

Search history

Search 1: FT=(Thin films and nickel and copper and oxynitride) and IC=(C23C14/34) (Results 64)
Search 2: FT=(Thin films and nickel and copper and oxynitride and argon flow) and IC=(C23C14/34) (Results 7)

1) Family number: 53736117 (US2014312336A)

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Title: ORGANIC DISPLAY PANEL, ORGANIC DISPLAY DEVICE, ORGANIC LIGHT EMITTING DEVICE, METHOD OF MANUFACTURE OF THESE, AND THIN FILM FORMATION METHOD

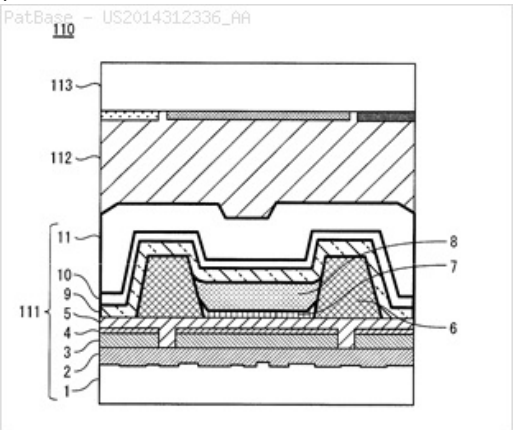
Abstract: An organic display panel having a high luminance, and including an organic light emitting element that includes a bottom electrode, a hole-injection layer, an organic light emitting layer, and a top electrode layered in the stated order on a substrate. The bottom electrode is composed of a material that is aluminium, silver, or an alloy including at least one of aluminium and silver. The hole-injection layer contains an oxide of a transition metal. The organic light emitting element further includes a mixed oxidized thin film interposed between and in contact with the bottom electrode and the hole-injection layer, the mixed oxidized thin film being composed of an oxidized mixture of the same material as the material in the bottom electrode and the same transition metal as the transition metal in the hole-injection layer.

Classifications:

International (IPC 8-9): C23C14/00 C23C14/06 C23C14/08 C23C14/14 C23C14/34 C23C4/08 C23C4/10 C23C4/18 H01L51/00 H01L51/50 H01L51/52 H01L51/54 H01L51/56 H05B33/10 H05B33/14 H05B33/26 (Advanced/Invention); H01L27/32 (Advanced/Non-invention)

CPC: H01L51/001 C23C14/14 C23C14/34 C23C14/081 C23C14/08 H01L51/5088 C23C4/08 C23C4/18 C23C14/0084 H01L27/3246 H01L51/5008 H01L51/5206 H01L2251/5315 H05B33/10 H05B33/26 H01L51/5218 C23C4/11

US: 1/1 204/192.15 204/192.26 257/40



Family:

Publication number	Publication date	Application number	Application date
JP2013069274 A1	20150402	JP20130542846T	20121107
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US9103017 BB	20150811	US20120355946	20121107
WO13069274 A1	20130516	WO2012JP07140	20121107

Priority:

JP20110246594 20111110 JP20130542846 20121107 WO2012JP07140 20121107

Probable Assignee: PANASONIC CORP

Assignee(s): (std): JOLED INC ; PANASONIC CORP

Inventor(s): (std): MIZUSAKI NAOKO ; NENDAI KENICHI ; ABE YUUKI

Agent(s): GREENBLUM AND BERNSTEIN PLC; NAKAJIMA SHIRO ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

2) Family number: 73054168 (WO19021192A1)

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Title: THIN FILMS OF NICKEL-COPPER BINARY OXYNITRIDE (NICUOXNY) AND THE CONDITIONS FOR THE PRODUCTION THEREOF

Abstract: Thin films of nickel-copper binary oxynitride (NiCuOxNy) were deposited on the surface of substrates of AISI 3161 stainless steel and glass using reactive RF sputtering, with a thickness between 700 and 2100 nm, under various depositing conditions, from a bimetallic nickel-copper precursor target, using specific conditions such as: base pressure, working pressure, argon flow, oxygen flow, nitrogen flow, strength of the Ni-Cu precursor target, target-substrate distance, and depositing time. The films were characterised and a preliminary study of biocompatibility and characterisation in terms of the optical properties thereof

