Provided is an inkjet adhesive which is applied using an inkjet device, wherein the adhesive can suppress generation of voids in the adhesive layer and, after bonding, can reduce an outgas at the time of being exposed to high temperatures, and can enhance moisture-resistant reliability. An inkjet adhesive according to the present invention comprises a first photocurable compound having one (meth)acryloyl group, a second photocurable compound having two or more (meth)acryloyl groups, a photo-radical initiator, a thermosetting compound having one or more cyclic ether groups or cyclic thioether groups, and a compound capable of reacting with the thermosetting compound, and the first photocurable compound contains alkyl (meth)acrylate having 8 to 21 carbon atoms.
INKJET ADHESIVE, MANUFACTURING METHOD FOR SEMICONDUCTOR DEVICE, AND ELECTRONIC COMPONENT

Nº publicación EP3249024A1  29/11/2017
Solicitantes  SEKISUI CHEMICAL CO LTD [JP]
Resumen Provided is an inkjet adhesive which is applied using an inkjet device, wherein the adhesive can suppress generation of voids in the adhesive layer and, after bonding, can enhance adhesiveness, moisture-resistant adhesion reliability, and cooling/heating cycle reliability. An inkjet adhesive according to the present invention comprises a photocurable compound, a photo-radical initiator, a thermosetting compound having one or more cyclic ether groups or cyclic thioether groups, and a compound capable of reacting with the thermosetting compound, and the compound capable of reacting with the thermosetting compound contains aromatic amine.

COMPOSITION FOR FORMING METAL-CONTAINING FILM, METHOD OF PRODUCING COMPOSITION FOR FORMING METAL-CONTAINING FILM, SEMICONDUCTOR DEVICE, AND METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE

Nº publicación WO2017200107A1  23/11/2017
Solicitantes  MITSUI CHEMICALS INC [JP]
Resumen A composition for forming a metal-containing film, the composition containing: (A) at least one compound selected from the group consisting of (a1) a compound comprising a cationic functional group containing a primary nitrogen atom and/or a secondary nitrogen atom, and (a2) a nitrogen-atom-containing compound other than compound (a1); and (B) at least one compound selected from the group consisting of (b1) a compound comprising a carboxy group and at least one of a germanium atom, a tin atom, a selenium atom, and a zirconium atom, and an ester of compound (b1).
A film-forming ink includes a film-forming material and a liquid medium in which the film-forming material is dissolved or dispersed. The liquid medium contains a first component which has a viscosity of less than 20 cp and a second component which has a boiling point at an atmospheric pressure within a range of ±30° C. relative to the boiling point at an atmospheric pressure of the first component and has a viscosity of 20 cp or more, and the second component is contained in an amount of 20 parts by weight or more and 500 parts by weight or less with respect to 100 parts by weight of the first component.
INK FOR FORMING FUNCTIONAL LAYER, METHOD OF MANUFACTURING INK FOR FORMING FUNCTIONAL LAYER, AND METHOD OF MANUFACTURING ORGANIC ELECTRO-LUMINESCENCE ELEMENT

Nº publicación US2017338413A1  23/11/2017
Solicitantes SEIKO EPSON CORP [JP]
Resumen An ink for forming a functional layer, which is used when any thin film layer among functional layers consisting of a plurality of thin film layers is formed, includes a functional layer forming material and a solvent for dissolving the functional layer forming material, and in which the number of particles of 0.5 μm or more is 7 or less in 10 ml of the ink for forming a functional layer.

Process to Improve Coverage and Electrical Performance of Solid Electrolytic Capacitors

Nº publicación US2017338048A1  23/11/2017
Solicitantes KEMET ELECTRONICS CORP [US]
Resumen A method for forming a capacitor, a capacitor formed thereby and an improved composition for a conductive coating are described. The method includes providing an anode, forming a dielectric on the anode and forming a cathode layer over the dielectric by applying a monoamine, a weak acid and a conductive polymer.
ORGANIC SEMICONDUCTOR ELEMENT AND METHOD FOR MANUFACTURING SAME, COMPOSITION FOR FORMING ORGANIC SEMICONDUCTOR FILM, AND METHOD FOR MANUFACTURING ORGANIC SEMICONDUCTOR FILM

Nº publicación US2017338425A1  23/11/2017
Solicitantes  FUJIFILM CORP [JP]
              UNIV TOKYO [JP]
Resumen  The purpose of the present invention is: to provide an organic semiconductor element having a high mobility; and to provide a composition for forming an organic semiconductor film with which it is possible to form an organic semiconductor film having a high mobility, and a method for forming an organic semiconductor film and a method for forming an organic semiconductor element formed using the above composition for forming an organic semiconductor film. This organic semiconductor element is characterized in having a semiconductor active layer containing a compound which is represented by formula 1 and which has a molecular weight of 3,000 or less. This composition for forming an organic semiconductor film is characterized in containing a solvent and a compound which is represented by formula 1 and which has a molecular weight of 3,000 or less.

