

# কৰ্তৃপক্ষ কৰ্তৃক প্ৰকাশিত

# বৃহস্পতিবার, মে ৩, ২০১৮

# ৪র্থ খণ্ড

# প্রথম খণ্ডে অন্তর্ভুক্ত প্রজ্ঞাপনসমূহ ব্যতীত পেটেন্ট অফিস কর্তৃক জারীকৃত প্রজ্ঞাপনসমূহ

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার পেটেন্ট, ডিজাইন ও ট্রেডমার্কস অধিদপ্তর শিল্প মন্ত্রণালয় ৯১, মতিঝিল বা/এ, ঢাকা-১০০০।

# গৃহীত পেটেন্ট দরখান্ত

# **Accepted Patent Applications**

এতদ্বারা জানানো যাইতেছে যে, নিম্নে বাম পার্শ্বে উল্লিখিত যে কোন পেটেন্ট আবেদনপত্র সম্পর্কীয় উদ্ভাবনের জন্য পেটেন্ট মঞ্জুরীর বিরুদ্ধে যে সকল ব্যক্তি বিরোধিতা করিতে ইচ্ছুক তাঁহার এই গেজেট প্রকাশের তারিখ হইতে চার মাস সময় সীমার মধ্যে যে কোন সময় পেটেন্ট, ডিজাইন ও ট্রেডমার্কস অধিদপ্তর, (পেটেন্ট ও ডিজাইন উইং), শিল্প মন্ত্রণালয়, (৬৯ তলা) ৯১, মতিঝিল বা/এ, ঢাকা-১০০০, বাংলাদেশ এই ঠিকানায় ১৯৩৩ ইং সনের পেটেন্ট ও ডিজাইন বিধিমালা-১৯৩৩ অনুযায়ী ৬নং নিদিষ্ট ফরমে বিরোধিতা নোটিশ দাখিল করিতে পারিবেন।

নিম্নে ডান পার্শ্বে প্রদর্শিত সাত অংকবিশিষ্ট সংখ্যাগুলি পুর্ণাঞ্চা বিশেষত্বনামা গৃহীত হইবার পর পেটেন্ট নম্বর প্রদান করা হইয়াছে এবং এই ক্রমিক সংখ্যা অনুসারে বিনির্দেশ মুদ্রণ করা হইবে এবং পরবর্তী কার্যক্রম গ্রহণ করা হইবে।

গৃহীত পেটেন্ট দরখান্তসমূহের সাময়িক (যদি থাকে) ও পুর্ণাঞ্চা বিশেষত্বনামা জনসাধারণের পরিদর্শনের জন্য অফিস চলাকালীন সময়ে অত্র অধিদপ্তরে প্রদর্শিত হয়। যে কোন আবেদনকারীর প্রয়োজনে টাইপ-রাইটারে মুদ্রিত বিশেষত্বনামা প্রত্যায়িত প্রতিলিপি সরবরাহ করা যাইতে পারে যদি তিনি ২৯ নং ফরমে নির্দিষ্ট ফিসহ আবেদন দাখিল করেন এবং বিশেষত্বনামা টাইপ করিবার জন্য নির্দিষ্ট ফি পরিশোধ করেন।

লঘুবন্ধনীর মধ্যে প্রদর্শিত তারিখ ১৯১১ইং সনের পেটেন্ট ও ডিজাইন আইনের ৭৮ক ধারা/প্যারিস কনভেনশনের বিধান অনুযায়ী অগ্রাধিকার তারিখ রূপে দাবি করা হইতেছে এবং যে দেশে দরখাস্তুটি প্রথম দাখিল করা হইয়াছে সেই দেশের নাম তৎসংগে উল্লিখিত হইয়াছে।

Notice is hereby given that all persons interested in opposing the grant of patent on any of the application referred to below may at any time within four months from the date this Gazette, give notice at the Department of Patents. Designs & Trademarks, (Patent & Design Wing), Ministry of Industries (5<sup>th</sup> Floor), 91 Motijheel C/A, Dhaka-1000. Bangladesh in the prescribed form 6 of the Patents and Designs Rules, 1933.

The seven figures numbers shown in the right hand side are those given to the application on acceptance of the complete specifications and under which the specifications will printed and subsequent proceeding will be taken.

The complete specifications of the accepted applications are open to the public inspection at this office at any time on all working days, if required typed copies of the specifications can be supplied by this office on payment of the prescribed charge which may be ascertained on application to this office.

The priority dates of the applications and the names of the countries in which the application to have been filed first are shown in the crescent brackets. The priority dates are claimed Under Section 78A of the Patents and Designs Act, 1911/provisions under this Paris Convention.

ANGADJI, Michael, United Arab Emirates Nationality:-Great Britain, (whose legal address is Hamid Reza, 1505, 345-SH, Zayed Road, Post Box: 38041, Dubai, United Arab Emirates) Priority: IN 301/DEL/2014

Dated: 12-08-2014

280/2015

Dolby International AB, A Company incorporated under the laws of Sweden, (whose legal address is Apollo Building, 3E, Herikerbergweg 1-35, NL-1101 CN Amsterdam, Netherlands) Priority: US 62/073, 642

Dated: 31-10-2014 and US

62/128, 425 Dated: 04-03-2015

9/2016

HONDA MOTOR CO., LTD. A corporation of Japan, (whose legal address is 1-1, Minami-Aoyama 2- chome, Minato-ku, Tokyo 107-8556, Japan) Priority: JP 2015-045348 Dated: 06-03-2015

GAS PRESSURE REGULATOR FOR TWO WHEELER.

IPC: F02D 19/02

#### 1005782

**Abstract :** The present disclosure relates to a cost effective and easy to install pressure regulator for two wheeler that reduces CNG pressure from its storage pressure of about 200 bar to less than 1 bar in two stages without any adverse effect of cooling of gas due to expansion and heating of cooled gases. The second stage pressure regulator also incorporate flow control valve and means to adjust idling speed and performance of engine thereby reducing number of assemblies, pipes and hardware making it cost effective for two wheeler application.

# PARAMETRIC ENCODING AND DECODING OF AUDIO SIGNALS.

IPC: G 10L 19/008, 19/22, H04S 7/00

#### 1005921

Abstract: A control section receives signaling indicating one of at least two coding formats of an M-channel audio signal, the coding formats corresponding to different partitions of the channels of the audio signal into respective first and second groups, wherein, in the indicated coding format, first and second channels of a downmix signal correspond to linear combinations of the first and second groups, respectively; and a decoding section reconstructs the audio signal based on the downmix signal and associated upmix parameters. In the decoding section: a decorrelation input signal is determined based on the downmix signal and the indicated coding format; and wet and dry upmix coefficients, controlling linear mappings of the downmix signal and a decorrelated signal, generated based on the decorrelation input signal, are determined based on the upmix parameters and the indicated coding format.

