

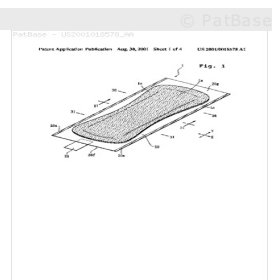
1) Family number: 30018118 (US2001018578A)

WATER-DECOMPOSABLE ABSORBENT ARTICLE AND METHOD FOR PRODUCING IT

Abstract: Source: US2001018578A Provided is a water-decomposable absorbent article including an absorbent body that has a water-decomposable top sheet, a water-decomposable back sheet, a water-decomposable adsorbent core sandwiched between the top sheet and the back sheet, and an adhesive layer provided on the back sheet to fit the absorbent article to an external support; and a water-decomposable release sheet for protecting the adhesive layer before use with covering the adhesive layer. The release sheet includes a release layer that faces the adhesive layer, a water-decomposable fibrous layer, and a water-soluble polymer layer sandwiched between the release layer and the fibrous layer. A basis weight of the release layer is at least 0.05 grams per square metre but smaller than 0.3 grams per square metre, and an equilibrium contact angle between a surface of the release layer and a water drop thereon is at least 100 degrees.

Probable Assignee: UNI CHARM CORP

Earliest Publication Date: 20010721



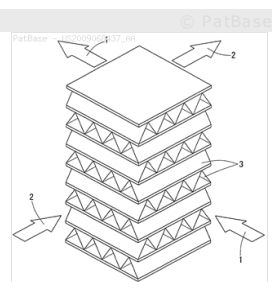
2) Family number: 40938422 (US2009068437A)

SHEET FOR TOTAL HEAT EXCHANGER

Abstract: Source: US2009068437A A liquid containing a hydrophilic polymer is applied by spreading or impregnation to a porous sheet comprising paper or a nonwoven fabric containing not less than 30 percent by weight and not more than 100 percent by weight of hydrophilic fiber to provide a hydrophilic polymer-processed sheet of which the surface and/or the interior of the porous sheet is filled with the hydrophilic polymer, which is made insoluble to water. This sheet is used as a sheet for a total heat exchanger which has higher conductivity of sensible heat and latent heat than conventional sheet for a total heat exchanger that uses a moisture permeable membrane.

Probable Assignee: FRONTIER INDUSTRIAL CO LTD

Earliest Publication Date: 20071213



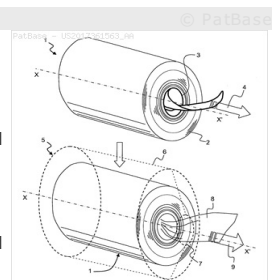
3) Family number: 62738495 (US2017361563A)

A TEARABLE CORE, A ROLL INCLUDING SUCH A CORE AND A TEARABLE CORE MANUFACTURING METHOD

Abstract: Source: US2017361563A A tearable core, adapted for winding a sheet product, includes a cylindrical body wall defining a longitudinal hole of longitudinal axis XX'. The cylindrical body wall is tearable from an edge, and includes an outer strip and an inner strip that are helically wound on one another and displacedly overlapped in a lateral direction parallel to the longitudinal axis XX', and secured together through their mutually facing surfaces by a first region of attachment. The strips are made of the material having characteristics such that the inner strip and the outer strip are made of cardboard having different water drops. The cylindrical body wall is formed by securing together the outer strip, a first end part of the outer strip of one turn being superposed and secured to a second end part of the outer strip of an adjacent turn through their mutually facing surfaces by a second region of attachment.

Probable Assignee: ESSITY OPERATIONS FRANCE

Earliest Publication Date: 20160623



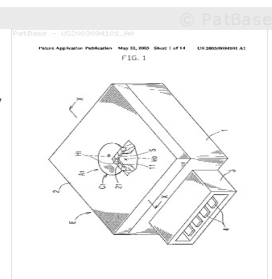
4) Family number: 28522082 (US2003094101A)

CASING MEMBER AND METHOD FOR MANUFACTURING THE SAME

Abstract: Source: US2003094101A A casing 2 constitutes a connector casing E required to have a sealing property, and the cover 2 is constituted by a cover main body 10 provided with, in its own part, a large vent hole H0 passing through the connector casing E in an inward and outward direction and having a predetermined inner diameter size; a permeable sheet S which has a property to permit permeation of a gas and to prevent permeation of a liquid and a solid, and is integrally joined to an outside peripheral part of the large vent hole H0 so as to cover the large vent hole H0 from its outside; and a cover member C which is disposed outside the permeable sheet S to cover the permeable sheet from its outside and a ring-shaped protrusion 22 of which is hermetically joined to the casing main body 10, and the cover member C1 is provided with a small vent hole H1 in its own inward and outward direction, which has an inner diameter smaller than the large vent hole H0 and connects the large vent hole H0 and the air through the permeable sheet S.

Probable Assignee: TOKAI KOGYO CO LTD

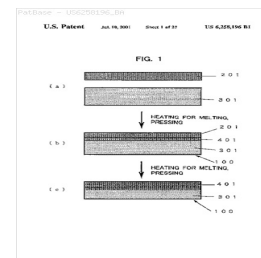
Earliest Publication Date: 20030521



5) Family number: 16082843 (US6258196B)

POROUS COMPOSITE SHEET AND PROCESS FOR THE PRODUCTION THEREOF

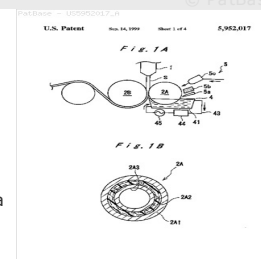
Abstract: Source: US6258196B A sintered porous composite sheet, comprising an A/B-component layer in which the A-component layer is easily fusible and the B-component layer has a relatively higher thermal stability as compared with the A-component layer. The layers are superposed and sintered. The A-component layer comprises a hydrophilic material, the B-component layer comprises a hydrophobic material, and the A-component and B-component may include a common material comprising an easily fusible material. The porous composite sheet is air and moisture permeable, and is readily adaptable for use in sanitary and medical applications.

