relative to the base.

No. of Pages : 50 No. of Claims : 36
Mill rolls capable of rolling long kilometres used for ESP production line and a method for rolling long kilometres using the mill rolls. The mill rolls comprise rolls (3 4) a bearing box (2) and a roll shifting hydraulic cylinder (1) wherein the middle portion of the surface of said roll sinks inwards one end of the rolls is frustum-shaped smaller and smaller outwards so that the roll surface forms a compensation ramp and the other end of the rolls is cylindrical. The upper roll (3) and the lower roll (4) have the same roll profile and are positioned in the opposite direction. The mill rolls are characterized by reduced runaway of the rolled product and a longer service life.
Title of the invention: AGROCHEMICAL FORMULATION BASED ON EMULSION POLYMERS

Abstract:
The present invention relates to agrochemical compositions based on emulsion polymers; their use for foliar application and their application in aqueous crop protection flowable formulations for controlling agricultural pests, weeds or diseases and reducing the wash-off of active ingredients by rainfall.

No. of Pages: 45  No. of Claims: 8
A polymer composition comprises a thermoplastic polymer a polymer additive selected from the group consisting of nucleating agents clarifying agents and combinations thereof and a fluoropolymer. A molded article comprises at least one wall defining a cavity the wall having an opening therein permitting access to the cavity. The wall comprises a polymer composition comprising a thermoplastic polymer a polymer additive selected from the group consisting of nucleating agents clarifying agents and combinations thereof and a fluoropolymer. A method for molding a polymer composition is also provided.

No. of Pages: 31 No. of Claims: 25
The present invention provides for the use of at least one oil soluble polymer comprising linear polymethylene sequences with an average of 10 to 40 consecutive methylene groups to improve the water resistance of an explosive composition comprising particulate ammonium nitrate and a fuel oil said linear polymethylene sequences with in average 10 to 40 consecutive methylene groups may be either in the main chain or in the side chains of the oil soluble polymer.
Disclosed are a control information processing method a base station and a terminal. The base station determines jointly encoded control information for an uplink subframe wherein the jointly encoded control information is control information obtained from joint encoding of first control information and second control information; and the base station sends the jointly encoded control information. The terminal receives the jointly encoded control information sent by the base station wherein the jointly encoded control information is for the uplink subframe and is the control information obtained from joint encoding of the first control information and the second control information; and the terminal performs clear channel assessment (CCA) according to the jointly encoded control information and occupies the uplink subframe to send a signal after completing CCA. The method of the present invention can reduce control signaling overheads.
**Title of the invention:** PROJECTION APPARATUS AND METHODS

| (51) International classification | G03B21/56 G03B21/62 G03B17/54 |
| (31) Priority Document No | 1607078.1 |
| (32) Priority Date | 22/04/2016 |
| (33) Name of priority country | U.K. |
| (86) International Application No | PCT/GB2017/051128 |
| Filing Date | 24/04/2017 |
| (87) International Publication No | WO 2017/182829 |
| (61) Patent of Addition to Application Number | NA |
| Filing Date | NA |
| (62) Divisional to Application Number | NA |
| Filing Date | NA |

**Abstract:**
A semi-transparent projection surface comprising one or more yarns knitted together to form a projection area at least some of the yarns being coated with a metal substance. Other projection apparatus and methods are disclosed and in particular to the use of a semi-transparent projection screen to allow two-dimensional projected images to appear as three dimensional realistic representations of life size objects or people or to create live special effects appearing in free space.

No. of Pages : 41 No. of Claims : 19
(54) Title of the invention: N-MYRISTOYLTRANSFERASE (NMT)1 NMT2 AND METHIONINE AMINOPEPTIDASE 2 OVEREXPRESSION IN PERIPHERAL BLOOD AND PERIPHERAL BLOOD MONONUCLEAR CELLS IS A MARKER FOR ADENOMATOUS POLYPS AND EARLY DETECTION OF COLORECTAL CANCER

(51) International classification: G01N33/68 G01N33/573 G01N33/574

(31) Priority Document No.: 62/331045
(32) Priority Date: 03/05/2016
(33) Name of priority country: U.S.A.

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Filing Date: 03/05/2017

(87) International Publication No.: WO 2017/190241

(61) Patent of Addition to Application Number: NA
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(57) Abstract:
Described herein is the identification of the NMT1 NMT2 and metAP2 genes mRNA overexpressed in PBMCs of patients with adenomatous polyps in comparison with patients with non-adenomatous polyps and healthy controls. We also discovered that NMT2 levels are higher in the PBMCs of patients adenomatous polyps in comparison with patients with non-adenomatous polyps and healthy control subjects.
In one aspect an apparatus is described that includes a transparent pane having a first surface and a second surface. An electrochromic device is arranged over the second surface that includes a first conductive layer adjacent the second surface a second conductive layer and an electrochromic layer between the first and the second conductive layers. The apparatus further includes at least one conductive antenna structure arranged over the second surface.
The present invention refers to a process for tanning pretanning or retanning leather comprising the steps of: a) providing leather stock tanned or pre-tanned leather b) treating the leather or leather stock of step a) with an aqueous composition and/or a powder composition comprising at least one carboxymethyl cellulose and/or its salts (CMC) and c) drying.
Clipping may be applied during various operations at an encoder or decoder. The lower and upper bounds for clipping can be differentially encoded with respect to predictors. Fixed predictors can be used for example 0 and 2bitdepth for the lower and upper bounds respectively. Adaptive predictors can also be used. Adaptive predictors can be derived from clipping bounds in previously encoded or decoded pictures or explicitly signaled in a bitstream. Whether to encode the clipping bounds can be determined based on the number of pixels that have values close to the clipping bounds. Additionally taking advantage of the clipping operation the prediction residuals can be smoothed while the distortion for the block may not necessarily increase.
(54) Title of the invention: LIQUID-ACCOMMODATING BODY AND LIQUID JET SYSTEM

| (51) International classification | :B41J2/175 |
| (31) Priority Document No | :2016-106433 |
| (32) Priority Date | :27/05/2016 |
| (33) Name of priority country | :Japan |
| (86) International Application No | :PCT/JP2017/018634 |
| Filing Date | :18/05/2017 |
| (87) International Publication No | :WO 2017/204072 |
| (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 feature whereby the orientation at which a liquid-accommodating body is mounted on a liquid jet device can be improved. This liquid-accommodating body which is flexible is provided with an accommodating unit that accommodates the liquid and a connecting member. The connecting member is provided with a liquid outlet port into which a liquid inlet part is inserted an accommodating-body-side electric connecting part that is electrically connected to a device-side electric connecting part while bearing force in at least a +Z direction from the device-side electric connecting part a first receiving part that receives a first positioning part a second receiving part that receives a second positioning part and a recess in which a protrusion of a case is accommodated. The recess and the accommodating-body-side electric connecting part are formed in positions so as to at least partially overlap as seen from the Z direction when oriented in a mounted state and in the orientation of the mounted state the width of the liquid-accommodating body in the Z direction is less than the width in a Y direction and the width in an X direction.

No. of Pages: 108 No. of Claims: 11
An adapter for connecting a separated-outlet fluid cartridge to a single-inlet static mixer includes a lock mechanism and a lock release mechanism. The adapter includes a connection portion that engages the mixer. The lock mechanism has at least one snap arm that lockingly engages the cartridge in a snap fit manner so as to secure the adapter to the cartridge in fluid communication. When in the locked position, separate fluids are evacuated from the cartridge into the mixer where they are mixed prior to dispensing. The lock release mechanism quickly and easily unlocks the at least one snap arm from the cartridge for allowing a user to separate the adapter from the cartridge. The adapter sealing engages with both the mixer and the cartridge so that fluid flowing from the cartridge to the mixer does not leak.
Title of the invention: COATED STEEL SHEET AND MANUFACTURING METHOD THEREFOR

Abstract:
The purpose of the present invention is to provide a coated steel sheet with extremely high tensile strength and excellent delayed fracture resistance and suppression of cracking during resistance welding. Provided is a coated steel sheet: which has a structure comprising 35% to 70% of ferrite by volume fraction not more than 12% of retained austenite by volume fraction 15% to 60% of martensite by volume fraction and for the balance not more than 30% of bainite by volume fraction and not more than 5% of non-recrystallized ferrite by volume fraction; in which the average crystal grain size of the ferrite is 5 µm or less the average crystal grain size of the retained austenite is 2 µm or less the average crystal grain size of the martensite is 2 µm or less and the average crystal grain size of the bainite is 3 µm or less; and in which the structure contains on average at least 30 grains per 100 µm2 of Ti or Nb deposits with an average grain size of 0.10 µm or less.

No. of Pages : 29 No. of Claims : 5
A hydraulic fluid includes an oil of lubricating viscosity and at least 2 wt. % of an ester of a carboxy group-containing interpolymer comprising units derived from a vinyl aromatic monomer and units derived from a carboxylic acid monomer. The interpolymer also contains nitrogen functionality. The hydraulic fluid is at least substantially free of polyacrylates and polymethacrylates.
(57) Abstract :
[Problem] To provide a mixer vehicle and a mixer vehicle management system with which it is possible to assess whether or not water has been added to a concrete mix. [Solution] The mixer vehicle 100 according to an embodiment of the present invention is equipped with a mixer drum 2 a driving device 4 a pressure sensor 4a and a slump-evaluating section 111. The driving device 4 comprises a fluid circuit for generating a driving force for rotating the mixer drum 2. The pressure sensor 4a detects information (mixer drum driving pressure) relating to the driving force. The slump-evaluating section 111 evaluates temporal changes in the slump of the concrete mix in the mixer drum 2 on the basis of the output of the pressure sensor 4a.

No. of Pages : 54 No. of Claims : 14
A head is disclosed for use with a continuous manufacturing system. The head may have a housing a fiber guide rotatably disposed at least partially inside the housing and a diverter disposed at an end of the housing. The diverter may be configured to divert radially outward a matrix-coated fiber passing through the fiber guide.
The present disclosure is directed to methods of treating cancer comprising administering dihydrotestosterone, a dihydrotestosterone derivative, a dihydrotestosterone promoter, or a combination thereof to a patient in need of treatment.
A system for filtering an input image dataset is disclosed. A plurality of sequences of input signal values wherein each sequence corresponds to a different attribute wherein an input signal value is associated with an attribute and a sampling point (i). At least one processor (4) is configured to control computing an output signal value corresponding to a sampling point and an attribute. For a particular sampling point (i) and for each of a plurality of different attributes of the set of attributes associating a weight to an input signal value based on a similarity between the signal value and for a plurality of the sampling points j excluding the sampling point (i). Also the system computes a weighted sum based on the input signal values and weights. The attribute is a location or a frequency.
A head is disclosed for use with a manufacturing system. The head may have a housing configured to discharge a tubular structure reinforced with at least one continuous fiber and having a three-dimensional trajectory and a cure enhancer operatively connected to the housing and configured to cure a liquid matrix in the tubular structure during discharge. The head may also have a nozzle configured to discharge a fill material into the tubular structure and a wand extending from the housing to the nozzle.
A process for preparing the polymorph I of the anhydrate of 2-Chloro-N-(4-chlorobiphenyl-2-yl)-nicotinamide (boscalid) of the formula (I) is provided the process comprising the steps of: 

a) dissolving the polymorph II of the anhydrate of boscalid in a first solvent in an amount and at conditions allowing dissolution of the polymorph II of the anhydrate of boscalid; 

b) combining the resulting solution with water; 

c) isolating the solid from the solvent mixture; and 

d) drying the solid to obtain the polymorph I of the anhydrate of boscalid.
# Patent Application Publication

- **Patent Application Number**: 201817042991 A
- **Publication Date**: 04/01/2019
- **Title of the Invention**: HEAT SOURCE UNIT
- **Abstract**: In this heat source unit (2) refrigerant circuit components are provided within a casing (40) and refrigerant circuit components are changed or added in accordance with capacity or function. A bottom frame (51) forming the bottom surface of the casing (40) comprises: a first bottom frame (51a) to which first refrigerant circuit components that are the same regardless of capacity or function among the refrigerant components are provided; and a second bottom frame (51b) to which second refrigerant circuit components that are changed or added in accordance with capacity or function among the refrigerant components are provided.

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### Technical Details
- **International Classification**: F24F1/56
- **Priority Document No**: 2016-084983
- **Priority Date**: 21/04/2016
- **Name of Priority Country**: Japan
- **International Application No**: PCT/JP2017/015450
- **Filing Date**: 17/04/2017
- **International Publication No**: WO 2017/183601
- **Patent of Addition to Application Number**: NA
- **Filing Date**: NA
- **Divisional to Application Number**: NA
- **Filing Date**: NA

No. of Pages: 15 No. of Claims: 5
A composition comprising: (a) a nonaqueous liquid carrier; (b) an inhibitor compound selected from the group consisting of urease inhibitors nitrification inhibitors and mixtures thereof; and (c) a colorant composition the colorant composition comprising: (i) an azo colorant; and (ii) about 1 wt.% to about 60 wt.% of water. A method for making the composition by mixing the ingredients. A method for producing a fertilizer composition the method comprising the steps of: (a) providing a granular substrate having a surface the granular substrate comprising a nitrogen source; (b) providing a coating composition; (c) applying the coating composition to at least a portion of the surface of the granular substrate; and (d) drying the granular substrate from step (c) to produce a coating on at least a portion of the surface of the granular substrate.
Provided are a method and apparatus for configuring a sounding reference signal. The method comprises: a base station determining a movement speed of a user equipment (UE); according to the movement speed of the UE the base station determining a UE-level subframe configuration set from a plurality of UE-level SRS subframe configuration sets corresponding to a cell-level SRS subframe configuration set used and determining a UE-level SRS subframe configuration parameter from the determined UE-level subframe configuration set wherein the UE-level SRS subframe configuration parameter is used for indicating a subframe for sending an SRS; and the base station sending to the UE the UE-level SRS subframe configuration parameter and identification information about the UE-level subframe configuration set. By determining a UE-level SRS subframe configuration set and a UE-level SRS subframe configuration parameter allocated to a UE according to a movement speed of the UE the density of the UE sending an SRS can be self-adaptively adjusted according to the movement speed of the UE thereby being favourable to a base station for acquiring complete channel information.
The present disclosure is related to pharmaceutical compositions and methods for treating and/or preventing oxalate-related disorders. More particularly, the present disclosure pertains to compositions comprising an oxalate-degrading bacteria Oxalobacter formigenes particularly suitable for the treatment and/or prevention of late-stage hyperoxaluria characterized by high plasma-oxalate levels and a progressing decrease in kidney function.
**Title of the invention: IMIDAZOLONE COMPOUNDS AS HUMAN NEUTROPHIL ELASTASE INHIBITORS**

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**Abstract:**
This invention relates to imidazolone derivatives having human neutrophil elastase inhibitory properties and their use in therapy.