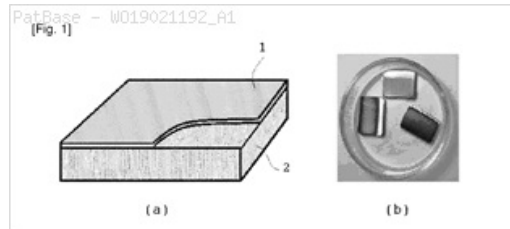
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Classifications:

International (IPC 8-9): C01G3/00 C01G53/00

C23C14/34 (Advanced/Invention)

CPC: C01G3/00 C01G53/00 C23C14/34



Family:

Publication number	Publication date	Application number	Application date
CO20170007378 A1	20190131	CO20170007378	20170725
WO19021192 A1	20190131	WO2018IB55522	20180725
WO19021192 A4	20190321	WO2018IB55522	20180725

Priority:

CO20170007378 20170725

Probable Assignee: UNIV NACIONAL DE COLOMBIA

Assignee(s): (std): UNIV NACIONAL DE COLOMBIA

Assignee(s): UNIVERSIDAD NACIONAL DE COLOMBIA

Inventor(s): (std): CUBILLOS GONZALEZ GLORIA IVONNE ; ALFONSO ORJUELA JOSE EDGAR ; VELASQUEZ MENDEZ KAREN LIZZETTE ; UMANA PEREZ YADI ADRIANA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

3) Family number: 53855476 (US2013133808A)

PatBase

Title: METHOD FOR MANUFACTURING SPUTTERING TARGET AND METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE

Abstract: When an oxide semiconductor is deposited by a sputtering method, there is a difference in composition between a sputtering target and a film deposited using the sputtering target in some cases depending on a material of the oxide semiconductor. In manufacturing a sputtering target containing zinc oxide, a crystal which contains zinc oxide is formed in advance, the crystal is crushed, and then a predetermined amount of zinc oxide is added and mixed. After that, the resulting object is sintered to form the sputtering target. The composition of the sputtering target is adjusted by setting the proportion of zinc in the sputtering target higher than that of zinc in a film having a desired composition which is obtained at last, in consideration of the amount of zinc which is reduced at the time of deposition by a sputtering method, the amount of zinc which is reduced at the time of sintering, and the like.

Classifications:

International (IPC 8-9): B29C65/00 C03B29/00 C04B35/01 C04B35/453 C04B35/622 C04B35/626 C04B35/64 C04B35/645 C04B37/02

C23C14/08 C23C14/34 H01L21/203 H01L21/336 H01L21/34 H01L21/363 H01L29/786 (Advanced/Invention);

H01L21/02 (Advanced/Non-invention)

CPC: C04B35/01 C04B35/453 C04B35/6262 C04B35/645 C04B35/6455

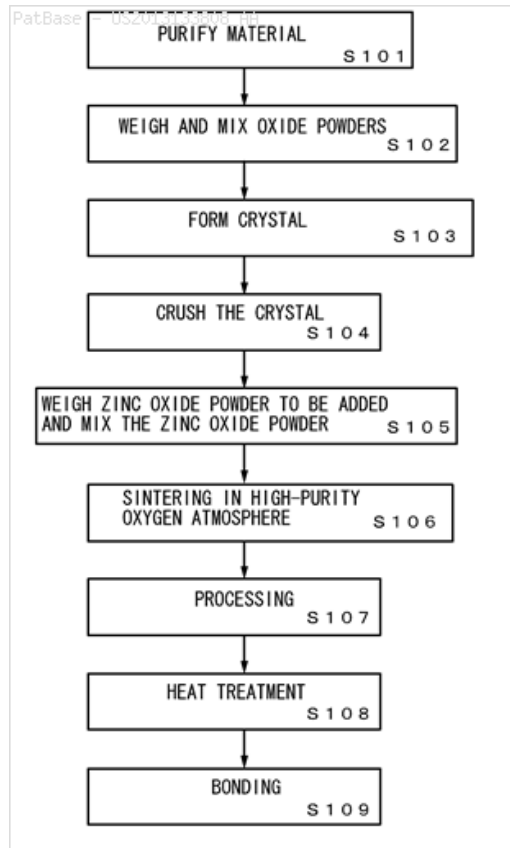
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C04B2235/94 C04B2237/34 C04B2237/403 C04B2237/406