Earliest Publication Date: 19960423

INK JET RECORDING SHEET

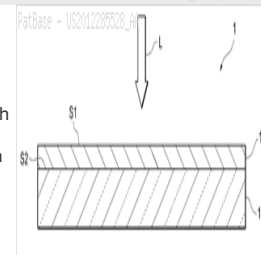
Earliest Publication Date: 19980303[illegible]

PRESSURE ROLL, AND MOLDING APPARATUS USING THE PRESSURE ROLL

Earliest Publication Date: 19960617

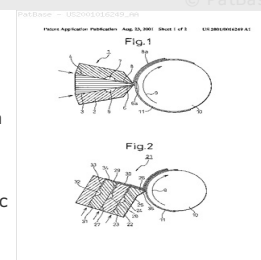
COATING COMPOSITION, COATING FILM, LAMINATE, AND PROCESS FOR PRODUCTION OF LAMINATE

Earliest Publication Date: 20100916



INK JET RECORDING MATERIAL

Earliest Publication Date: 20010801

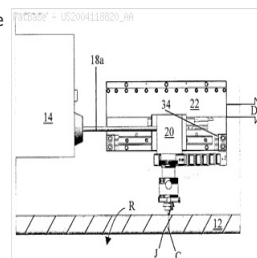


METHOD AND SYSTEM FOR CUTTING CORES WITH A LASER

Abstract: Source: US2004118820A A system for cutting cores used to wind up web materials or as a base structure for containers and other devices is provided. The system uses a core guidance tube in one aspect to position a continuously forming core while a laser beam is directed at the core to cut the core into desired lengths. A method for using the system is further provided.

Probable Assignee: KIMBERLY CLARK CORP

Earliest Publication Date: 20040624



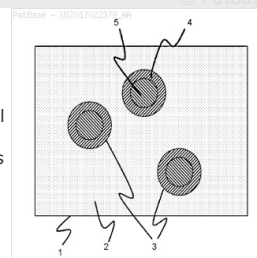
11) Family number: 60612335 (US2017022379A)

AQUEOUS RESIN BASED INKJET INKS

Abstract: Source: US2017022379A An inkjet ink includes a) an aqueous medium; and b) capsules composed of a polymeric shell surrounding a core; wherein the capsules are dispersed in the aqueous medium using a dispersing group covalently bonded to the polymeric shell; wherein the core contains a photoinitiator and one or more chemical reactants capable of forming a reaction product upon application of UV light; wherein the capsules have an average particle size of no more than 4 micro m as determined by dynamic laser diffraction; and wherein the photoinitiator is a diffusion hindered photoinitiator selected from the group consisting of multifunctional photoinitiators, oligomeric photoinitiators, polymeric photoinitiators and polymerizable photoinitiators.

Probable Assignee: AGFA GEVAERT NV

Earliest Publication Date: 20151022



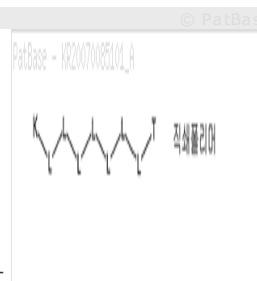
12) Family number: 32355200 (US2007260030A)

METHOD FOR THE MANUFACTURE OF POLYBRANCHED ORGANIC/INORGANIC HYBRID POLYMERS

Abstract: Source: US2007260030A Polybranched organic/inorganic hybrid polymer and method for its manufacture. The hybrid polymer has the form of an inorganic core carrying organic branches. The core is first prepared by controlled hydrolysis and condensation of a silane with a structure: $X-B-Si(-Y)_3$ in which $X-NP_1$ R_2 , while R_1 , R_2 are chosen among hydrogen, alkyl and aryl, or R_1 , R_2 are chosen among condensation products, addition products of one or more type of chemical substances such as acids, alcohols, phenols, amines, aldehydes or epoxides. B is a linkage group chosen among alkylene and arylene which may include oxygen, nitrogen, sulphur, phosphorous, silicon and boron. Y is chosen among hydrolyzable residues such as alkoxy, carboxyl, and halogen. The organic branches are developed by substituting N-H hydrogen atoms in the X-B group by reactions that are typical for primary and secondary amines, and/or by adding an acid that causes an addition to the N atoms of the X-B group in the core. Specific uses of the hybrid polymers are also indicated.

Probable Assignee: SINVENT AS

Earliest Publication Date: 20051017



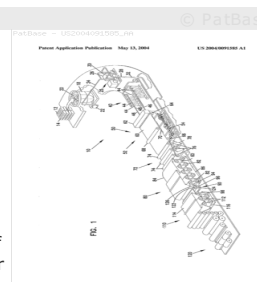
13) Family number: 30569343 (US2004091585A)

TREATED PAPER PRODUCT, COMBINATION FOOD AND TREATED PAPER PRODUCT, AND METHODS FOR MANUFACTURING AND USING TREATED PAPER PRODUCT

Abstract: Source: US2004091585A A treated paper product is provided according to the invention. The treated paper product comprises a result of applying a water based emulsion to a paper base sheet to provide an impregnated paper product, and drying the impregnated paper product to a water content of less than about 8 weight percent to provide the treated paper product. The water based emulsion includes a barrier and/or release forming component comprising at least one of stearylated melamine, polyethylene wax, paraffin wax, isoparaffin wax, microcrystalline wax, fluoropolymer wax, silicone wax, alkyl ketene materials, octyl succinic anhydride, Werner chrome complex, natural wax, and mixtures thereof. The water based emulsion can have a solids content of between about 2 weight percent and about 50 weight percent when it is applied to the paper base sheet. Methods for manufacturing and using the treated paper product, and a combination food and treated paper product are provided.