No. of Pages: 101 No. of Claims: 14
A multi-dose dry powder inhaler with a blister folding device is provided. The inhaler comprises a housing containing a blister strip and a blister opening device. The blister strip comprises a plurality of individual blisters each blister containing a dose of medicament for inhalation by a user. The blister opening device comprising a blister support element for supporting one of said blisters and a blister folding element co-operable with the blister support element the blister folding element and the blister support element being moveable relative to each other between a first position permitting movement of said blister into or onto the blister support element and a second burst position in which the blister folding element has co-operated with the blister support element. Movement from the first position to the second position causes two spaced apart portions of said blister to each fold relative to the remainder of the blister to produce two spaced apart openings each opening extending along the circumference of the blister bowl beginning and terminating at points located on the fold line No piercing of the blister at any stage is required.
Provided is a reverse magnetostrictive power generation element with increased electromotive force and reduced manufacturing cost and which enables mass production; also provided are a method for manufacturing this power generation element and an actuator. This reverse magnetostrictive power generation element is equipped with: a frame yoke comprising a magnetic material and having a curved section for forming a closed magnetic circuit; a magnetic part formed in a portion of the frame yoke; a magnetostrictive plate comprising a magnetostrictive material; a coil; and magnets. The magnetic part has a hardness and a shape for the purpose of imparting a uniform compressive force or tensile force to the magnetostrictive plate and is magnetically saturated by the magnetic bias of the magnets. The magnetostrictive plate is attached to the frame yoke so as to be parallel to the magnetic part. The coil is wound around a parallel-joist part comprising the magnetostrictive plate and the magnetic part and/or around the frame yoke. The magnetostrictive plate elongates or contracts and generates electricity when external force is applied.
Provided are an expression inhibitor of inflammation promoting factors based on the discovery of a new factor which influences the expression level of inflammation promoting factors and a development tool for the expression inhibitor as well as a diagnostic agent and a diagnosis method for immune diseases inflammatory diseases painful conditions and the like. Specifically provided are: an expression inhibitor of inflammation promoting factors containing at least one inhibitor selected from the group consisting of RBMS2 expression inhibitors and RBMS2 function inhibitors; a screening method using as an indicator the expression or the function of RBMS2; an expression cassette useful for said method; a diagnostic agent containing a detection agent for RBMS2 gene expression products and a disease detection method using as an indicator the RMBS2 gene expression level.
Provided is a synchronous steering vehicle body (1000) comprising vehicle wheels (0400) a driving cab (0600) and a steering mechanism driving the vehicle wheels (0400) to steer synchronously with the driving cab (0600). The steering center axis of a vehicle wheel (0400) is perpendicular to the autorotation center axis of the vehicle wheel (0400). The steering motions of the vehicle wheels (0400) and the driving cab (0600) keep synchronized. The synchronous steering vehicle body (1000) is capable of directly achieving synchronous steering of the vehicle wheels (0400) and the driving cab (0600).
The present invention is a cooling device comprising a body (1) in the form of a cabinet with heat insulation defining a refrigerated inner space; a door (2) that is hinged to the body (1) in a closeable manner and a cold storage container (10) that has a detachable base (19) in the inner volume and side walls (12) extending perpendicularly to the base (19) and that defines a storage space (50) for the items to be refrigerated. The cooling device comprises a cold battery element (30) that is placed in an upright manner from the base (19) in the storage space (50) so as to divide the storage space (50) into a first section (52) and at least one second section (54) neighboring to the first section (52).
An ultrasound-on-a-chip device has an ultrasonic transducer substrate with plurality of transducer cells and an electrical substrate. For each transducer cell one or more conductive bond connections are disposed between the ultrasonic transducer substrate and the electrical substrate. Examples of electrical substrates include CMOS chips integrated circuits including analog circuits interposers and printed circuit boards.
**Title of the invention:** UNIVERSAL ULTRASOUND DEVICE AND RELATED APPARATUS AND METHODS

**Abstract:**
An ultrasound device is described configurable to operate in a variety of modes. At least some of the modes are associated with different frequencies of ultrasound signals. A system is also described comprising a multi-modal ultrasound probe configured to operate in a plurality of operating modes associated with a respective plurality of configuration profiles and a computing device coupled to the handheld multi-modal ultrasound probe and configured to in response to receiving input indicating an operating mode selected by a user cause the multi-modal ultrasound probe to operate in the selected operating mode.

No. of Pages : 69  No. of Claims : 28
A method and systems for monitoring changes for a server system (200) are disclosed. Data are obtained (100) from the server system and the data are processed (102) to determine a first change for the server system. A record of the first determined change is stored (104). The first determined change is then compared (106) to a second determined change (100a-104a) for the server system and the comparison is used (108) to evaluate the second determined change for the server system. The second determined change may be a current change for the server system and the first determined change a previously determined change; the step of comparing may compare (106) the stored record of the previously determined change to the current change.
(51) International classification : C12Q1/70
(31) Priority Document No : 62/339323
(32) Priority Date : 20/05/2016
(33) Name of priority country : U.S.A.
(86) International Application No : PCT/US2017/031595
   Filing Date : 08/05/2017
(87) International Publication No : WO 2017/200790
(61) Patent of Addition to Application Number : NA
   Filing Date : NA
(62) Divisional to Application Number : NA
   Filing Date : NA

(71) Name of Applicant :
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(72) Name of Inventor :
1) LI, Yu

(57) Abstract :
A real-time reverse transcriptase-polymerase chain reaction (RT-PCR) assay that utilizes multiplex primers and probes with degenerate nucleotides to detect divergent species of lyssavirus is described. The probes used in the RT-PCR assay target a highly conserved region at the 5 end of the lyssavirus genome and are modified with either a minor groove binder (MGB) or locked nucleic acid (LNA) nucleotides to increase their melting temperature. The described assay detects all known lyssavirus species with a sensitivity and specificity superior to traditional hemi-nested PCR and the direct fluorescent antibody (DFA) test.

No. of Pages : 34 No. of Claims : 28
**Abstract:**

A vibratory screening apparatus (1) is disclosed. According to the invention the vibratory screening apparatus (1) comprises a support (2); at least two screen decks (30) arranged one over the other as an assembly (3) each screen deck (30) including a screen frame (31) a screen (32) and a chamber underlaying the screen surface an outlet duct (12) for oversized material and an outlet duct (13) for undersized material that is in communication with the chamber; mountings (4a 4b) configured for mounting the assembly (3) of the at least two screen decks (30) to the support (2); a drive support (5) with a motor assembly (6) configured for vibrating the assembly of the at least two screen decks (3); and a feed unit (7) configured to feed the material to be screened to each screen deck (30); wherein the feed unit (7) is arranged on the support (2) and configured to be moved between a feed position and a maintenance position and wherein the assembly of the at least two screen decks (3) is resiliently arranged on the support (2) while the feed unit (7) is non-resiliently arranged on the support (2).

---

**Title of the invention:** VIBRATORY SCREENING APPARATUS

**Priority Document No:** 16168337.0

**Priority Date:** 04/05/2016

**Name of priority country:** EPO

**International Application No:** PCT/EP2017/060521

**Filing Date:** 03/05/2017

**International Publication No:** WO 2017/191181

**Name of Applicant:** 1) METSO MINERALS, INC.

**Address of Applicant:** Tlnlahdenkatu 2 00100 Helsinki Finland

**Name of Inventor:** 1) GR–NVALL, Lars

**Abstract:**

A vibratory screening apparatus (1) is disclosed. According to the invention the vibratory screening apparatus (1) comprises a support (2); at least two screen decks (30) arranged one over the other as an assembly (3) each screen deck (30) including a screen frame (31) a screen (32) and a chamber underlaying the screen surface an outlet duct (12) for oversized material and an outlet duct (13) for undersized material that is in communication with the chamber; mountings (4a 4b) configured for mounting the assembly (3) of the at least two screen decks (30) to the support (2); a drive support (5) with a motor assembly (6) configured for vibrating the assembly of the at least two screen decks (3); and a feed unit (7) configured to feed the material to be screened to each screen deck (30); wherein the feed unit (7) is arranged on the support (2) and configured to be moved between a feed position and a maintenance position and wherein the assembly of the at least two screen decks (3) is resiliently arranged on the support (2) while the feed unit (7) is non-resiliently arranged on the support (2).
### Title of the invention: SN-PLATED STEEL SHEET

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<th>(21) Application No. 201817042630 A</th>
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### (51) International classification:
- C25D11/34
- C25D5/26
- C25D5/48

### (31) Priority Document No
- 2016-103382

### (32) Priority Date
- 24/05/2016

### (33) Name of priority country
- Japan

### (43) Publication Date: 04/01/2019

### (54) Title of the invention: SN-PLATED STEEL SHEET

#### (71) Name of Applicant:
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   - Address: 6-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo 1008071 Japan

#### (72) Name of Inventor:
1. YAMANAKA, Shintaro
2. HIRANO, Shigeru
3. YANAGIHARA, Morio
4. YOKOYA, Hirokazu

### (57) Abstract:
This Sn-plated steel sheet comprises: a steel sheet; a Sn plating layer that is formed on at least one surface of the steel sheet and that contains 0.1-15 g/m² of metal Sn in mass%; and a coating layer that is formed on the surface of the Sn plating layer and that contains a zirconium oxide and a tin oxide. The content of the zirconium oxide within the coating layer is 0.2-50 mg/m² in terms of the amount of metal Zr. The peak position of the binding energy of Sn3d5/2 according to X-ray photoelectron spectroscopy of the tin oxide within the coating layer is greater than the peak position of the binding energy of the metal Sn by 1.6 eV or more.

No. of Pages: 30
No. of Claims: 3
The present disclosure relates to a process for producing a mono-alkylated aromatic compound using a treated catalyst made by a method of this invention is disclosed. The method comprises the steps of heating an untreated catalyst in the presence of a gaseous stream having a dew point temperature less than about 5°C to form a treated catalyst. The treatment is effective to improve the activity and selectivity of the catalyst.
Title of the invention: SN ALLOY-PLATED STEEL SHEET

Abstract:
This Sn alloy-plated steel sheet comprises: a steel sheet; a composite alloy layer that is formed on at least one surface of the steel sheet and that comprises an Fe-Ni-Sn alloy layer and an island-shaped Sn layer positioned on the Fe-Ni-Sn alloy layer; and a coating layer that is formed on the surface of the composite plating layer and that contains a zirconium oxide and a tin oxide. The composite plating layer contains a predetermined amount of Ni and a predetermined amount of Sn. The content of the zirconium oxide within the coating layer is 0.2-50 mg/m² in terms of the amount of metal Zr. The peak position of the binding energy of Sn3d5/2 according to X-ray photoelectron spectroscopy of the tin oxide within the coating layer is greater than the peak position of the binding energy of the metal Sn by 1.6 eV or more.
Title of the invention: THREE-CHAMBER ELECTROCHEMICAL BALANCING CELLS FOR SIMULTANEOUS MODIFICATION OF STATE OF CHARGE AND ACIDITY WITHIN A FLOW BATTERY

Abstract:
Parasitic reactions such as evolution of hydrogen at the negative electrode can occur under the operating conditions of flow batteries and other electrochemical systems. Such parasitic reactions can undesirably impact operating performance by altering the pH and/or state of charge of one or both electrolyte solutions in a flow battery. Electrochemical balancing cells can allow adjustment of electrolyte solutions to take place. Electrochemical balancing cells suitable for placement in fluid communication with both electrolyte solutions of a flow battery can include: a first chamber containing a first electrode a second chamber containing a second electrode a third chamber disposed between the first chamber and the second chamber a cation-selective membrane forming a first interface between the first chamber and the third chamber and a bipolar membrane a cation-selective membrane or a membrane electrode assembly forming a second interface between the second chamber and the third chamber.
**Title of the invention :** DROPLET DEPOSITION HEAD ALIGNMENT SYSTEM

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**Name of Applicant :**
1) XAAR TECHNOLOGY LIMITED
   Address of Applicant : 316 Science Park Cambridge CB4 0XR U.K.

**Name of Inventor :**
1) NAUNTON, Ulrik Manfred
2) JEAPES, Stephen Mark
3) LEWIS, Richard Hugh
4) GARCIA MAZA, Jesus
5) GOMEZ, Arturo Garcia
6) DUNN, Robert John Charles

**Abstract :**
A droplet deposition head including a datum surface arrangement for alignment of the head relative to an external mounting component in either a vertical mounting mode in which the head is held against a vertical mounting plate or a horizontal mounting mode where the head is held against a horizontal mounting plate. The datum surface arrangement comprising at least seven datum surfaces (x1; y1 y2 y3; z1 z2 z3) provided on the head wherein five of the seven datum surfaces are provided for alignment in both vertical and horizontal mounting modes and wherein a sixth datum surface (z3) is provided for alignment exclusively in said horizontal mounting mode and a seventh datum surface (y3) is provided for alignment exclusively in said vertical mounting mode.

No. of Pages : 29 No. of Claims : 20
**Title of the invention:** METHOD AND APPARATUS FOR SEGMENT ROUTING AND RSVP-TE ROUTING IN TRANSPORT SDN NETWORKS

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**Abstract:**

A method for routing packet traffic through a network comprising a plurality of network nodes supporting RSVP-TE protocol and Segment Routing protocol. Each of the two protocols is associated with a separate set of labels. The method comprises calculating (202) a path through the network; checking support (204) for both protocols at nodes along the calculated path; and encoding (206) the calculated path as a set of Adjacency Segment Identifiers. The method also comprises optimising (208) a label stack of the calculated path by substituting more than one adjacency SID(s) with a node SID if a partial path identified by the substituted adjacency SIDs equals a shortest path. If all nodes along the calculated path support label stack depth equal to or deeper than the optimised label stack depth (210) then segment routing is used to set up the path. If a node along the calculated path does not support a label stack depth equal to or deeper than the depth of the optimised label stack (210) then an Explicit Route Object is used for signalling the calculated path using RSVP-TE (214).

No. of Pages : 23  No. of Claims : 18
(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application: 15/11/2018

(43) Publication Date: 04/01/2019

(54) Title of the invention: LUBRICANT BASE OIL AND LUBRICATING OIL COMPOSITION

(51) International classification: C10M105/42C10M133/40C10M169/04

(31) Priority Document No: 2016-118099

(32) Priority Date: 14/06/2016

(33) Name of priority country: Japan

(86) International Application No: PCT/JP2017/021113

(87) International Publication No: WO 2017/217295

(61) Patent of Addition to Application Number: NA

(62) Divisional to Application Number: NA

(71) Name of Applicant:

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(72) Name of Inventor:

1) KAWAMOTO Hideki
2) MONJIYAMA Shunsuke

(57) Abstract:

[Problem] To provide a lubricant base oil having excellent biodegradability and excellent low-temperature fluidity and capable of providing excellent extreme pressure performance when an extreme pressure additive is blended therein. [Solution] An ester constituting a lubricant base oil and having a molar percentage Amol% for a trimethylolpropane-derived constituent component (A) of 25-42 mol% a molar percentage Bmol% for a C8-12 monovalent linear saturated fatty acid-derived constituent component (B) of 33-55 mol% a molar percentage Cmol% for an adipic acid-derived constituent component (C) of 12-34 mol% and a molar percentage for a lauric acid-derived constituent component in the C8-12 monovalent linear saturated fatty acid-derived constituent component (B) of 5-50 mol%. (BCOOH + CCOOH)/AOH = 0.90 to 1.02 (AOH indicates the hydroxyl group equivalent for the trimethylolpropane-derived constituent component (A); BCOOH indicates the carboxyl group equivalent for the C8-12 monovalent linear saturated fatty acid-derived constituent component (B); and CCOOH indicates the carboxyl group equivalent for the adipic acid-derived constituent component (C)).

No. of Pages: 32 No. of Claims: 2
(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application: 13/11/2018

(43) Publication Date: 04/01/2019

(54) Title of the invention: HIGH STRENGTH GALVANNEALED STEEL SHEET AND PRODUCTION METHOD THEREFOR

(51) International classification: C21D9/46C22C38/00C22C38/06

(31) Priority Document No: 2016-126251

(32) Priority Date: 27/06/2016

(33) Name of priority country: Japan

(86) International Application No: PCT/JP2017/020764

Filing Date: 05/06/2017

(87) International Publication No: WO 2018/003407

(33) Name of priority country: Japan

(32) Priority Date: 27/06/2016

(31) Priority Document No: 2016-126251

(36) Name of Applicant: 1) JFE STEEL CORPORATION

Address of Applicant: 2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku, Tokyo 1000011 Japan

(72) Name of Inventor:

1) MAEDA Satoshi
2) MAKIMIZU Yoichi
3) SUZUKI Yoshitsugu
4) KAWASAKI Yoshiyasu

(57) Abstract:

Provided are: a high strength galvannealed steel sheet having an Mn-containing TRIP steel sheet as the base metal and having excellent workability and hole expandability; and a manufacturing method therefor. A method for producing a high strength galvannealed steel sheet which has a galvanized layer with a coated plating weight of 20-120 g/m² per single surface on the surface of a steel sheet the component composition of which contains in mass% C: 0.03-0.35% Si: 0.01-1.00% Mn: 3.6-8.0% Al: 0.001-1.000% P: 0.100% or less S: 0.010% or less the balance being made of Fe and unavoidable impurities. When cold-rolling the steel sheet the cold-rolling reduction is 20%-35% and when annealing the maximum temperature the steel sheet reaches in the annealing furnace is 600°C-700°C.