C04B2237/407 C23C14/08 C23C14/3414 C04B2235/6583 H01L21/02

US: 1/1 156/89.11



Family:

Publication number	Publication date	Application number	Application date
■ CN103132030 A	20130605	CN201210500277	20121129
■ CN110079772 A	20190802	CN201811631478	20121129
■ JP2013136835 A2	20130711	JP20120261121	20121129
■ JP2017108142 A2	20170615	JP20160252917	20161227
■ JP6071478 B2	20170201	JP20120261121	20121129
■ JP6412549 B2	20181024	JP20160252917	20161227
■ KR20130060123 A	20130607	KR20120130983	20121119
■ TW201329266 A	20130716	TW20120143470	20121121
■ TWI580808 B	20170501	TW20120143470	20121121
■ US2013133808 AA	20130530	US20120677656	20121115
■ US9057126 BB	20150616	US20120677656	20121115

Priority:

JP20110260448 20111129 CN201210500277 20121129 JP20120261121 20121129
JP20160252917 20161227

Probable Assignee: SEMICONDUCTOR ENERGY LAB CO LTD

Assignee(s): (std): SEMICONDUCTOR ENERGY LAB ; SEMICONDUCTOR ENERGY LAB CO LTD ; SEMICONDUCTOR ENERGY LABORATORY ; SEMICONDUCTOR ENERGY LABORATORY CO LTD

Assignee(s): SEMICONDUCTOR ENERGY LABORATORY CO

Inventor(s): (std): YAMAZAKI SHUNPEI ; MARUYAMA TETSUNORI ; MARUYAMA YOSHIKI

Agent(s): ERIC J; ROBINSON INTELLECTUAL PROPERTY LAW OFFICE PC

4) Family number: 28168778 (US2002018281A)

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Title: COUPLED ELECTROCHROMIC COMPOUNDS WITH PHOTOSTABLE DICATION OXIDATION STATES

Abstract: Coupling of anodic electrochromic compounds by a covalent bond or a bridge link which provides for electronic communication between the coupled electrochromic compounds results in coupled electrochromic compounds which exhibit greater stability as well as electrochromic activity that differs from the monomeric electrochromic compounds. Extension of the absorption spectrum into the near-infrared region of the spectrum is frequently observed. The coupled electrochromic compounds are highly suitable for use in electrochromic media used to produce electrochromic devices.

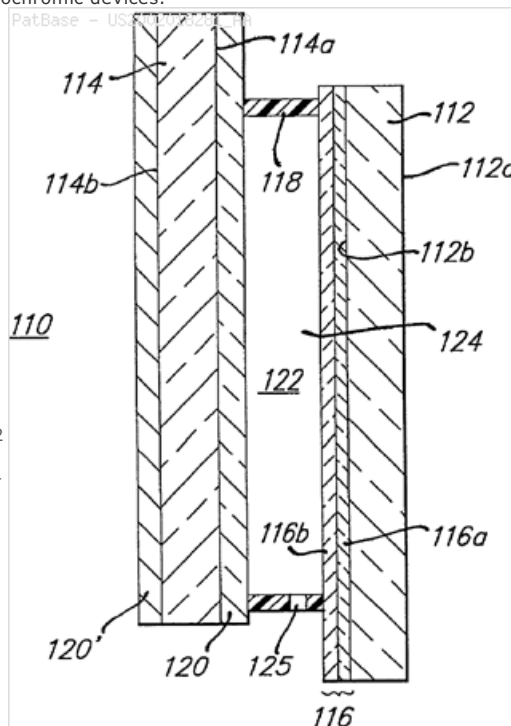
Classifications:

International (IPC 8-9): B05D5/06 B05D5/12 B23K26/362 B23K26/402 B32B17/06 B32B17/10 B32B7/02 B32B7/14 B60Q1/26 B60R1/02 B60R1/04 B60R1/06 B60R1/07 B60R1/08 B60R1/12 C03C17/36 C09K9/02 C23C14/08 C23C14/18 C23C14/34 C23C14/46 C23C14/58 F16M13/02 G02B1/04 G02B1/10 G02B13/04 G02B27/00 G02B27/14 G02B5/08 G02B5/20 G02B5/26 G02B5/28 G02B7/182 G02F1/00 G02F1/01 G02F1/03 G02F1/061 G02F1/15 G02F1/153 G02F1/155 G02F1/157 G02F1/161 G02F1/163 H05K1/02 H05K3/32 (Advanced/Invention); B60R1/04 B60R1/06 B60R1/08 C23C14/08 C23C14/34 G02F1/1345 G02F1/15 G02F1/155 G02F1/157 G02F1/161 H05K1/03 (Advanced/Non-invention); B05D5/06 B32B7/02 B60R1/06 B60R1/08 B60R1/12 C09K9/02 C23C14/46 G02B1/04 G02B27/00 G02B5/08 G02B5/20 G02B5/26 G02B5/28 G02F1/00 G02F1/01 H05K1/02 H05K3/32 (Core/Invention); H05K1/03 (Core/Non-invention); B60R (Subclass/Invention)

International (IPC 1-7): B60R1/08 G02B27/00 G02F1/15 G02F1/153 G02F1/161
CPC: B60R1/1207 B60R2001/123 B60R2001/1284 G02F1/1345 F16M13/02 H05K2201/10106 H05K1/0306 H05K1/0274 H05K3/321 H05K2201/0108 H05K2201/10651 H05K2201/2036 H05K2201/2054 G02B27/14 B60R1/084 G02F1/0018 G02B5/0808 B32B17/06 B32B17/10036 B32B17/10174 B32B17/10321 B32B17/10513 B32B2255/205 B32B2605/00 B32B2307/40 B60R1/12 C03C17/36 C03C17/3618 C03C17/3639 C03C17/3663 B60R1/025 B32B2307/202 B32B2307/412 B32B2307/728 B32B2307/73 B32B2605/006 C23C14/34 G02B5/0875 B23K26/362 B23K26/402 G02F1/1533 Y10T29/49002 Y10T428/24355 Y10T428/2495 G02F2203/09 C03C17/3647 C03C17/3649 B60R1/00 B60R1/04 B60R1/083 B60R1/085 B60R2001/1215 B60R2001/1223 B60R2001/1253 B60R2300/108 E06B3/6722 G02F2201/34 G02F1/136204 E06B9/24 G02F1/13439 G02F1/157 G02F1/163 G02F2201/48 B60R1/06 G02F1/161 C23C14/086 C23C14/185 C23C14/5833 C23C14/5873 B23K2103/00 B23K2103/50 Y10T29/49826 G02F1/1503 G02F2001/15145 G02F1/153 C09K9/02 G02F2001/1502 G02F1/15 B60R1/088 B82Y20/00 G02F1/155 G02F2202/36 Y10S359/90

European: B32B17/06 B32B17/10C4 B32B17/10E10 B32B17/10E20 B32B17/10E40D64 B60R1/00 B60R1/04 B60R1/06 B60R1/08 B60R1/08G B60R1/08G2 B60R1/08G3 B60R1/08G5 B60R1/12 B82Y20/00 C03C17/36 C03C17/36B320 C03C17/36B339 C03C17/36B352M C09K9/02 C23C14/08L C23C14/18B C23C14/58D2 C23C14/58J E06B3/67F2 G02F1/15 G02F1/153 G02F1/153B G02F1/157 G02F1/15V G02F1/161 G02F1/163 H05K1/02G H05K3/32B L60R1/12A L60R1/12B L60R1/12C L60R1/12D L60R1/12G L60R1/12L L60R300/10X P06B9/24 S02F1/1343B S02F1/1345 S02F1/153B S02F1/155 S02F1/157 S02F1/15B S02F1/15M S02F1/161 S02F1/163 S02F201/34 S02F201/48 S02F202/36 S02F203/02 T05K1/03B T05K201/01A1 T05K201/10D1D T05K201/20F