METAL NANOPARTICLE INK FOR FLEXOGRAPHY AND METHOD FOR PRODUCING LAMINATE USING SAME

Nº publicación WO2017195621A1  16/11/2017
Solicitantes  DAINIPPON INK & CHEMICALS [JP]
Resumen  The present invention provides a metal nanoparticle ink for flexography characterized by containing: a composite of metal nanoparticles (A) and an organic compound (B); and an aqueous medium (C) containing water and a monoalcohol having 1-3 carbon atoms, wherein the content of the monoalcohol having 1-3 carbon atoms in the aqueous medium (C) is 45 mass% or more. When the ink is printed on a base material which to a great extent does not absorb a solvent, the ink is less likely to be repelled and a uniform pattern can be stably produced with high precision.

FLUORINATED COMPOSITIONS FOR ION SOURCE PERFORMANCE IMPROVEMENT IN NITROGEN ION IMPLANTATION

Nº publicación WO2017196934A1  16/11/2017
Solicitantes  ENTEGRIS INC [US]
Resumen  Compositions, methods, and apparatus are described for carrying out nitrogen ion implantation, which avoid the incidence of severe glitching when the nitrogen ion implantation is followed by another ion implantation operation susceptible to glitching, e.g., implantation of arsenic and/or phosphorus ionic species. The nitrogen ion implantation operation is advantageously conducted with a nitrogen ion implantation composition introduced to or formed in the ion source chamber of the ion implantation system, wherein the nitrogen ion implantation composition includes nitrogen (N2) dopant gas and a glitching-suppressing gas including one or more selected from the group consisting of NF3, N2F4, F2, SiF4, WF6, PF3, PF5, AsF3, AsF5, CF4 and other fluorinated hydrocarbons of CxFy (x≥1, y≥1) general formula, SF6, HF, COF2, OF2, BF3, B2F4, GeF4, XeF2, O2, N2O, NO, NO2, N2O4, and O3, and optionally hydrogen-containing gas, e.g., hydrogen-containing gas including one or more selected from the group consisting of H2, NH3, N2H4, B2H6, AsH3, PH3, SiH4, Si2H6, H2S, H2Se, CH4 and other hydrocarbons of CxHy (x≥1, y≥1) general formula and GeH4.
CHARGING CABLE HAVING FLEXIBILITY AT LOW TEMPERATURE AND OIL RESISTANCE

Número de publicación: DE102016223329A1 16/11/2017


Resumen: Un cable de carga se proporciona. El cable de carga incluye cables para suministrar energía, un cable para transferir una señal y un sheath, y exhibe propiedades mecánicas mejoradas en forma significativa, tales como flexibilidad a bajas temperaturas y resistencia al desgaste, propiedades químicas mejoradas con substancialmente mejor resistencia al aceite y propiedades eléctricas mejoradas, tales como resistencia a la aislación. Adicionalmente, el cable de carga tiene propiedades mejoradas eléctricas, mecánicas y químicas por mejorar la resistencia a la aislación, resistencia al calor y flexibilidad a bajas temperaturas de los cables, en comparación con cables convencionales con PVC.

ELECTROCONDUCTIVE INK

Número de publicación: WO2017195491A1 16/11/2017

Solicitantes: BANDO CHEMICAL IND [JP]

Resumen: Se proporciona un tinta electroconductiva de la cual se puede formar una película electroconductiva con suficiente electroconductividad y adherencia satisfactoria a la superficie del soporte a través de bricolaje a baja temperatura y que es fácil de manejar y tiene excelente estabilidad de dispersión. La tinta electroconductiva del presente invento se caracteriza por consistir en nanopartículas de plata, un medio de dispersión y un resina terpénica que tiene un punto de fusión de 90°C o más y es adherente a la superficie de las nanopartículas de plata o se encuentra en el medio de dispersión.
INTEGRATED ZWITTERIONIC CONJUGATED POLYMERS FOR BIOELECTRONICS, BIOSENSING, REGENERATIVE MEDICINE, AND ENERGY APPLICATIONS

Nº publicación US2017327635A1 16/11/2017
Solicitantes CHENG GANG [US] UNIV AKRON [US]
Resumen The present invention is directed to a versatile and high performance zwitterionic CP platform, which integrates all desired functions into one material. This zwitterionic CP consists of the conducting backbone and multifunctional zwitterionic side chains. Non-conducting zwitterionic materials gain electronic conductivity through the conducting backbone and CPs obtain excellent biocompatibility, sensitivity to environmental stimuli and controllable antifouling properties via multifunctional zwitterionic side chains. Unique properties from two distinct materials (conducting materials and zwitterionic materials) are integrated into one material without sacrificing any properties. This platform can potentially be adapted for a range of applications (e.g. bioelectronics, tissue engineering, wound healing, robotic prostheses, biofuel cell, etc.), which all require high performance conducting materials with excellent antifouling/biocompatibility at complex biointerfaces. This conducting material platform will significantly advance the development of conducting polymers in the field of biomedicine and biotechnology.

CONDUCTIVE PASTE AND MANUFACTURING METHOD THEREFOR

Nº publicación US2017330690A1 16/11/2017
Solicitantes MURATA MANUFACTURING CO [JP]
Resumen A conductive paste that includes conductive particles and a solvent. The solvent has a Hansen solubility parameter with an SP value of 24 to 39, a hydrogen bond term δh of 15 or more, and a polarity term δp of 7 or more. The conductive paste is applied to an unfired laminated body having laminated ceramic green sheets and internal electrode layers.
Electrically Conductive PTC Screen Printable Ink with Double Switching Temperatures and Method of Making the Same

Nº publicación US2017327707A1 16/11/2017
Solicitantes XIAO SHUYONG [CA]
WU KAI [CA]
1-MATERIAL INC [CA]
Resumen The invention provides an electrically conductive screen-printable PTC ink with double switching temperatures, which comprising by weight based on total composition, 10-30 wt % conductive particles; 5-15 wt % polymer resin 1; 5-15 wt % polymer resin 2; 40-80 wt % organic solvent; e) 1-5 wt % other additives.

