

Search history

Search 1: TAC=(heat AND (treatment or process) AND (irradiation or radiation) AND electromagnetic and emitter) (Results 223)
Search 2: TAC=(stack AND layers AND metal AND INDIUM) (Results 918)
Search 3: pn = 1 AND 2 (Results 3)
Search 4: TAC=(heat AND (treatment OR annealing) AND (irradiation OR radiation) AND layers AND indium) (Results 191)
Search 5: CPC=(C03C17/3618 OR C03C17/3644 OR C03C17/366 OR C03C17/3689 OR B32B17/10018) (Results 3233)
Search 6: pn= 4 and 5 (Results 13)

1) Family number: 29787155 (US2002172775A)

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Title: METHOD OF MAKING COATED ARTICLES AND COATED ARTICLES MADE THEREBY

Abstract: A method of making a coated substrate includes providing a substrate having at least one functional coating with a first emissivity value; depositing at least one coating material having a second emissivity value over at least a portion of the at least one functional coating wherein the deposited coating has a thickness ranging from greater than 100 Å to less than 10 microns and a refractive index ranging from 1.4 to 2. The resulting coating stack has an emissivity value greater than the emissivity value of the functional coating. Optionally the coated substrate is heated whereby the coated substrate can be bent to a desired shape and/or tempered.

Classifications:

International (IPC 8-9): B05B5/00 B05D1/36 B05D5/06 B05D7/24 B32B B32B15/00 B32B15/04 B32B15/08 B32B17/00 B32B17/06 B32B17/10 B32B18/00 B32B19/00 B32B27/00 B32B27/06 B32B33/00 B32B5/00 B32B7/02 B32B9/00 B32B9/04 B60J1/00 B60J10/00 B60J3/00 C03C C03C17/00 C03C17/23 C03C17/34 C03C17/36 C03C17/38 C03C17/42 C03C27/12 C04B41/89 C09D5/00 C23C C23C10/00 C23C14/08 C23C14/34 C23C14/35 C23C14/58 C23C16/00 C23C28/00 C23C4/10 E06B3/67 G02B1/10 G02B1/11 G02B1/111 G02B1/14 G02B5/08 G02B5/20 H01J37/34 H05B3/84 (Advanced/Invention); C03C17/34 C23C14/58 C23C30/00 H01J37/34 (Advanced/Non-invention); B32B17/00 B32B17/06 B32B9/00 C03C17/00 C03C17/34 C03C17/36 C03C17/42 C23C14/08 C23C14/34 C23C14/58 G02B1/10 (Core/Invention)

International (IPC 1-7): B05B5/00 B05D1/36 B05D3/02 B05D5/06 B05D7/00 B05D7/24 B32B1/00 B32B15/08 B32B17/00 B32B17/06 B32B17/10 B32B27/00 B32B7/02 B32B9/00 C03C17/00 C03C17/34 C03C17/36 C03C17/38 C03C17/42 C03C27/12 C08J7/04 C23C0/00 C23C10/00 C23C14/00 C23C14/08 C23C14/34 C23C14/35 C23C14/58 C23C16/00 C23C4/10 E06B3/67 G02B1/10 H01J37/34 H05B3/84

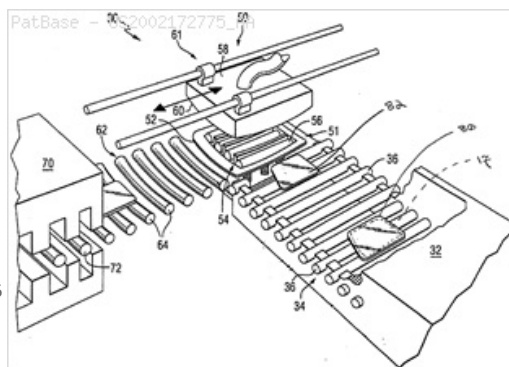
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European: B32B17/00 B32B17/10C4 B32B17/10E10 B32B17/10G B32B17/10G28 C03C17/34 C03C17/34D2 C03C17/36 C03C17/36B320 C03C17/36B334 C03C17/36B339 C03C17/36B342 C03C17/36B346 C03C17/36B352L C03C17/36B356 C03C17/36B374 C03C17/38 C03C17/42 C23C14/08 C23C14/34B2 C23C14/58B G02B1/10B G02B1/11B G02B5/08C G02B5/08M2S G02B5/08M2S1 G02B5/08M2T G02B5/20V M03C217/730 M03C217/780 M03C217/940 M23C14/58B S02B1/10B S02B1/11B S02B5/08C S02B5/08M2T S02B5/20V Y02T10/88 Y02T50/67