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: GENTEX CORP

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Inventor(s): POE G ; MINIKEY DANNY L ; TONAR WILLIAM L BAUER FREDERICK T ARNOLD JOHN W CA ; JOHN W CARTER ; STRAY JOEL A HUDSONVILLE ; ANDERSON JOHN S HOLLAND ; POLL DAVID L HOLLAND ; NEUMAN GEORGE A HOLLAND ; CAMMENGA DAVID J ZEELAND ; TONAR WILLIAM L HOLLAND ; YPMA KENTON J HUDSONVILLE ; BUSSCHER BRADLEY L GRAND RAPIDS ; BOSTWICK DANIEL ; WATSON ALAN ; RUMSEY WAYNE ; KLOEPPNER LEROY ; GUARR THOMAS ; EATON DAVID ; TURNBULL ROBERT ; NELSON BARRY ; BRUMMEL NELSON FUS ; PERRON LANSEN MUS ; ANDERSON JOHN AUS ; FORGETTE JEFFREY AUS ; DOZEMAN GARY JUS ; TONAR WILLIAM LUS ; CAMMENGA DAVID JUS ; POE G BRUCEUS ; NEUMAN GEORGE AUS ; LUTEN HENRT AUS ; STRAY JOEL ; YPMA KENTON ; ARNOLD JOHN ; BUSSCHER BRADLEY ; CARTER JOHN ; BAUER FREDERICK ; FOGG JEREMY ; SCOTT W VANDER ZWAAG ; DAVID L EATON ; THOMAS F GUARR ; LEROY J KLOEPPNER ; BRUMMEL NELSON ; DOZEMAN GARY ; CAMMENGA DAVID ; TONAR WILLIAM ; PERRON LANSEN ; LUTEN HENRY ; FORGETTE JEFFREY ; ANDERSON JOHN ; FOGG JEREMY A HOLLAND ; CARTER JOHN W HOLLAND ; BAUER FREDERICK T HOLLAND ; ARNOLD JOHN W HOLLAND

Agent(s): MACRAE AND CO; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; MUELLER BORE AND PARTNER PATENTANWALTE; BAYLISS GEOFFREY CYRIL; FINNIE PETER JOHN; MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; CUNDY JACK WILLIAM; UESUGI HIROSHI; OHTSUKA FUMIAKI; SUDA HIROYUKI; KUMAKURA YOSHIO; NISHIJIMA TAKAKI; PRICE HENEVELD COOPER DEWITT AND LITTON LLP GENTEX CORP; BRIAN J REES GENTEX CORP; BROMBERG AND SUNSTEIN LLP; GENTEX C O QUARLES AND BRADY LLP CORP; PRICE HENEVELD COOPER DEWITT AND LITTON LLP; SHULTZ JR JAMES E; JAMES E; QUARLES AND BRADY LLP; YAKOV; SCOTT P; PRICE HENEVELD LLP; BRADLEY D; REISING ETHINGTON PC; JOHNSON BRADLEY D; SUNSTEIN BRUCE D ET AL; SIDORIN YAKOV

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MULTILAYER FILM INCLUDING FIRST AND SECOND DIELECTRIC LAYERS

Abstract: A multilayer dielectric film including a first dielectric layer made from a material having a first breakdown field strength and a second dielectric layer disposed on the first dielectric layer made from a material having a different breakdown field strength. A multilayer film including a first electrically conductive layer, the first dielectric layer disposed on the first electrically conductive layer, the second dielectric layer disposed on the first dielectric layer, and a second electrically conductive layer disposed on the second dielectric layer is also disclosed. The first electrically conductive layer can have at least one of an average surface roughness of at least ten nanometers, a thickness of at least ten micrometers, or an average visible light transmission of up to ten percent. The first dielectric layer may be a polymer and typically has a lower dielectric constant than the second dielectric layer, which may be ceramic.

Classifications:

International (IPC 8-9): C23C14/08 C23C14/34 C23C16/22 C23C28/00 C25D5/00 H01G4/10 H01G4/20 H01G4/33 H01L49/02 H05K1/16 (Advanced/Invention)

CPC: H01L28/56 H05K1/036 H05K1/0393 H05K1/162 H05K3/022 H05K2201/0179 H05K2201/0195 H05K2203/1366 H05K3/4655 H05K2203/1545 H01G4/10 C23C14/34 C23C14/083 C23C16/22 C25D5/00 C23C28/32 C23C28/3455 H01G4/20 H01G4/206 H01G4/33