# MUFFLER SUPPORTING STRUCTURE OF ROCKING VEHICLE.

IPC: B62M 7/02

## 1005912

Abstract: To enable a muffler supporting stay to restrict the direction of sway of a muffler. [Means for Solving the Problem] A muffler 31 and a bracket holder 28 are coupled to each other via a muffler supporting stay 32. The muffler supporting stay 32 is made by bonding together an inside member 37 and an outside member 38 arranged in an in-out direction of a vehicle, and lower parts of these members are welded to the muffler 31. A rigidity adjusting bore 58 is formed in the inside member 37 whereas no rigidity adjusting bore is provided in the outside member, 38. By doing so, durring left cornering, the muffler 31 sways inward since the rigidity of the outside member that undergoes a centrifugal force is high and the rigidity of the inside member 37 being a part that undergoes a gravity dorce is lowered due to the rigidity adjusting bore 58. Suring right cornering, the mulfler 31 still sways inward because the inside member 37 becomes a part that undergoes a centrifugal force at this time. Therby, it is possible to enable the muffler supporting stay 32 to restrict the direction of sway of the muffler 31 and enhance turning performance.

CJ HEALTHCARE CORPORATION, a corporation organized and existing under the laws of Korea, (whose legal address is 330, Dongho-ro, Jung-gu, Seoul 04560, Republic of Korea) Priority: KR 10-2015-0009326

Dated: 20-01-2015

25/2016

LONATI S.P.A., a Company organized and existing under the laws of Italy, (whose legal address is Via Francesco Lonati, 3 25124 BRESCIA, Italy)

Priority: IT BS 2015

A 000017

Dated: 06-02-2015

34/2016

Evonik Specialty Chemicals (Shanghai) Co., Ltd (whose legal address is No. 68
Lianhe Road, Chemical Industry Park, Shanghai, 201507, China) and Evonik Degussa GmbH, a Gereman Company, (whose legal address is Rellinghauser StraBe 1-11, 45128 Essen., Germany) Priority: CN PCT/CN 2015/073404
Dated: 28-02-2015

# A NOVEL CRYSTALLINE FORM OF A BENZIMIDAZOLE DERIVATIVE AND A PREPARATION METHOD THEREOF.

*IPC*: C 07D 401/00

## 1005913

**Abstract:** The present invention relates to a novel crystalline form of a benzimidazole derivative and a preparation method thereof. The novel crystalline form according to the present invention is hardly changed chemically and/or physically under a long-term photo-stressed condition, has a low hygroscopicity, and has an extremely low static-electricity-inducing capability, thus being advantageous for formulation, and due to the excellent stability of the crystal form itself, it is very useful for long-term storage of the compound.

# METHOD FOR MAKING ASSEMBLED TEXTILE PRODUCTS.

*IPC:* A 41H 43/00, 43/04, D 06C 5/00

#### 1005917

**Abstract**: A method for making assembled textile products comprising the following steps: arranging an open piece of fabric, made by producing a tubular knitted fabric by means of a circular knitting machine for hosiery or for knitwear, by pulling the tubular fabric over a support so as to stretch the tubular fabric, by applying a heat adhesive material onto at least a first portion of an outer surface of the tubular fabric pulled over the support letting the heat adhesive material firmly adhere under heat onto the tubular fabric, and by cutting the tubular fabric onto which the heat adhesive material has been applied, so as to obtain an open piece of fabric; cutting the open piece of fabric according to predefined cutting lines for making one or more parts of a textile product to be assembled, and assembling a plurality of parts obtained from the open piece of fabric or from a plurality of pieces of fabric for obtaining an assembled textile product, in particular a jacket, a pair of trousers, a men's suit, a women's dress.

OEM textile finishing compositions.

IPC: C 08G 77/26, 77/38, D 06M 15/043

# 1005918

**Abstract :** Crosslinked aminosiloxanes obtainable by reaction of identical or diffetent aminosiloxanes with identical or diffetent epoxide components which are water-soluble hydrocarbons, the hydrocarbons, comprising oxygen as well as carbon, and optionally further elements selected from nitrogen, sulphur and phosphorus, the hydrocarbon having on average more than one terminal epoxy group, the epoxy group being a carbooxirane radical, and, further, not more than 50% of all the amino groups having undergone reaction with an epoxide group.

Tong Siang Company Limited, a corporation duly organized under the laws of Thailand, (whose legal address is 302, 302/2 Moo 2, Sethakij 1 Soi 6 rd., Omnoi, Kratumban, Samutsakorn 74130, Thailand).

61/2016

Chiu-Huei, LIAO (LIAO is family name), Nationality: Chinese Taipei, , (whose legal address is No. 123, Sec. 3, Changxing Road, Luzhu Dist., Taoyuan City 33852, Taiwan, Province of China).

75/2016

Erber Aktiengesellschaft, a Company organized and existing under the laws of Austria, (whose legal address is Erber Campus 1, 3131 Getzersdorf bei Traismauer, Austria) Priority: AT PCT/AT 2015/000048 Dated: 27-03-2015

76/2016

SMART COMMUNICATIONS, INC., a Company incorporated under the laws of Philippines, (whose legal address is Smart Tower, 6799 Ayala Avenue, Makati City 1226, Philippines) Priority: SG 10201502399V

Dated: 26-03-2015

# METHOD AND SYSTEM FOR MANUFACTURING A FOOTWEAR UPPER.

IPC: A 43b 1/04, 23/04, A 43D 999/00

#### 1005930

**Abstract**: A method and a system for manufacturing a footwear upper are disclosed. The method comprising the steps of providing a pattern of the footwear upper to an electronically controlled knitting machine: thereding at least one yarn to a needle bed of the kniting machine, the needle bed comprising a plurality of knitting needles; and controlling the plurality of knitting needles of the kniting machine to selectively knit the at least one yarn based on the received pattern of the footwear upper for forming the footwear upper.

#### ENERGY-SAVING DYEING MACHINE.

IPC: D 06B 23/22

# 1005932

**Abstract :** An energy-saving dyeing machine includes a body, a liquid dyes supply device, a liquid dyes heating device having a direct-heating heat exchanger, and a cooling unit connecting to the direct-heating heat exchanger by a series connection. When heating up the liquid dyes, the liquid dyes enters the direct-heating heat exchanger from the liquid dyes supply device via a supply tube, saving several heating procedures and unnecessary energy wastes. Additionally, an outer wall is surrounding the body to form a surrounding space for the heated exhaust gas from the direct-heating heat exchanger to enter and reheat the liquid dyes in the body again, making a better use of the heat energy.

Procedure for the transformation of trichothecenes and trichothecene-transforming additive.

IPC: H 01M 00/20, 2/00, 2/02

## 1005915

**Abstract :** Use of an alcohol dehydrogenase of sequence ID no. I containing metal ions and a quinone cofactor, or in addition, a functional variant exhibiting a sequence identity of at least 80%, preferably at least 86%, especially preferred at least 89%, and at least one redox cofactor for the transformation of at least one trichothecene exhibiting a hydroxyl group on the C-3 atom, as well as a procedure for the enzymatic transformation of trichothecenes and a trichothecene-transforming additive.

# SYSTEM AND METHOD FOR FACILITATING REMITTANCE

IPC: G 06Q 20/38, 20/40, 20/42

## 1005916

**Abstract**: Aspects of the invention relate to system, method and non-transitory computer readable medium for facilitating remitance hosted by a network operator. A remitance facilitator comprising at least one processor is arranged receive a remittance request from a sender to a target beneficiary and thereafter a first and second verification is performed to verify the identity of the target beneficiary. The first and second verification include the generation of remittance reference number and a one-time-password.