Probable Assignee: WAUSAU PAPER MILLS LLC

Earliest Publication Date: 20040513



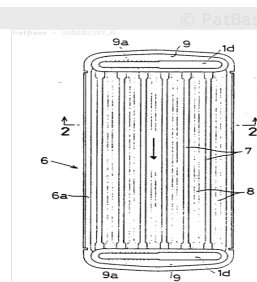
14) Family number: 29361176 (US5152337A)

STACK TYPE EVAPORATOR

Abstract: Source: US5152337A A stack type evaporator according to the invention comprises a plurality of plate-shaped tubular elements stacked in a direction of their width with a fin member interposed between two of such tubular elements which have inlet header portions at their ends and outlet header portions at their further ends so that coolant can flow straight within said tubular elements, a pair of dish-shaped core plates which constitute each tubular element having inner surfaces provided with ribs arranged at regular intervals in a direction of coolant flow, wherein an end surface of each rib protruding from one core plate is alternately bonded to a flat body of the other core plate whereby the coolant paths within each tubular element are formed parallel with each other and straight from the inlet header portion toward the outlet header portion.

Probable Assignee: SHOWA DENKO KK

Earliest Publication Date: 19910306



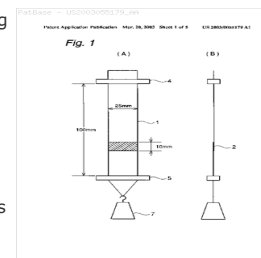
15) Family number: 23210215 (US2003055179A)

OLEFIN BLOCK COPOLYMERS PROCESSES FOR PRODUCING THE SAME AND USES THEREOF

Abstract: Source: US2003055179A The present invention provides polymers having any one of properties including affinity for metals or polar resins, impact resistance, mar resistance, heat resistance, rigidity, oil resistance, transparency, anti-fogging properties, electric insulating properties, high breakdown voltage, coating properties, low-temperature flexibility, moldability, environmental degradation, fluidity and dispersibility, and provides a process for preparation thereof. The olefin block copolymers (A-1) of the invention are represented by the formula (I) PO1-g1-B1 (I) (wherein PO1 is a segment composed of repeating units derived from an olefin having 2 to 20 carbon atoms, g1 is an ester, ether, amide, imide, urethane, urea, silylether or carbonyl linkage, and B1 is a segment containing an unsaturated hydrocarbon or a hetero atom). The olefin block copolymers are suitable for uses in adhesives; various molded articles such as construction and civil engineering materials, automobile interior and exterior materials, gasoline tanks, electric and electronic parts, medical care and sanitation materials, materials of miscellaneous goods, resin materials having environmental degradation properties, films and sheets; modifiers and dispersions.

Probable Assignee: MITSUI CHEMICALS INC

Earliest Publication Date: 20010726



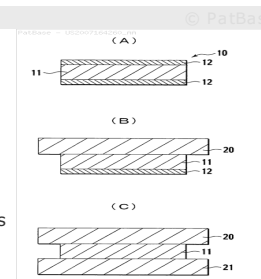
16) Family number: 31796941 (US2007164260A)

MIXED CONDUCTIVE POWER AND USE THEREOF

Abstract: Source: US2007164260A There are disclosed a highly packed, mixed conductive powder with a relative packing density of at least 68 percent, a process for producing the same, a conductive paste using the mixed conductive powder and a process for producing the same, as well as a sheet and a sheet with attached film using the mixed conductive powder. This mixed conductive powder comprises substantially monodispersed conductive scale-like particles (A1) and conductive substantially spherical particles (B1). Or, this mixed conductive powder comprises substantially monodispersed, conductive, substantially spherical particles (A2) and conductive substantially spherical particles (B2) with a smaller particle diameter than that of the substantially spherical particles (A2).

Probable Assignee: ZOWIN DAVID MR

Earliest Publication Date: 20050407



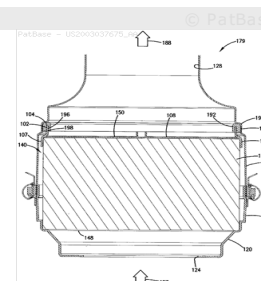
17) Family number: 33539312 (US2003037675A)

AIR FILTRATION ARRANGEMENTS HAVING FLUTED MEDIA CONSTRUCTIONS AND METHODS

Abstract: Source: US2003037675A Filter arrangements include a barrier media in the form of fluted media treated with a deposit of fine fibers. The media is particularly advantageous in high temperature (greater than 140 to 240 degrees Fahrenheit) systems. Such systems may include engine systems, gas turbine systems, and fuel cell systems. Filter arrangements may take the form of media packs having a circular cross-section or a racetrack shaped cross-section, or media packs formed in a panel configuration.

Probable Assignee: DONALDSON CO INC

Earliest Publication Date: 20020314



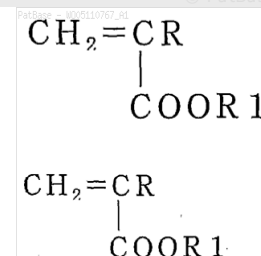
18) Family number: 32431509 (US2007242124A)

ORGANIC PARTICLE FOR INKJET RECORDING SHEET AND RECORDING SHEET

Abstract: Source: US2007242124A Disclosed are organic particles for an inkjet recording sheet comprising a copolymer (a) which is obtained by copolymerizing alicyclic (meth)acrylate (A) represented by the formula (1) and other monomer (B) copolymerizable with (A): wherein R represents a hydrogen atom or a methyl group; and R1 represents an alicyclic hydrocarbon group having 8 to 20 carbon atoms.

Probable Assignee: MITSUI CHEMICALS INC

Earliest Publication Date: 20051124



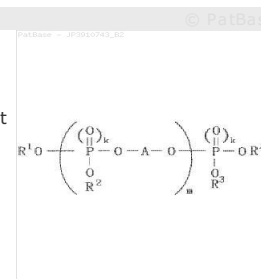
19) Family number: 13681005 (WO9950356A1)

THERMOPLASTIC RESIN COMPOSITION, WATER-BASED COMPOSITION, HEAT-SENSITIVE PRESSURE-SENSITIVE ADHESIVE, AND HEAT-SENSITIVE SHEET

Abstract: A thermoplastic composition comprising a thermoplastic resin and a solid plasticizer, characterized in that the solid plasticizer consists of at least one compound selected among (i) esters having two or more ester groups and obtained from (A) an alcohol (A1) having an alkyl-substituted cyclohexene ring in which the total number of carbon atoms in the substituent is 3 or larger or an alcohol (A2) having a cross-linked ring including a six-membered carbon ring with (B) a polybasic acid, (iia) phosphorus compounds having a melting point of 55 to 100 DEG C, and (iia) diesters of (C1) hydroquinone, resorcinol, or catechol in each of which the benzene ring may be substituted by an alkyl group with (D) an organic monobasic acid. The composition is highly safe for human genital organs, and is used as or in a heat-sensitive pressure-sensitive adhesive or a heat-sensitive pressure-sensitive adhesive sheet having excellent blocking resistance.