US: 1/1 156/102 156/102S 156/221 156/305 156/305S 204/298.13 204/298.13S 427/162 427/163.1 427/165 427/376.2 427/376.200P 427/376.200S 427/402 427/402S 427/404 427/404P 427/404S 427/407.1 427/407.100S 427/419.2 427/419.200S 427/419.3 427/419.300S 428/212 428/336 428/336S 428/337 428/414 428/423.1 428/426 428/428 428/432 428/432P 428/432S 428/433 428/434 428/437 428/446 428/448 428/457 428/469 428/469P 428/480 428/522 428/577 428/577P 428/615 428/621 428/621P 428/627 428/627S 428/632 428/632S 428/697 428/697S 428/698 428/699 428/701 428/701S 428/702 428/702P 428/702S 428/704

Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: VITRO FLAT GLASS LLC

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG 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 LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

2) Family number: 65470192 (US2018305250A)

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Title: METHOD FOR RAPID ANNEALING OF A STACK OF THIN LAYERS CONTAINING AN INDIUM OVERLAY

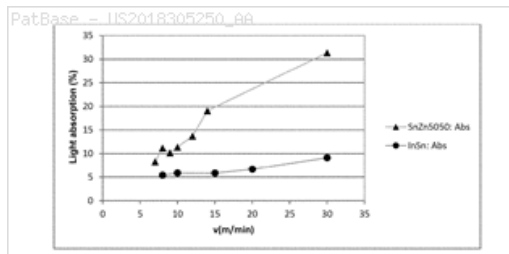
Abstract: A heat treatment process includes irradiating a substrate including a glass sheet coated on one of its faces with a stack of thin layers, under an atmosphere containing oxygen (O₂), with electromagnetic radiation having a wavelength comprised between 500 and 2000 nm, the electromagnetic radiation being emitted by an emitter device placed facing the stack of thin layers, a relative movement being created between the emitter device and the substrate, so as to raise the stack of thin layers to a temperature at least equal to 300 degrees centigrade for a brief duration shorter than one second, wherein the last layer of the stack, making contact with the atmosphere, called the overcoat, is a metal layer of indium or of an indium-based alloy.

Classifications:

International (IPC 8-9): B23K26/12 B32B15/04 B32B17/10 B32B9/00 B32B9/04 C03C17/36 C03C23/00 (Advanced/Invention)

International (IPC 1-7): C03C17/36

CPC: C03C17/3649 C03C17/3642 C03C17/3668 C03C23/0025 B32B17/10018 C03C17/3681 C03C17/3618 C03C17/3644 C03C17/366 C03C17/3689 C03C2217/948 C03C2218/322



Family:

Publication number	Publication date	Application number	Application date
AU2016338962 AA	20180524	AU20160338962	20161012
BR112018007675 A2	20181106	BR20181107675	20161012
CA2999205 AA	20180320	CA20162999205	20161012
CN108137395 A	20180608	CN201680060452	20161012
CO20180004061 A2	20180731	CO20180004061	20180416
EP3362416 A1	20180822	EP20160794373	20161012
FR3042492 A1	20170421	FR20150059882	20151016
FR3042492 B1	20180119	FR20150059882	20151016

ID201808863 A	20180816	ID2018PID02737	20161012
IN201817010538 A	20180713	IN201817010538	20180322
JP2018531872 T2	20181101	JP20180519485T	20161012
KR20180066205 A	20180618	KR20187013389	20161012
MX2018004583 A1	20190121	MX20180004583	20161012
US2018305250 AA	20181025	US20160768411	20161012
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ZA201802154 A	20190130	ZA20180002154	20180403

Priority:

FR20150059882 20151016 WO2016FR52636 20161012

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Assignee(s): (std): SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN ; SAINT GOBAIN SA

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Inventor(s): YEMINA BON SAINT COME