Steven Caffall Finch, a
Natural Person, Nationality: a
British citizen,
(whose legal address is 92
Lincoln Road, London
E7 8QW, United Kingdom).
Priority: GB 1505913.2,
Dated: 07-04-2015 and

GB 1509460.0 Dated: 01-06-2015

86/2016

Tata Motors Ltd., a Company organized and existing under the laws of India, (whose legal address is Bombay House, 24 Homi Mody Street, Mumbai 400001, India) and Tata Motors European Technical Centre Plc, Nationality: a Company organized and existing under the laws of United Kingdom, (whose legal address is 18 Grosvenor Place, London, SWIX 7HS, United Kingdom, United Kingdom) Priority: IN 1531/MUM/2015 Dated: 13-04-2015

87/2016

Dometic S.a.r.l, a corporation organized existing under the laws of Luxembourg, (whose legal address is 17, op der Hei, 9808, Hosingen, Luxembourg) Priority: EP PCT/EP 2015/058207, Dated: 15-04-2015

Inflatable cushion assembly operable by a travelling contraction to move a ship over land

*IPC*: B 62D 57/02

#### 1005938

**Abstract**: A ship or other large and heavy load may be supported on a fluid cushion comprising a two dimensional array of airbags constrained within elastic mesh compartments and inflated by individual valve assemblies which are connected by a grid of airlines and distrbuted over a flexible web separating respective horizontal layers of the assembly. The ship rests on an upper layer while the compartments of a lower layer are inflated and deflated in sequence to generate a travelling contraction which moves through the fluid cushion to translate its base surface over the ground in any desired direction of travel, with the load gradually moving by fluid pressure in the same direction. The deflated cuhion assembly can be stored and deployed on a spool rotated by a hydraulic motor. Independent claims are included to the cushion assembly including an elastic or other tension force generating means, the compartmentalised structure, the layered structure, the deployment spool, the distributed valve assemblies, and corresponding methods of operation.

#### BATTERY MODULE.

IPC: H 01M 10/6557

## 1005919

**Abstract :** The present disclosure relates to a battery module for a traction battery. The battery module comprises a plurality of battery cells and a plurality of heat transfer members. A cooling plate is provided to transfer heat from the heat transfer members. An electrical grounding connector is electrically connected to each said heat transfer member. The electrical grounding connector comprises an electrically conductive elastomer. The present disclosure also relates to a traction battery; and to a vehicle.

Cooling device having at least one evaporator disposed in a cooling liquid in a cooling reservoir.

IPC: F 25D 3/00

# 1005914

**Abstract :** The present invention relates to a cooling device, in particular a freezer, comprising a cooling circuit having a compressor, at least one evaporator, and a condenser; a space for cooling goods that can be closed at its upper surface; and a coolant reservoir at least partially surrounding an upper region of the space for cooling goods, wherein the at least one evaporator is disposed in the coolant reservoir, and wherein the at least one eveporator at least partially surrounds the upper region of the space for cooling goods.

MSD Wellcome Trust Hilleman Laboratories Pvt. Ltd., an incorporated under the laws of India, (whose legal address is D-15, Ground Floor, Jangpura Extension, New Delhi-110014, India)

92/2016

BRITISH AMERICAN TOBACCO (INVESTMENTS) LIMITED., a British Company of (whose legal address is Globe House, 1Water Street, London WC2R 3LA., United Kingdom), Priority: GB 1512343.3 Dated: 15-07-2015

94/2016

Glaxo SmithKline Consumer Healthcare Holdings (US) LLC., a Company existing under the laws of USA, (whose legal address is 2711, Centerville Road, Suite 400, Wilmington, Delaware 19808, United States of America) and Glaxo SmithKline Consumer Healthcare (UK) IP Limited, a Company existing under the laws of UK, (whose legal address is 980 Great West Road, Brentford, Middlesex TW8 9GS, United Kingdom) Priority: US 62/150970

Dated: 22-04-2015 and US 62/241314 Dated: 14-10-2015

Polysaccharide-Protein Conjugates With Enhanced Immunogenicity And Rapid High Yielding Process thereof.

IPC: A 61K 47/48

#### 1005939

Abstract: The present invention relates to polysaccharide-protein conjugates with enhanced immunogenicity displaying significantly high antibody titres. The carrier protein is obtained from group of gram positive bacteria, polysaccharide fragment is obtained from group of gram negative bacteria, preferably from Haemophilus influenzac serotype, Neisseria meningitidis serogroup A and C. The present invention also relates to a rapid and high yielding process of preparing the polysaccharide-protein conjugates in which derivatized carrier protein reacts with cleaved and depolymerized polysaccharide fragments of optimum length to obtain polysaccharide-protein conjugates employing reductive amination chemistry. The present invention further relates to a chemical process of polysaccharide fragmentation to optimum length for use in conjugation.

A HEATER COMPRISING AN INTEGRATED FURNACE AND HEAT EXCHANGER FOR CURING TOBACCO.

IPC: A24B 1/02, F 24B 7/00, F 26B 23/00, 23/02

#### 1005943

**Abstract:** A heater is provided for use in curing tobacco or other similar processes. The heater comprises: a furnace having a chamber in which to burn fuel to generate heat; and a heat exchanger for transfering heat from the heater to an airflow for use in curing the tobocco or other similar process. The airflow passes outside the heater. The heat exchanger has one or more pipes that connect into the chamber of the furnace and is integrated into the furnace. For example, the heat exchanger may have a plurality of pipes that connect into the chamber of the furnace, wherein the plurality of pipes comprises two rows of pipes, one on each side of the furnace. The heat exchanger may further include a plenum, wherein each of the pipes leads upwards from the furnace chamber to the plenum. The heat exchanger may be integrated into the furnace by the use of one or more welded junctions.

Process for gelatinisation and enzymatic hydrolysis of flour using extrusion technology.

IPC: A 21D 2/18, 2/40, C 12N 9/32

# 1005923

**Abstract :** The present invention relates to the use of extrusion technology in a process for the low-moisture continuous gelatinisation and the enzymatic hydrolysis of flour to provide a dextrinised product having a dextrose equivalent (DE) of at least 15 and to a process for drying a dextrinised product.

Bruno Muller dos Anjos, Nationality: Brazilian, (whose legal address is Rua Waldyr Tolentino Rosar, 15, Centro, 88103-213, São José, SC, Brazil),

101/2016

Gravi Float AS, A Limited Company Incorprtated in Norway, (whose legal address is P.O. Box 2424, Solheimsviken, N-5824 Bergen, Norway).

102/2016 GHP IP Pty Ltd, (a company incorporated under the laws of Australia), (whose legal address is 718 Parrmatta Road, PETERSHAM NSW

Priority: AU AU2015901488

2049, Australia),

Dated: 27-04-2015 and

AU2015901490 Dated: 27-04-2015

# ROTATING INSERT FOR FLANGING AND WIDENING METAL TUBES, "A FLANGING BIT"

*IPC*: B21D 19/00, 41/02

## 1005946

**Abstract**: Rotating insert for flanging and widening metal tubes, "a flanging bit", with a metal body, for use with flanges and metal tube widening in split-type air-conditioning connection systems, domestic refrigerators, chiller cabinets and the like; characterized by the rotary actuation method, which can be coupled to a drill or screwdriver, which requires no counterpoint mechanism, which is composed of a coupling cylindrical body and a flanging tip with a single stage or multiple stages, with different flanging diameters (gauges).