US: 428/141 428/212 428/216 428/336 428/337 428/457

**Family:**

Publication number	Publication date	Application number	Application date
■ CN104903982 A	20150909	CN201380069675	20131121
■ CN104903982 B	20180817	CN201380069675	20131121
■ CN104937685 A	20150923	CN201380070965	20131121
■ US2015294793 AA	20151015	US20130646637	20131121
■ US2015302990 AA	20151022	US20130646648	20131121
■ WO14081917 A2	20140530	WO2013US71187	20131121
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■ WO14081918 A2	20140530	WO2013US71192	20131121
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Priority:

US20120728986P 20121121	US20130779906P 20130313	CN201380069675 20131121
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Probable Assignee: 3M CO**Assignee(s):** (std): 3M CO ; 3M INNOVATIVE PROPERTIES CO**Assignee(s):** ENERGY UNITED STATES DEPARTMENT OF**Inventor(s):** (std): GORRELL ROBIN E ; MAKI STEPHEN P ; GHOSH DIPANKAR ; LYONS CHRISTOPHER S**Agent(s):** GROSS KATHLEEN B ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: COATING FOR OPTICAL FIBERS AND METHOD THEREFOR

Abstract: An improved coating for optical fibers and a method for applying the improved coating are described. The present invention is a dimensionally precise and uniform coating with low-porosity. The improved coating is applied via sputtering in a vacuum chamber. Environmental conditions are monitored within a cylindrical magnetron during sputtering. Sputtering is adjusted or temporarily ceased when environmental conditions approach a damage threshold. Sputtered particles within a plasma cloud are dimensionally similar and adhere to an optical fiber in a volume efficient arrangement forming a more precise, denser, and more adherent coating. Embodiments of the present invention provide improved pull strength by compressively constraining the optical fiber within the coating and by closing microcracks.

Classifications:

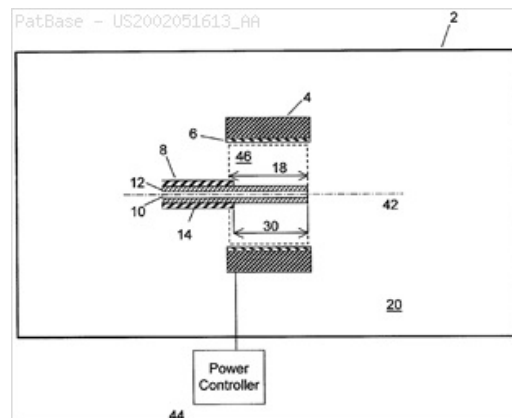
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International (IPC 1-7): C03C25/00 C03C25/10 C03C25/22 C03C25/52 C23C14/34 C23C14/35 C23C14/56 G02B6/02 G02B6/22 H01J37/34

CPC: G02B6/02395 G02B6/2558 C03C25/226 C23C14/3407 C23C14/352 C23C14/562 G02B6/25 Y10T428/2964

European: C03C25/22D C23C14/34B C23C14/35D C23C14/56B G02B6/02 G02B6/02P G02B6/16 G02B6/16P G02B6/25 G02B6/255R

US: 134/42 204/192.12 385/123 385/128 385/128P 385/141 427/163.2 427/163.200S 428/392



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: LIGHTMATRIX TECHNOLOGIES INC

Assignee(s): (std): LINGA KRISHNA ; SINGH BAWA ; PATEL VIPULKUMAR ; OUALI ALI ; KUMAR NALIN ; LIGHTMATRIX TECHNOLOGIES INC

Assignee(s): LIGHTMATRIX TECHNOLOGIES INC A OF DELAWARE CORP

Inventor(s): (std): SINGH BAWA ; KUMAR NALIN ; PATEL VIPULKUMAR ; LINGA KRISHNA ; OUALI ALI ; VIPULKUMAR PATEL ; ALI OUALI ; BAWA SINGH ; NALIN KUMAR ; KRISHNA LINGA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

7) Family number: 47026923 (US2010252416A)

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Title: SPUTTERING TARGET FOR PVD CHAMBER

Abstract: Target assemblies and PVD chambers including target assemblies are disclosed. The target assembly includes a target that has a concave shaped target. When used in a PVD chamber, the concave target provides more radially uniform deposition on a substrate disposed in the sputtering chamber.