4-HYDROXYQUINOLINE COMPOUNDS

Nº publicación US2017327465A1 16/11/2017
Solicitantes BASF SE [DE]
MAX-PLANCK-GESELLSCHAFT ZUR FOERDERUNG DER WSS E V [DE]
Resumen The present invention relates to 4-hydroxyquinoline compounds of the formula (I) wherein A is selected from diradicals of the formulae (A.1), (A.2), (A.3), (A.4), (A.5), and (A.6) wherein R 1, R 2a, R 2b, R 3, if present R 4a, R 4b, R 5a, R 5b, R 6a, R 6b, R 6c, R 6d, R n1, R n2, R n3, R n4, R m5, R m6, R m7, R m8, R 7, R 8a, R 9 are as defined in the claims and in the description. Also provided is a method for their preparation and their use.

ELECTRODE COMPRISING ORGANIC SEMICONDUCTOR MATERIAL, METHOD FOR MANUFACTURING ELECTRODE, AND SUPERCAPACITOR COMPRISING ELECTRODE

Nº publicación US2017330698A1 16/11/2017
Solicitantes UNIV-INDUSTRY COOPERATION GROUP OF KYUNG HEE UNIV [KR]
Resumen The present invention relates to: an electrode comprising a current collector and a film located on the current collector, wherein the film comprises an organic semiconductor material and one selected from a carbon material, a metal oxide and a conductive polymer; a method for manufacturing the electrode; and a supercapacitor comprising the electrode.
METAL PASTE FOR GAS SENSOR ELECTRODE FORMATION

Nº publicación: US2017328860A1  16/11/2017

Solicitantes: TANAKA PRECIOUS METAL IND [JP]

Resumen: To be provided is a metal paste from which an electrode having high electrode activity as a sensor electrode of various gas sensors can be produced. The present invention is a metal paste for forming a gas sensor electrode obtained by dispersing a conductive particle including Pt or a Pt alloy and a ceramic powder including zirconia or stabilized zirconia, or any of zirconia and stabilized zirconia and one or more oxides of La, Ce, Pr, Nd, Sm, and Hf in a solvent, the metal paste further including an inorganic oxide particle containing alumina and an insoluble particle that is insoluble in the solvent, in which 0.5 or more to 3.0 mass % or less of the inorganic oxide particle and 1.0 to 5.0 mass % of the insoluble particle are dispersed based on the mass of the solid content of the conductive particle, the ceramic powder, the inorganic oxide particle, and the insoluble particle.

Fluorinated compositions for ion source performance improvements in nitrogen ion implantation

Nº publicación: US2017330726A1  16/11/2017

Solicitantes: ENTEGRIS INC [US]

Resumen: Compositions, methods, and apparatus are described for carrying out nitrogen ion implantation, which avoid the incidence of severe glitching when the nitrogen ion implantation is followed by another ion implantation operation susceptible to glitching, e.g., implantation of arsenic and/or phosphorus ionic species. The nitrogen ion implantation operation is advantageously conducted with a nitrogen ion implantation composition introduced to or formed in the ion source chamber of the ion implantation system, wherein the nitrogen ion implantation composition includes nitrogen (N2) dopant gas and a glitching-suppressing gas including one or more selected from the group consisting of NF3, N2F4, F2, SiF4, WF6, PF3, PF5, AsF3, AsF5, CF4 and other fluorinated hydrocarbons of CxHy (x ≥ 1, y ≥ 1) general formula, SF6, HF, COF2, OF2, BF3, B2F4, GeF4, XeF2, O2, N2O, NO, NO2, N2O4, and O3, and optionally hydrogen-containing gas, e.g., hydrogen-containing gas including one or more selected from the group consisting of H2, NH3, N2H4, B2H6, AsH3, PH3, SiH4, Si2H6, H2S, H2Se, CH4 and other hydrocarbons of CxHy (x ≥ 1, y ≥ 1) general formula and GeH4.
FUNCTIONALIZED QUINACRIDONE PIGMENTS

Nº publicación US2017327692A1 16/11/2017
Solicitantes E INK CORP [US]
Resumen Quinacridone pigments that are surface-functionalized with glycidyl methacrylate, maleic anhydride, or 4-methacryloxyethyl trimellitic anhydride to create a functionalized pigment. The functional groups are then activated to bond hydrophobic polymers, thereby coating the pigment with the hydrophobic polymers. The quinacridone pigments can be used for a variety of applications. They are well-suited for use in electro-optic materials, such as electrophoretic media for use in electrophoreetic displays.
A conductive paste that includes conductive particles and a solvent. The solvent has a Hansen solubility parameter with an SP value of 24 to 39, a hydrogen bond term δh of 15 or more, and a polarity term δp of 7 or more. The conductive paste is applied to an unfired laminated ceramic green sheets and internal electrode layers.