#### SEABED TERMINAL FOR OFFSHORE ACTIVITES.

IPC: B 63B 35/44, E 02B 17/02, 3/06

#### 1005940

Abstract: The publication relates to a shallow water seabed terminal for storing and loading or unloading hydrocarbons, such as LNG, oil or gas, comprising a floatable, removable module, and a removable seabed substructure intended to be supported by a seabed, the floatable module being releasably fixed to the seabed substructure so that a harbour terminal is formed, the seabed substructure comprises a base sturucture provided with buoyancy devices, an upwards extending wall structure extending up from the base structure and arranged along at least a part of the periphery of the base structure, the base structure also being provided with an opening in the wall structure for allowing the floatable module, to be berted in and supported by the seabed substructure. The base structure is provided with a submerged beam or base slab structure extending laterally out from the vertical wall structure, configured to support the floatable, removable module, the beam or slab structure being provided with sleeves or ducts extending through the submerged beam or slab structure configured to receive the piles to be driven down into the seabed soil.

# Hybrid Fuel System

IPC: F 02D 19/08, 19/12, F 02M 21/02

## 1005949

**Abstract**: A hybrid fuel supply system for diesel and other fuel injected internal combustion engines; the system including separate liquid fuel and compressed hydrogen gas sources; and wherein a hydrogen gas supply module calculates of "maps" instant liquid fuel requirements based on engine size and capacity and at least one parameter output from the engine's control unit (ECU) to derive an instant volume of hydrogen gas for addition to the engine's fuel injection system.

103/2016 Tectonics c/o Mourant Ozannes Corporate Ser

Ozannes Corporate Services (Cayman) Limited,
Nationality: A company organized under the laws of US, (whose legal address is Harbour Center, 42 North Church Street, P.O. Box 1348, Grand Cayman,

KY1-1108, Cayman Islands).

Chiaki Kushida, Japanese National, whose legal address

Tokyo, 111-0023, Japan).

Priority: JP 2015-093108

is 302 Kanai Bldg., 1-3-6 Hashiba, Taito-ku,

Dated: 30-04-2015

IPC: G06Q 20/00, 20/32, 20/40

#### 1005945

NETWORKED AUTHENTICATION OF ENCRYPTED

DIGITAL ITEMS.

**Abstract :** Networked authentication systems and methods are described including using a mobile network operator agent in communication with an authentication systems, a data storage, and a wireless handset via a network, the agent configured to, receive a request for encrypted validated data denominations from the wireless handset via the network, generate encrypted data denomination corresponding to the requested denomination, retrieve, from the data storage, numbers of validator strings corresponding to the requested data denomination, wherein the validators are received from the authentication system prior to and/or after receiving the request, and append the corresponding number of validator strings to the requested data denominations.

METHOD OF PRODUCING FEED OR PET FOOD INGREDIENT USING CRUSHED PINEAPPLE LEAVES AND STALKS AND FEED OR PET FOOD INGREDIENT USING CRUSHED PINEAPPLE LEAVES AND STALKS.

IPC: A 23K 10/12, 10/30, 50/40

#### 1005952

**Abstract :** Granulated pineapple leaves and stalks dried to correspond to a predetermined fermentation condition are fermented in an anaerobic bacteria fermentative environment in a predetermined room temperature with 15% or more and less than 50% moisture content, or 20 to 40% moisture content maintained therein such that the packaged feeds or pet foods based on granulated pineapple leaves and stalks in a dry, low-fermentation condition are produced.

107/2016 JOHNSON MATTHEY

PUBLIC LIMITED COMPANY, an Industrial Chemical Company duly organized and existing under the laws of Great Britain, (whose legal address is 5<sup>th</sup> Floor, 25 Farringdon Street, London, EC4A 4AB, United Kingdom)

Priority : GB 1509019.4 Dated : 27/05/2013

108/2016 Telefonaktiebolaget LM
Ericsson (Publ), a Company
organized and existing under
the laws of Sweden, (whose

legal address is SE-164 83 Stockholm, Sweden) Priority : EP

PCT/EP2015/061277 Dated: 21/05/2015 Process and Catalyst.

IPC: C 07C 17/08, 17/25, 21/06

## 1005933

**Abstract**: A process for the production of vinyl chloride comprises the step of passing a feed stream comprising ethylene dichloride over a catalyst system comprising a dehydrochlorination catalyst and a hydrochlorination catalyst at a temperature, which may be in the range, sufficient to effect dehydrochlorination of the ethylene dichloride to produce vinyl chloride.

# CONTROLLER ARRANGEMENT AND METHOD.

IPC: G 08C 17/02, H 04W 36/08, 76/06

## 1005931

**Abstract**: A controller arrangement comprising a transceiver capable of communication via a wireless communication network, a controller arranged to control a physical entity at which the controller arrangement is arranged, and an interface between the

transceiver and the controller is disclosed. The transceiver is arranged to provide information via the interface about present or imminent interrupts in the communication via the wireless network. The controller is arranged to operate in at least a first state when the information indicates that no interrupts are present or imminent, wherein the first state includes closed loop control from a remote entity via the wireless communication network, and a second state when the the information indicates that interrupts are present or imminent, wherein the second state includes autonomous control operations by the controller. A method and computer program are also disclosed.

#### THERMAL MAPPING METHOD AND APPARATUS.

IPC: G 04L 27/26, 5/00, 5/14

#### 1005922

**Abstract :** The present disclosure relates to a method of generating a thermal map for estimating internal temperatures of a battery module. A plurality of cycling operations are performed on a battery module having one or more battery cell. During the cycling operations, a plurality of first temperatures are measured at frist locations; and one or more second temperature are measured at one or more second locations. The first temperatures measured at said first locations are crossplotted with the second temperatures measured at the one or more second locations. The thermal map can be generated from the analysis of the first and second temperatures. The present disclosure also relates to a battery module having a thermal map for estimating internal temperatures.

Phase locked loop arrangement, transmitter and receiver and method for adjusting the phase between oscillator signals.

IPC: H 01Q 3/36, H 03L 7/089, 7/23

## 1005924

Abstract: A Phase locked loop arrangement beamforming comprises two or more Phase locked loops. The loops include a phase comparator and an adjustable charge pump arrangement having a loop filter and charge pump current source with an adjustment input connected to the loop filter to inject an adjustable charge pump carrent into the loop filter. A constant current source is configured to inject a first predetermined charge current into the loop filrer. The adjustable charge pump arrangement are connected to the respective phase comparators to provide a voltage control signal to an oscillator of the respective phase adjustable phase locked loop in response to the respective control signal (up, down) and to generate a phase deviation between the first and one of the at least one secong oscillator signals (fosc 1, fosc 2) based on an adjustment signal applied to the adjustment input.

