



New connection on: : 05-04-2018 : 05:36:39 - Last disconnection on: : 04-04-2018 : 21:51:14

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

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[No database/cluster active] ..fi epodoc

 Database: EPODOC

[EPODOC: SS 1] (surface d2 (method or treatment or process) and substrate and alkaline and acid

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[SS 1] (surface d2 (method or treatment or process)) and substrate and alkaline and acid

An operator is missing. *ERROR(-101310)*

[SS 1] (surface 2d (method or treatment or process)) and substrate and alkaline and acid

Results in EPODOC 79

[SS 2] * and PD<2014-05-26

Results in EPODOC 58

[SS 3] ..v

[EPODOC: SS 3] ..li 1-10

Unknown command or preparation. [More info](#) *ERROR(-104000)*

[SS 3] ..li 1-10



1/58 © EPODOC / EPO

PN - [TW200745387](#) A 20071216

PR - TW20060120089 20060606

AP - TW20060120089 20060606

DT - I

PA - CHEN TAI-ZUO [TW]

TI - **Method** for treating **surface** of tool

AB - The present invention provides a **method** for treating **surface** of a tool, which mainly comprises forming a metal layer with a gun tube's color on the surface of the tool, in which more than two layering techniques are used. Other than cleaning operation, a first layering step (e.g. electroplating or baking or other means) is used to form a nickel **substrate** layer. A second adjustment coating layer comprises installing a gun tube's color layer on the surface of the **substrate** layer in order to form a gun tube's color on the surface of a tool. The second adjustment coating layer is formed by darkening the color of the nickel **substrate** layer (by immersion in a chemical solution containing nickel and tin, electroplating or baking or coloring) in order to form a gun tube's color. After the formation of the nickel and tin coating layer and coloring, a highly stable and **acid**-resistant and **alkaline**-resistant structure is formed. Furthermore, an un-conventional gun tube's color achieves the effect of practical and beautiful.

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PN - [TW200736368](#) A 20071001

PR - JP20060046332
20060223; JP20060176958
20060627

AP - TW20070103129 20070129

DT - I

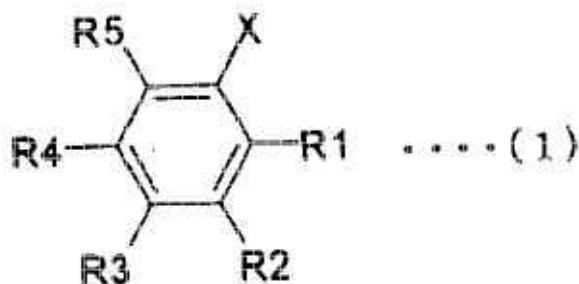
CCI - [H01L31/02363](#) ; [H01L31/075](#) ;
[H01L31/1804](#)

CCA - [Y02E10/548](#) ; [Y02E10/547](#) ;
[Y02P70/521](#)

PA - SANYO ELECTRIC CO [JP]

TI - Method for making
undulated **substrate** and method
for making light emitting element

AB - This invention provides a
method for making an
undulated **substrate** by dipping a
crystalline silicon **substrate** in
an **alkaline** solution to perform
an anisotropic etching of the
surface of the **substrate**, to form
an undulated construction of
the **surface**. The **method** is
characterized in having an
additive represented by the
following general formula (I) in
the **alkaline** solution: Wherein X
represents any one of carboxyl
sulfuric **acid**, sulfate ester,



phosphate ester, and quaternary ammonium, R1~R5 are any one of hydrogen, alkyl, alkenyl, and alkoxy; at least one of R1~R5 contains 3 or more than 3 carbon atoms.

3/58 © EPODOC / EPO

PN - [TW201412945](#) A 20140401
PR - JP20120153973 20120709
AP - TW20130124604 20130709
DT - I
CCI - [C09K13/06](#) ; [H01L31/02363](#)
CCA - [Y02E10/50](#)
PA - SETTSU OIL MILL INC [JP]
TI - Etching fluid, etching force recovery agent, method for manufacturing semiconductor **substrate** for solar cell, and semiconductor **substrate** for solar cell
AB - In the present invention, an **alkaline** etching fluid which contains at least one selected from a specified sulfonic **acid** compound or salt thereof, and silicic **acid** and/or a silicate, is used to **process** the **surface** of a semiconductor **substrate** for a solar cell. The sulfonic **acid** compound of the present invention is preferably p-toluenesulfonic **acid**.