No. of Pages: 36 No. of Claims: 7
A measuring a closed-loop fluid transfer system is provided that includes a measuring adapter having a first end and a second ends and a chamber located there between and configured to hold a volume of fluid. The measuring adapter includes a first receiving valve assembly located at the first end of the measuring adapter. The first receiving valve assembly includes a receiving valve member at least a portion of which is separable from a portion of the first receiving valve assembly. This creates an opening that provides fluid communication to the chamber when a force is exerted on the receiving valve member of the first receiving valve assembly. A second valve assembly located at the second end of the measuring adapter includes a valve member. At least a portion of the valve member of the second valve assembly is separable from a portion of the second valve assembly to create an opening that provides fluid communication to the chamber.
Title of the invention: AN ARRANGEMENT FOR INTERCONNECTION OF WAVEGUIDE STRUCTURES AND A STRUCTURE FOR A WAVEGUIDE STRUCTURE INTERCONNECTING ARRANGEMENT

Abstract:
The present invention relates to an arrangement (100) for interconnection of waveguide structures (1020) or components comprising a number of waveguide flange adapter elements (100) comprising a surface of a conductive material with a periodic or quasi-periodic structure (15) formed by a number of protruding elements (115) arranged or designed to allow waves to pass across a gap between a surface around a waveguide opening (3) to another waveguide opening in a desired direction or waveguide paths at least in an intended frequency band of operation and to stop propagation of waves in the gap in other directions. It comprises means allowing interconnection with a waveguide flange or another waveguide flange adapter element without requiring electrical or conductive contact and assuring that the gap is present between the at least one surface (15) formed by periodically or quasi-periodically arranged protruding elements (115) and a surface around a waveguide opening of the other waveguide flange (20) hence assuring that the surface (15) formed by the periodically or quasi-periodically arranged protruding elements (115) is not in direct mechanical contact with the other opposite interconnecting waveguide flange (20).

Fig. 1

No. of Pages : 35 No. of Claims : 39
Poultry vaccines against infectious bronchitis and Turkey Rhinotracheitis are provided. The vaccines are adjuvanted with oil emulsion containing an immunostimulatory oligonucleotide. The methods of using the vaccines are also provided.
Compositions and methods are provided for genome modification of a target sequence in the genome of a plant or plant cell for genome editing of a nucleotide sequence in the genome of a plant or plant cell and/or for inserting or deleting a polynucleotide of interest into or from the genome of a plant. The methods and compositions employ a guide polynucleotide/Cpf1 endonuclease system to provide an effective system for modifying or altering target sequences within the genome of a plant plant cell or seed. Also provided are guide polynucleotides/Cpf1 endonucleases complexes guide polynucleotides plant-optimized Cpf1 endonuclease sequences recombinant DNA constructs comprising plant-optimized Cpf1 endonucleases genes and combinations thereof.
Isoquinoline compounds for treating various diseases and pathologies are disclosed. More particularly the present disclosure concerns the use of an isoquinoline compound or analogs thereof in the treatment of disorders characterized by the activation of Wnt pathway signaling (e.g. cancer abnormal cellular proliferation angiogenesis Alzheimers disease lung disease inflammation auto-immune diseases and osteoarthritis) the modulation of cellular events mediated by Wnt pathway signaling as well as neurological conditions/disorders/diseases linked to overexpression of DYRK1A.
(57) Abstract:
Disclosed herein is one or more subtilisin variant useful for cleaning applications and in methods of cleaning. One embodiment is directed to one or more subtilisin variant including one or more Bacillus sp. subtilisin polypeptide variant and one or more cleaning composition comprising one or more such variant.
The invention relates to a rotor pole for a generator (130) of a wind energy plant (100). The rotor pole comprises a pole body (10) said pole body (10) preferably being laminated. The pole body (10) has a pole core (14) and a pole shoe (12) and at least one aluminium winding in particular made from a flat aluminium strip which is arranged around the pole core (14). The pole body (10) also has an intermediate layer (18) which is arranged between the pole body (10) and the aluminium winding the intermediate layer (18) being produced with aluminium or consisting of aluminium. The invention further relates to a wind energy plant generator and to a method for producing a rotor pole.
Title of the invention: NLRP3 MODULATORS

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Abstract:
This disclosure features chemical entities (e.g. a compound or a pharmaceutically acceptable salt and/or hydrate and/or co-crystal and/or drug combination of the compound) that modulate (e.g. agonizes or partially agonizes) NLRP3 that are useful e.g. for treating a condition disease or disorder in which a decrease in NLRP3 activity (e.g. a condition disease or disorder associated with repressed or impaired NLRP3 signaling) contributes to the pathology and/or symptoms and/or progression of the condition disease or disorder (e.g. cancer) in a subject (e.g. a human). This disclosure also features compositions as well as other methods of using and making the same.

No. of Pages: 121 No. of Claims: 16
(54) Title of the invention: COMMON RESOURCE-BASED DATA TRANSMISSION METHOD AND DEVICE

(51) International classification: H04W72/04
(31) Priority Document No: NA
(32) Priority Date: NA
(33) Name of priority country: NA
(86) International Application No: PCT/CN2016/080805
  Filing Date: 29/04/2016
(87) International Publication No: WO 2017/185371
(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 present invention are a common resource-based data transmission method and device. A communication method according to the present invention comprises: acquiring common resource configuration information; determining on the basis of the common resource configuration information an available resource for data transmission; and transmitting data on the basis of the available resource. Another communication method according to the present invention comprises: determining common resource configuration information; sending to one or more terminals the common resource configuration information; and performing on the basis of the common resource configuration information data transmission with a first terminal of the one or more terminals. The solutions provided in the present invention enable a terminal to transmit data with no signaling cost or a reduced required signaling cost.

No. of Pages: 20  No. of Claims: 15
Embodiments described generally relate to systems comprising a humidifier (e.g. a bubble column humidifier) and a heating device (e.g. a heat exchanger) and associated methods. In certain embodiments the heating device heats a first liquid stream comprising a condensable fluid in liquid phase (e.g. water) and a dissolved salt (e.g. NaCl) to a relatively low temperature (e.g. about 90°C or less) prior to the first liquid stream entering the humidifier through a main humidifier liquid inlet. In some cases the system comprising the humidifier and the heating device requires only low-grade heat to operate which may be advantageous due to the low cost and high availability of such heat.
Methods for diagnosis of bacterial and viral infections are disclosed. In particular, the invention relates to the use of biomarkers that can determine whether a patient with acute inflammation has a bacterial or viral infection.
A sensing system for numerical representation is disclosed. The sensing system is comprised of optical sensors each of which provides output signal a bar to hold the optical sensor sliding objects to be slide over the bar to intersect with optical wave of the optical sensors; and a microprocessor to receive the output signals of the optical sensors and converts each unique combination of the output signals into an identifier representing a number.
(54) Title of the invention : APPARATUS FOR TRANSMITTING SYNCHRONOUS SIGNAL AND METHOD FOR TRANSMITTING SYNCHRONOUS SIGNAL

(51) International classification :H04J11/00H04B7/06H04B7/0413
(31) Priority Document No :10-2016-0072377
(32) Priority Date :10/06/2016
(33) Name of priority country :Republic of Korea
(86) International Application No :PCT/KR2017/003820
   Filing Date :07/04/2017
(87) International Publication No :WO 2017/213342
(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 technique of improving when performing synchronization between a transmitting device and a receiving device communicating on the basis of a beamforming technique an overall beamforming synchronization performance by enabling fast beam tracking in a receiving device.

No. of Pages : 37 No. of Claims : 15
The invention relates to: - a laminated glazing comprising a first and a second sheet of glass bonded together by an adhesive interlayer characterized in that the surface of the first sheet of glass facing the second sheet comprises a peripheral band of opaque enamel and a borderless functional layer the edge of which covers the peripheral enamel band while being entirely located inside the surface of the band and in that the second sheet of glass has a thickness less than 1.4 mm; - two methods for manufacturing this laminated glazing; - and the application of this laminated glazing for a transport vehicle a building interior design or street furniture and particularly as a windshield for a motor vehicle.

No. of Pages : 9 No. of Claims : 10
(54) Title of the invention: **MULTICELL RECHARGEABLE BATTERY WITH A DYNAMIC POWER MANAGEMENT SYSTEM**

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(57) **Abstract:**

A multicell rechargeable battery with a dynamic power management system has an enclosure multiple cell clamps and a power management system. The enclosure is the outer casing that holds the cell clamps in place. Each of the cell clamps is a device used to hold a single cell for the multicell battery. The enclosure has two trays that sandwich the cell clamps and keep the enclosed cells in place. Each cell clamp has a pair of endcaps and a pair of terminals. The terminals are positioned within the endcaps so that the enclosed cells can be placed into electrical communication with the power management system. The power management system dynamically modifies the circuit connection between each of the cell clamps to compensate for changes in the electrical state of the enclosed cells.

No. of Pages: 8 No. of Claims: 20
The invention relates to a method of assembling a laminated glazing (1) in which an overmoulded component (10; 11) is placed inside an opening cut in an adhesive sheet (4); the overmoulded component (10; 11 4d) and the precut adhesive sheet (4 4e) are spot-welded (5) to a first sheet of glass (2) in the vicinity of the opening so that the lateral walls of this opening and of the overmoulded component (10; 11 4d) remain contiguous; the adhesive sheet (4 4e) and a second sheet of glass (3) are spot-welded (6); and the laminated glazing (1) is assembled by implementing suitable temperatures and pressures in the usual way; a laminated glazing (1) obtained by this method and the application thereof to a transport vehicle to buildings to street furniture or to interior fixtures and fittings.
The invention is directed to a single- or multiple-component composition which forms upon mixing with water a (meth)acrylic hydrogel and which composition comprises at least one water soluble at room temperature liquid (meth)acrylic compound supported on a solid carrier and/or an aqueous solution of at least one at room temperature solid or liquid (meth)acrylic compound a free-radical initiator and optionally a catalyst for the initiator. The invention is also directed to a method for producing a hydrogel to a hydrogel to an acrylic injection material and to a method for sealing cracks voids flaws and cavities in building structures.
An apparatus (100) to maintain an environment over an anterior surface of a patient eye can include an enclosure (110) sized and shaped to be seated about the patient eye to form a cavity (112) within the enclosure. The enclosure can be configured to contain a fluid other than ambient air in contact with the patient eye. The apparatus can include a fluid regulator (1209) in communication with the enclosure where the fluid regulator can be configured to regulate the composition of the fluid contained within the enclosure.

No. of Pages : 45 No. of Claims : 37
The present invention relates to prolonged release pharmaceutical dosage forms, the manufacture thereof as well as their use for administration to human being.

No. of Pages : 45  No. of Claims : 14
The present invention provides compositions and methods relating to or derived from antigen binding proteins activate FGF21-mediated signaling. In embodiments, the antigen binding proteins specifically bind to (i) (3-Klotho; (ii) FGFRlc, FGFR2c, FGFR3c or FGFR4; or (iii) a complex comprising (3-Klotho and one of FGFRlc, FGFR2c, FGFR3c, and FGFR4. In some embodiments the antigen binding proteins induce FGF21-like signaling. In some embodiments, an antigen binding protein is a fully human, humanized, or chimeric antibodies, binding fragments and derivatives of such antibodies, and polypeptides that specifically bind to (i) (3-Klotho; (ii) FGFRlc, FGFR2c, FGFR3c or FGFR4; or (iii) a complex comprising (3-Klotho and one of FGFRlc, FGFR2c, FGFR3c, and FGFR4. Other embodiments provide nucleic acids encoding such antigen binding proteins, and fragments and derivatives thereof, and polypeptides, cells comprising such polynucleotides, methods of making such antigen binding proteins, and fragments and derivatives thereof, and polypeptides, and methods of using such antigen binding proteins, fragments and derivatives thereof, and polypeptides, including methods of treating or diagnosing subjects suffering from type 2 diabetes, obesity, NASH, metabolic syndrome and related disorders or conditions.
The present disclosure provides compositions and methods relating to or derived from antigen binding proteins activate FGF21-mediated signaling. In embodiments, the antigen binding proteins specifically bind to (i) β-Klotho; (ii) FGFR1c, FGFR2c, FGFR3c or FGFR4; or (iii) a complex comprising β-Klotho and one of FGFR1c, FGFR2c, FGFR3c, and FGFR4. In some embodiments the antigen binding proteins induce FGF21-like signaling. In some embodiments, the antigen binding proteins are fully human, humanized, or chimeric antibodies, binding fragments and derivatives of such antibodies, and polypeptides that specifically bind to (i) β-Klotho; (ii) FGFR1c, FGFR2c, FGFR3c or FGFR4; or (iii) a complex comprising β-Klotho and one of FGFR1c, FGFR2c, FGFR3c, and FGFR4. Other embodiments provide nucleic acids encoding such antigen binding proteins, and fragments and derivatives thereof, and polypeptides, cells comprising such polynucleotides, methods of making such antigen binding proteins, and fragments and derivatives thereof, and polypeptides, and methods of using such antigen binding proteins, fragments and derivatives thereof, and polypeptides, including methods of treating or diagnosing subjects suffering from type 2 diabetes, obesity, NASH, metabolic syndrome and related disorders or conditions.
**Title of the invention:** METHOD FOR PRODUCING SUBSTITUTED 5-FLUORO-1H-PYRAZOLOPYRIDINES

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**Abstract:**
The present application relates to a novel and efficient method for producing novel substituted 5-fluoro-1H-pyrazolopyridines of the formula (VI) which are suitable as an intermediate for producing medicaments and for producing medicaments for the treatment and/or prophylaxis of cardiovascular disorders. In particular, the 5-fluoro-1H-pyrazolopyridines of the formula (VI) are suitable for producing the compound of the formula (I) which serves for producing medicaments, for producing medicaments for the treatment and/or prophylaxis of cardiovascular disorders.

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3) BIERER, Donald

No. of Pages: 82 No. of Claims: 20
A stacking device includes a drive mechanism coupled to a movable band. The movable band is configured to move along an orbital path, and a twin roller with first and second portions engages the movable band and folds the movable band into at least two portions. In some cases, the drive mechanism can also include, or be attached to, two additional rollers that are inside the band and move along the orbital path. A stacking device may also include a roller set with first and second portions that press against a band. A mechanism may cause the band to orbit along a path such that it causes the band to receive a stackable item and move it to a predetermined location. At the predetermined location, the band releases the stackable item while continuing to orbit along the path, but while having zero total velocity.
Provided is a novel compound which can be used for a transport layer or as a host material or a light-emitting material in a light-emitting element and with which a high-performance light-emitting element can be manufactured. A dibenzo[c,g]carbazole compound in which an aryl group having 14 to 30 carbon atoms and including at least anthracene is bonded to nitrogen of a dibenzo[c,g]carbazole derivative is synthesized. By use of the dibenzo[c,g]carbazole compound, a light-emitting element having very good characteristics can be obtained.
**Title of the invention**: STERILE SURGICAL TRAY

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<td>:3802/DELNP/2011</td>
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<td>Filed on</td>
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**Abstract**:
A sterile surgical tray (10) includes structure (12) for receiving a plurality of surgical instruments (14), a pump fluid reservoir (30) within the tray (10), a pump (40) contained within the sterile tray (30) and connected to the pump fluid reservoir (30), and a motor (42) contained within the sterile tray and connected to the pump (40). Sterile surgical tray (10) also may include electrical input and output connectors attached to tray (10).