Classifications:

International (IPC 8-9): C23C14/34 C23C14/35 C23C14/40 C23C14/44 C23C14/50 C23C14/54 C23C14/56 H01J37/32 H01J37/34 H01L21/02 H01L21/203 H01L21/285 H01L21/316 H01L21/324

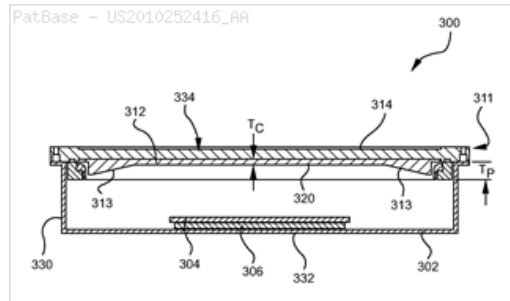
H05H1/46 (Advanced/Invention);

C23C14/34 C23C14/35 C23C14/56 H01L21/203 (Core/Non-invention)

CPC: H01J37/32082 H01L21/203 H01L21/363 C23C14/3492 C23C14/564 C23C14/345 C23C14/548 H01J37/32642 H01J37/3408 H01J37/3441 H01J37/342 H01J37/3423 C23C14/34 H01L21/02 H01L21/02266 H01L21/02521 H01L21/02631 H01L21/2855 H01L21/324 C23C14/3407 C23C14/35 H01J37/3411 H01J37/3405 H01J37/3455

European: C23C14/34B C23C14/34C4 C23C14/35 C23C14/54F C23C14/56D H01J37/3208D H01J37/34M2 H01J37/34M2A H01J37/34O H01J37/34O14D H01J37/34O8 T01J237/325D4 T01J237/362D T01J237/36C T01J237/36C6

US: 1/1 204/192.12 204/192.120P 204/298.02 204/298.06 204/298.060P 204/298.08 204/298.080P 204/298.080S 204/298.09 204/298.090S 204/298.11 204/298.12 204/298.120S 204/298.2

**Family:**

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KR20180100730 A	20180911	KR20187025470	20110331
TW201038757 A	20101101	TW20100109443	20100329
TW201104004 A	20110201	TW20100110606	20100406
TW201137148 A	20111101	TW20110111347	20110331
TW201142068 A	20111201	TW20110109194	20110317
TWI488987 B	20150621	TW20100109443	20100329
TWI499682 B	20150911	TW20100110606	20100406
TWI521081 B	20160211	TW20110109194	20110317
TWI537406 B	20160611	TW20110111347	20110331
US2010252416 AA	20101007	US20100723199	20100312
US2010252417 AA	20101007	US20100754473	20100405
US2011240464 AA	20111006	US20110048440	20110315
US2011240466 AA	20111006	US20110075841	20110330
US2017029941 AA	20170202	US20160237414	20160815
US2017350001 AA	20171207	US20170679480	20170817
US8795487 BB	20140805	US20110075841	20110330
US8795488 BB	20140805	US20110048440	20110315
US9752228 BB	20170905	US20100723199	20100312
US10060024 BB	20180828	US20170679480	20170817
WO10114823 A2	20101007	WO2010US29171	20100330
WO10114823 A3	20110113	WO2010US29171	20100330
WO10114823 A4	20110303	WO2010US29171	20100330
WO10115128 A2	20101007	WO2010US29815	20100402
WO10115128 A3	20110113	WO2010US29815	20100402
WO10115128 A4	20110303	WO2010US29815	20100402
WO10115128 A9	20110324	WO2010US29815	20100402
WO11123399 A2	20111006	WO2011US30226	20110328
WO11123399 A3	20120126	WO2011US30226	20110328
WO11139439 A2	20111110	WO2011US30718	20110331
WO11139439 A3	20120126	WO2011US30718	20110331

Priority:

US20090166682P 20090403	US20100723199 20100312	CN201080019306 20100330
WO2010US29171 20100330	US20100319377P 20100331	WO2010US29815 20100402
US20100754473 20100405	US20100328725P 20100428	US20100371774P 20100809
US20100393309P 20101014	US20110048440 20110315	WO2011US30226 20110328
US20110075841 20110330	WO2011US30718 20110331	US20160237414 20160815
US20170679480 20170817		

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