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PN - [WO2014010471](#) A1 20140116
PR - JP20120153973 20120709
AP - WO2013JP68150 20130702
DT - *; Rep
CT - [JP] ISR (A1)
[JP2007258656](#) A 20071004 [Y] (SANYO ELECTRIC CO);
[JP2012004528](#) A 20120105 [Y] (SHINRYO AIR COND);
[WO2012023613](#) A1 20120223 [Y] (TOKUYAMA CORP [JP], et al);
[WO2011114675](#) A1 20110922 [Y] (MITSUBISHI ELECTRIC CORP [JP], et al);
[JP2013089629](#) A 20130513 [XP] (SHINRYO AIR COND)
CCI - [C09K13/06](#) ; [H01L31/02363](#)
CCA - [Y02E10/50](#)
PA - SETTSU OIL MILL INC [JP]
TI - ETCHING FLUID, ETCHING FORCE RECOVERY AGENT, METHOD FOR MANUFACTURING SEMICONDUCTOR **SUBSTRATE** FOR SOLAR CELL, AND SEMICONDUCTOR **SUBSTRATE** FOR SOLAR CELL
AB - In the present invention, an **alkaline** etching fluid which contains at least one selected from a specified sulfonic **acid** compound or salt thereof, and silicic **acid** and/or a silicate, is used to **process** the **surface** of a semiconductor **substrate** for a solar cell. The sulfonic **acid** compound of the present invention is preferably p-toluenesulfonic **acid**.

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- PN - [US2013052774](#) A1 20130228
- PR - JP20100147853 20100629; WO2011JP64921 20110629
- AP - US201113697227 20110629
- DT - *; Rep
- CT - || R141 (A1)
[US2004142835](#) A1 [];
[US6066571](#) A [];
[US5676760](#) A [];
[US2008044990](#) A1 [];
[US2007014915](#) A1 [];
[US7928446](#) B2 [];
[US2009095346](#) A1 [];
[US2010037952](#) A1 [];
[US2005006348](#) A1 [];
[US6228823](#) B1 [];
[US2006199399](#) A1 [];
[US7179746](#) B2 [];
[US8268735](#) B2 [];
[JPH1160377](#) A [];
[JP2010051900](#) A [];
[US2009050901](#) A1 []
- CTNP - || R141 (A1)
[] Neutralization, UCDAVISChemwiki, retrieved from
http://chemwiki.ucdavis.edu/Physical_Chemistry/Acids_and_Bases/Acid%2F%2FBase_Reactions/Neutralization
- CCI - [H01L21/2255](#) ; [H01L31/068](#) ; [H01L31/1868](#)
- CCA - [Y02E10/547](#) ; [Y02P70/521](#)
- PA - KUROBE KENICHI [JP]; KYOCERA CORP [JP]
- TI - **METHOD FOR SURFACE-TREATING SEMICONDUCTOR SUBSTRATE, SEMICONDUCTOR SUBSTRATE, AND METHOD FOR PRODUCING SOLAR BATTERY**
- AB - Disclosed is a **method** for **surface**-treating a semiconductor **substrate** to thereby reduce loss of minority carriers caused by surface recombination and improve the lifetime. In the method, a semiconductor **substrate** is prepared. An **acid** additive and an **alkaline** additive are added to water to obtain an aqueous solution having a pH of not more than 7. The aqueous solution comprises no hydrofluoric **acid**. A dangling bond at a surface of the semiconductor **substrate** is hydrogen-terminated. The surface, at which the dangling bond has been hydrogen-terminated, is brought into contact with the aqueous solution.