113/2016 Tata Motors Ltd.,

Nationality: a Company organized and existing under the laws of India, (whose legal address is Bombay House, 24 Homi Mody Street, Mumbai 400 001, India) and Tata Motors European Technical Centre plc, Nationality: a Company organized and existing under the laws of United Kingdom, (whose legal address is 18 Grosvenor Place, Lindon, SW1X 7HS, United Kingdom) Priority: IN 1916/MUM/2015

Dated: 15-05-2015

117/2016

Telefonaktiebolaget LM Ericsson (Publ), a Swedish Company, (whose legal address is SE-164 83 Stockholm, Sweden) Priority · EP

PCT/EP 2015/ 063109 Dated: 11-06-2015

# 118/2016 LOESCHE GmbH

(a Company organized and existing under the laws of Germany), (whose legal address is Hansaallee 243 40549 Duesseldorf, Germany),

#### 120/2016

Secure International Holdings Pte. Ltd., a Company organized existing under the laws of Singapore, (whose legal address is 3 Philip street, # 18-00, Commerce Point, 048693, Singapore) Priority: GB 1511936.5 Dated: 08-07-2015 and IN 1507/DEL/2015 Dated: 26-05-2015

# 127/2016

KAWASAKI JUKOGYO KABUSHIKI KAISHA,

Nationality: a Japanese National, (whose legal address is 1-1, Higashikawasaki-cho 3-chome, Chuo-ku, Kobe-shi, Hyogo 650-8670, Japan). Priority: JP 2015-112946

Dated: 03-06-2015

# 131/2016

SMS group GmbH, a German company, (whose legal address is Eduard-Schloemann-StraBe 4, 40237 Dusseldorf, Germany)
Priority: DE 10 2015 210596.2
Dated: 10-06-2015 and DE

10 2015 223 641.2 Dated: 30-11-2015

## GRINDING PAN.

IPC: B 02C 15/04

#### 1005947

**Abstract:** The invention relates to a grinding pan, in particular for vertical mills. Due to the demands for increasingly large throughputs in vertical mills, the grinding pans are also necessarily becoming larger in their outer diameter, height and weight. In order to overcome the associated problems in production and transport of such a large assembly as a one-piece grinding pan, especially to sites in areas with limited infrastructure, the invention takes the route of realising a multi-part grinding pan which has a plurality of upper ring segments which are placed on a one-piece lower base module, so that a grinding pan is created which also satisfies higher load requirements.

Electricity Meter with Isolated Shunt.

IPC: G 01B 21/00, 22/00

#### 1005920

**Abstract :** An electricity meter including a voltage transformer and a shunt is provided. The electricity meter is coupled to a source of electricity and to a load via the shunt, and in particular the primary windings of the voltage transformer are coupled across first and second terminals of the shunt. The electricity meter includes a control device that is configured to measure a voltage generated in the secondary windings of the voltage transformer and determine an amount of electricity consumed. In preferred embodiments the control device is configured to apply a temperature correction to the measured voltage and to use the resulting temperature corrected current to determine an amount of electricity consumed by the load.

# CARBODY OF RAILCAR.

IPC: B 61D 17/04

# 1005929

**Abstract :** A carbody of a railcar includes: an underframe; a first member provided at one of vertical sides of a vertical center of the underframe, supported by the underframe, and absorbing collision energy; a second member provided at the other vertical side of the vertical center of the underframe, supported by the underframe, and contacting an obstacle when the first member is compressed by collision with the obstacle. In a case where the second member receives a reaction force from the obstacle when the first member is compressed by the collision with the obstacle, the second member transfers to the underframe a moment load that is opposite in a rotational direction to a moment load transferred to the underframe by the first member.

Device for transmitting torque from a drive mechanism to a roll in a roll stand.

IPC: B 21B 1/46, 35/00, 35/14, F 16N 13/00

# 1005959

**Abstract:** The invention relates to an apparatus for transmitting torque from a drive mechanism to a roll in a roll stand. Known apparatuses of this type comprise a spindle which is rotatably coupled via a drive-side pivot bearing to the drive mechanism and

via a roll-side pivot bearing to the neck of the roll. In the prior art, the pivot bearings are lubricated either with the help of grease or with a liquid lubricant, wherein the latter must then be supplied to the bearings continuously from the outside by means of a pumping mechanism. To make the apparatus independent of the continuous external supply of lubricant, the invention proposes fluidically interconnecting the lubricant, chambers in the two pivot bearings via an outflow channel and a return channel for the lubricant in the region of the spindle, so that a closed circuit for the lubricants is formed and so that the at least one pumping mechanism 140 is integrated into the circuit so as to maintain the circulation of the lubricant in the circuit.

Method for automatically correcting faults in a winding station and winding station of an automatic winding machine.

IPC: B 65H 54/22, 67/00

## 1005958

**Abstract**: The invention relates to a method for automatically correcting faults in a winding station of an automatic winding machine, with a rotatably mounted round magazine, which comprises receiving pockets for storing feed packages, an intermediate station arranged underneath the round magazine for the temporary storage of a feed package, a loading bay mounted to be rotatable about a pivot axis to a limited degree and which can be adjusted between a position of rest securing the feed package in the intermediate station and a transfer position for moving the feed package into an unwinding position, a tube receiving device arranged in the region of the unwinding position which during the rewinding process fixes a feed package in the unwinding position and a tube ejector, by means of which the tube of an unwound feed package can be disposed of, and a winding station for performing the method. According to the invention the winding station comprises a sensor, which after transferring the feed package monitors the pivoting back of the loading bay into the position of rest and transmits to a control device, which emits control commands in the absence of the signal, whereupon the loading bay pivots back into the transfer position and the tube ejector moves upwards so that the feed package lies back in the loading bay and afterwards there is a repeat transfer of the feed package into the unwinding position.

SECURED HOUSING FOR AN ELECTRICAL DEVICE

IPC: G 01R 11/24, H 02B 1/06, H 05K 5/02, 6/00

# 1005950

**Abstract:** The invention relates to a housing for a device. The housing comprises a first housing part and a second housing part which are joined in a closed state of the housing. The housing parts each have at least one holding device for holding a locking element which, in the closed state, extends at least in some sections along the respective at least one holding device of the two housing parts. The holding devices and the locking element are designed in such a way that the locking element engages in a form-fit manner in a wall of the respective holding device of the two housing parts.

132/2016 Saurer Germany GmbH & Co. KG., a German company, (whose legal address is Leverkuser Strasse 65, 42897 Remscheid, Germany).
Priority: DE 10 2015 007

821.6

Dated: 18-06-2015

136/2016

Landis+Gyr AG, a Swiss Corporation, (whose legal address is Theilerstrasse 1, 6301 Zug, Switzerland) Priority: CH 00866/15 Dated: 16-06-2015

(1) Fabrica Nacional De Moneda Y Timbre-Real Casa De La Moneda (whose legal address is C/Jorge Juan, 106 Madrid 28009-Madrid, Spain) and (2) Consejo Superior De **Investigaciones Cientificas** (whose legal address is Serrano, 117, E-28006 MADRID, Spain).

Priority: EP 15382329.9 Dated: 19-06-2015

144/2016 Federal state Unitary Enterprise "ALL-RUSSIAN RESEARCH INSTITUTE OF AUTOMATICS", (a company incorporated under the laws of Russian Federation), (whose legal address is ul, Sushchevskaya, d. 22, Moscow, 127055,

> Russian Federation) Priority: RU 2015125044 Dated: 25-06-2015

Nanostructured phosphorescent pigment, method of using the nanostructured phosphorescent pigment, uses of the nanostructure phosphorescent, and security article comprising the nanostructure phosphorescent thereof.

*IPC*: C 09D 5/22, C 09K 11/02, 11/77

#### 1005956

Abstract: The present invention relates to a nanostructured phosphorescent pigment comprising an A12O3 substrate; MA12O4-X nanocrystals, where M is a cation selected from Ca2+, Sr2+, Ba2+, Mg2+, Zn2+ and combinations thereof and where X is a cation selected from Eu2+, Dy3+, Nd3+, Er3+, La3+, Lu3+, Ce3+, Y3+, Sm3+, Gd3+, Tb3+, Tm3+, Yb3+ and combinations thereof, disposed on the A12O3 substrate; and nanocrystals of molten salt disposed on the MA12O4; X nanocrystals. Additionally, the invention relates to a method for preparing the nanostructured phosphorescent pigment of the invention comprising the steps of i) mixing starting materials comprising a cation M precursor, a cation X precursor A12O3 and a molten salt; ii) heating the mixture resulting from step (i) in reducing atmosphere. The invention also relates to the use of the nanostructured phosphorescent pigment of the invention for signaling. illumination, decoration or authentication and to a security article comprising the nanostructured phosphorescent pigment of the invention.