Agent(s): GRIFFITH HACK ; GOUDREAU GAGE DUBUC ; LAVERY DE BILLY LLP ; CAROLINA MERCEDES DAZA MONTALVO ; SAINT GOBAIN RECHERCHE ; IR MIGNI MYRIASANDRA SH MIP MSEL ; AOKI ATSUSHI

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 JP KE KG KM KN KP KR KW 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 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: 11116308 (US5201926A)

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Title: Method for the production of coated glass with a high transmissivity in the visible spectral range and with a high reflectivity for thermal radiation

Abstract: Method for making glazing with a high transmissivity in the visible spectral range and with a high reflectivity for thermal radiation as well as low surface resistance. On substrates of mineral glass a system of coatings is built up in the following order: Coating 1: oxide from the group, tin oxide, silicon dioxide, aluminum oxide, tantalum oxide, zirconium oxide, or mixtures thereof, Coating 2: alloy of 80 weight-percent of nickel and 20 weight-percent of chromium, Coating 3: silver or a silver alloy with at least 50 weight-percent silver content, Coating 4: alloy of 80 weight-percent of nickel and 20 weight-percent of chromium, Coating 5: oxide from the group tin oxide, silicon dioxide, aluminum oxide, tantalum oxide, zirconium oxide, or mixtures thereof. Thereafter the substrate with the entire packet of coatings is heated to the softening temperature of the glass and bent to the final shape.

Classifications:

International (IPC 8-9): B32B7/02 B32B9/00 C03C17/36

G02B5/20 (Advanced/Invention);

B60J1/00 (Advanced/Non-invention);

B32B7/02 B32B9/00 C03C17/36 G02B5/20 (Core/Invention);

B60J1/00 (Core/Non-invention)

International (IPC 1-7): B32B7/02 B32B9/00 B60J1/02 C03C17/36

C03C25/02 C23C14/06 C23C14/34 G02B1/10 G02B5/20

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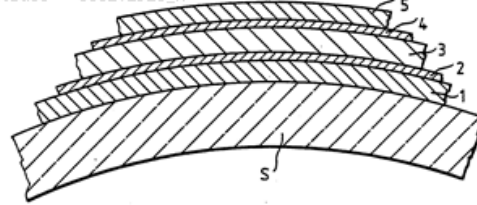
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European: C03C17/36 C03C17/36B320 C03C17/36B342 C03C17/36B346 C03C17/36B352L C03C17/36B356 L60J1/00C

US: 204/192.27 427/109 427/165 65/102 65/60.2 65/60.4 65/60.8

PatBase - US5201926 A



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Assignee(s): LEYBOLD AG 6450 HANAU DE ; LEYBOLD HERAEUS GMBH ; LEYBOLD AKTIENGESELLSCHAFT ; BALZERS U LEYBOLD DEUTSCHLAND HOLDING AG ; LEYBOLD 6450 HANAU DE AG

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Designated states: AT BE CH DE ES FR GB LI LU NL SE

Title: HIGH QUALITY EMISSION CONTROL COATINGS, EMISSION CONTROL GLAZINGS, AND PRODUCTION METHODS

Abstract: The invention provides emission control coatings. The coating includes a transparent conductive film over which there is an oxygen barrier film. In some embodiments, the transparent conductive film comprises indium tin oxide and the oxygen barrier film comprises silicon nitride.

Classifications:

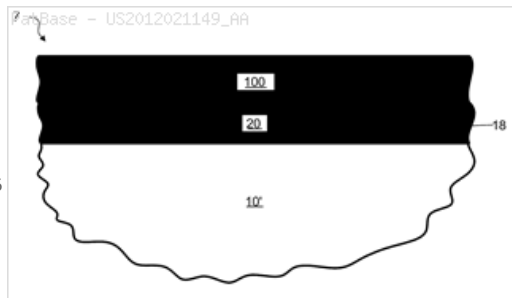
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E06B3/677 (Advanced/Invention);
E06B3/66 (Advanced/Non-invention)

CPC: C23C14/086 C23C14/34 C03C2218/154 C03C17/3417
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C03C2217/94 E06B3/6722 Y02A30/25 Y02B80/24

European: C03C17/34D M03C217/940 M03C217/948

US: 1/1 204/192.29 428/141 428/141S 428/216 428/34 428/34P
428/432 428/433 428/434 428/698 428/699 428/701 428/702 52/786.1 52/786.13



Family:

Publication number	Publication date	Application number	Application date
CA2786872 AA	20110721	CA20112786872	20110114
EP2524099 A2	20121121	EP20110702534	20110114
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WO11088330 A3	20120531	WO2011US21314	20110114
WO11088330 A9	20120809	WO2011US21314	20110114
WO17014930 A1	20170126	WO2016US39979	20160629
WO17078909 A1	20170511	WO2016US56518	20161012
WO17078910 A1	20170511	WO2016US56522	20161012
WO17078911 A1	20170511	WO2016US56523	20161012

Priority:

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US20170827632 20171130		

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Assignee(s): (std): CARDINAL CG CO ; HARTIG KLAUS ; MYLI KARI B ; VANCE GREG ; PFAFF GARY L ; HARTIG KLAUS H W ; NIPPON SHEET GLASS CO LTD ; CARDINAL CG CO ; KARDINAL SIDZHI KOMPANI

Assignee(s): CARDINAL CG COMPANY ; NIPPON SHEET GLASS COMPANY LIMITED ; HARTIG KLAUS HW

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Inventor(s): HARTIG KLAUS HW

Agent(s): BORDEN LADNER GERVAIS LLP; HOWE STEVEN; IKEUCHI SATO AND PARTNER PATENT ATTORNEYS; FREDRIKSON AND BYRON PA; SNUSTAD ERIC J ET AL; SNUSTAD ERIC J

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 JP KE KG KM KN KP KR KW 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 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: SUBSTRATE COMPRISING A STACK HAVING THERMAL PROPERTIES

Abstract: The invention relates to a substrate (10), provided with a thin-film multilayer comprising an alternation of n

functional layers (40, 80) having reflection properties in the infrared and/or in solar radiation and (n+1) coatings (20, 60, 100), where n is an integer greater than or equal to 2, said coatings being composed of a plurality of dielectric layers (24, 26; 64, 66; 104), so that each functional layer (40, 80) is placed between two coatings (20, 60, 100), at least two functional layers (40, 80) each being deposited on a wetting layer (30, 70) itself deposited respectively directly onto a subjacent coating (20, 60), characterized in that two subjacent coatings (20, 60) each comprise at least one dielectric layer (24, 64) and at least one noncrystalline smoothing layer (26, 66) made from a material that is different from the material of said dielectric layer within each coating, said smoothing layer (26, 66) being in contact with said superjacent wetting layer (30, 70) and in that these two subjacent coatings (20, 60) being of different thicknesses, the thickness of the smoothing layer (26, 66) of the subjacent coating (20, 60) that has a total thickness of less than that of the other subjacent coating (60, 20) is less than or equal to the thickness of the smoothing layer (66, 26) of this other subjacent coating (60, 20).

Classifications:

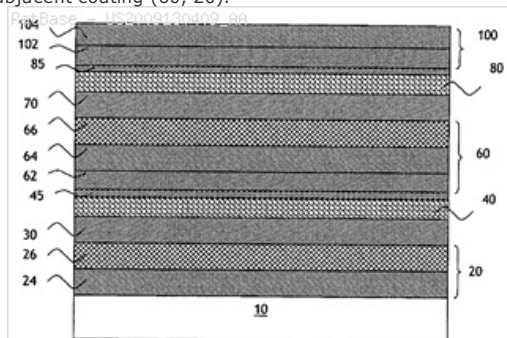
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International (IPC 1-7): B32B17/06

CPC: Y10T428/2495 Y10T428/24975 B32B17/10036 B32B17/10018 B32B17/10174 B32B17/10761 B32B17/10788 C03C17/3626 C03C17/3639 C03C17/3652 C03C17/366 C03C17/3668 C03C17/3681 C03C17/36

European: B32B17/10C2 B32B17/10C4 B32B17/10E10 B32B17/10G28 B32B17/10G36 C03C17/36 C03C17/36B332 C03C17/36B339 C03C17/36B346 C03C17/36B352L C03C17/36B354 C03C17/36B356

US: 204/192.1 204/192.100S 204/192.12 204/192.120S 428/213 428/213S 428/216 428/216P



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Publication number	Publication date	Application number	Application date
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Priority:

FR20060050770 20060306 EP20070731698 20070306 WO2007FR50881 20070306

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM 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 MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

6) Family number: 36060634 (US2009197077A)