Described herein are ink compositions comprising hole carrier compounds typically conjugated polymers, polymeric acids, and organic solvent, and uses thereof, for example, in organic electronic devices. The polymeric acid comprises one or more repeating units comprising at least one alkyl or alkoxy group which is substituted by at least one fluorine atom and at least one sulfonic acid moiety.
### SILVER FINE PARTICLE DISPERSION LIQUID

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<th>Nº publicación</th>
<th>KR20170126024A</th>
<th>15/11/2017</th>
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<td>Resumen</td>
<td>There is produced a fine silver particle dispersing solution which contains: fine silver particles (the content of silver in the fine silver particle dispersing solution is 30 to 90 % by weight), which have an average primary particle diameter of 1 to 100 nm and which are coated with an amine having a carbon number of 8 to 12, such as octylamine, serving as an organic protective material; a polar solvent (5 to 70 % by weight) having a boiling point of 150 to 300 °C; and an acrylic dispersing agent (1.5 to 5 % by weight with respect to the fine silver particles), such as a dispersing agent of at least one of acrylic acid ester and methacrylic acid ester.</td>
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### ELECTROCONDUCTIVE PASTE AND METHOD FOR MANUFACTURING ELECTROCONDUCTIVE FILM USING SAME

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<th>Nº publicación</th>
<th>EP3244420A1</th>
<th>15/11/2017</th>
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<tr>
<td>Solicitantes</td>
<td>DOWA ELECTRONICS MATERIALS CO [JP]</td>
<td></td>
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<tr>
<td>Resumen</td>
<td>After there is prepared a conductive paste which contains fine copper particles having an average particle diameter of 1 to 100 nm, each of the fine copper particles being coated with an azole compound, such as benzotriazole, coarse copper particles having an average particle diameter of 0.3 to 20 µm, at least one of a polyvinylpyrrolidone (PVP) resin and a polyvinyl butyral (PVB) resin, a chlorine compound, and a glycol solvent, such as ethylene glycol, the total amount of the fine copper particles and the coarse copper particles being 50 to 90 % by weight, and the weight ratio of the fine copper particles to the coarse copper particles being in the range of from 1:9 to 5:5, the conductive paste thus prepared is applied on a substrate by screen printing to be preliminary-fired by vacuum drying, and then, fired with light irradiation by irradiating with light having a wavelength of 200 to 800 nm at a pulse period of 500 to 2000 µs and a pulse voltage of 1600 to 3800 V to form a conductive film on the substrate.</td>
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NANO-SIZED SILVER PARTICLE INK

Nº publicación EP3243881A1 15/11/2017
Solicitantes TANAKA PRECIOUS METAL IND [JP]
Resumen Provided are a nano-sized silver particle ink formed by dispersing silver particles in a solvent, wherein the silver particle use a silver oxalate that has been wetted by 30 to 200 wt% of a solvent, as a silver raw material, a solvent was added to the silver particles and dissolved the silver particles such that the silver concentration after mixing was 20 to 50 wt% and the molar ratio of hexylamine with respect to dodecylamine finally included in the silver particle ink is 3:1 to 60:1, and the amount of oleic acid included in the silver particle ink is 0.02 to 0.30 mmol/g relative to the weight of silver and when a silver film formed by applying the ink on a substrate is dried and then sintered, a sintered body has a volume resistance of 8 to 25 µΩ·cm.

Conductive film comprising silver nano wire heater and manufacturing method thereof

Nº publicación KR20170125145A 14/11/2017
Resumen 본 발명은 은나노와이어를 포함하는 전도막, 발열체 및 그의 제조 방법에 관한 것으로, 고온 환경에서도 전기전도성과 헤이즈 특성을 유지하면서 우수한 발열 특성을 구현하기 위한 것이다. 본 발명에 따른 은나노와이어 전도막은 베이스 기판 위에 은나노와이어들이 서로 접촉되어 네트워크 구조를 형성하는 은나노와이어층을 포함한다. 은나노와이어층의 은나노와이어들의 표면은 금속 산화물로 코팅되어 보호된다.

Electroconductive ink composite including metal-organic precursor and polyhydric alcohol capable of heating in the air and method for forming the metal line using the same

Nº publicación KR20170124660A 13/11/2017
Resumen 본 발명은 환온을 둔 환온온 역할을 수행하는 알칼라아민, 또는 알칼라아민 및 아미노 리간드로 합성된 금속-포르메이트를 포함하는 금속 유기 전구체와 분산용액 및 다가 알코올(polyhydric alcohol)을 포함하며 공기 중에서 안전하게 열처리가 가능한 전도성 백색 조성물에 관한 것이다. 본 발명의 전도성 백색 조성물은 기판에 건조시켜 금속 배선을 형성하는 과정에서 백색 조성물에 첨가한 다가 알코올이 환원분위기를 형성하여, 기존의 질소 가스 등 고비용, 위험 조건에서의 금속 배선 형성이 아닌 일반 공기 중에서도 금속 배선을 형성할 수 있는 특성이 있어 위험성이 낮고 비용을 절감할 수 있는 효과를 가진다.
CONDUCTIVE COATED COMPOSITE BODY AND METHOD FOR PRODUCING SAME