<table>
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<th>Name of Applicant</th>
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<tr>
<td>1) Doheny Eye Institute</td>
<td>1450 San Pablo Street, #3000, Los Angeles, CA 90033, U.S.A.</td>
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<tr>
<td>1) HUMAYUN, Mark</td>
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<td>2) DEBOER, Charles</td>
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<td>3) MCCORMICK, Matthew</td>
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<td>4) BHADRI, Prashant</td>
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<td>5) CICCHIELLA, Joel</td>
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<td>6) KERNS, Ralph</td>
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No. of Pages : 53 No. of Claims : 23
A device, system, and method for isolating a ventilator from one or more patients in which the delivery conditions of gas delivered to an isolation device from a ventilator may drive the delivery of breathing-gas delivered to one or more patients, the breathing-gas having the same or different delivery conditions. In one embodiment, an isolation device may have a housing and a movable partition. The movable partition may be joined to the housing. The movable partition may have a patient side on a first side of the partition and an actuating side on a second side of the partition. The isolation device may include an inlet pressure regulator on the actuating side and/or an exhaust pressure regulator on the patient side. These regulators may alter the delivery conditions (including, but not limited to, pressure and volume) of breathing-gas delivered to a patient.
A spray head or spray head insert (1) is provided for use in at least one of a shower head, an industrial spray head and an agricultural spray head including a plurality of groups of nozzles (2), each group of nozzles (2) having at least two nozzles that are suitable for issuing jets of fluid from a surface of the spray head or spray head insert (1) and are dimensioned and oriented, at least in use, so that fluid exiting the said at least two nozzles under pressure collides, interacts substantially unimpeded by surrounding structures and breaks into droplets.
An edge morphing arrangement for an airfoil having upper and lower control surfaces is provided with a rib element arranged to overlie the edge of the airfoil. The rib element has first and second rib portions arranged to communicate with respectively associated ones of the upper and lower control surfaces of the airfoil. A first compliant linkage element has first and second ends and is disposed between the first and second rib portions of the rib element, the first and second ends are each coupled to the interior of a selectable one of the first and second rib portions. There is additionally provided a driving link having first and second driving link ends, the first driving link end being coupled to the interior of a selectable one of the first and second rib portions.
Title of the invention: CONTAINER COMPRESSING ARRANGEMENT AND METHOD OF OPERATING A CONTAINER COMPRESSING ARRANGEMENT

Abstract:
Container compressing arrangement (100) mountable in a reverse vending machine for compacting empty containers in particular beverage bottles or cans which are preferably made of plastic or metallic material such as PET or tinned metal said container compressing arrangement comprising: a first and a second rotatable roller (102 104) each of said rollers having a working surface (122) arranged between two oppositely arranged ends (110a-110b llOc-llOd) wherein said rollers are arranged adjacent to each other to rotate in opposite directions around a respective rotation axis (106 108) in a common geometrical xz-plane (x-z); and wherein said working surface (122) comprises a plurality of ridges extending across said working surface in an axial direction of said roller and distributed in the circumferential direction of said working surface each ridge (120) having a longitudinal extension in said axial direction.
Microorganisms with NADPH escape valves are described. The NADPH escape valves convert NADPH to NADP and decrease photodamage and/or increase ATP production growth and/or biomass yield in high light conditions. NADPH escape valves can be created by up-regulating enzymes or other molecules that convert NADPH to NADP (e.g. transhydrogenases Flv3 Flv1 hox hydrogenase and/or PTOX).
A method for translating levels of diet quality into photographic representations of dietary pattern. The method includes the steps of:

(a) using a diet quality measure to identify a plurality of dietary patterns that each represent a level of diet quality for a period of time;
(b) assigning a dietary score to each of the plurality of dietary patterns;
(c) converting the plurality of dietary patterns into representative dietary patterns; and
(d) converting the representative dietary patterns into food photographs. The food photographs depict the photographic representation of the dietary patterns for the period of time. The photographic representations of dietary patterns can be used to establish an individual or households dietary pattern and can be incorporated into programs to navigate a user from a current dietary pattern to a more optimal dietary pattern.
Title of the invention: METHOD FOR MANUFACTURING DIFFERENT-THICKNESS STEEL PIPE AND DIFFERENT-THICKNESS STEEL PIPE

Abstract:
This method for manufacturing a different-thickness steel pipe which manufactures a different-thickness steel pipe from a hollow cylindrical element pipe has: a locking step wherein the element pipe is arranged inside a die and a plug is inserted from one end of the element pipe while movement of the element pipe in the lengthwise direction is restricted thereby enlarging the outer shape of that one end and locking the element pipe in the die; and an ironing step wherein the restriction of the element pipe is released and while the locking of the element pipe is maintained the plug is inserted farther toward the other end of the element pipe thereby enlarging the inside shape while maintaining the outside shape of the element pipe and forming a thin section.
The invention relates to mutant forms of CsgG. The invention also relates to analyte detection and characterisation using CsgG.
In order to specify a transport apparatus (1) in the form of a long stator linear motor, by means of which the negative effects of a non-uniform magnetic flux in the joint region (10) between two adjacent transport segments (Tsk, Tsk+1) can be at least alleviated, according to the invention, the spacing (I) between the coil center of an end coil (7e) of a transport segment (Tsk, Tsk+1) and the relevant end of the transport segment (Tsk, Tsk+1) is smaller than half the tooth pitch (f55) of the two adjacent end coils (7e) of the transport 2 segments (Tsk, Tsk+1), the tooth pitch (xne) of the two adjacent end coils (7e) corresponding to the tooth pitch (xn) of the drive coils (7, 8) of at least one of the transport segments (Tsk, Tsk+1).
A system for orchestrating an operation is disclosed. The system includes an case orchestration engine to identify a discrepancy in the operation, and to generate a plurality of hypotheses for resolving the discrepancy. The case orchestration engine further collects evidence pertaining to the discrepancy in the operation, evaluates each of the plurality of hypotheses based on a dialogue-driven feedback received from a user, and selects one of the plurality of hypotheses for resolving the discrepancy based on the evidence and an expected outcome of the operation. The case orchestration engine provides reasons for the discrepancy along with remedial measures for resolving the discrepancy based on the selected hypothesis, and then generates a plan for performing the operation to achieve the expected outcome based on the remedial measures.
Systems, methods, and machine readable media are provided for targeted advertising. One or more images of individuals in a location in a facility are captured with an imaging device. Face detection is performed on the one or more images. Based on a face detection result, Convolutional Neural Network models are used to determine a gender and estimate an age of each detected face. A targeted audience is determined, based on pre-determined criteria using the age estimation and gender identification of each detected face. A relevant advertisement is selected for the targeted audience for display on a display device. The relevant advertisement may be selected based at least in part on a footfall score (f.score) indicative of customer traffic in the facility.

No. of Pages: 19 No. of Claims: 15
The Patent Office Journal No. 01/2019 Dated 04/01/2019

(21) Application No.201817032256 A
(19) INDIA
(22) Date of filing of Application : 28/08/2018
(43) Publication Date : 04/01/2019

(54) Title of the invention : INTELLIGENT AUTOMATIC CONICAL NET MAKING MACHINE

(57) Abstract :
Disclosed is an intelligent automatic conical net making machine. The net making machine comprises a net winding device (3) and a net binding device (4). The net winding device (3) comprises a filter screen winding shaft (3.1) a filter screen winding drum (3.3) and a net winding power device (3.2). The filter screen winding shaft (3.1) comprises a conical hollow shaft body and a strip-shaped net binding hole is axially provided in the hollow shaft body. The filter screen winding drum (3.3) comprises two arc-shaped plates (3.5) hinged together and the two arc-shaped plates (3.5) can be driven by the net winding power device (3.2) to be opened and closed along a hinged shaft to wrap the filter screen winding shaft (3.1) without shielding the net binding hole. The net binding device (4) comprises an automatic stapler (4.1) and a stapler base mould (4.5) and the stapler base mould (4.5) of the net binding device (4) can be inserted into the hollow shaft body of the filter screen winding shaft (3.1). The automatic stapler (4.1) can cooperate with the stapler bottom mould (4.5) through the net binding hole to complete a net binding operation. The equipment can stably and reliably finish the net supplying feeding winding and binding process is smooth in equipment operation and is suitable for popularization and industrial production in the industry.

No. of Pages : 27 No. of Claims : 20
A user equipment is configured for use in a wireless communication system. The user equipment in this regard is configured to detect an orientation of an equipment coordinate frame defined for the user equipment relative to an earth coordinate frame defined for Earth. The user equipment is also configured to determine, based on the detected orientation, a set of beams defined in the equipment coordinate frame which does not include any beam pointing in one or more predefined directions in the earth coordinate frame. The user equipment is further configured to perform a beam sweep or scan on the determined set of beams.
The patent processing system receives an electronic document including component documents generated from various sources in different formats. Plain text data can be extracted from the electronic document in addition to formatting and structuring information. The plain text data is segmented into sections and various entities are extracted and linked from the sections. An interactive graphical user interface (GUI) that displays content including the plain text data is formatted according to the styling information and annotated entity relationships are determined from the linked entities. The GUI enables user edits to the annotated entity relationships. REFER TO FIGURE 1. 

No. of Pages : 73 No. of Claims : 20
A measurement and control device (100), a system (1000), and a method for a wind farm. The measurement and control device (100) comprises a first communication interface (110), a second communication interface (120), and a processor board (130). The processor board (130) is connected to the first communication interface (110) and the second communication interface (120). The processor board (130) receives a frequency adjustment instruction issued by a grid scheduling server (300) by means of the first communication interface (110); receives operation information of wind turbines (201, 202) by means of the second communication interface (120); calculates, on the basis of the operation information of the wind turbines (201, 202), the first frequency adjustment capability of the wind turbines (201, 202) in the condition that first energy storage batteries (203, 204) are not to be put into use; and when the first frequency adjustment capability of the wind turbines (201, 202) meets the requirement of the frequency adjustment instruction, sends the frequency adjustment instruction to the wind turbines (201, 202), and does not start the first energy storage batteries (203, 204). When the wind speed meets the frequency adjustment requirement, the measurement and control device enables a wind farm to only use the frequency adjustment capability of the wind turbines (201, 202) to output continuous and stable voltage and complete a frequency adjustment task, not only being able to improve the reliability of frequency adjustment, but also being able to save battery energy.
# A FUEL PUMP SOLENOID HAVING HYDRAULIC DAMPING

A solenoid assembly of a fuel pump includes a housing; a pole piece disposed within the housing; an armature assembly movably disposed within the housing and including an armature and a plunger; and a coil disposed within the housing. A plurality of metal disks are disposed in a stacked arrangement, coupled to the pole piece and situated so as to be impacted by the armature during a full stroke of the armature assembly. The solenoid assembly further includes at least one fluid path in fluid communication with the region surrounding the metal disks, the at least one fluid path configured such that only a portion of a secondary swept volume of fuel associated with the armature assembly during operation of the fuel pump passes through the region and decelerates the armature assembly when the armature assembly moves towards the pole piece responsive to a current passing through the coil.

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![Diagram of fuel pump solenoid assembly](image)

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No. of Pages: 40  No. of Claims: 20
**Title of the invention**: DISPLAY DEVICE

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<td>(87) International Publication No</td>
<td>:NA</td>
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<td>1) Samsung Display Co., Ltd.</td>
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<td>2) Minwoo Byun</td>
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<td>Provided is a display device including: a substrate; a plurality of display elements defining a display area on the substrate and each including a pixel electrode, an opposite electrode, and an intermediate layer between the pixel electrode and the opposite electrode; a power supply wiring disposed outside the display area; an organic insulating layer on the power supply wiring and having an opening exposing the power supply wiring; a power supply electrode layer partially disposed on the organic insulating layer and including a plurality of holes over the organic insulating layer, wherein a first portion of the power supply electrode layer overlaps the power supply wiring and a second portion of the power supply electrode layer overlaps the opposite electrode; a plurality of protrusions spaced apart from each other and respectively covering at least some of the plurality of holes; and an encapsulation layer covering the plurality of display elements.</td>
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**Fig. 1**

No. of Pages : 42 No. of Claims : 20
(54) Title of the invention : PREDICTING QUALITY OF A 3D OBJECT PART

(51) International classification : B29C67/00B33Y10/00B33Y40/00

(31) Priority Document No : NA
(32) Priority Date : NA
(33) Name of priority country : NA
(86) International Application No : PCT/US2016/032099
    Filing Date : 12/05/2016
(87) International Publication No : WO 2017/196344

(61) Patent of Addition to Application Number : NA
    Filing Date : NA
(62) Divisional to Application Number : NA
    Filing Date : NA

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3) DE PENA, Alejandro Manuel
4) WHITE, Scott

(57) Abstract:
According to an example a computing apparatus may include a processing device and a machine readable storage medium on which is stored instructions that when executed by the processing device cause the processing device to access from a sensing device information pertaining to formation of a part of a 3D object in a layer of build materials upon which fusing agent droplets have been or are to be selectively deposited. The instructions may also cause the processing device to predict based upon the accessed information a quality of the part and output an indication of the predicted quality of the part.

No. of Pages : 20 No. of Claims : 15
In an example a method includes measuring the temperature of a fused region and the temperature of an unfused region of a first layer of build material; determining a preheating setting for a subsequent layer of build material in response to the measured temperature of the unfused region of the first layer; determining a print instruction for applying print agent to the subsequent layer of build material wherein the application of print agent prescribed by the print instruction for the subsequent layer to cause the temperature of the preheated build material to be a predetermined temperature prior to fusion in response to the measured temperature of the fused region of the first layer; forming the subsequent layer of build material; preheating the subsequent layer of build material in accordance with the preheating setting; and selectively applying the print agent onto the subsequent layer based on the print instruction.
Title of the invention: DISPLAY DEVICE AND GATE DRIVING CIRCUIT THEREOF, CONTROL METHOD AND VIRTUAL REALITY DEVICE

International classification: G09G5/00

Application No. 201714043755 A

Date of filing of Application: 06/12/2017

Publication Date: 04/01/2019

Title of the invention: DISPLAY DEVICE AND GATE DRIVING CIRCUIT THEREOF, CONTROL METHOD AND VIRTUAL REALITY DEVICE

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Name of Inventor: YOO, Ooksang

Abstract:
A driving circuit are disclosed. The display device includes a display panel (100) comprising a plurality of data lines (102), a plurality of gate lines (104) and a plurality of pixels arranged in a matrix in which the plurality of data lines (102) and the plurality of gate lines (104) intersect with each other; a system controller (50) that sends image data of an input image to a display driver (200); and the display driver (200) that drives the display panel (100) by decreasing the number of shifts in gate signals applied to gate lines (104) in a second area as compared with a first area. The first area is an area in which the input image is to be displayed in a first resolution in the display panel, and the second area is an area in which the input image is to be displayed in a second resolution smaller than the first resolution in the display panel.