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Title: SUBSTRATE COMPRISING A STACK HAVING THERMAL PROPERTIES

Abstract: The invention relates to a substrate (10), especially a transparent glass substrate, provided with a thin-film multilayer comprising a functional layer (40) having reflection properties in the infrared and/or in solar radiation, especially a metallic functional layer based on silver or on a metal alloy containing silver, and two coatings (20, 60), said coatings being composed of a plurality of dielectric layers (24, 26; 64), so that the functional layer (40) is placed between the two coatings

(20, 60), the functional layer (40) being deposited on a wetting layer (30) itself deposited directly onto a subjacent coating (20), characterized in that the subjacent coating (20) comprises at least one dielectric layer (24) based on nitride, especially on silicon nitride and/or aluminum nitride, and at least one noncrystalline smoothing layer (26) made from a mixed oxide, said smoothing layer (26) being in contact with said superjacent wetting layer (30).

Classifications:

International (ipc 8-9): B32B15/04 B32B17/00 B32B17/06 B32B17/10 B32B9/00 C03C17/36 C23C14/34 C23C14/35 (Advanced/Invention); B32B15/04 B32B17/00 B32B17/06 B32B9/00 C03C17/36 C23C14/34 C23C14/35 (Core/Invention)

International (ipc 1-7): B32B17/06 C03C17/36 C23C14/34

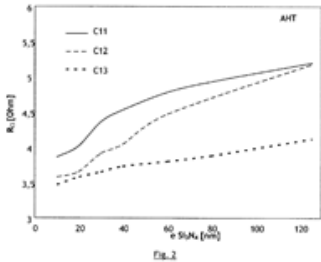
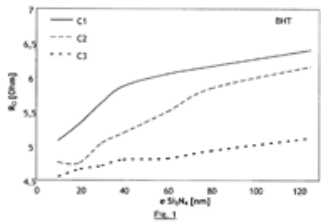
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European: B32B17/10E10 C03C17/36 C03C17/36B332 C03C17/36B342 C03C17/36B346 C03C17/36B352L

US: 204/192.26 204/192.260S 428/336 428/336P 428/434 428/434S

PatBase - US2009197077_AA

Patent Application Publication Aug. 6, 2009 Sheet 1 of 4 US 2009/0197077 A1



Family:

Publication number	Publication date	Application number	Application date
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MX2008011390 A1	20080918	MX20080011390	20070306
PL1993965 T3	20181031	PL20070731699T	20070306
TR201810727 T4	20180827	TR20180010727T	20070306
US2009197077 AA	20090806	US20070281480	20070306
US2018141314 AA	20180524	US20180873098	20180117
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WO07101964 A1	20070913	WO2007FR50882	20070306

Priority:

FR20060050771 20060306 EP20070731699 20070306 WO2007FR50882 20070306
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Probable Assignee: SAINT GOBAIN SA

Assignee(s): (std): GILLET PIERRE ALAIN ; MATTMANN ERIC ; PETITJEAN ERIC ; REUTLER PASCAL ; SAINT GOBAIN ; SAINT GOBAIN SA

Assignee(s): SAINT GOBAIN GLASS FRANCE SOCIETE ANONYME ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN GLASS FRANCE SOC ANONYME

Inventor(s): (std): PETITJEAN ERIC ; MATTMANN ERIC ; GILLET PIERRE ALAIN ; REUTLER PASCAL ; PASCAL REUTLER ; ERIC PETITJEAN ; ERIC MATTMANN ; PIERRE ALAIN GILLET

Agent(s): GOUDREAU GAGE DUBUC ; LAVERY DE BILLY LLP ; JAMET VINCENT ET AL ; SAINT GOBAIN RECHERCHE ; ELZABURU SLP ELZABURU SLP ; OSAKI KATSUMASA ; TSUBOKURA MICHIAKI ; KANAYAMA MASATAKA ; KAWAGUCHI YOSHIO ; ONO MAKOTO ; FULYA SUEMERALP ; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT PC ; OBLON MCCLELLAND MAIER AND NEUSTADT LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM 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 MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: ARTICLES INCLUDING ANTICONDENSATION COATINGS AND/OR METHODS OF MAKING THE SAME

Abstract: Certain example embodiments of this invention relate to articles including anticondensation coatings that are exposed to an external environment, and/or methods of making the same. In certain example embodiments, the anticondensation coatings may be survivable in an outside environment. The coatings also may have a sufficiently low sheet resistance and hemispherical emissivity such that the glass surface is more likely to retain heat from the interior area, thereby reducing (and sometimes completely eliminating) the presence condensation thereon. The articles of certain example embodiments may be, for example, skylights, vehicle windows or windshields, IG units, VIG units, refrigerator/freezer doors, and/or the like.