Resumen

Provided are: a conductive coated composite body which has both good adhesion of a conductive coating film to a base and excellent electrical conductivity of the conductive coating film at the same time even in cases where a glass base or a base having low heat resistance is used; and a method for producing this conductive coated composite body. A conductive coated composite body which is characterized by comprising: a base; a resin layer that is formed on at least a part of the base; and a conductive coating film that is formed on at least a part of the resin layer. This conductive coated composite body is also characterized in that: the conductive coating film is a sintered body of silver fine particles; the main component of the resin layer is a polyurethane resin having an elongation at break of 600% or more; and the polyurethane resin has one of the functional groups represented by -COO-H, -COOR, -COO-NH+R2 and -COO-NH4 + (wherein each of R and R2 independently represents a linear or branched, optionally substituted alkyl group, a linear or branched, optionally substituted cycloalkyl group, a linear or branched, optionally substituted alkylene group, a linear or branched, optionally substituted alkoxy group, a linear or branched, optionally substituted oxyalkylene group, a linear or branched, optionally substituted aryl group, a linear or branched, optionally substituted aralkyl group, a linear or branched, optionally substituted heterocyclic group, a linear or branched, optionally substituted alkoxy group, a linear or branched,

AQUEOUS CONDUCTIVE COATING

Resumen

An aqueous composition is provided comprising a resin, a curative, a filler, a surfactant, and water; wherein the resin comprises an average molecular weight of less than about 800 Daltons and comprises at least 50 weight percent of at least one of: (a) an unmodified epoxy or phenoxy resin, or (b) a surfactant-modified epoxy or phenoxy resin. This composition, applied to a substrate and dried, can then be cured so as to thermoset the resin and self-assemble to form continuous pathways of filler within the resin matrix.
Ink Composition for High-Quality/High-Definition Screen Printing, Printed Matter Produced by the Screen Printing Ink Composition, and Method for Producing the Printed Matter

Nº publicación US2017321072A1  09/11/2017
Solicitantes TEIKOKU PRINTING INKS MFG CO LTD) [JP]
Resumen An ink composition for high-quality/high-definition screen printing that, when producing printed matter by screen printing on an object to be printed using a 360-mesh screen printing plate formed by a high-strength, non-deforming stainless steel mesh with a filament diameter of 25 μm, produces printed matter with a printed image edge spreading width of no more than 10 μm from the image design dimensions of the printing plate, the ink composition for screen printing containing a solvent with a boiling point of 170° C. or higher at 70 wt % or greater of the total solvent, and a prepolymer or polymer with a weight-average molecular weight of 2000 or greater at 2 wt % or greater with respect to the total ink composition, and having a viscosity of 30 to 180 Pa·s as measured with a BH-type rotating viscosimeter at 25° C., and a thixotropic index of 2.0 to 8.0.

ELECTRICALLY CONDUCTIVE, COLORED INTERFERENCE PIGMENTS

Nº publicación US2017321058A1  09/11/2017
Solicitantes MERCK PATENT GMBH [DE]
Resumen The present invention relates to electrically conductive, coloured interference pigments, in particular flake-form interference pigments, which have an outermost layer which comprises crystalline carbon in the form of graphite and/or graphene, to a process for the preparation of such pigments, and to the use of the pigments prepared in this way.
COATINGS CONTAINING CARBON COMPOSITE FILLERS AND METHODS OF MANUFACTURE

Nº publicación US2017321069A1 09/11/2017
Solicitantes ZHAO LEI [US]
XU ZHIYUE [US]
RICHARD BENNETT M [US]
BAKER HUGHES INC [US]
Resumen An article comprises a substrate, a coating disposed on a surface of the substrate. The coating comprises a carbon composite dispersed in one or more of the following: a polymer matrix; a metallic matrix; or a ceramic matrix. The carbon composite comprises carbon and a binder containing one or more of the following: SiO2; Si; B; B2O3; a filler metal; or an alloy of the filler metal.

Durable and Flexible Ink Composition for High-Quality/High-Definition Screen Printing, Printed Product Obtained by Screen Printing Said Ink Composition, and Manufacturing Method for Said Printed Product

Nº publicación US2017320345A1 09/11/2017
Solicitantes TEIKOKU PRINTING INKS MFG CO LTD [JP]
Resumen An ink composition for screen printing having a measured flow radius value 13.0 to 24.0 mm after 1 minute from the start of measurement by a flow property measuring method using a spread meter at 25° C. according to JIS K5701-1:2000, “F60”−“F45”≦ 1.0 mm is satisfied, wherein “F60” and “F45” are defined as measured flow radius values after 1 minute and 45 seconds, respectively, from the start of measurement by the flow property measuring method, the viscosity is 5 to 180 Pa·s, the thixotropic index is 2.0 to 8.0, the composition contains a solvent with a boiling point at least 170° C. at least at 70 mass % and a thermoplastic polymer with a weight-average molecular weight of at least 4000 and with a Tg of 20 to 95° C. at least at 10 mass %, wherein the printed image coating film has an elongation percentage at least 250%.