NUCLEAR POWER PLANT CONTROL SAFETY SYSTEM.

IPC: G 21C 7/36

# 1005934

Abstract: The invention relates to automatics and computer engineering, and can be used in systems of nuclear power plants for constructing control safety systems. Technical result of the invention is as follows:- improvement of multichannel control safety system reliability by means of using in every safety channel of a single processor for solving all the tasks of state analysis and protection control, exclusion of common cause failure due to encapsulated errors in software owing to the possibility of developing the entire applied software using computer-aided methods in software environment of a single processor, enhancement of majority redundancy efficiency owing to the reduction of a number of digital processing devices to a single processor, and consequently reduction of levels of interchannel exchange and majority redundancy of those devices, elimination of false commands sent to actuation devices due to failure of signal input devices and a processing device owing to the twolevel majority redundancy,- extension of remote control and diagnosing functions due to introduction of data communication of every channel processor with the normal operation system and the main control room and emergency control room of the, reduction of restoring time and enhancement of the availability due to use of fault-tolerant and diagnosed bus that is built based on communications modules and duplex 'point-to point'-type

interfaces in the form of a tree-type structure. Technical result is achieved by the fact that in the digital control safety system of a nuclear plant that contains multiple identical safety channels, each channel includes process signal stations, actuation mechanism priority control stations connected with the main control room and emergency control room, safety features automation controller, safety feature bus for data-exchange between controller and stations, and is cross-connected with other safety channels by means of duplex optical fiber communication paths; the station contains modules of communication with the process and communication module-converter of communication interfaces of bus; the station contains actuation mechanism priority control modules and communication modules: voting communication module and voting module bus; the automation controller contains safety feature automation processor module and communication modules branching modules bus; safety feature automation processor module of every safety channel is connected with of the other safety channels by means of cross-connected links implemented based on interprocessor interfaces of 'point-to-point' type built based on Ethernet interface and specific data-level communication protocol, bus of a safety channel has a tree-type structure, the upper root node of which is of the safety channel, and the low end nodes are modules of communication with the process stations and priority control modules stations of its own safety channel, and priority control modules stations of other safety channels; and intermediate nodes are communication modules of automation controller, stations of the priority control stations; links between the modules being in the nodes of the bus are implemented as the lines of serial duplex 'point-to-point' type interface; interchannel links between automation controller each safety channel and priority control stations of other safety channels are implemented using fiber optic cables. Each safety channel is implemented using a single processor located in the automation processor module; and the majority redundancy according to the algorithm of choosing commands and data '2 out of N', where N is a number of safety channels, is implemented here at the two levels of interchannel communications: at the level of the processors of modules, when the processor of the modules of each safety channel receives commands and measured parameters from the processors of the modules of other safety channel via interprocessor interfaces IPI, and at the level of the priority control stations in communications modules stations, when control commands come to stations from the processors of the modules of all safety channel via the buses. In the modules of stations the output of the programmable logic circuit of the actuation mechanism priority control logic is connected to the AM and via feedback links to controller of the safety channel via safety feature programmable logic circuits and controllers of the safety channels are connected with the via interprocessor interfaces IPI of 'pointto-point' type implemented based on Ethernet interface and specific data-level communication protocol. Automation controllers of all safety channels are connected to the normal operation system via redundant bus built based on switched Ethernet interface, ring structure of net switch connection, and

specific data-level communication protocol. In station of every safety channel, communication module of the bus is connected via separate communication lines with the automation controller of the safety channel and with each module. In each safety channel, stations are combined into groups of N stations; the number of stations is determined by the number of safety channels; the first station of the group is connected by the communication line with controller of its safety channels; the other station of the group are connected with controllers of other safety channels; communication module of each station is connected with the communication module of voting according to '2 out of 4' majority principle of its own station and communication modules of the other stations of the group; communication module of each station is connected via communication lines with the priority control modules of this station.

NUCLEAR POWER PLANT CONTROL SAFETY SYSTEM.

IPC: G 21C 7/36

#### 1005935

Abstract: The invention relates to automatics and computer engineering, and can be used in systems of nuclear power plants for constructing control safety systems. Technical result of the invention is exclusion of common cause failures of all safety channels owing to including in each safety channel of the two mutually independent hardware and software sets built based on different hardware and software platforms and executing all functions of the safety channel, and enhancement of multichannel control safety system reliability due to double redundancy of each channel equipment. Technical result is achieved by the fact that in the digital control safety system of a nuclear plant that contains multiple identical safety channels, each channel includes process signal stations, actuation mechanism priority control stations connected with the main control room and emergency control room, safety features automation controller, safety feature bus for data exchange between stations, and is cross-connected with other safety channels by means of duplex optical fiber communication paths; stations; priority control stations and safety feature automation controller of each safety channel contain two mutually independent software & hardware sets that form subchannel A and subchannel B built based on different hardware & software platforms; each subchannel executes all functions of a safety channel, each channel contains controller of subchannel and controller of subchannel, each of which is connected, respectively, with controllers of other safety channels via interprocessor interfaces of 'point-to point' type built based on Ethernet interface and specific data-level communication protocol, with the normal operation system via redundant switched system bus of normal operation built based on Ethernet interface, ring structure of net switches connection, and specific data-level communication protocol, with the main control room and emergency control room via communication lines of buses, respectively, built based on Ethernet interface and specific data-level communication protocol,

145/2016 Federal state Unitary
Enterprise "ALL-RUSSIAN
RESEARCH INSTITUTE OF
AUTOMATICS", (a company
incorporated under the laws of
Russian Federation), (whose
legal address is ul.
Sushchevskaya, d. 22,
moscow, 127055, Russian

Federation).

Priority: RU 2015125045 Dated: 25-06-2015 with stations of the safety channel and with stations of other safety channel via special-purpose bus, respectively, of subchannel of subchannel and here each of buses has a 'tree'-type structure, the upper root node of which is, respectively, automation processor module controller and controller, and the low end nodes are modules of communication with the process stations and priority modules stations, and intermediate nodes communication modules, and here links between nodes and between nodes are implemented as the lines of serial duplex point-to-point'-type interface. station contains modules of communication with the process and two communication modules-converters of interfaces: bus and bus, and here module, module are connected via one communication line of the module with its automation controller and via separate communication line with each module; modules of communication with the process station include processor of subchannel a and processor of subchannel that are connected, respectively, via intra- station lines of buses with communication modules buses are connected, respectively, to controller of subchannel controller of subchannel B. Each priority control station contains priority control modules, communication modules of bus of subchannel bus of subchannel B: voting communication modules and voting modules of input commands from channels according to '2 out of 4' principle. In each subchannel of a safety channel, stations are combined into groups of N stations; the number of stations is determined by the number of safety channels; in subchannel A of each safety channel the first station of the group is connected by the communication line with controller of its safety channel; the other stations of the group are connected with controllers of the other safety channels; communication module of each station is connected with the voting communication module of its station and with communication modules of the other stations of the group; communication module of each station is connected via communication lines with priority control modules; and in subchannel B of each safety channel communication links of modules of stations of the group with automation controllers of each safety channel are implemented similarly to communication links of subchannel A. Priority control modules stations contain safety feature programmable logic circuits of subchannel of subchannel that are connected, respectively, via intra-station lines of and buses with communication modules of subchannel of subchannel and via and buses are connected, respectively, to controllers of subchannel of subchannel. Automation controller of subchannel A of each safety channel includes automation processor module communication modules bus connected via lines modules, with communication with processor communication modules stations and communication modules of priority control stations of their own safety channel and with communication modules of priority control stations of the other safety channels; automation controller of subchannel of each safety channel is similar to subchannel A as to its configuration and links.