Probable Assignee: DAICEL GROUP

Earliest Publication Date: 19991007



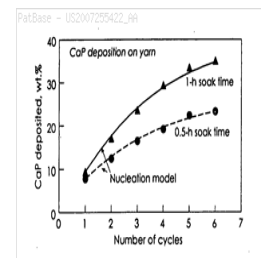
20) Family number: 40764773 (US2007255422A)

CALCIUM PHOSPHATE POLYMER COMPOSITE AND METHOD

Abstract: Source: US2007255422A A bone-repair composite includes a core and a sheath. The core is a first primary unit including a combination of a first set of yarns coated with a calcium phosphate mineral layer. The first set of yarns being made from a first group of one or more polymers. The sheath is a second primary unit a combination of a second set of yarns or one or more polymer coatings. The second set of yarns being made from a second group of one or more polymers, wherein the composite is made by covering the core with the sheath, and the composite is compression molded to allow the sheath to bond to the core. The bone-repair composite has a bending modulus comparable to that of a mammalian bone, such that the ratio of the core to the sheath is provided to maximize the mechanical strength of the bone-repair composite to mimic the mammalian bone.

Probable Assignee: OF CONNECTICUT UNIV

Earliest Publication Date: 20071101



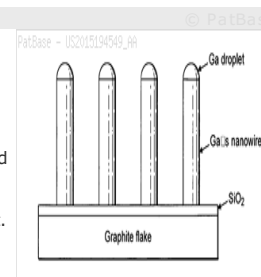
21) Family number: 51793000 (US2015194549A)

SOLAR CELLS

Abstract: Source: US2015194549A A composition of matter, in particular a photovoltaic cell, comprising: at least one core semiconductor nanowire on a graphitic substrate, said at least one core nanowire having been grown epitaxially on said substrate wherein said nanowire comprises at least one group III-V compound or at least one group II-VI compound or at least one group IV element; a semiconductor shell surrounding said core nanowire, said shell comprising at least one group III-V compound or at least one group II-VI compound or at least one group IV element such that said core nanowire and said shell form a n-type semiconductor and a p-type semiconductor respectively or vice versa; and an outer conducting coating surrounding said shell which forms an electrode contact.

Probable Assignee: NORWEGIAN UNIV OF SCIENCE AND TECHNOLOGY NTNU

Earliest Publication Date: 20131227



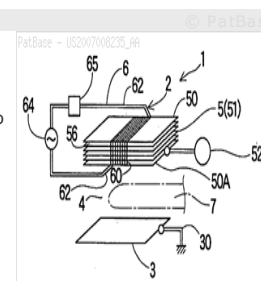
22) Family number: 32560362 (US2007008235A)

ANTENNA DEVICE WITH CAPACITANCE-OPERATED SENSOR

Abstract: Source: US2007008235A An antenna device 1 has an antenna unit 2 which includes an antenna core member 5 including a soft magnetic member 51 having conductivity and a conductor member 6 which is attached to the antenna core member 5. At least part of the antenna core member 5 (for example, a core sheet 50 A) is a sensor electrode which is able to detect an object. The sensor electrode is used as a sensor electrode such as a capacitance-operated sensor electrode. Thus, it is possible to provide an antenna device and a door handgrip apparatus having an antenna unit including an antenna core member which is shared for an antenna function and a sensor function.

Probable Assignee: AISIN SEIKI KK

Earliest Publication Date: 20041104



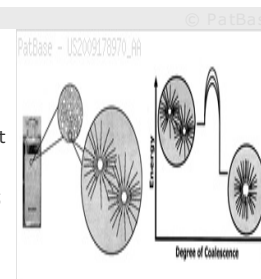
23) Family number: 43506814 (US2009178970A)

COALESCENCE MEDIA FOR SEPARATION OF WATER-HYDROCARBON EMULSIONS

Abstract: Source: US2009178970A A coalescence media for separation of water-hydrocarbon emulsions comprising an emulsion-contacting sheet formed as single dry layer from a wet-laid process using a homogeneously distributed, wet-laid furnish including two or more constituents of the group consisting of: (1) up to about 80 percent cellulose or cellulosic fibers; (2) up to about 50 percent synthetic fibers; (3) up to about 60 percent high-surface-area fibrillated fibers; (4) up to about 70 percent glass microfiber; (5) up to about 80 percent of a surface-area-enhancing synthetic material; (6) up to about 5 percent of a wet-laid-paper, dry strength additive; (7) up to about 5 percent of a wet-laid-paper, wet strength additive; (8) up to about 30 percent of a strength-enhancing component; and (9) up to about 30 percent binder resin for the finished sheet (where percent denotes percent of dry weight of the finished sheet).

Probable Assignee: AHLSTROM CORP

Earliest Publication Date: 20090716



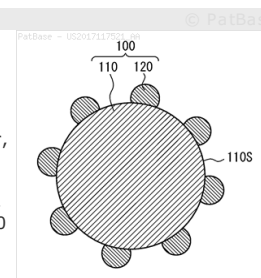
24) Family number: 61253764 (US2017117521A)

LAMINATE FOR NON-AQUEOUS SECONDARY BATTERY, METHOD OF MANUFACTURING THE SAME, AND NON-AQUEOUS SECONDARY BATTERY

Abstract: Source: US2017117521A Disclosed is a laminate for non-aqueous secondary battery which includes a water-soluble polymer-containing functional layer and an adhesive layer adjacently disposed on the functional layer, and which can suppress reductions in peel strength of a battery member including the laminate while allowing the functional layer to exert its expected function. The disclosed laminate includes a functional layer containing functional particles and a water-soluble polymer, and an adhesive layer adjacently disposed on the functional layer, wherein a film obtained by shaping of the water-soluble polymer has a water drop contact angle of 30 degrees to 80 degrees.