COATINGS CONTAINING CARBON COMPOSITE FILLERS AND METHODS OF MANUFACTURE

Nº publicación WO2017192223A1 09/11/2017
Solicitantes BAKER HUGHES INC [US]
Resumen An article comprises a substrate, a coating disposed on a surface of the substrate. The coating comprises a carbon composite dispersed in one or more of the following: a polymer matrix; a metallic matrix; or a ceramic matrix. The carbon composite comprises carbon and a binder containing one or more of the following: SiO2; Si; B; B2O3; a filler metal; or an alloy of the filler metal.
POLYMER COMPOSITION, INK COMPOSITION AND METHOD FOR SELECTIVELY METALLIZING INSULATING SUBSTRATE

Resumen
An application of a doped tin oxide, used as a chemical plating promoter in a method for selectively metallizing a surface of an insulating substrate is provided. A polymer composition including the doped tin oxide, a polymer molded body, an ink composition and a method for selectively metallizing a surface of an insulating substrate are also provided. The doped tin oxide has a light color, and does not interfere the color of the substrate while presetting thereof. The doped tin oxide has a strong ability of promoting chemical plating; while using it as a chemical plating promoter, a continuous metal layer can be formed with a high plating speed, together with higher adhesive between the metal layer and the insulating substrate.

SEALING WEB ACTIVATABLE WITHOUT OPEN FLAME AND HAVING A HOT-MELT ADHESIVE COATING, AND METHOD FOR APPLYING SAID SEALING WEB

Resumen
The invention relates to composite films that comprise a water-impermeable substrate layer composed of plastic having a coating, which comprises a planar element composed of an electrically conductive material and a hot-melt adhesive. In such composite films, the hot-melt adhesive can be selectively heated and activated by induction, and therefore the hot-melt adhesive can also be activated in a contactless manner from the side of the composite film opposite the hot-melt adhesive layer. In the application of roof membranes, this leads to the advantage that the membrane no longer has to be moved after the activation of the hot-melt adhesive and can be laid in final positions of the membrane even before the activation of the hot-melt adhesive. In addition, by means of such composite films, the need to activate the hot-melt adhesive by means of open flames is avoided and thus the hazard potential of the processing is significantly reduced. The invention further relates to a method for applying corresponding composite films to a substrate, in particular to concrete and to roof structures, wherein the hot-melt adhesive layer is activated and melted by means of an inductor.

STRETCHABLE POLYMER THICK FILM COMPOSITIONS FOR THERMOPLASTIC SUBSTRATES AND WEARABLES ELECTRONICS

Resumen
This invention is directed to stretchable polymer thick film compositions useful for wearable garments. More specifically, the polymer thick film may be used in applications where significant stretching is required, particularly on substrates that can be highly elongated. A particular type of substrate is a thermoplastic polyurethane substrate.
METHODS TO CONTROL ELECTRICAL RESISTIVITY IN FILLER-POLYMER COMPOSITIONS AND PRODUCTS RELATED THERETO

Nº publicación JP2017200994A 09/11/2017
Resumen Methods to control electrical resistivity in filler-polymer compositions are described using dual phase fillers. Polymer compositions containing the dual phase fillers are further described.

HIGH-MOLECULAR COMPOUND, INTERMEDIATE COMPOSITION, NEGATIVE ELECTRODE, ELECTRICAL STORAGE DEVICE, SLURRY FOR NEGATIVE ELECTRODE, METHOD FOR PRODUCING HIGH-MOLECULAR COMPOUND, AND METHOD FOR PRODUCING NEGATIVE ELECTRODE

Nº publicación US2017324094A1 09/11/2017
Solicitantes KK TOYOTA JIDOSHOKKI [JP]
Resumen This high-molecular compound, used as a binder for the negative electrode of an electrical storage device, is formed by condensing polyacrylic acid and a multifunctional amine shown in general formula (1), wherein Y represents a straight-chain alkyl group with a carbon number 1-4, a phenylene group, or an oxygen atom, and each of R1 and R2 independently represents at least one hydrogen atom, a methyl group, an ethyl group, a trifluoromethyl group, or a methoxy group.
ORGANIC SEMICONDUCTOR COMPOSITION AND METHOD FOR MANUFACTURING ORGANIC SEMICONDUCTOR ELEMENT

Nº publicación EP3242339A1 08/11/2017
Solicitantes FUJIFILM CORP [JP]
Resumen An object of the present invention is to provide an organic semiconductor composition, which makes it possible to obtain an organic semiconductor film having high mobility and being excellent in film uniformity and heat resistance, and a method for manufacturing an organic semiconductor element. The organic semiconductor composition of the present invention contains an organic semiconductor as Component A and an organic solvent, which is represented by Formula B-1 and has a melting point of equal to or lower than 25°C and a boiling point of equal to or higher than 150°C and equal to or lower than 280°C, as Component B, in which an ionization potential of Component A is equal to or higher than 5.1 eV. In the formula, X represents O, S, S=O, O=S=O, or NR, Y1 to Y4 each independently represent NR1 or CR10R11, R, R1, R10, and R11 each independently represent a hydrogen atom or a substituent, and n represents 1 or 2.