Federal state Unitary
Enterprise "ALL-RUSSIAN
RESEARCH INSTITUTE
OF AUTOMATICS", (a
company incorporated under
the laws of Russian
Federation), (whose legal
address is ul. Sushchevskaya,
d. 22, Moscow, 127055,
Russian Federation),

Priority: RU 2015125046 Dated: 25-06-2015

#### NUCLEAR POWER PLANT CONTROL SAFETY SYSTEM.

IPC: G 21C 7/36

## 1005936

Abstract: The invention relates to automatics and computer engineering, and can be used in I&C systems of nuclear power plants for constructing control safety systems. Technical result of the invention includes reduction of inputs for monitoring and automatic control of general equipment from the side of the safety and normal operation systems owing to normal operation features integrated in safety channels, enhancement of safety system reliability and protection against common cause failures by means of constructing safety features and normal operation features based on different software & hardware platforms, extension of diagnostic capabilities owing to implementation by a normal operation automation controller of additional functions of evaluating safety channel operation using state-of-health data received by the controller from the process and from the automation controllers of safety channels, extension of diagnostic capabilities owing to equipment state-of-health control features integrated into generating special fault signals, and their input, processing and transmission by the normal operation automation controller to the upper level of the normal operation system control. Technical result is achieved by the fact that in the control safety system of a nuclear plant, which contains multiple identical safety channels, each channel includes process signal I/O stations, actuation mechanism priority control stations connected with the main control room and emergency control room safety features automation controller, safety feature bus for data exchange between stations, and is cross-connected with other safety channels by means of duplex optical fiber communication paths; the IOS station contains modules of communication with the process and communication module-converter of communication interfaces bus; the station contains actuation mechanism priority modules and communication modules: communication module and voting module bus; the automation controller contains safety feature automation processor module and communication modules-branching modules bus; automation controllers of all safety channels are connected to the normal operation system via redundant bus; each safety channel additionally contains normal operation automation controllers that are connected with stations and stations via redundant buses of normal operation built based on switched Ethernet interface, radial structure of net switch connection and specific data-level communications protocol, and with the normal operation system via redundant bus of normal operation built based on switched Ethernet interface, ring structure of net switch connection and specific data-level communications protocol; normal operation automation processors, means of communication with modules integrated into and stations, and normal operation software & hardware built in modules are built based on different hardware & software platforms; station, controller, and power supply and

communications equipment of the safety system contain built-in self-testing and self-monitoring means that generate at special outputs binary signals of state of the respective equipment 'operative/inoperative' coming to where signals are processed and transmitted to the upper level of the normal operation system control via bus. In station, communication module bus via separate communication lines is connected with automation controller of safety channel and with each module of this station. Each station contains two redundant interface modules of normal operation connected to normal operation automation controller via redundant bus; an individual normal operation processor is built in each module, which is connected with each of the 2 modules via separate line of a serial duplex 'point-to-point'-type interface of the normal operation bus. In each safety channel, stations are combined into groups of N stations, a number of stations is determined by a number of safety channels; the first station of the group via communication line is connected with controller of its safety channel, other stations of the group are connected with controllers of the other safety channels; communication module of each station is connected with communication module of each station is connected with communication module of voting according to majority algorithm of its station and communication modules of other stations of the group; communication module of each station is connected via communication lines with priority control modules of this station. Each station contains two redundant interface modules of normal operation connected to normal operation automation controller via redundant bus; an individual normal operation processor is built in each module, which is connected with each of the modules via separate line of serial duplex 'point-to-point'-type interface of the normal operation bus.

ebolaget LM METHOD AND APPARATUS FOR DATA TRANSMISSION.

*IPC*: H 04W 56/00

## 1005953

Abstract: Embodiments of the present disclosure provide a method at a communications device of a first type that is operable on both a licensed carrier and an unlicensed carrier. The method comprises performing channel sensing on the unlicensed carrier, at different sensing slots within a time duration, for respective links directed to at least two communications devices of a second type that are operable on both the licensed carrier and the unlicensed carrier. The time duration is specified as a portion of a subframe in a frame structure used on the licensed carrier. The method also comprise scheduling transmission on a channel that is determined to be available based on corresponding channel sensing. Correspondingly, there is also provided an apparatus embodied at or as at least part of a communications device of a first type, e.g. a base station that is operable on both a licensed carrier and an unlicensed carrier.

189/2016 Telefonaktiebolaget LM
Ericsson (Publ), a Swedish
company, (whose legal
address is SE-164 83
Stockholm, Sweden)

Priority: CN

PCT/CN2015/ 091578 Dated: 09/10/2015

Bangladesh Council of Scientific and Industrial Research (BCSIR), a body corporate of Govt. of Bangladesh. (whose legal address is Dr. Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Bangladesh).

197/2016

COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, An Indian Registered body incorporated under the Registration of Societies Act, (whose legal address is Anusandhan Bhawan, Rafi Marg, New Delhi-110001, India)

Priority: IN 20161 1009091

Dated: 16-03-2016

222/2016

JFE STEEL CORPORATION, a Japanese Corporation, (whose legal address is 2-3, Uchisaiwai-Cho 2-Chome, Chiyoda-Ku, Tokyo 100-0011, Japan)

Priority: JP JP2015-179797 Dated: 11-09-2015 Preparation of anionic surfactant treated bentonite as adsorbent for water treatment.

*IPC*: B 01J 41/00, C 02F 1/00

## 1005954

**Abstract**: Bentonite has been subjected to modification through ion-exchange reaction by anionic surfactant, Sodium dodecyl Sulfate. The modified clay was studied by X-ray diffraction technique, Fourier transform infrared spectroscopy and scanning electron microscopy. The study revealed that the basal spacing was increased significantly for modified bentonite. The FT-IR studies revealed structural differences between the modified and unmodified bentonite clays. Adsorption of petroleum hydrocarbon (crude oil) by modified bentonite has been investigated. Experimental results confirmed the superiority of modified bentonite over pure bentonite as an adsorbent for petroleum hydrocarbon. Adsorption efficiency of organobentonite increased from 15% to 50% and was reached at equilibrium at 1 h.

## AN IMPROVED CHROME TANNING PROCESS

*IPC*: C 14C 3/06, 3/28

## 1005951

Abstract: Water utilization during leather manufacture is inevitable as it is important for diffusion and distribution of chemicals in the skin matrix. Since, higher volume of water is employed during various unit processes, the discharge of effluent correspondingly increase with the pollutants. The present invention relates to avoiding the use of water for picklebasification free chrome tanning process. Auxiliary chemicals like fatliquors are used to enhance the exhaustion of chromium during tanning process. Moreover, the use of salt and the basification process are avoided in the new process. The organoleptic and strength properties of the tanned leathers are on par with conventionally processed leathers. This new invention makes an effort to utilize the inherent water in the skin for tanning so as to attain sustainability with reduced pollution loads.