FIG. 4

No. of Pages: 66 No. of Claims: 19
The present disclosure provides a method for treating and/or preventing nephrotic syndrome, such as but not limited to MCD and MN, and conditions related to nephrotic syndrome, such as but not limited to, proteinuria and edema, as well as diabetic nephropathy, diabetes mellitus, lupus nephritis or primary glomerular disease. The present disclosure further provides methods for reducing proteinuria and other disease states as discussed herein. Such methods comprise the therapeutic delivery of an Angptl4 polypeptide or Angptl4 polypeptide derivative to a subject.
The invention relates to a climbing device (1) for carrying out a movement relative to a tower (102, 202) comprising a main body (5) having a longitudinal extension from a first end (6) to a second end (7) wherein the second end is facing a base (112) of a tower in an operating state at least one first climbing element (10) having an extension between a first inner end and a first retaining end (12) at least one second climbing element (20) having an extension between a second inner end and a second retaining end (22) wherein the first climbing element is arranged and configured to carry out a first retaining movement (19) of the first retaining end relative to the main body with a first retaining movement direction being orthogonal to the longitudinal extension and/or to carry out a first climbing movement (18) of the first retaining end relative to the main body.
The present invention relates to pharmaceutical compositions comprising an antibody or a fragment thereof suitable for freeze-drying (i.e. lyophilizing). The pharmaceutical compositions which comprise an antibody or an antigen-binding fragment thereof; from 1 % to 20% w/v sucrose; an amino acid or a mixture of amino acids; and surfactant are provided as pharmaceutical compositions for freeze-drying; as freeze-dried (i.e. lyophilized) compositions which can be reconstituted into a solvent at the time of use or as reconstituted liquid formulations ready for administration.

The Patent Office Journal No. 01/2019 Dated 04/01/2019

594
A thin steel plate is provided which includes at least a prescribed amount of ferrite phase has a low yield ratio a tensile strength of 780 MPa or greater and excellent bending fatigue characteristics. This thin steel plate has a specific component composition and has a steel structure in which the ferrite phase area ratio 20-80% the martensite phase area ratio is 20-80% the average ferrite particle diameter of the steel plate surface layer is 5.0 µm or less the inclusion density in the steel plate surface layer is 200/mm² or fewer; and defining as 100% the hardness in the position 1/2t in the thickness direction from the steel plate surface (where t is the thickness of the steel plate) the steel plate surface hardness is greater than or equal to 95%.

No. of Pages : 56 No. of Claims : 11
The present invention relates to a synthetic resin mixed material comprising a weight body and a method for preparing same. The method for preparing a synthetic resin mixed material comprising a weight body which is added to a synthetic resin and adds weight comprises: a first step for inputting a synthetic resin and a weight body to a mixer; a second step for mixing the synthetic resin and weight body in the mixer; a third step for discharging the synthetic resin and weight body which have been mixed in the mixer in a fixed amount; a fourth step for melting the synthetic resin discharged from the mixer; a fifth step for molding the melted synthetic resin which comprises the weight body into the form of a finished product in an injection machine having a mold mounted thereon; and a sixth step for cooling the finished product. The present invention relates to a preparation by means of injection utilizing an environment-friendly material and renewable energy resources and enables an increase in productivity by means of reducing production time compared to the existing mortar extrusion and injection. And the present invention enables quality improvement due to reduced labor cost and defect rate by means of simplifying process steps. Also cost competitiveness due to reduced waste treatment cost and raw material can be acquired by means of grinding and reusing a processed material in case of a defect.
(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application : 27/08/2018

(43) Publication Date : 04/01/2019

(54) Title of the invention : MUTANT PORE

(51) International classification : C07K16/12C12Q1/68G01N33/483

(31) Priority Document No. : 1603656.8
(32) Priority Date : 02/03/2016

(33) Name of priority country : U.K.

(86) International Application No. : PCT/GB2017/050569
   Filing Date : 02/03/2017

(87) International Publication No. : WO 2017/149316

(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 mutant forms of CsgG. The invention also relates to analyte detection and characterisation using CsgG.

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(72) Name of Inventor :
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2) WALLACE, Elizabeth Jayne

No. of Pages : 172 No. of Claims : 47
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<td>4) SCHNEIDER, John Robert</td>
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<td>(62) Divisional to Application Number</td>
<td>:NA</td>
<td>5) WANG, Wei</td>
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(57) Abstract:
A multi-layer coating that transmits and reflects light can include a first coating layer and a second coating layer applied over the first coating layer. The first coating layer is prepared from a coating composition that includes a film forming resin, crosslinked organic particles, and inorganic pigment particles. The crosslinked organic particles and the inorganic pigment particles each have a refractive index that is different from the refractive index of the film forming resin. The second coating layer is prepared from a coating composition that includes a film forming resin and reflective and/or translucent particles.

No. of Pages: 20 No. of Claims: 20
The invention relates to a system and micro monitor apparatus, a space-, time-, and cost-efficient device to concentrate, identify, and quantify organic compounds in gas environments. The invention further relates to a method centered on gas chromatography for identifying and quantifying organic compounds in gas environments, using air as the carrier gas, without the need for a compressed pre-bottled purified carrier gas.
No. of Pages : 133 No. of Claims : 28
(54) **Title of the invention:** METHOD FOR THE POWDER-METALLURGICAL PRODUCTION OF COMPONENTS FROM TITANIUM OR TITANIUM ALLOYS

(51) **International classification:** B22F1/00 B22F3/10 C22F1/02

(31) **Priority Document No:** 16165222.7

(32) **Priority Date:** 14/04/2016

(33) **Name of priority country:** EPO

(36) **Application No:** 201817035721 A

(22) **Date of filing of Application:** 20/09/2018

(43) **Publication Date:** 04/01/2019

(31) **Priority Document No:** 16165222.7

(32) **Priority Date:** 14/04/2016

(33) **Name of priority country:** EPO

(36) **Application No:** 201817035721 A

(22) **Date of filing of Application:** 20/09/2018

(43) **Publication Date:** 04/01/2019

(57) **Abstract:**

A method for the powder-metallurgical production of a component from titanium or a titanium alloy is disclosed. In this method, following the customary procedure, first a green part is formed by using metal powder formed from titanium or the titanium alloy and is densified and compacted in a subsequent sintering step. What makes the method according to the invention special is that metal powder of titanium or the titanium alloy with an average particle size of < 25µm is used for producing the green part and that the sintering step is carried out at a sintering temperature of up to a maximum of 1100°C for a sintering time of ≤ 5 hours in an atmosphere that is under a reduced pressure in comparison with normal pressure. These measures achieve the effect that the grain structure of the material thus obtained, and consequently also the material properties, can be selectively influenced.

No. of Pages : 9

No. of Claims : 17
A solenoid assembly of a fuel pump is disclosed, including a housing having an open end and a partly closed end; a pole piece fixedly disposed within the housing; a bobbin assembly disposed within the housing and including a coil disposed proximal to the pole piece; and a bobbin retainer disposed between the open end of the housing and the bobbin assembly, a radially outer surface of the bobbin retainer contacting the housing. A portion of the housing which is adjacent the bobbin retainer has an outer surface that is recessed and an inner surface that protrudes against the bobbin retainer. The portion is created by deforming the housing to create the protrusion on the inner surface of the housing. The housing inner surface protrusion provides a press fit engagement with the bobbin retainer.
**Title of the Invention:** ASYMMETRIC SPRING VALVE DISK

**Abstract:**
A valve assembly for a fluid pump includes a valve body; a fluid inlet and a fluid outlet defined in the valve body; a valve seat; and an inlet disk disposed in the valve body having an inner portion, an outer portion fixed within the valve body, and a plurality of legs connected between the inner portion and the outer portion so that the inner portion is movable between a first position against the valve seat and a second position spaced apart from the valve seat. The connection between the legs, the inner portion and the outer portion provides a spring bias force to the inner portion against movement of the inner portion from the first position. The plurality of legs, the inner portion and the outer portion are configured such that the spring bias force is asymmetric as applied to the inner portion of the inlet disk.

![Diagram](image-url)

**No. of Pages:** 43  **No. of Claims:** 22
Title of the invention: COMBINED INLET AND OUTLET CHECK VALVE SEAT

Abstract:
A valve assembly for a fluid pump includes a valve body; an inlet disk movably disposed in the valve body; an outlet disk movably disposed in the valve body; and a valve seat fixed within the valve body. The valve seat includes a first aperture defined axially through the valve seat in a radial central portion thereof, and one or more second apertures disposed at least partly around the first aperture. The inlet disk is biased in a closed position against the valve seat along a first surface thereof, the closed position of the inlet disk covering the one or more second apertures of the valve seat. The outlet disk is biased in a closed position against the valve seat along a second surface thereof.
**Title of the invention:** CONTROL METHOD FOR ROTOR TURNING DEVICE COMPUTER PROGRAM PRODUCT COMPUTER READABLE STORAGE MEDIUM CONTROL DEVICE AND ROTOR TURNING SYSTEM

**Abstract:**
A control method for a rotor turning device, a computer program product, a computer readable storage medium, a control device, and a rotor turning system. The rotor turning device comprises at least two turning units (50); a movable end of a telescoping cylinder (51) in each turning unit (50) is provided with a pin body (53); the pin body (53) is releasably secured on a rotor (28). The control method comprises: dividing the at least two turning units (50) into two groups; first removing pin bodies (53) of a first group of turning units (50) from the rotor (28), and then re-securing the pin bodies (53) at another position on the rotor (28), wherein pin bodies (53) of a second group of turning units (50) are fixedly connected with the rotor (28) in the process of removing and re-securing the pin bodies (53) of the first group of turning units (50); and after the pin bodies (53) of all the turning units (50) are re-secured, changing the state of the telescoping cylinders (51) of all the turning units (50), and driving the rotor (28) to turn relative to a machine base (27). In this way, all the turning units (50) in the turning device are sequentially unlocked, moved to a next working station, and re-locked on the rotor (28). In the whole process, there are always some pin bodies (53) locked on the rotor (28), thereby avoiding uncontrollable turning of the rotor (28), and improving the pushing efficiency of the turning units (50) while ensuring the safety in the turning process of the rotor (28).

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6) ZHAO Xiang
The present invention relates to a contact lens for presbyopia and more specifically to a contact lens for presbyopia providing both a far-distance vision area and a near-distance vision area in one contact lens and continuously forming a lens magnification of the far-distance vision area and the near-distance vision area of the dominant eye and the non-dominant eye while changing the sizes of the far-distance vision area and the near-distance vision area of two eyes according to the dominant eye and the non-dominant eye such that an intermediate-distance area is partially overlapped thereby continuously providing a near-distance vision area at a far distance by a neural summation phenomenon that selects a clearly visible image in both eyes.

No. of Pages : 11 No. of Claims : 3
A tool for fixing a protective textile sleeve about an elongate member contained therein, and method of use thereof is provided. The tool includes a clamp assembly having opposed clamp members. Each of the clamp members has a clamp surface for abutting the textile sleeve. Each of the clamp surfaces includes a plurality of heating members operably connected to a source of power. The heating members within each clamping surface are supported for independent radial movement relative to one another in response to engagement with an outer surface of the textile sleeve to allow the clamp surfaces to automatically conform to the arcuate shape of the sleeve and elongate member being clamped therebetween.
(54) Title of the invention: METHOD OF DESIGNING MACHINE

(51) International classification: G06F17/50

(31) Priority Document No: 2017-125996

(32) Priority Date: 28/06/2017

(33) Name of priority country: Japan

(86) International Application No: NA

(87) International Publication No: NA

(61) Patent of Addition to Application Number: NA

(62) Divisional to Application Number: NA

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(57) Abstract:
A method of designing a machine (11, 12, 13) on which a drive motor (220), a fuel cell stack (100), and a secondary battery (120, 120A, 120B) are mounted includes: determining a maximum output of the drive motor (220) to be a first output value and an output of the drive motor (220) when a vehicle travels under a cruise condition to be a second output value; determining the number of fuel cell stacks (100) to be mounted to be n (n is a natural number); and determining a maximum output of the secondary battery (120, 120A, 120B) to be a value obtained by subtracting a value obtained by multiplying a maximum output of the fuel cell stack (100) by the n, from the first output value. A value obtained by multiplying the third output value by the n is equal to or larger than the second output value, and a value obtained by multiplying the third output value by (n – 1) is less than the second output value.
The Patent Office Journal No. 01/2019 Dated 04/01/2019

(12) PATENT APPLICATION PUBLICATION
(21) Application No.201817043076 A
(19) INDIA
(22) Date of filing of Application :15/11/2018
(43) Publication Date : 04/01/2019

(54) Title of the invention : HUMANIZED ANTI-BASIGIN ANTIBODIES AND THE USE THEREOF

(51) International classification :C07K16/42A61K39/395A61P35/00
(31) Priority Document No :201610285139.4
(32) Priority Date :29/04/2016
(33) Name of priority country :China
(86) International Application No :PCT/CN2017/082713
          Filing Date :02/05/2017
(87) International Publication No :WO 2017/186182
(61) Patent of Addition to Application Number :NA
          Filing Date :NA
(62) Divisional to Application Number :NA
          Filing Date :NA

(57) Abstract :
Provided herein is a humanized anti-BASIGIN antibody or antigen binding fragment thereof which comprises heavy chain variable region (V\text{H}) comprising an amino acid sequence of SEQ ID NO:1 optionally further comprises light chain variable region (V\text{L}) comprising an amino acid sequence of SEQ ID NO: 2. Also provided a composition comprising the humanized anti-BASIGIN antibody or antigen binding fragment thereof an isolated nucleic acid sequence encoding the humanized anti-BASIGIN antibody or antigen binding fragment thereof a vector comprising the nucleic acid a host cell comprising the vector and use of the humanized anti-BASIGIN antibody or antigen binding fragment thereof.

Selected amino acid variations in humanized VH frameworks

No. of Pages : 82 No. of Claims : 30

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7) BIAN, Huijie
8) JIANG, Jianli
Methods of using substituted 2-anilinopyrimidine derivatives and pharmaceutically acceptable salts solvates or compositions for the treatment of brain cancers in particular EGFR-mediated metastatic brain cancer are disclosed.
A surgical instrument for use in passing suture through tissue is provided that includes first and second jaws disposed on a distal end of an elongate shaft and configured to grasp tissue therebetween, and a needle selectively movable along a longitudinal channel extending through an outer side wall of the first jaw. The first jaw has a cavity configured to seat a removable and replaceable suture magazine. The suture magazine can be coupled to a suture magazine carrier that is removed before the surgical instrument is activated cause to the needle to advance distally and thereby pass a suture coupled thereto through tissue in a patient™s body. As the needle is retracted proximally, a subsequent suture portion, such as a loop, is loaded onto the needle. The jaws remain in the body during passing the suture through the tissue.

FIG. 1

No. of Pages : 75 No. of Claims : 20
Title of the invention: MICROPHONE STRUCTURE FOR CELL PHONE REAL-TIME VOICE TRANSLATION IN TRAVELING

Abstract:
A microphone structure for cell phone real-time voice translation in traveling includes primarily a front and rear microphone screens B10, B030, a hollow tube B020, a transmission line B040, an electret condenser PCB assembly 050, a front and rear PCB assembly covers B060, B070, and a plug 051. Upon being used with voice translation software, the microphone structure of the present invention is used only by inserting into a cell phone charging jack and turning off a microphone on the cell phone A. The present invention utilizes first and second unidirectional microphones BP21, BP11 or one bidirectional microphone, with a transmission line B040 being added between the microphone and the plug 051, so as to maintain a clear sound quality for a cell phone owner and a dialogue person within a social distance zone, thereby enabling the voice translation to be accurate and smooth.
Provided in an embodiment of the invention is an arcless on-load automatic voltage-regulating distribution transformer device. The device comprises a low voltage side and a high voltage side. The low voltage side comprises a low voltage winding. The high voltage side comprises: N voltage-regulating windings; N switch modules; a high voltage winding; and a voltage regulation control module. Two ends of the voltage-regulating winding are respectively connected to two ends of the switch module. The high voltage winding and the switch modules are connected in series. The voltage regulation control module and the high voltage winding are connected in parallel.
A system (200) and a method (400) for inserting a circlip (60) in an axle shaft assembly (100) are disclosed. The system (200) comprises a bottom locator (110), a circlip locator (120), and a circlip pressing dolly (140) used with an existing workstation (300) comprising a pressing machine (220) and a fixture (260) with replacement of only a previous dolly locator (240). The system (200) and the method (400) safely fit the circlip (60) on a bearing carrier subassembly (90) of the axle shaft assembly (100) in a fast and fixed cycle time without requiring extra manpower or a separate workstation. Figure 7
The present invention is to provide a mechanism for holding article in a storage compartment. The storage compartment is delimited by a first wall and a second wall and each of the first wall and the second wall is having a first recess and a second recess. The mechanism includes a holder element, a supporting element, a locking element and a handling member. The holder element is articulated in the first wall. The supporting element is pivotally configured on the holder element for supporting a bottom portion of the article in a holding position. The locking element locks the holder element in the first recess in a non-holding position and locks with the second recess in the holding position. The handling member is configured on the second member for unlocking the locking element from the first recess and from the second recess to move the holder element to the holding and non-holding position respectively.