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- PN - [TW201212755](#) A 20120316
- PNFP - TWI536884B B 20160601
- PR - JP20100097702 20100421
- AP - TW20110113715 20110420
- DT - I

CCI - [H05K3/0055](#)

CCA - [H05K3/0032](#)

PA - (A)
UYEMURA & AMP CO LTD C [JP]

- (B)
UYEMURA C & CO LTD [JP]

TI - (A B)
Method and agent for surface processing of printed circuit board **substrate**

AB - (A)
To provide a **surface treatment method** and a **surface** treating agent, with which a smear occurring in a via and the like can effectively be removed without performing treatment using permanganate and the like which is a large load to an environment and an operator and which is expensive and without etching an inner layer metal, and adhesion and connection reliability of an inner layer metal circuit and a plated metal are improved. In the **surface treatment method** of a printed wiring board, the smear remaining in a hole such as a blind via, a through hole and a trench formed in the printed wiring board including a resin is removed without etching the inner layer metal. The printed wiring board is immersed in a first treatment liquid which includes at least peroxide and is weak **acid** to weak **alkaline**, and the printed wiring board is immersed in a second treatment liquid including at least an alkali compound and an organic solvent.

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PN - [JP2012138151](#) A 20120719

PNFP - JP5821188B B2 20151124

PR - JP20100289647 20101227

AP - JP20100289647 20101227

DT - I

CT - || STSE (A)
[JP2004059419](#) A 20040226 [] (NIPPON SHEET GLASS CO LTD);
[US2003232173](#) A1 20031218 [] (SAITO YASUHIRO [JP], et al);
[JP2003212603](#) A 20030730 [] (NIPPON SHEET GLASS CO LTD);
[US2003170417](#) A1 20030911 [] (SAITO YASUHIRO [JP], et al);
[WO2012001924](#) A1 20120105 [] (KONICA MINOLTA OPTO INC [JP], et al);
[JP2005089259](#) A 20050407 [] (NIPPON ELECTRIC GLASS CO);
[JP2005097090](#) A 20050414 [] (NIPPON ELECTRIC GLASS CO)

FI - C03C15/00&B; C03C23/00&A; G11B5/84&A; G11B5/84&Z

FT - 4G059/AA09; 4G059/AC03; 4G059/BB12; 5D112/AA02; 5D112/AA24; 5D112/BA03; 5D112/BA09; 5D112/BA10; 5D112/GA08; 5D112/GA09; 5D112/GA26; 5D112/GA27

PA - (A)
ASAHI GLASS CO LTD

TI - (A)
METHOD FOR MANUFACTURING GLASS **SUBSTRATE** FOR INFORMATION RECORDING MEDIUM

AB - (A)
PROBLEM TO BE SOLVED: To provide a glass **substrate** for a magnetic disk information

recording medium without causing a foreign matter defect on the glass **substrate** surface when a glass **substrate** for an information recording medium is manufactured from a glass **substrate** containing an **alkaline** earth metal oxide. SOLUTION: A method for manufacturing a glass **substrate** for an information recording medium comprises: a disk processing step for processing a glass plate containing CaO, SrO and BaO into a glass disk; a wrapping step for wrapping the main surface of the glass disk; a main surface polishing step for polishing the wrapped main surface of the glass disk; and between, within or after the above steps, a step of performing **surface treatment** of the glass disk. A treatment liquid used for the **surface treatment** contains at least one selected from nitric **acid**, acetic **acid**, hydrochloric **acid**, perchloric **acid**, propionic **acid**, butyric **acid**, tartaric **acid**, malonic **acid**, malic **acid**, succinic **acid**, fumaric **acid**, maleic **acid**, hydrobromic **acid**, hydriodic **acid**, alkylsulfonic **acid** and alkylphosphonic **acid**.

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PN - [CN102586775](#) A 20120718

PNFP - CN102586775B B 20140521

PR - CN2012116195 20120118

AP - CN2012116195 20120118

DT - I

CT - || STSE (A)
[CN102174289](#) A 20110907 [Y] (UNIV SHANGHAI JIAOTONG, et al)
[Y] 1-16
[CN101481553](#) A 20090715 [A] (CHANGZHOU NANOCOATING CO LTD [CN])
[A] 1-16
[CN101709147](#) A 20100519 [A] (INST ELECTRICAL ENG CAS)
[A] 1-16