Method for Manufacturing Flexible Information Display Device Comprising Tranfer Process of Detaching Assist Layer

Nº publicación KR20170122307A 06/11/2017
Resumen 본 발명은 플렉시블 정보 표시 소자를 제조하는 방법으로서, (a) 상대적으로 유연한 제 1 기재의 적어도 일면에 박리 조력층을 형성하는 과정; (b) 상대적으로 경직한 제 2 기재의 적어도 일면에 제 1 기재의 박리 조력층을 전사하는 과정; (c) 제 2 기재에 전사된 박리 조력층 상에 플렉시블 기판을 형성하고, 상기 플렉시블 기판 상에 정보 표시 소자를 형성하는 과정; 및 (d) 상기 제 2 기재로부터 플렉시블 기판을 박리하는 과정;을 포함하는 것을 특징으로 하는 플렉시블 정보 표시 소자의 제조 방법에 관한 것이다.

Precoating for impinger for shot peenning and commitment equipment

Nº publicación KR20170121886A 03/11/2017
Resumen 본 발명은 소트피닝을 위한 집진장치의 프리코팅재 투입장치에 관한 것으로, 보다 상세하게는 소트피닝 작업 중에 발생하는 분진을 포집하는 집진장치에서 분진에 의하여 발생되는 화재를 방지하는 프리코팅재를 정량으로 공급할 수 있도록 하여 재료낭비방지 및 안전성을 향상시킬 수 있도록 발명한 것이다. 본 발명의 구성은, 소트피닝장치(10)를 구성하는 소트피닝챔버(16)에서 가공물(13)과 소트의 충돌로 발생하는 분진을 사이클론(19)에 공급하는 분진이송파이프(18)에 연결되어 프리코팅재 투입장치(100)에 있어서; 상기 프리코팅재 투입장치(100)는, 프리코팅재가 공급되는 프리코팅재 공급부(110)와; 상기 프리코팅재 공급부(110)를 통해 공급된 프리코팅재를 승강이송하는 승강이동부(120)와; 상기 승강이동부(120)를 통해 이송된 프리코팅재가 상부투입구(131)를 통해 투입되어 내부에 구비된 흐로(132)에 보류되면서 하부 배출구(133)로 배출하는 케이싱(130)과; 상기 케이싱(130)의 흐로(132) 내부에 설치되어, 동력부(M)에 의해 회전하면서 흐로(132) 내부에 보유된 프리코팅재를 교반하는 교반기(140)와; 상기 케이싱(130)의 하부 배출구(133)에 결합되어, 동력부(M)와 연결된 스크류(151)의 회전으로 배출
Manufacturing method of transparent electromagnetic wave shield film using copper ink comprising copper nano particle and laser sintering

Nº publicación: KR20170121985A   03/11/2017

Resumen: 본 발명은 구리포메이트-아민 콤플렉스를 열분해하여 구리 나노 입자를 제조하고, 구리 나노 입자를 용매와 바인더에 혼합하여 구리 잉크를 제조한 후, 기판에 인쇄한 뒤, 레이저를 사용하여 선택적으로 소결시켜 차폐 패턴을 제조함으로써, 레이저 소결을 이용한 투명 전자파 차폐 필름을 제조하는 방법에 관한 것이다.

VARNISH FOR FORMATION OF CHARGE-TRANSPORTING THIN FILM

Nº publicación: JPWO2016117521A1   02/11/2017

Resumen: Provided is a varnish for the formation of a charge-transporting thin film, sa id varnish including an organic solvent, a charge-transporting substance, and a 2,2,6,6-tetraalkylpiperidine-N-oxyl derivative represented by formula (T1) ( in the formula, each RA independently represents a C1-20 alkyl group, and RB represents a hydrogen atom, a hydroxy group, an amino group, a carboxyl group, a cyano group, an oxo group, an isocyanato group, a C1-20 alkoxy group, a C2-2 0 alkylcarbonyloxy group, a C7-20 arylcarbonyloxy group, a C2-20 alkylcarbonyl amino group or a C7-20 arylcarbonylamino group).

DISPERSION OF SILVER PARTICLES, INK COMPOSITION, SILVER ELECTRODE, AND THIN FILM TRANSISTOR

Nº publicación: JPWO2016093050A1   02/11/2017

Resumen: Provided are: a dispersion of silver particles comprising an aqueous medium, and organic particles and silver particles dispersed in the aqueous medium, wherein the silver particles are dispersed in the aqueous medium by a nonionic dispersant, and the contact angle of water on a film formed using the dispersion of silver particles is 60°or more; an ink composition using the dispersion of silver particles; a silver electrode using the ink composition; and a thin fi lm transistor comprising the silver ele ctrode.
INK COMPOSITION AND PHOTOELECTRIC CONVERSION ELEMENT PRODUCED USING SAME

Resumen
The present invention provides an ink composition comprising a P-type semiconductor material, an N-type semiconductor material, and two or more types of solvents including a first solvent and a second solvent, wherein the total weight of the first solvent and the second solvent is 70 wt% or more with respect to 100 wt% of all solvents contained in the ink composition, the boiling point of the first solvent is lower than the boiling point of the second solvent, the boiling point of the first solvent is between 120°C and 400°C, inclusive, and the hydrogen-bonding Hansen solubility parameter of the first solvent, H1 (MPa0.5), and the hydrogen-bonding Hansen solubility parameter of the second solvent, H2 (MPa0.5), are in the relationship 0.5≤(H2-H1)≤5.0.