No. of Pages : 25 No. of Claims : 8
**Title of the invention:** A METHOD AND A SYSTEM FOR CONTROLLING AND DISTRIBUTING ELECTRIC POWER TO A LIGHTING DEVICE FROM A BATTERY

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<th>Shruti Abhaykumar Bora</th>
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**Abstract:**
The present invention provides a system and a method for controlling and distributing electric power to a lighting device from a battery. The system includes a photovoltaic panel, a control unit and a bidirectional current measuring element. The method includes the steps of estimating energy availability of the battery by measuring the electric power supplied to the battery by the photovoltaic panel on a particular day. Further, the system determines the working hours of the lighting device for various charge levels of the battery thereby estimating working hours of the lighting device for different charge levels of the battery for self-learning. Further, the system controls and regulates the electric power supplied to the lighting device depending upon the duration of working hours and utilized electric power by the lighting device on the previous night. The control unit varies the electric power supplied to the lighting device in a predefined sequence to optimize the utilization of the battery.

No. of Pages : 28 No. of Claims : 11
The present invention relates to an improved process for purification of trans-5-chloro-2-methyl-2,3,3a,12b-tetrahydro-1H-dibenz[2,3:6,7]oxepino[4,5-c]pyrrole maleate compound of formula I (asenapine maleate) which is free from process related impurities.
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**Abstract:**
Method for texturing diamond wire cut multicrystalline silicon wafers without additive. Embodiments herein provide a method for diamond wire cutting (DWC) multicrystalline silicon (multi-Si) wafer texturing. The method includes preparing an acid texturing solution comprising of a specific concentration of nitric acid and hydrofluoric acid. Further, the method includes forming a porous-Si layer by treating the DWC multi-Si wafer with the acid texturing solution for a predetermined time interval and at a predetermined temperature. The method also includes dissolving the porous-Si layer by dipping the DWC multi-Si wafer surface in an alkali solution for DWC multi-Si wafer texturing. FIG.3

No. of Pages: 20, No. of Claims: 10
A magnetic hood pop-up assist system for vehicles, comprising: a hood assembly; a pair of electromagnets, one each disposed on either side of the hood front edge and assembled on the front top cross-member of the BIW; a pair of permanent magnets, one each disposed on either side of the hood inner panel; a pair of dampeners disposed on either side under the hood; and hood unlatching or releasing mechanism; wherein the electromagnet and permanent magnet on either side are disposed with their like poles facing each other in the closed position of the hood to generate repulsive force to assist in hood pop-up. The hood assembly vertically moves from a primary lock position to a secondary lock position and on reaching the secondary lock position, hood is unlatched/released by operating the hood releasing mechanism to provide user access to secondary lever of hood latch for complete hood opening for maintenance, cleaning and replacement etc. FIGURE 4a.
The present invention provides an Underground Tunnel Detection System designed using embedded system which is capable of detecting cross border tunnels beneath the ground. The invention further provides high range of underground metal detection and frequency detection which is useful for confirming that the tunnel is manmade. The various methods employed by our technology are based on Frequency detector circuit, metal detector and earth resistivity meter. They measure the various parameters required to detect any illegal activity beneath the ground. When an activity is registered in the protected areas, these sensors produce a signal which is processed in real time through the advanced circuitry, identifying which type of activity has been registered. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the block diagram and Figure 2 of sheet 1 showing the circuit diagram of underground tunnel detector.
The present invention relates to telescopes and in particular to terrestrial and/or astronomical reflecting telescopes having multiple focal lengths/focal ratios. The presently disclosed telescopes can be used for more than one purpose, has more than one focal length and/or focal ratios, reduces the cost of buying multiple telescopes, and reduces the storage issues.
**Title of the invention :** SYSTEM FOR COOLING AN ENGINE OF AN AGRICULTURAL VEHICLE

| (51) International classification | :A01B 3/70 |
| (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 |

**Abstract :**

In one embodiment, a system for use in an agricultural vehicle, includes a cover assembly that includes a cold chamber assembly configured to be coupled to a first portion of a frame assembly of the agricultural vehicle. Further, the cold chamber assembly includes a first set of one or more sheets that is configured to cover at least a portion of a radiator supported on a second portion of the frame assembly when the cold chamber assembly is coupled to the first portion of the frame assembly, and at least one sheet of the first set of one or more sheets comprises a perforated sheet.

**No. of Pages :** 24  **No. of Claims :** 10
**Title of the invention:** DRIVE SYSTEM FOR AN AGRICULTURAL HARVESTER

**Abstract:**
A harvester assembly includes a drum drive system having a first pulley configured to non-rotatably couple to a power take off (PTO) shaft of an agricultural vehicle, a second pulley positioned vertically above the first pulley and configured to non-rotatably couple to a drive shaft, and a first belt extending about the first pulley and the second pulley to enable rotation of the PTO shaft to drive rotation of the drive shaft to facilitate collection of an agricultural crop from an agricultural field.

**Priority Document No**: NA
**Priority Date**: NA
**Name of priority country**: NA

**Application No**:201721022965 A
**Date of filing of Application**: 30/06/2017
**Publication Date**: 04/01/2019

**Priority Document No**: NA
**Priority Date**: NA
**Name of priority country**: NA

**International Application No**: Filing Date: NA

**International Publication No**: NA

**Patent of Addition to Application Number**: Filing Date: NA

**Divisional to Application Number**: Filing Date: NA

**Abstract**: A harvester assembly includes a drum drive system having a first pulley configured to non-rotatably couple to a power take off (PTO) shaft of an agricultural vehicle, a second pulley positioned vertically above the first pulley and configured to non-rotatably couple to a drive shaft, and a first belt extending about the first pulley and the second pulley to enable rotation of the PTO shaft to drive rotation of the drive shaft to facilitate collection of an agricultural crop from an agricultural field.

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A system includes a harvester assembly configured to be coupled to a frame of an agricultural vehicle to facilitate conversion of the agricultural vehicle into a harvester. The harvester assembly includes a cabin configured to house an operator and configured to be removeably coupled to the agricultural vehicle at a different location than an agricultural vehicle cabin of the agricultural vehicle, an evaporator assembly mounted on the cabin, wherein the evaporator assembly includes an evaporator, and a plurality of tubes configured to extend from the evaporator assembly, and a first coupling assembly configured to fluidly couple a first tube of the plurality of tubes to an input of a compressor supported on the frame of the agricultural vehicle.
Title of the invention: AGRICULTURAL HARVESTER TRANSMISSION SYSTEMS AND METHODS

Abstract:

In one embodiment, a system includes a harvester assembly configured to be coupled to a drivetrain of an agricultural vehicle to facilitate conversion of the agricultural vehicle into a harvester. The harvester assembly comprises a platform configured to support an operator, one or more harvester levers supported on the platform, and a mounting bracket. The mounting bracket is configured to couple to a transmission housing supporting a transmission of the drivetrain of the agricultural vehicle. A plurality of cables is configured to extend from the one or more harvester levers to one or more transmission levers extending from the transmission housing to enable the operator to adjust a gear ratio of the transmission via the one or more harvester levers.
A method includes coupling one or more stands of a support system to a frame of a harvester assembly, moving a powertrain assembly of an agricultural vehicle to position beneath the harvester assembly, while the harvester assembly is coupled to and supported by the one or more stands, and coupling the harvester assembly to the powertrain assembly to construct a harvester.
A harvester is configured to removably couple to a tractor assembly. The harvester includes a lift system that lifts and lowers a harvesting assembly. The lift system includes a linkage system coupled to a harvester chassis and the harvesting assembly. A first actuator couples to the harvester chassis and harvesting assembly. The first actuator lifts and rotates the harvesting assembly into a transportation position as the first actuator expands, as well as lowers and rotates the harvesting assembly into a harvesting position when the first actuator contracts.
CONVEYING SYSTEM FOR A HARVESTER

A conveying system for a harvester includes a plenum having an inlet and multiple outlets. The outlets are formed in an outlet element, the outlet element includes a first portion forming a first outlet and a second outlet, the outlet element includes a second portion forming a third outlet and a fourth outlet, a first outlet passage extends from the first outlet, a second outlet passage extends from the second outlet, a third outlet passage extends from the third outlet, and a fourth outlet passage extends from the fourth outlet. The first and second portions of the outlet element are angled relative to one another such that the first and second outlet passages are angled away from the third and fourth outlet passages, the first outlet passage is longer than the second outlet passage, the third outlet passage is longer than the fourth outlet passage, or a combination thereof.

No. of Pages : 22 No. of Claims : 10
A harvester is configured to removably couple to a tractor assembly. The harvester includes a fuel system coupled to a harvester chassis. The fuel system includes a fuel tank that stores fuel. A fuel line couples the fuel tank to a motor on the harvester.
Title of the invention: POSITION ADJUSTMENT SYSTEM FOR A DRUM ASSEMBLY

Abstract:
A position adjustment system for a drum assembly of a harvester includes a screw mechanism having a nut and a threaded shaft. The nut is engaged with the threaded shaft, the screw mechanism is configured to extend from the drum assembly to a toolbar of the harvester, and the screw mechanism is configured to drive the drum assembly to move along the toolbar in response to rotation of the threaded shaft.

No. of Pages: 21 No. of Claims: 10
**Title of the invention:** HARVESTER BASKET ASSEMBLY HAVING AN INLET HOOD

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<td>1) CNH Industrial (India) Pvt. Ltd.</td>
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<td>NA</td>
<td>B1-207, Boomerang, Chandivali Farm Road, Near Chandivali Studio, Andheri (East) Mumbai 400 072, India Maharashtra India</td>
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<tr>
<th>Name of Inventor</th>
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<tr>
<td>1) Nicholas Stephen Shane</td>
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<td>2) Frank Calvin Dupire</td>
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**Abstract:**
A basket assembly for a harvester includes a body configured to rotate between a product-receiving position and a product-expelling position. The body is configured to receive product through an inlet while the body is in the product-receiving position, and the body is configured to expel the product through an outlet of the body while the body is in the product-expelling position. The basket assembly also includes a lid rotatably coupled to the body and a linkage assembly configured to drive the lid to rotate between a closed position and an open position in response to rotation of the body from the product-receiving position to the product-expelling position. The basket assembly also includes a hood coupled to the lid and/or the linkage. The hood extends outwardly from the body, and the hood is configured to direct the product from an outlet of a chute to the inlet of the body.
The seed sowing done in the agricultural field is mostly done by hand or some advanced tools but they all are with limitations. So to reduce the human efforts there are lot advancement done in every field but the agricultural field is not left with much of the alternatives. So to improvise the present agricultural condition and promote some better alternatives, the seed sowing robot with the multiple seed sowing capacity is proposed. The agricultural robot proposed is having the capacity to sow the seed at the proper depth in the ground with the additional support to cover the sowed seed. The robot will also provide the user with ability to use multiple seeds to sow them at the same time at the different multiple location as per need. On the field the robot operates on automated mode, but outside the field is strictly operated in manual mode. For manual control the robot uses the Bluetooth pairing app as control device and helps in the navigation of the robot outside the field.
Title of the invention: CHANNELED INSULATION FOR TELECOMMUNICATION CABLE

Abstract:
The present disclosure relates to a telecommunications cable. The telecommunication cable includes a plurality of twisted pairs of insulated wires extending substantially along a longitudinal axis of the telecommunications cable. Each insulated wire of the plurality of twisted pairs of insulated wires includes a conductor and an insulation surrounding the conductor. The insulation includes a first insulation layer defining a plurality of channels disposed around a peripheral surface of the conductor. In addition, the insulation includes a second insulation layer disposed circumferentially around the first insulation layer. Moreover, the insulation includes a third insulation layer disposed circumferentially around the second insulation layer. Furthermore, the telecommunication cable includes a separator and a first layer defining the outer jacket of the telecommunication cable.
The present invention is to provide a glove box arranged interior to a vehicle. The glove box includes a first door and a second door for latching with a first compartment and a second compartment of the glove box. A first latch mechanism and a second latch mechanism for the first door and the second door respectively. A button for operating the first latch mechanism and the second latch mechanism, the button being configured between the first door and the second door. The bottom is pivotably arranged on the glove box. Upon pivoting the button around a pivot axis in a first operating direction the first latch mechanism is operated to unlatch the first door. Upon pivoting the button around a pivot axis in a second operating direction the second latch mechanism is operated to unlatch the second door. Figure 2a
The present invention provides a glove box for a vehicle. The glove box includes a lid, a storage space and a receptacle. The lid for closing and opening the storage space the receptacle slidably arranged over the glove box. The receptacle locks the lid against the storage space to configure a closed position in both a retracted position and an extended position of the receptacle and unlocks the lid upon lifting the receptacle to configure an open position. The receptacle is slides on a rail guide arranged on both side of the receptacle. The rail guide is pivoted at a distal end for enabling arcuate movement of the rail along with the receptacle when the receptacle is lifted for unlocking. A biasing member is provide around a pivotal joint of the rail guide for biasing the receptacle against the glove box in absence of external force. Figure 1b
A system for generating electrical energy using piezoelectric effect by placing piezoelectric setup inside the tyre periphery and rim periphery. Piezoelectricity means electricity generated from pressure or stress. When automobile vehicle is in motion then the surface of tyre which is contact with the ground or road exerts force on piezoelectric generator inside the tyre and on the rim. Due to that electricity is generated and it is stored in battery. This energy can be used for further application.
A system for cooling and heating car space using solar energy works on peltier effect. In this system the sunlight is absorb by solar panel as a source of energy and it converts into electrical energy. This electric energy stores in Battery. According to peltier effect there are two junctions. One is place inside the vehicle indoor space and another place outside the vehicle, when current supply is ON by using switch the one junction is heated and another one get cools and if the current direction is reverse then effect will be reverse. The fan is provided for force circulation of air. So according to environmental conditions (i.e. warm and cold atmosphere) current direction is decided. In warm atmosphere , when current is supply then junction inside the car space is get cool and fan circulates the cold air inside the car and hot junction dissipates the heat outside the car. In cold atmosphere, current direction is reverse, the effect are vice versa. Thus said system provides the better comfort according to atmospheric conditions.
Abstract:
Embodiments herein disclose a method for controlling a motor-drive system. The method includes determining, by a control system, a value of a load torque and a value of a travel distance of an object operated by a motor in the motor-drive system. Further, the method includes determining, by the control system, a value of a current component for the load torque and the maximum operating speed of the motor. Further, the method includes computing, by the control system, an optimized velocity trajectory based on the values of the current component, the load torque, the travel distance and the maximum operating speed. Furthermore, the method includes controlling, by the control system, the motor-drive system based on the optimized velocity trajectory. FIG. 9
Title of the invention : A WIRELESS AND VOICE CONTROL: EX-ARM EXOSKELETON ARM FOR REHABILITATION AND DEXTERITY IMPAIRMENT: EX-ARM.