Probable Assignee: ZEON CORP

Earliest Publication Date: 20151230



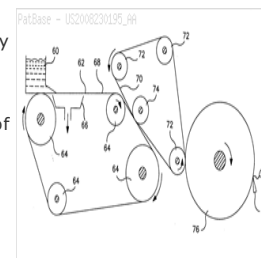
25) Family number: 42178844 (US2008230195A)

TISSUE PRODUCTS CONTAINING NON-FIBROUS POLYMERIC SURFACE STRUCTURES AND A TOPICALLY-APPLIED SOFTENING COMPOSITION

Abstract: Source: US2008230195A Soft tissue products with a good rate of absorbency, such as facial and bath tissue, are provided by forming a tissue sheet with a non-fibrous polymeric surface structure and thereafter topically applying a softening composition comprising a polysiloxane, a fatty alkyl derivative and glycerin. The non-fibrous polymeric surface structure is created by applying an additive composition to the surface of a tissue sheet prior to or after drying. The additive composition can be an aqueous dispersion containing an alpha-olefin polymer, an ethylene-carboxylic acid copolymer, or mixtures thereof. The alpha-olefin polymer may comprise an interpolymers of ethylene and octene, while the ethylene-carboxylic acid copolymer may comprise ethylene-acrylic acid copolymer.

Probable Assignee: KIMBERLY CLARK CORP

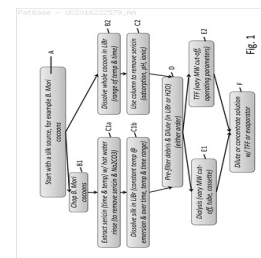
Earliest Publication Date: 20080925



Abstract: Source: US2016222579A Silk performance apparel and methods of preparing the same are disclosed herein. In some embodiments, silk performance apparel includes textiles, fabrics, consumer products, and other materials that are coated with aqueous solutions of pure silk fibroin-based protein fragments. In some embodiments, coated apparel products exhibit surprisingly improved moisture management properties and increased resistance to microbial growth.

Probable Assignee: SILK THERAPEUTICS INC

Earliest Publication Date: 20160609



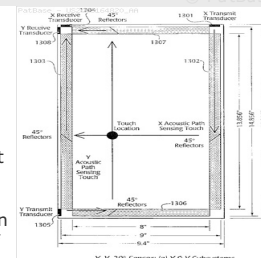
31) Family number: 12153803 (US2003164820A)

ACOUSTIC CONDITION SENSOR EMPLOYING A PLURALITY OF MUTUALLY NON-ORTHOGONAL WAVES

Abstract: Source: US2003164820A A touch sensor comprising an acoustic wave transmissive medium having a surface; a plurality of acoustic wave path forming systems, each generating a set of incrementally varying paths through said transmissive medium; and a receiver, receiving signals representing said sets of waves, a portion of each set overlapping temporally or physically by propagating in said transmissive medium along axes which are not orthogonal. The waves may also be of differing wave modes. The receiver system may include a phase, waveform or amplitude sensitive system. Reflective arrays are associated with said medium situated along a path, said path not being a linear segment parallel to a coordinate axis of a substrate in a Cartesian space, a segment parallel to an axial axis or perpendicular to a radial axis of a substrate in a cylindrical space nor parallel and adjacent to a side of a rectangular region of a small solid angle section of a sphere; situated along a path substantially not corresponding to a desired coordinate axis of a touch position output signal; situated along a path substantially non-parallel to an edge of said medium; has a spacing of elements in said array which differs, over at least one portion thereof, from an integral multiple of a wavelength of an incident acoustic wave; has elements in said array which are non-parallel; has an angle of acceptance of acoustic waves which varies over regions of said array; and/or coherently scatter at least two distinguishable acoustic waves which are received by said receiving system.

Probable Assignee: ELO TOUCH SOLUTIONS INC

Earliest Publication Date: 19961024



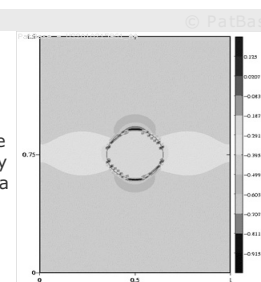
32) Family number: 46626449 (US2010215961A)

METHODS, APPARATUS AND SYSTEMS FOR CONCENTRATION, SEPARATION AND REMOVAL OF PARTICLES AT/FROM THE SURFACE OF DROPS

Abstract: Source: US2010215961A Methods are provided for concentrating particles on the surface of a drop or bubble in a continuous phase, for separating different types of particles, and for removing particles from the surface of the drop or bubble. The methods also facilitate separation of two types of particles on a drop or bubble, optionally followed by solidification of the drop or bubble, to produce a particle for which the surface properties vary, such as a Janus particle. The methods can be also used to destabilize emulsions and foams by re-distributing or removing particles on the surface of the drop or bubble, facilitating coalescence of the particle-free drops or bubbles.

Probable Assignee: CARNEGIE MELLON UNIV

Earliest Publication Date: 20100826



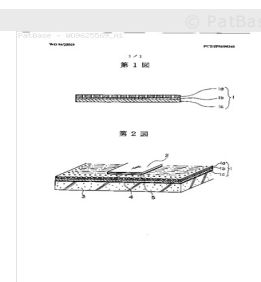
33) Family number: 20484665 (WO9625569A1)

MOISTURE-PERMEABLE COMPOSITE SHEET FOR WATER-PROOFING CONCRETE

Abstract: A moisture-permeable water-proofing sheet to be applied to a concrete surface for water-proofing the same. It has the structure wherein a protective cloth having a gas permeability and a cushioning property is laminated and fixed to one of the surfaces of a polymer film having a water repellency and a moisture permeability by partial fusing or bonding, and a light-weight flexible sheet having a large number of vent pores is laminated and fixed to the other surface by partial fusing or bonding.