# STRUCTURAL STEEL MATERIAL EXCELLENT IN ATMOSPHERIC CORROSION RESISTANCE

IPC: C 22C 38/00, 38/16, 38/60

## 1005942

Abstract: Provided is a structural steel material that shows excellent atmospheric corrosion resistance even in a high airborne salinity environment. The structural steel material has a chemical composition containing. In mass %. C, Si, Mn, P, S, and Al in predetermined amounts, and Cu: 0.0 1% or more and 1.00% or less; Ni: 0.01% or more and 0.65% or less; Co: 0.002% or more and less than 0.220%; Nb: 0.005 or more and 0.200% or less and Sn: 0.005% or more and 0.200% or less.

Mr. MAHESHKUMAR JAYANTILAL MEVADA (whose legal address is 18 Aaryavart-2 Bunglows, Opp. Auda Garden Prahaladnagar, Vejalpur, Ahemdabad-380051, Gujarat, India) and Mr. NIRAV JAYANTILAL MEVADA, Nationality: (both Indian Nationals), (whose legal address is 19 Aaryavart-2 Bunglows, Opp. Auda Garden Prahaladnagar, Vejalpur, Ahemdabad-380051, Gujarat, India) Priority: IN 3664/MUM/2015 Dated: 28-09-2015

263/2016

Telefonaktiebolaget LM Ericsson (publ), a company organized and existing under the laws of Sweden. (whose legal address is SE-164 83 Stockholm, Sweden) Priority: SE

PCT/SE2015/51162 Dated: 04/11/2015

266/2016

LONATI S. P. A, a company organized and existing under the laws of Italy, (whose legal address is Via Francesco Lonati, 3 25124 BRESCIA, Italy) Priority: IT

102015000070695 Dated: 10/11/2015 Discarding Defective Label.

IPC: B 65C 9/00

#### 1005948

Abstract: In accordance with an aspect of the present invention, an apparatus to discard defective label form a labeling machine is provided. The invention includes a label path to move a label web containing a plurality of labels from an origin station to a destination station. The invention then includes an inspection unit to detect the defective labels from the plurality of labels in the label path. The invention also includes a defective label discarding unit configured to discard the defective labels from the label path. The invention further includes, a collecting unit to collect the plurality of defective labels. The invention then includes, a labeling unit configured to label the good label in a required product and a processor to synchronize the label path, the inspection unit, the defective label discarding unit, the collecting unit and the labeling unit.

# PRECODING A TRANSMISSION FROM A TWO-DIMENSIONAL ANTENNA ARRAY USING A PARTIALLY RESHAPED CODEBOOK.

IPC: H 04B 7/04

#### 1005944

**Abstract :** A transmitting radio node precodes a transmission from an antenna array, which includes antenna elements arranged along at least two axes, using a main codebook which is representable as a Kronecker product of a first codebook and a second codebook, where the first code-book comprises predetermined sub-precoders and the second codebook comprises configurable sub-precoders. A receiving radio node may benefit from adaptive beamforming made possible by the configurability of the main codebook, while still using a stable format, which remains valid also after reconfiguration, for the exchange of reference signals and corresponding feedback information.

Turning device for kintted tubular articles, particularly for turning inside-out tubular articles with pockets that protrude from the lateral surface thereof.

IPC: D 04B 15/92, 9/40

## 1005937

Abstract: A turning device for knitted tubular articles, particularly for turning inside-out tubular articles with pockets that protrude from the lateral surface thereof. The turning device in question comprises a main supporting structure which supports a tubular body arranged with its axis substantially vertical. The tubular body has its upper axial end beveled along a plane that is inclined with respect to its axis. The turning device comprises first actuation means which can be activated to perform a translation of the tubular body along its axis with respect to the main supporting structure. The tubular body is insertable, with its upper axial end, through an axial end of a tubular article in order to turn it inside out. The turning device in question comprises second actuation means which can be activated to rotate the tubular body about its own axis, through an angle of preset breadth, with respect to the main supporting structure.

281/2016 Novozymes A/S, a Company incorporated under the laws of Denmark, (whose legal address is Krogshoejvej 36, DK-2880 Bagsvaerd,

Denmark)

Priority: CN

PCT/CN2015/094695 Dated: 16/11/2015

292/2016

Huntsman Advanced Materials (Switzerland) GmbH., a Swiss company (whose legal address is Klybeckstrasse 200, 4057 Basel, Switzerland) Priority: EP 16153367.4 Dated: 29/01/2016

250/2017 Steven Caffall Finch, a
Natural Person, Nationality: a
British citizen, (whose legal
address is 92 Lincoln Road,

London E7 8QW, United

Kingdom)

Priority : GB 1505913.2 Dated : 07-04-2015 and

GB 1509460.0 Dated : 01-06-2015

# CELLULASE VARIANTS AND POLYNUCLEOTIDES ENCODING SAME.

IPC: C 12N 9/46

#### 1005955

**Abstract :** The present invention relates to cellulase variants. The present invention also relates to polynucleotides encoding the variants; nucleic acid constructs, vectors, and host cells comprising the polynucleotides; and methods of using the variants.

# FIBRE REACTIVE FORMAZAN DYES, THEIR PREPARATION AND THEIR USE.

IPC: C 09B 62/503, 62/675, C 09D 11/328, D 06P 1/384

#### 1005957

**Abstract**: A reactive dye of formula (CO)qO O N HN N N SO2-Z1 (SO3H)n NH-CO-(CH2)m-SO2-Z2 A Cu B C(1), wherein Z1 and Z2 are each independently of the other vinyl or a radical-CH2-CH2-Y and Y is a group removable under alkaline conditions, n is the number 1, 2, 3 or 4, m is the number 2, 3 or 4, q is the number 0 or 1, and the substituents-(SO3H)n, -SO2-Z1 and -NH-CO-(CH2)m-SO2-Z2 are bound to the benzene rings A, B and/or C, said benzene rings A, B and/or C are optionally further substituted by at least one substitutent selected from the group C1-C4alkyl, C1-C4alkoxy and halogen, is suitable for dyeing and printing cellulosic or amide-group-containing fibre materials.

Inflatable cushion assembly operable by a travelling contraction to move a ship over land.

IPC: B 62D 57/02

## 1005941

**Abstract**: A ship or other large and heavy load may be supported on a fluid cushion comprising a two dimensional array of airbags constrained within elastic mesh compartments and inflated by individual valve assemblies which are connected by a grid of airlines and distributed over a flexible web separating respective horizontal layers of the assembly. The ship rests on an upper layer while the compartments of a lower layer are inflated and deflated in sequence to generate a travelling contraction which moves through the fluid cushion to translate its base surface over the ground in any desired direction of travel, with the load gradually moving by fluid pressure in the same direction. The deflated cushion assembly can be stored and deployed on a spool rotated by a hydraulic motor. Independent claims are included to the cushion assembly including an elastic or other tension force generating means, the compartmentalised structure, the layered structure, the deployment spool, the distributed valve assemblies, and corresponding methods of operation.

# Md. Saidur Rahman

Deputy Registrar (Patents & Designs).