Abstract:
ABSTRACT Over the past few decades, exoskeletons have emerged as leading tools for boosting able-bodied performance, aiding human mobility, and restoring lost limb functions. These systems are anthropomorphic, structural devices that work in conjunction with the body's natural architecture to aid limb mobility. The device may be worn in close contiguity to the body, and transfuse torques via powered revolute joints and structural limbs. Controllable, wireless exoskeletons offer revelatory capability in restoring lost limb function, and refining mobility and strength of the user. The existing devices includes brain controlled exoskeleton, pneumatic powered exoskeleton etc. However, the existing systems suffer from several disadvantages such as (i) brain-controlled exoskeleton arm is costly; (ii) pneumatic system is bulky and uncomfortable to the wearer. Therefore, to overcome the above-mentioned limitations, a battery powered exoskeleton arm has been developed which will control both hand, fingers, and provide wrist movement. The proposed arm is designed with the novel approach of controlling the arm and fingers using voice controlled exoskeleton arm for applications in physical therapy, mobility assistance and also for rehabilitation. The key features of this design include robust mechanical design, unprecedented actuation methods, and sophisticated integration of embedded systems. The proposed device has met numerous performance metrics including a low inertia and light-weight arm, wireless controlling operation, feedback control, considerable payload capacity and low-cost development. The product design is divided into 3 parts namely: Controlling System, Arm Support Mechanism, and Grabbing Mechanism. The device has two controlling features i.e., voice recognition module (VRM) and voice control through Ex-ARm App via Bluetooth module connected to an Android phone. However, either of the features can be used for controlling the limb functions. The VRM sends the signal to the microcontroller for controlling the limb functions. In addition, the device can communicates with the patients for controlling arm through Ex-ARm App via Bluetooth module connected to an Android phone. Further, the Ex-ARm App allows them to control the arm through a button options. The various kinds of motions performed by exoskeleton arm include: Flexion/Extension, Grabbing and Wrist Rotation. The Android application also includes several exercise mode features such as hand, and fingers and wrist exercise. The innovative product Ex-ARm offers a solution that can be extended to accessible exoskeleton systems for the use in assisting human mobility. It will also be useful for regaining limb functions which will allow disabled populations to regain independence and mobility.
The present invention relates to a method and a system for managing usage of digital subscriptions on the predefined electronic devices with respective UICCTM's without the intervention and transparent to the digital subscription server provider. The digital subscriptions, such as a MNO subscriptions, a TV subscription device, a vehicle subscriptions device and but no limited digital electric meter. The method comprising steps of configuring a device management application and UICC management application. The device management application and the UICC management application on respective devices are adapted to communicate therebetween. Thereafter, a request is sent the device management application on the controller device for modification of the digital subscription on the device management application thereon. After receiving approval from the user of the controller device the modified digital subscription for activation is sent to the UICC management application of the predefined electronic device through the device management applications.
The present disclosure relates to a flame retardant composition having enhanced flame-retardancy. The composition comprises a polymer component; a boron-based nano-filler; and an additive. The limiting oxygen index (LOI) of the flame retardant composition of the present disclosure is greater than 21.0. The present disclosure further provides a process for preparation of the flame retardant composition. The flame retardant composition of the present disclosure can be used in electrical insulation, adhesives, coatings, castings, and reinforced composites.
A STABLE CONJUGATE AMINOSILANE ADDUCT

Abstract:
The present disclosure relates to a stable conjugate aminosilane adduct and a process for preparation. The stable conjugate aminosilane adduct comprises at least one of epoxy compound or at least one acetoacetate compound; and at least one aminosilane compound. The stable adduct is characterized by an amine value in the range of 90 to 250 mgKOH/g and a viscosity in the range of 30 - 350 cps. The stable conjugate aminosilane adduct of the present disclosure provides longer pot life, does not require long induction time before application and shows comparatively less blushing in the coating.
The present disclosure relates to the field of fuel intake system. An apparatus disclosed in the present disclosure is modular. The apparatus comprises a proximity sensor, density measurement sensor, temperature sensor, a computational unit, and a valve system. The proximity sensor is configured to detect the introduction of a fuel filling nozzle in the fuel pipe. The density measurement sensor and the temperature measurement sensor are configured to measure the density and temperature of the fuel being introduced into the fuel pipe. The computational unit is configured to generate either a first or a second actuation signal based on the measured density and temperature signal to operate the valve system. The valve system based on the first and second actuation signal is configured to allow or restrict the fuel to flow towards a fuel tank.
The invention discloses a gas filling arrangement use in assembly of connecting and disconnecting of contacts inside the vacuum used in assembly of complete pole unit for circuit breaker. The gas inside the assembly of unit filled through the component called as base plate. The provision of circular slot inside the base plate is used as path of flowing of gas inside the enclosed assembly of hollow insulator. The slot is covered from outside with help of a non-return valve. The provision for restrict of flowing gas along with insulator shaft is made with help of sealing agent at bottom of the support plate.
The present invention relates to an improved process for the preparation of Tipiracil. More particularly, the present invention relates to an improved process for the preparation of Tipiracil in pure form and Crystal II of Tipiracil HCl.

No. of Pages : 10 No. of Claims : 7
The present invention discloses an UID/UIN/Aadhaar based preferential electronic voting machine and a system thereof. The control system for of preferential electronic voting machine comprised of three units namely Enroller & Authenticator, Control Unit (CU) and Ballot Unit (BU). The control system is indigenously designed to be utilized for registering casted votes for a preferential elections where the voter is required to give preferences between 1 to "$n$", where "$n$" is the total number of contesting candidates. Traditionally this process is very complicated and time consuming. The present invention aimed towards providing an electronic infrastructure which facilitate this process of registering casted votes and counting the votes with preferences, similarly all voters were authenticated based on biometric characteristic and UID/UIN/Aadhaar number issued by the government. Towards providing state of art preferential electronic voting machine wherein the first segment that is Enroller & Authenticator is dedicated towards acquiring biometric characteristics of voter through the preconfigured biometric acquisition device(s) as well as UID/UIN/Aadhaar number will be entered so that both the entries were authenticated by authenticator using communication service through communicator installed therein. Once voter is authenticated, the enroller and authenticator activates the control unit (CU) through an indicator to allow ballot for the authenticated voter, once CU initiates ballot, the ballot unit is providing ballot to the voter on the VDU screen mounted on BU. The voter selects the contestant and cast his/her preference by pressing PREFERENCE button of BU. The preference is automatically set to 1 to "$n$" based on sequential selection of contestant by voter, once voter decides submission of vote, he/she required to press SUBMIT button to cast the vote. After pressing SUBMIT button an long beep indicates that the vote being casted successfully and stored on CU The CRCI section of Control unit contains button as CLOSE, RESULT, IOE (INTERNET OVER EXPORT) buttons, where CLOSE indicates the voting process to be closed, the RESULT button provides contestent wise preference counting and IOE allows transport of casted vote data to the preconfigured remote server for announcement of results using communication medium that is "Communicator" installed in CU. The communicator installed in CU, operates on the any communication medium such as broadband, GSM,2G,3G,4G, VoLTE but not limited to. The EA, CU, BU were provided with battery power for their operations. The CU also provided an interface with small thermal printer to provide print of voter statistics such as total number of vote casted, male voter, female voter etc.
An organic light-emitting diode (OLED) display panel includes a layered structure. The layered structure includes an emitter and a receiver. The emitter emits an infrared light, and the infrared light traverses a portion of the layered structure that is above the emitter, and the receiver receives the infrared light that traverses a portion of the layered structure that is above the receiver. [FIG 1]
Title of the invention: **ROTOR, MOTOR, AND METHOD OF MANUFACTURING ROTOR**

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<td>:30/06/2017</td>
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<th>Filing Date</th>
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Abstract:
A motor includes a rotor rotatable about a central axis, and a stator that rotationally drives the rotor. The rotor includes a rotor core that annularly surrounds the central axis extending in an up-down direction and that is formed of stacked steel sheets, and a plurality of magnets arranged in a circumferential direction. The plurality of magnets are provided on an inner lateral surface of the rotor core on a radial direction inner side. The rotor core includes protruded portions that protrude from the inner lateral surface of the rotor core on the radial direction inner side towards the radial direction inner side. The protruded portions include upper side protruded portions provided on an axial direction upper side of the magnets, and lower side protruded portions provided on an axial direction lower side of the magnets. Gaps between protruded portion opposing surfaces that oppose the axial direction end surfaces of the magnets in an axial direction, and the axial direction end surfaces of the magnets become larger towards the radial direction inner side in at least either the upper side protruded portions and the lower side protruded portions. [Selected Figure] Fig. 4A

No. of Pages: 51 No. of Claims: 10
**Title of the invention:** BRUSHLESS MOTOR AND AIR-SENDING APPARATUS

**Abstract:**
A magnet portion included in a rotor of an outer-rotor brushless motor faces a stator in a radial direction. The magnet portion includes first magnetic poles and second magnetic poles that are arranged alternately in a circumferential direction. In a stator core included in the stator, teeth extend in the radial direction from a core back. The teeth each include, at a tip portion thereof, a plurality of toothlets that face the rotor in the radial direction and are adjacent to one another in the circumferential direction. In each of the teeth, a toothlet spread angle is greater than twice a magnet pitch. Figure of Abstract : Fig. 5

**No. of Pages :** 39  **No. of Claims :** 15
The invention relates to a subgrade stability reinforcement and filter composite, comprising woven fabric and nonwoven fabric, with the woven fabric set on top of the nonwoven fabric; the woven and nonwoven fabric are structurally attached together as an integral composite material using multiple parallel stitch line seams. The subgrade stability reinforcement and filter composite of the present invention can more effectively provide combined application functions of reinforcement, separation, filtration, and drainage; to maintain the subgrade stability of the railways, highways, access roads, airport runways, and other structural load bearing platform applications. The use of multiple parallel stitch line seaming method of the two fabric surfaces can effectively prevent the relative slippage of the woven fabric and nonwoven fabric in whole or in part, reduce construction time and cost, and improve engineering stability and construction.
The invention relates to a yarn splicing device (10) for pneumatically joining the yarn ends of an upper yarn (31) and of a lower yarn (32), more particularly of elastane yarns, comprising a splicing prism (19), which has a splicing channel (20) to which compressed air can be applied, small holding and opening tubes (34) for pneumatically preparing the yarn ends to be joined, yarn clamping apparatuses and yarn cutting apparatuses (11, 17) for handling and cutting to length the yarn ends, respectively, and holding means arranged at a distance from the splicing channel (20) of the splicing prism (19) for fixing the free lengths of the yarn ends after the yarn ends have been cut to length. According to the invention, the holding means are designed as yarn brake elements (35), which are arranged at respective ends of the splicing channel (20) of the splicing prism (19) and are formed by attachment plates (18), which have an opening (27) having a structure that has a motion-inhibiting effect on the yarn ends of the upper and lower yarns (31, 32).
**Abstract:**
A waveguide device module includes: a waveguide device and a circuit board having an electrically-conductive line pattern. A conductor face of an electrically conductive member of the waveguide device defines a waveguide between itself and the line pattern. A line pattern on the circuit board includes a stem pattern and a first and second branch patterns branching out from the stem pattern. The waveguide includes a main waveguide, a first branch waveguide between the first branch pattern and the conductor face, and a second branch waveguide between the second branch pattern and the conductor face. A difference between a variation in phase of the first electromagnetic wave while propagating through the first branch waveguide and a variation in phase of the second electromagnetic wave while propagating through the second branch waveguide is within ±90 degrees of an odd multiple of 180 degrees.

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**No. of Pages :** 338  **No. of Claims :** 41
The present invention relates to a ring spinning machine (1) having a plurality of spinning positions, the spindles (2) of which are frictionally driven by a circulating tangential belt (3) during spinning operation. The ring spinning machine (1) is distinguished in that the ring spinning machine (1) is equipped with a device for monitoring the belt tension of the tangential belt (3), which device has sensor devices (12, 14) and a belt tensioning apparatus (27, 15), wherein the belt tensioning apparatus (27, 15) is connected to a control device (13), which processes the measured values of the sensor devices (12, 14), and can be controlled in such a way that the belt tension of the tangential belt (3) is automatically kept at a set, optimal value during the entire spinning operation of the ring spinning machine (1). (Fig. 1)
The present invention is directed to an integral planet carrier with no joints, a method of manufacturing it and an apparatus for doing so. Such integrally manufactured components have better strength than a conventionally produced multi-piece jointed planet carriers or integral planet carriers made from casting process. The present invention provides a hot forging process which can be used for the manufacturing of the planet carrier. The manufacturing process comprises of forward extrusion of a billet followed by backward extrusion. This is followed by bending operation, which is in turn followed by a flattening operation. Post-forging heat treatment and other treatments such as shot blasting follow. Finally machining is carried out to arrive at the final integrally formed planet carrier. The forward extrusion, backward extrusion, bending and flattening operations are done on a press or hammer having sufficient energy and load capacity. Preferably these operations are performed on a hydraulic press in order to achieve the required accuracy and precision.

No. of Pages : 36 No. of Claims : 24
The present invention relates to a composition and a method for treating substrates such as fabrics; in particular a composition that can deliver cleaning and anti-microbial benefits to the fabric thereby delaying laundry. There is a long left need for a composition which can clean the fabric and deliver anti-microbial benefits without the use of water and detergents. It is therefore an object of the present invention to provide a composition with no surfactants in it which can deliver cleaning and anti-microbial benefits through a single product. It has been found that cleaning and anti-microbial benefits on fabric can be achieved by a solvent mix of a glycol ether a fatty acid ester and a diol in combination with a bipolar antimicrobial particle in an aqueous solution.
The Patent Office Journal No. 01/2019 Dated 04/01/2019

Title of the invention: BINDER FOR AQUEOUS INKJET INKS

Abstract:
Carboxylated polyurethane having blocked isocyanate groups for use as binder in aqueous pigmented inkjet inks.

No. of Pages: 34
No. of Claims: 11
**Title of the invention:** METHOD FOR PREPARING A TWO-COMPONENT ARTICLE AND ARTICLE OBTAINABLE BY THE METHOD

| (51) International classification | C08J7/04C08G61/08C08K5/132 |
| (31) Priority Document No | 16305100.6 |
| (32) Priority Date | 01/02/2016 |
| (33) Name of priority country | EPO |
| (36) International Application No | PCT/EP2017/052097 |
| Filing Date | 01/02/2017 |
| (87) International Publication No | WO 2017/134073 |

| (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 method for preparing an article comprising at least a first component of a polyolefin in conjunction with a second component of a polymer made by ring-opening metathesis polymerisation of norbornene type monomers. The method comprises pre-treating a surface of the first component applying a ring-opening metathesis polymerisable mixture of norbornene type monomers and a catalyst to the surface and curing the ring-opening metathesis polymerisable mixture in contact with the surface wherein the ring-opening metathesis polymerisable mixture has a 1000 at 30°C of more than 9 sec. Articles such as pipe line field joint or a protective element for a concrete tunnel lining element can be obtained with the method.

No. of Pages: 25  No. of Claims: 13

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2) MARQUETTE, Reynald

No. of Pages: 25  No. of Claims: 13
Title of the invention: A SYSTEM FOR CONNECTING A BEACON DEVICE AND A GATEWAY DEVICE

Abstract:
The application relates to a system for connecting a beacon device (802) and a gateway device (804). The system comprising beacon devices (802) and the gateway device. The beacon device belonging to the beacon devices is adapted to provide a bi-directional connection (800 801) to the GW device and the GW device is adapted to provide a bi-directional connection (805) to an application system (806). The beacon devices form a multi-hop wireless mesh network (800) the GW device provides a bi-directional mesh connection to the wireless mesh network and the wireless mesh network is used for communicating data between the beacon device and the GW device.