Probable Assignee: JAPAN GORE TEX INC

Earliest Publication Date: 19960822



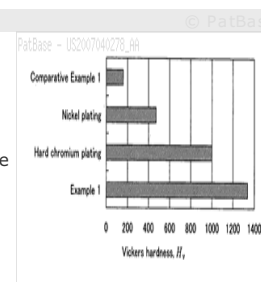
34) Family number: 32018165 (US2007040278A)

MULTIFUNCTIONAL MATERIAL HAVING CARBON-DOPED TITANIUM OXIDE LAYER

Abstract: Source: US2007040278A A multifunctional material having a carbon-doped titanium oxide layer, which has carbon doped in the state of Ti-C bonds, is excellent in durability (high hardness, scratch resistance, wear resistance, chemical resistance, heat resistance) and functions as a visible light responding photocatalyst, is provided. The multifunctional material of the present invention is obtained, for example, by heat-treating the surface of a substrate, which has at least a surface layer comprising titanium, a titanium alloy, a titanium alloy oxide, or titanium oxide, in a combustion gas atmosphere of a gas consisting essentially of a hydrocarbon such that the surface temperature of the substrate is 900 to 1,500 degrees centigrade; or by directly striking a combustion flame of a gas consisting essentially of a hydrocarbon, against the surface of the substrate for heat treatment such that the surface temperature of the substrate is 900 to 1,500 degrees centigrade

Probable Assignee: CENTRAL RES INST ELECT

Earliest Publication Date: 20050623



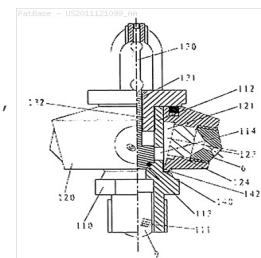
35) Family number: 42783525 (US2011121099A)

SPRAYING DEVICE

Abstract: Source: US2011121099A A rotary spray device includes a seat body having an entrance and a spray head body in which a fluid passage is provided. The rotary spray device further includes at least one impeller. The entrance communicates with the fluid passage by a fluid chamber. The impeller is located within the fluid chamber and is rotated with the spray head body. The spray head body is rotatably connected with the seat body. Preferably, the spray head body has eccentric spray nozzles, and the minimal distance is not zero between the center lines of the eccentric spray nozzles and the rotation center line of the spray head body, and the center lines do not parallel the rotation center line. The rotation center line of spray head body is an axis about which the spray head body rotates relative to the seat body. The spray device according to the present invention rotates the spray head body by the drive of the fluid energy, to perform a pressure spray, and may also spray leak liquid through the rotation clearance. It has a simple, compact structure, and may achieve a good effect.

Probable Assignee: HAN TIE FU

Earliest Publication Date: 20081210



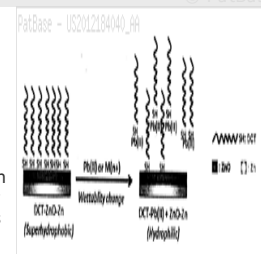
36) Family number: 51558581 (US2012184040A)

METHOD AND DEVICE FOR DETECTION OF HEAVY METAL IONS IN WATER

Abstract: Source: US2012184040A This disclosure discloses a method and a device for the detection of heavy metal ions in water. The method includes: providing a detection material, wherein the detection material includes a hydrophilic layer which is at least partially covered by a hydrophobic layer formed from a long-chain compound selected from the group consisting of a long-chain thiol, a long-chain fatty acid and combinations thereof, and wherein a detection area is an area covered by the hydrophobic layer, and the detection area has a surface having an initial contact angle with water of more than or equal to about 120 degrees; contacting the detection area with an aqueous solution sample; determining whether the surface of the detection area has a hydrophobicity-hydrophilicity change after contact with the aqueous solution sample; and deciding whether heavy metal ions exist in the aqueous solution sample according to the determination.

Probable Assignee: SONY CORP

Earliest Publication Date: 20120719



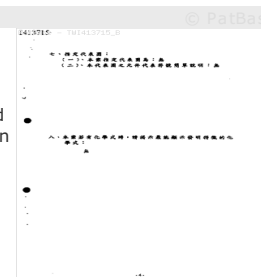
37) Family number: 36069858 (US2009029164A)

CONJUGATE FIBER-CONTAINING YARN

Abstract: Source: US2009029164A A conjugate fiber-containing yarn containing side-by-side or eccentric core-in-sheath conjugate fibers each composed of a polyester component and a polyamide component, that can be crimped by heating, and that has properties of increasing its crimp ratio when it absorbs moisture or water and is excellent in windbreaking and warmth-retaining properties, has a wool-like soft and bulky hand, and is capable of forming a fabric in which a see-through property is not increased even when wetted with water.

Probable Assignee: TEIJIN LTD

Earliest Publication Date: 20070913



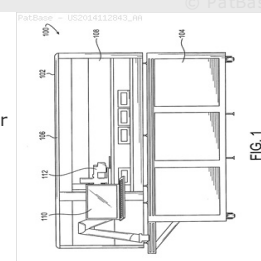
38) Family number: 56296128 (US2014112843A)

AUTOMATED PELLETIZED SAMPLE DECANTING APPARATUS AND METHODS

Abstract: Source: US2014112843A An automated sample tube decanting system having one or more decanting grippers, a decant waste receptacle, a transporter, and means for rotating the decanting gripper. Each decanting gripper has a respective holder configured to selectively mate with a respective interface on a tube strip. The one or more decanting grippers are rotatable between a first position in which the tube strip is upright and a second position in which the tube strip is inverted. The transporter is configured to move the one or more decanting grippers in a lateral direction from a starting location to a location above the decant waste receptacle.