CARBON NANOTUBE DISPERSION, METHOD FOR PRODUCING SAME, AND CONDUCTIVE MOLDED BODY

Resumen
A carbon nanotube dispersion that includes a carbon nanotube-containing composition, a cellulose derivative of a particular structure, and an organic solvent, the organic solvent including at least one type selected from aprotic polar solvents or terpenes, the concentration of the carbon nanotube-containing composition included in the carbon nanotube dispersion being 1 mass% or less, and when the dispersion is subjected to centrifugation for ten minutes at 10,000 G and 90 vol% is recovered as a supernatant, the concentration of the carbon nanotube dispersion of the supernatant portion being 80% or more of the concentration of the carbon nanotube dispersion before the centrifugation. Thus, the carbon nanotube dispersion, which exhibits high conductivity on a substrate by exhibiting excellent dispersion in an organic solvent, and a method for producing the carbon nanotube dispersion are provided.

ORGANIC SEMICONDUCTOR COMPOSITION AND METHOD FOR MANUFACTURING ORGANIC SEMICONDUCTOR ELEMENT

Resumen
The purpose of the present invention is to provide: an organic semiconductor composition with which it is possible to obtain an organic semiconductor film exhibiting excellent film uniformity and heat resistance while having high mobility; and a method for manufacturing an organic semiconductor element. This organic semiconductor composition is characterized in containing, as component A, an organic semiconductor, and as component B, an organic solvent which is represented by formula B-1 and which has a melting point of 25°C or lower and a boiling point of 150-280°C, the ionization potential of component A being 5.1 eV or higher. In the formula: X represents O, S, S=O, O=S=O, or NR; each of Y1-Y4 independently represents NR1 or CR10R11; each of R, R1, R10, and R11 independently represents a hydrogen atom or a substitution group; and n represents 1 or 2.
Composición compuesta de nanofilamentos de plata y perlas de polímero disueltas para la preparación de capas transparentes electroconductoras

Resumen
Described is a composition suitable for the preparation of an electroconductive transparent layer, said composition comprising silver nanowires and dispersed polymer beads.

Composición compuesta de nanofilamentos de plata y copolímeros de estireno/(methyl)ácido para la preparación de capas transparentes electroconductoras

Resumen
Described is a composition suitable for the preparation of an electroconductive transparent layer said composition comprising silver nanowires and dissolved styrene/(meth)acrylic copolymers.

Sistema y método para la fabricación de un arreglo de micropilares

Resumen
A system and method for manufacturing a micropillar array (20). A carrier (11) is provided with a layer of metal ink (20i). A high energy light source (14) irradiates the metal ink (20i) via a mask (13) between the carrier (11) and the light source. The mask is configured to pass a cross-section illuminated image of the micropillar array onto the metal ink (20i), thereby causing a patterned sintering of the metal ink (20i) to form a first subsection layer (21) of the micropillar array (20) in the layer of metal ink (20i). A further layer of the metal ink (20i) is applied on top of the first subsection layer (21) of the micropillar array (20) and irradiated via the mask (13) to form a second subsection layer (21) of the micropillar array on top. The process is repeated to achieve high aspect ratio micropillars 20p.

Composición compuesta de nanofilamentos de plata y fibras de celulosa cristalina para la preparación de capas transparentes electroconductoras

Resumen
Described is a composition suitable for the preparation of an electroconductive transparent layer, said composition comprising silver nanowires and fibers of crystalline cellulose.

Composición de partículas de plata para impresión

Resumen
Provided is a silver coating composition with which excellent electric conductivity (low resistance) is achieved by baking at a low temperature for a short time and which has excellent printability. The present invention is a silver particle coating composition comprising silver nanoparticles, the surfaces of which are coated with an aliphatic hydrocarbon amine-containing protectant, and a dispersion solvent, said dispersion solvent comprising a solvent selected from a group consisting of glycol ether solvents and glycol ester solvents. Said silver particle coating composition is ideal for various kinds of printing uses such as intaglio offset printing and screen printing.
COMPOSITION FOR ELECTROMAGNETIC SHIELDING OF ELECTRONIC DEVICE AND METHOD FOR MANUFACTURING ELECTROMAGNETIC SHEILDING COATING LAYER OF THE SAME

Nº publicación KR20170120343A 31/10/2017
Solicitantes NTRIUM INC [KR]

Resumen  전자부품용 전자파차폐층의 형성방법이 개시된다. 본 발명에 의한 전자부품용 전자파차폐층의 형성방법은 전자부품을 제공하는 단계, 상기 전자부품에 전자파차폐 조성물을 스프레이 도포하되 스프레이 도포시 상기 전자부품의 하부를 가열하여 상기 비점이 낮은 유기용제의 기화를 촉진시키는 전자파차폐 조성물의 반경화 단계 및 상기 전자파차폐용 조성물을 완전히 경화시키는 단계를 포함한다. 본 발명에 의한 전자부품의 전자파차폐층의 형성방법은 전자부품의 표면에 전자파차폐층을 균일하게 형성함으로써 전자파차폐 효율을 증진시킬 수 있다. 특히, 스프레이 분사에 의한 전자부품의 전자파차폐층 형성시 모서리 부분에서의 차폐층의 두께를 균일하게 유지함으로써 전자부품의 차폐효율을 보다 증진시킬 수 있다.