No. of Pages : 10 No. of Claims : 10
**Title of the invention:** DOOR-USE IRIS AUTHENTICATION DEVICE AND IRIS AUTHENTICATION SYSTEM

**International classification:** E05B49/00 E05B47/00 E05B57/00

**Priority Document No:** 2016-002938

**Priority Date:** 08/01/2016

**Name of priority country:** Japan

**International Application No:** PCT/JP2016/088083

**Filing Date:** 21/12/2016

**International Publication No:** WO 2017/119295

**Patent of Addition to Application Number:** NA

**Filing Date:** NA

**Divisional to Application Number:** NA

**Filing Date:** NA

**Abstract:**

[Problem] To provide a door-use iris authentication device that can be installed easily and an iris authentication system.  

[Solution] A door-use iris authentication device is configured to be mountable on a door and is for unlocking the door. The door-use iris authentication device is provided with: an unlocking mechanism for unlocking the door onto which the door-use iris authentication device is mounted; an imaging unit for capturing an image; an authentication unit for performing iris authentication on the basis of a captured image captured by the imaging unit and when the iris authentication is successful unlocking the door using the unlocking mechanism; and a casing for integrally housing the unlocking mechanism the imaging unit and the authentication unit.
The present invention relates to a process for manufacturing a wood-based board as use of a liquid coating composition comprising at least one particulate filler material and at least one binder for in-line coating of wood-based boards.

No. of Pages : 59 No. of Claims : 26
TITLE OF THE INVENTION: METHOD AND DEVICE FOR MAGNETIC DOMAIN REFINEMENT OF ORIENTED ELECTRICAL STEEL PLATE

Abstract:

By optimizing equipment and processing magnetic domain refinement efficiency can be increased workability can be improved and processing ability can be increased through same. Provided is a method for magnetic domain refinement of an oriented electrical steel plate the method comprising: a steel plate supporting roll position adjusting step of controlling the vertical direction position of a steel plate that progresses along a production line while supporting the steel plate; and a laser emitting step of emitting a laser beam onto the steel plate surface and melting the steel plate to form a groove in the surface of the steel plate the laser emitting step including an angle changing step of rotating an optical system which emits the laser beam onto the steel plate and changing the emitted angle of the laser beam with respect to the width direction of the steel plate wherein the method further comprises a focal distance maintaining step of changing the tilt of the steel plate supporting roll to support the steel plate to match the change in focal distance of the laser beam along the width direction of the steel plate.
**Title of the invention:** METHOD AND DEVICE FOR USE IN SECONDARY TEXT INPUT

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<td>A method and a device for use in secondary text input the method comprising: detecting a contact action; when the contact action conforms to a trigger condition for entering into a candidate result cutting mode triggering to enter the candidate result cutting mode and selecting and cutting a to-be-cut candidate result thus forming an upper-screen portion and a re-acquisition portion; and performing an upper-screen operation on the upper-screen portion and re-acquiring a secondary candidate result according to a character string corresponding to the re-acquisition portion. The method and device according to the present invention can streamline user operations modify the candidate result at any time according to user input and retain accurate parts in the candidate result which provide users with more timely and efficient input feedback in the input process and thereby providing a better user experience.</td>
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No. of Pages : 21 No. of Claims : 21
Device (100) for continually and automatically measuring geometrical and shaping parameters of a rope (8) comprising a first plate (1) and a second plate (2) parallel to each other and constrained in a removable way by means of spacer means (3) and anchoring means (4) at least two micrometers (5 6) angularly unaligned one to the other and positioned between said first plate (1) and second plate (2) an encoder (7) anchored to the second plate (2) in contact with the rope (8) being the device (100) wherein said first plate (1) and second plate (2) comprise a shaped opening (9) for the passage of the rope (8) inside said shaped opening so that the rope (8) centrally flows through the device (100) and the two micrometers (5 6) carry out the measurements.
The invention relates to a floating wind turbine (10) comprising a floating platform (14) and a turbomachine (12) resting on the platform the turbomachine comprising:
- first and second transverse flow turbines (24) disposed symmetrically with respect to a first plane each turbine comprising blades (32) disposed in central parts (33) that are extended at the ends by arms connected to shaft elements (52 56) by pivoting connections (74 76) each turbine also comprising upper and lower fairings (42 44); and
- a structure (26) for holding the turbines comprising a vertical median pylon (28) between the turbines and upstream of a second plane containing the axes (A A) of rotation of the blades of the turbines.
A moisture-curable silylated resin is derived from a copolycarbonate diol prepared from diol(s) of specific types.

No. of Pages : 41 No. of Claims : 20
Title of the invention: HOOKAH

Abstract:
A hookah and method for smoking a hookah are disclosed that permit more effective purging of stale wetted tobacco smoke from a hookah. The hookah includes a stem bottle and check valve in fluid communication with a dry smoke inlet of hookah. The valve is located in a low position within the hookah for more effective use of positive pressure within the hookah for purging. The method includes purging wetted tobacco smoke through a valve that selectively leads to the dry smoke conduit.

No. of Pages: 23  No. of Claims: 20
Title of the invention: **A METHOD AND SYSTEM FOR AUTOMATED BUILDING PLAN SCRUTINIZE AND APPROVAL**

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Abstract:
Disclosed is a system (100) and a method (300) for automated approval of a building proposal. The system (100) and the method (300) enables submission of a single building proposal through an automated single window platform and receive therefrom a plurality of approvals and digitally signed NOC™s and certificates from building and construction authority and various government departments, thereby reducing on the time-cycle required for approval of the building proposal. The system (100) and the method (300) is cost effective and enables citizens to keep track of the building proposal throughout the approval process. Figure 1
The present invention relates to a patch panel scanning device, comprising a single-chip microcomputer control unit, at least one port detection sending module and at least one port detection receiving module, wherein both the port detecting sending module and the port detection receiving module are connected to the single-chip microcomputer control unit, and configured to send and receive port detection data from the patch panel scanning device in parallel respectively under the control of the single-chip microcomputer control unit. Figure 1
**Title of the invention:** HYDRAULIC TETHER SYSTEM

### Abstract:

A hydraulic tether system is configured to control rotation of a spindle assembly on a harvester. The hydraulic tether system includes a tether motor system configured to convert force from a pressurized hydraulic fluid into torque for rotating the spindle assembly. The hydraulic tether system also includes a tether valve assembly fluidly coupled to the tether motor system. The tether valve assembly controllably releases the pressurized hydraulic fluid for use by the tether motor system.

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**No. of Pages:** 25

**No. of Claims:** 10
An optical fiber ferrule polishing jig is provided such that optical fiber ferrules can be easily secured and the securing of the optical fiber ferrules can be easily released. The optical fiber ferrule polishing jig 10A has: a pedestal 12a which has multiple insertion holes 20 for multiple optical fiber ferrules 51 to be inserted therein in a removable manner; multiple turning rods 13 which are disposed adjacent to the insertion holes 20 of the pedestal 12a and can be turned about the lower end part 36 thereof; multiple securing pieces 14a which are disposed inside multiple installation recess parts 19a formed on the pedestal 12a and are moved with the turning of the rods 13 thereby securing the optical fiber ferrules 51 to the insertion holes 20; and multiple coil springs 15a which are disposed inside the installation recess parts 19a and bias the securing pieces 14a so as to release the securing of the optical fiber ferrules 51 to the insertion holes 20.
Title of the invention: CONNECTION DEVICE BETWEEN A GUTTER AND GULLY

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Name of Inventor:
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3) MILLER, Michael
4) SIEBER, Michael

Abstract:
Connection devices for connecting a drainage gutter to a further functional element (10) for example to an inlet box are known which comprise an adapter plate (20) to which the drainage gutter can be connected. In order to ensure simple assembly on the building site in combination with a high degree of tightness it is proposed to provide a cast-in part (40) which can be tightly cast into a wall of the functional element (10) and comprises fastening devices by means of which the adapter plate (20) can be fixedly connected to the cast-in part (40) in such a way that a flow space (2) of the drainage gutter can be tightly connected to an interior of the functional part (10) via a transfer space.

No. of Pages: 7  No. of Claims: 10
Techniques are disclosed for facilitating optical character recognition (OCR) by identifying one or more regions in an electronic document to perform the OCR. For example a method for identifying information in an electronic document includes:

- Obtaining a set of training documents for each template of a plurality of templates for the electronic document.
- Extracting spatial attributes for at least a first label region and at least a first corresponding value region from the set.
- Training a classifier model based on the extracted spatial attributes.
- Using the classifier model to identify the information in the electronic document. The spatial attributes represent a position of at least the first label region and at least the first value region within the electronic document.
The invention relates to a jewelry element (1) containing (a) a gemstone (2) (b) an electrically conductive layer (5) on at least a partial area of the gemstone and (c) an electronic sensor (7).

No. of Pages : 23 No. of Claims : 14
A laminated coating film 12 has a lower layer coating film 14 and an upper layer coating film 15. The lower layer coating film 14 has a lightness L value of 30 or less. The upper layer coating film 15 contains aluminum flakes 22. The aluminum flakes 22 have a surface roughness Ra of 30 nm or less and a thickness of 70 nm to 150 nm. At least 70 mass% of the aluminum flakes included in the upper layer coating film 15 have a long diameter of 7 µm to 15 µm and an aspect ratio of 3 or less. When all the aluminum flakes 22 included in the upper layer coating film 15 are projected onto the surface of the upper layer coating film 15 the projection area proportion of the surface occupied by the portion in which the aluminum flakes 22 are projected is 40% to 90%.
(54) Title of the invention : ORGANIC LIGHT EMITTING DIODE DISPLAY SUBSTRATE ORGANIC LIGHT EMITTING DIODE DISPLAY APPARATUS AND METHOD OF FABRICATING ORGANIC LIGHT EMITTING DIODE DISPLAY SUBSTRATE

(51) International classification :H01L27/32,H01L51/56,H01L51/00

(31) Priority Document No :201611176024.8

(32) Priority Date :16/12/2016

(33) Name of priority country :China

(86) International Application No :PCT/CN2017/090688

Filing Date :29/06/2017

(87) International Publication No :WO 2018/107722

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(57) Abstract :
A method of fabricating an organic light emitting diode display substrate having a subpixel region(201) and an inter subpixel region(202) is provided. The method includes forming a pixel definition layer(20) on the base substrate(10) the pixel definition layer(20) being formed in the inter subpixel region(202) and defining the subpixel region(201) of the organic light emitting diode display substrate; forming an insulating dielectric layer(50) on a side of the pixel definition layer(20) distal to the base substrate(10) the insulating dielectric layer(50) being formed to define a first aperture region(501) greater than the subpixel region(201); and subsequent to forming the insulating dielectric layer(50) forming an organic light emitting layer(102) in each subpixel region(201) using a mask plate(30) placed on the insulating dielectric layer(50).

No. of Pages : 24 No. of Claims : 20
The invention discloses a light weight wheel having a wheel rim and a disc, said rim comprising an outer flange, a central body portion, a gutter portion, and a locking ring, characterized in that said disc is attached to said wheel rim at the underside of said gutter portion or under the central body portion of rim using a weld. Reference Figure: Figure 3

No. of Pages: 21 No. of Claims: 7
Title of the invention: METHOD OF FABRICATING THIN FILM TRANSISTOR THIN FILM TRANSISTOR AND DISPLAY APPARATUS

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Abstract:
A thin film transistor and a fabricating method thereof are provided. The method includes: forming an active layer (1) having a channel region (R3) a source electrode contact region (R1) and a drain electrode contact region (R2) on a base substrate (10); forming a first photoresist layer (20) on a side of the active layer (1) distal to the base substrate (10) the first photoresist layer (20) is formed in a region outside that corresponding to the channel region (R3); forming an insulating material layer (102) on a side of the first photoresist layer (20) distal to the base substrate (10); forming a first conductive metal material layer (202) on a side of the insulating material layer (102) distal to the first photoresist layer (20) and removing the first photoresist layer (20) the insulating material layer (102) the first conductive metal material layer (202) in the region outside that corresponding to the channel region (R3) by a lift off method.

No. of Pages: 19 No. of Claims: 20
A flexible display substrate comprises a repairable first electrically conductive material and a repair layer formed of a repairable electrically conductive material. Thus, when the flexible display apparatus is used, the repair layer formed of the repairable electrically conductive material can prevent damage to the flexible structure assembly or when the flexible structure assembly is damaged, the flexible structure assembly can be rapidly repaired by means of the repairable electrically conductive material.
### Title of the invention: WATER TREATMENT APPARATUS AND STERILIZATION METHOD THEREOF

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(57) Abstract:
The present invention is directed to providing a water treatment apparatus capable of sterilizing a mechanical valve type water cock and a sterilization method of the water treatment apparatus. To implement the objective, the water treatment apparatus of the present invention includes a storage tank configured to store water to be discharged to a user; a water cock of which an internal valve is opened or closed by an operation of a lever manipulated by a user to discharge the water of the storage tank; a sterilization module provided on a discharge line connecting the storage tank and the water cock and configured to produce sterilizing water; and a controller which controls the water cock such that the sterilizing water produced by the sterilization module is discharged therethrough.
Disclosed is a method and apparatus for running a plurality of operating systems in an industry internet operating system, wherein the industry internet operating system includes an application layer, a cloud control layer, and a field layer; the cloud control layer includes an industry real-time cloud operating system module configured to acquire and analyze data between the cloud control layer and the application layer, and to transmit a control instruction to the field layer; and the method includes: running a first core of a multi-core CPU in a VMX mode using a preset virtualization technology, creating at least one VM in the first core of the multi-core CPU, and running a first operating system on a VM in the first core, wherein each VM corresponds respectively to a logic partition; and running a second operating system directly on a physical partition in a second core of the multi-core CPU.
A Method Of Manufacturing Near-Net Shape Crown Wheel Abstract Invention relates to a method of producing a crown wheel with near-net shaped as-forged teeth having continuous grain flow lines and having minimal machining allowance. The method of invention comprises the steps of making ring using hammer forging and ring rolling technique followed by blocker and finisher forging step for manufacturing of gear teeth on the ring and after which a cold coining operation is performed on the finished forging to achieve near net shape of gear teeth. The cold-coining operation allows a reduced machining allowance of up to 0.3mm but with minimal dimensional variation of teeth. These near net shaped teeth are further finished to final shape by grinding operation. The forging of near net shape gear teeth profile is carried out using any type of press capable of applying required force. Representative Figure: Figure 3

No. of Pages: 37  No. of Claims: 15
A pressure fixing device applied to a shoe is disclosed. The pressure fixing device includes an inflatable shoelace, a first air pump, a second air pump, an airbag and a control module. The control module enables the second air pump to pump the air into the inflatable shoelace according to a second enabling signal, so that the inflatable shoelace is inflated and tightened, so as to fix the user’s foot within the shoes. The control module also enables the first air pump to pump the air out of the inflatable shoelace according to a first enabling signal, so that the inflatable shoelace is deflated and loosened to facilitate the user to wear or take off the shoe easily.
**Abstract:**
A dynamic pressure controlled air cushion device disposed on a bottom part of a shoe comprises a first air bag and a second air bag communicated with each other through an air passage, and the first air bag and the second air bag are respectively disposed corresponding to a front foot sole and a rear foot sole of a user. Through introducing the air into the first air bag by the first air pump and introducing the air into the second air bag by the second air pump, the first air bag and the second air bag are inflated, so as to increase a supporting force for the front foot sole and the rear foot sole of the user.

**No. of Pages :** 44  **No. of Claims :** 10
Title of the invention: Extractor Fan with Wear Indicator

Abstract:
An extractor fan for use in a sugarcane harvester is configured to generate a flow of air to separate debris from sugarcane billets produced by the sugarcane harvester. The extractor fan comprises an extractor fan blade configured to contribute to generation of the flow of air. The extractor fan blade comprises a wear indicator configured to indicate wear of the extractor fan blade.

CONTINUED TO PART- 2