Probable Assignee: QIAGEN GAITHERSBURG INC

Earliest Publication Date: 20140424



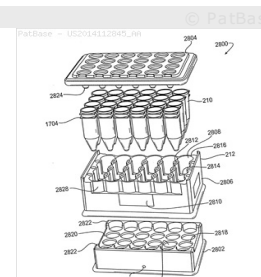
39) Family number: 56296130 (US2014112845A)

CONDENSATION-REDUCING INCUBATION COVER

Abstract: Source: US2014112845A A cover for covering an array of sample tubes during an incubation process. The cover has an upper panel and protrusions extending downward from the upper panel. Each protrusion has an upper seal and a lower seal. The upper seal includes a first conical section that tapers from a first diameter that is larger than the inside diameter of a corresponding sample tube to a second diameter that is smaller than the inside diameter of the corresponding sample tube. The lower seal includes a cylindrical section extending downward from the bottom of the first conical section. The cylindrical section has a diameter selected to create a capillary seal, in the presence of a liquid, between the cylindrical section and an adjacent portion of an inner wall of the corresponding sample tube.

Probable Assignee: QIAGEN GAITHERSBURG INC

Earliest Publication Date: 20140424



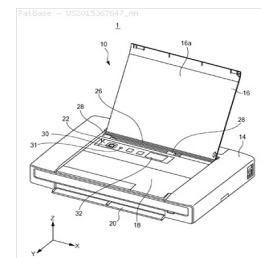
40) Family number: 61246981 (US2015367647A)

LIQUID ACCOMMODATING CONTAINER

Abstract: Source: US2015367647A A liquid accommodating container in which a fiber member and a liquid are accommodated has a fiber ratio of the fiber member is 5 percent or more to 30 percent or less, a fiber diameter of the fiber member is 10 micro m or more to 50 micro m or less, a volume average particle diameter (D50) of a pigment included in the liquid satisfies a condition of 50 nm<D50<150 nm, and a maximum particle diameter is 200 nm or less.

Probable Assignee: SEIKO EPSON CORP

Earliest Publication Date: 20151224



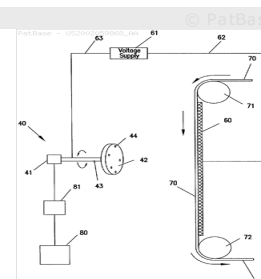
41) Family number: 33539283 (US2002059868A)

AIR FILTER ASSEMBLY FOR FILTERING AN AIR STREAM TO REMOVE PARTICULATE MATTER ENTRAINED IN THE STREAM

Abstract: Source: US2002059868A Filter arrangements for industrial air cleaners include a barrier media, usually pleated, treated with a deposit of fine fiber. The media is particularly advantageous in high temperature (greater than 140 degrees Fahrenheit) operating environments.

Probable Assignee: DONALDSON CO INC

Earliest Publication Date: 20020314



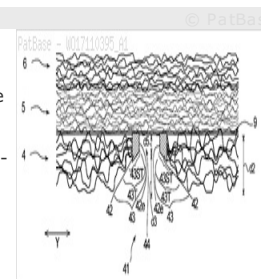
42) Family number: 66215624 (WO17110395A1)

DISPOSABLE DIAPER

Abstract: This disposable diaper (1) has abdominal waist flaps (FA) and back waist flaps (FB) located to the outside of the front and back ends (23A, 23B) in the longitudinal direction (X) of an absorbent (23) and extending in the transverse direction (Y). The back waist flaps (FB) have a hydrophobic skin-side sheet (4) and a hydrophilic non-skin-side sheet (5). The skin-side sheet (4) is provided with depressions (41) that form hollows toward the non-skin-side sheet (5) and openings (44) in the depressions (41) that pass through to the skin-side sheet (4). The thickness of the depressions (41) of the skin-side sheet (4) is smaller closer to the openings (44).

Probable Assignee: KAO CORP

Earliest Publication Date: 20170629



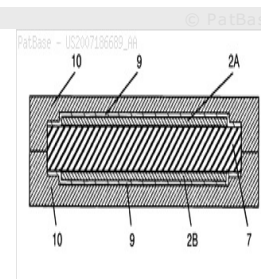
43) Family number: 32878068 (US2007186689A)

PIEZOELECTRIC ELEMENT AND METHOD OF MANUFACTURING THE SAME

Abstract: Source: US2007186689A A piezoelectric element includes a piezoelectric composition pressure sensitive substance, a first electrode, a second electrode and a covering layer. The piezoelectric composition pressure sensitive substance includes a piezoelectric ceramic powder and a flexible organic polymer. The first and second electrodes are connected to the piezoelectric composition pressure sensitive substance and electrically insulated from each other. The covering layer is provided outside of the piezoelectric ceramic powder and suppresses absorption of the water by the piezoelectric ceramic powder.

Probable Assignee: PANASONIC CORP

Earliest Publication Date: 20060309



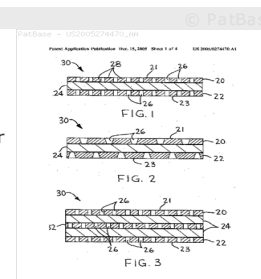
44) Family number: 32484034 (US2005274470A)

APERTURED TISSUE PRODUCTS

Abstract: Source: US2005274470A The fluid intake rate of a tissue product having at least one hydrophobic exterior layer can be increased significantly by the addition of apertures through the hydrophobic exterior layer to the tissue product's hydrophilic interior layer. The apertures allow for fluid to be absorbed by the hydrophilic interior layer, while leaving the hydrophobic exterior layer dry to the touch. The size, number and spacing of the apertures can be controlled to manage the absorbent properties of the tissue product. In one embodiment, a three-ply tissue product has two exterior hydrophobic plies each having a plurality of apertures extending from the surface of both exterior plies through the plies to a hydrophilic interior ply.

Probable Assignee: KIMBERLY CLARK CORP

Earliest Publication Date: 20051215



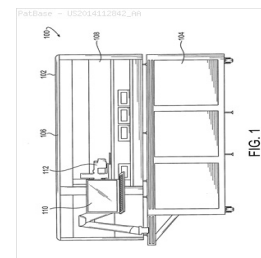
45) Family number: 56296126 (US2014112842A)

AUTOMATED PELLETIZED SAMPLE BLOTTING APPARATUS AND METHODS

Abstract: Source: US2014112842A An automated sample tube blotting system having one or more rotating grippers, a supply of absorbent material, a transporter, and an absorbent material removal mechanism. Each rotating gripper has a respective holder configured to selectively mate with a respective interface on a tube strip, and the one or more rotating grippers are rotatable between a first position in which the tube strip is upright and a second position in which the tube strip is inverted. The transporter is configured to move the rotating gripper in a lateral direction from a starting location to a location above the absorbent material, and in a vertical direction towards and away from the absorbent material.