CTNP - || STSE (A)
[] Daniel R. Dreyer et al, "The chemistry of graphene oxide",
<<Chem. Soc. Rev.>>, (20101231), no. 39
[] <<石墨烯-结构,制备方法与性能表征>> 20111130 朱宏伟等 石墨烯-结构,制备方法与性能表征,
[Y] E.Grazenaite et al, "GRAPHITE OXIDE AND GRAPHENE COATING ON
METAL SURFACES", <<10th INTERNATIONAL CONFERENCE OF
LITHUANIAN CHEMISTS>>, (20110815), PAGE 48
[Y]
1-16
48
[A] "石墨烯-结构,制备方法与性能表征", 朱宏伟等, <<石墨烯-结构,制备方法与性能表征>>
[A]

PA - (A B)
UNIV SHANGHAI JIAOTONG; SHANGHAI AIRCRAFT MFG CO LTD

TI - (A B)
Surface preservative treatment method for aviation aluminium alloy material

AB - (A)
The invention discloses a method for forming one layer of sol-gel coating with a

compact reticular crosslinking structure on the surface of the aviation aluminium alloy **substrate** material. The coating and an atom on the surface of the aluminium alloy **substrate** material can be firmly combined by the action of a chemical bond, and the coating has good adhesive force on the **substrate** material. In the method, graphene is added in a coating ingredient to participate in the crosslinking structure, and therefore the anti-corrosion capability of the coating is enhanced. The coating prepared by the method has strong anti-corrosion capability and adhesive force on the surface of aviation aluminium alloy. In addition, the coating has good chemical stability and thermal stability and can resist the influence on the coating because of an external **acid** and **alkaline** environment and temperature variation. The method is simple, is convenient to operate, has low requirement on equipment, is environmentally friendly and is free from pollution.

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PN - [TW201014906](#) A 20100416

PNFP - TWI518178B B 20160121

PR - JP20080262982 20081009

AP - TW20090134348 20091009

DT - I

CCI - [C09K13/02](#) ; [H01L21/02052](#) ; [H01L21/30608](#)

PA - (A B)
KANTO KAGAKU [JP]

TI - (A)
Alkaline aqueous solution composition for treating a **substrate**

AB - (A)
An aqueous solution of ammonia, tetramethylammonium hydroxide and sodium hydroxide, etc. has been used as a cleaning liquid and an etching liquid of a semiconductor **substrate** and a glass **substrate**. However, the metal impurities in the alkali components are adsorbed onto the **substrate surface** during **treatment**, so that a process for removing the adsorbed metal impurities is necessary as the next process. In addition, in the case of the cleaning liquid, though it is effective in the removal of fine particles, the metal impurities cannot be cleaned, so that it is necessary to carry out **acid** cleaning, which makes the process complicated. According to the present invention, the **alkaline** aqueous solution for treating a **substrate** wherein an alkali component and a specific chelating agent are combined prevents adsorption of metal impurities onto the **substrate**, and further cleans and removes the metals adhered to the **substrate**. If necessary, it is also possible to add a metal anticorrosive and a surfactant to suppress corrosion of the metal materials, or enhance affinity to the **substrate** and ability for removing fine particles.

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PN - [CN102091607](#) A 20110615

PR - CN20101607454 20101227

AP - CN20101607454 20101227

DT - I

CT - || STSE (A)

[CN1958151](#) A 20070509 [] (BONA SOLID MATERIALS TECH CO L [CN])

- PA - TIANJIN BONNA AGELA TECHNOLOGIES CO LTD
- TI - Multi-layer structure high-purity bonded silica gel chromatographic filler and preparation method thereof
- AB - The invention provides a multi-layer structure high-purity porous silica gel and a preparation method thereof, and further provides a corresponding multi-layer structure high-purity porous bonded chromatographic filler and a corresponding preparation method thereof on the basis. High-purity silica sol is agglomerated and sintered at high temperature to form high-purity porous spherical silica gel; and a new surface with low activity, low acidity and good uniformity is obtained through **surface acid treatment** and silicate ester treatment. On the silica gel **substrate**, a series of silane stationary phases are bonded to form the chromatographic filler with good chromatographic separation property, particularly with good separation property for **alkaline** compounds. Due to treatment of ortho-silicate, the number of surface silanols is further improved, the surface activity and acidity are reduced, and the surface is uniform. After the chromatographic filler is further bonded with C18 methyl dichloresilane and subjected to end-capping, the property, particularly separation property for **alkaline** compounds, of the obtained reversed phase chromatographic filler is obviously improved.