Probable Assignee: QIAGEN GAITHERSBURG INC

Earliest Publication Date: 20140424



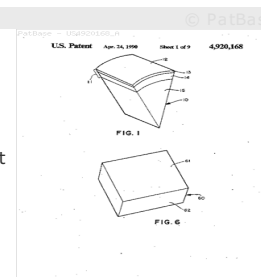
46) Family number: 3135239 (US4920168A)

STABILIZED SILOXANE-CONTAINING MELT-EXTRUDABLE THERMOPLASTIC COMPOSITIONS

Abstract: Source: US4920168A A stabilized surface-segregatable, melt-extrudable thermoplastic composition suitable for processing by melt extrusion to form a fiber or film having a differential, increasing concentration of a siloxane-containing primary additive from the center of the fiber or film to the surface thereof, which differential, increasing concentration imparts hydrophilicity to the surface of the fiber or film, which composition includes at least one thermoplastic polymer, at least one siloxane-containing primary additive, and at least one siloxane-containing stabilizing additive. During formation of the fiber or film, the primary additive rapidly segregates in a controllable manner toward the newly-formed surface of the fiber or film, thereby resulting in a controllable differential concentration of the primary additive, which concentration increases with increasing distance from the center of the fiber or film to its surface. The weight ratio of the polymer to the additive is in the range of from about 1 to about 1,000. The preferred polymer is a polyolefin such as polyethylene and polypropylene. The stabilizing additive prevents or minimizes degradation of additive and/or polymer during the melt-extrusion process. The stabilized thermoplastic composition is useful in the preparation of fibers or films which have hydrophilic surfaces. The thermoplastic composition is particularly useful in the formation of nonwoven webs which are used in the construction of such disposable absorbent products as diapers, feminine care products, incontinence products, and the like.

Probable Assignee: KIMBERLY CLARK CORP

Earliest Publication Date: 19891019



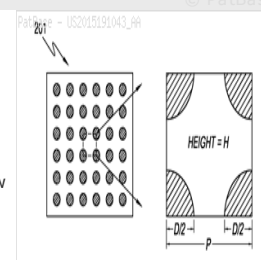
47) Family number: 59685794 (US2015191043A)

DECORATIVE LAMINATES HAVING A TEXTURED SURFACE EXHIBITING SUPERHYDROPHOBICITY, SELF-CLEANING AND LOW ADHESION

Abstract: Source: US2015191043A A decorative laminate lay-up used in the manufacture of decorative laminates includes a decorative laminate sheet assembly composed of resin impregnated paper layers and a textured release sheet positioned on a top surface of the decorative laminate sheet assembly. The textured release sheet provides a textured surface to decorative laminates resulting from processing of the decorative laminate sheet assembly, wherein the textured release sheet includes a textured surface exhibiting superhydrophobicity, self-cleaning and low surface energy.

Probable Assignee: WILSONART LLC

Earliest Publication Date: 20150709



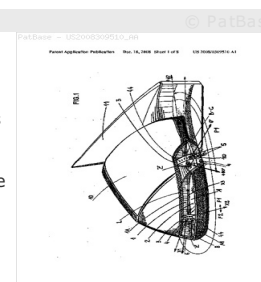
48) Family number: 32133637 (US2008309510A)

MULTISIGNAL DEVICE FOR VEHICLE, COMPRISING A LIGHT-EMITTING CORE

Abstract: Source: US2008309510A The invention relates to a multisignal device for the rear-view mirror of a vehicle, which can be connected to other parts of the vehicle and which comprises a light beam emitter, said beams lighting up in a progressive and controlled manner according to the user's requirements or the automatic response to events. In addition, the signal can exit at the front and/or the side owing to the arrangement of the elements of the system. The light sources essentially comprise cores with printed circuits on the faces thereof, in which LEDs are inserted.

Probable Assignee: BARROS ALEJANDRO RODRIGUEZ

Earliest Publication Date: 20050811



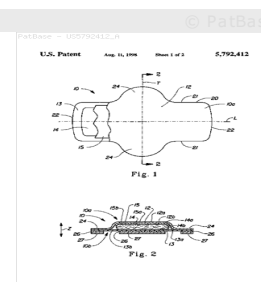
49) Family number: 20640301 (US5792412A)

APERTURED FILMS HAVING DURABLE WETTABILITY AND PROCESSES FOR MAKING THEM

Abstract: Source: US5792412A This invention relates to a process for forming a single-layer, durably wettable polymeric web having a plurality of apertures. This process comprises melting a mixture of at least one thermoplastic polymer and at least one migratable surfactant and extruding the mixture to form a single-layer, substantially continuous polymeric film. The film is then apertured using high pressure fluid flows. Aperture formation is conducted when the single-layer polymeric film has a contact angle of at least about 30 DEG, to minimize wash-off of the surfactant impregnated in the polymer web. The invention also relates to durably-wettable apertured webs.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 19980303



50) Family number: 29969430 (US2004220535A)

TRANSFERRING MATERIALS INTO CELLS POROUS SILICON

Abstract: Source: US2004220535A The present invention relates to the use of porous silicon in the delivery of substances into cells. The porous silicon can be formed into micropiercers, microneedles and biolistic bullets for penetration of the cell. The control of the pore size and porosity of the porous silicon allows tuning of the bioactivity of the porous silicon. The porous silicon is also resorbable and is therefore resorbed from the cells without leaving any particles or being seen as a foreign body. The present invention also relates to the methods of manufacturing the porous silicon micropiercers, microneedles, microelectrodes, biolistic bullets, and precipitation of calcium phosphate on a bioactive substrate, and their advantages over known methods of delivering materials into cells.

Probable Assignee: PSIMEDICA LTD

Earliest Publication Date: 20000203