Classifications:

International (IPC 8-9): B05D1/36 B05D3/02 B23K26/00 B23P17/00

B32B15/04 B32B17/00 B32B17/06 B32B17/10 B32B33/00

B32B38/00 B32B7/02 B32B9/00 B60J1/00 B60J1/02 B60J1/20

C03C17/09 C03C17/22 C03C17/23 C03C17/245 C03C17/34

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E06B3/677 E06B7/00 E06B7/12 F21S4/00 F21V33/00 F21V5/04

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H05B3/00 H05B3/02 H05B3/14 H05B3/16 H05B3/84

H05B33/22 (Advanced/Invention);

B82Y30/00 E04D13/03 F21Y115/10 F21Y115/15

F25D23/02 (Advanced/Non-invention);

C03C17/34 (Core/Invention)

CPC: C23C14/083 C23C14/10 C03C2217/734 G02B1/116

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C03C2218/365 C03C2217/22 C03C2217/24 C03C2217/281

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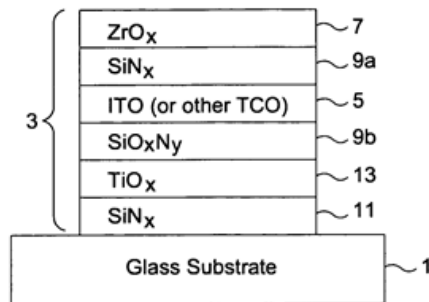
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428/119 428/119S 428/212 428/212P 428/213 428/216 428/216P 428/336 428/34 428/34P 428/34S 428/426 428/428

428/432 428/434 428/446 428/446S 428/448 428/448S 428/450 428/697 428/698 428/699 428/701 428/702 428/704

438/663 52/171.3 52/204.5 52/204.6 52/786.13 977/755 977/755S

PatBase - US2011210656_AA



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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US20190266129	20190204				

Probable Assignee: GUARDIAN GLASS LLC

Assignee(s): (std): CENTRE LUXEMBOURGEOIS DE RECH POUR LE VERRE ET LA CERAM S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECH POUR LE VERRE ET LA CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECH POUR LE VERRE ET LA CERAMIQUE S A C R V C ; GUARDIAN INDUSTRIES ; GUARDIAN IND CORP CRVC ; CT LUXEMBOURGEOIS RECH VERRE ; GUARDIAN IND ; FERREIRA JOSE ; BLACKER RICHARD ; BOURQUE TIMOTHY ; CT LUXEMBOURG DE RECH S POUR LE VERRE ET LA CERAMIQUE S A C R V C ; MURPHY NESTOR P ; LEMMER JEAN MARC ; MCLEAN DAVID D ; MCCLEAN DAVID D ; MAIKOWSKI DAVID P ; HOBBS CHRISTOPHER ; GUARDIAN EUROPE S A R L ; PALLOTTA PIERRE ; LAGE HERBERT ; GARDIAN INDASTRIZ KORP ; GUARDIAN GLASS LLC

Assignee(s): CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SARL ; MURPHY NESTOR ; PALLOTTA PIERRE ; SRVS ; SANTR LYUKSAMBURZHUA DE RESHERSH PUR LE VERR E LYA SERAMIK SA ; GUARDIAN EUROPE RL SA ; GUARDIAN GLASS LLC AUBURN HILLS ; GUARDIAN INDUSTRIES CORP ; GUARDIAN INDUSTRIES CORP CRVC ; GUARDIAN IND CORP AUBURN HILLS ; GUARDIAN EUROPE SARL ; CENTRE LUXEMBOURG DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE CRVC SA ; GUARDIAN IND CORP2300 HARMON ROAD AUBURN HILLS MI48326-1714US ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SAZONE INDUSTRIELLE WOLSERL-3452DUDELANGELU ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET AL CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SA CRVC ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE RL SA ; GUARDIAN IND CORP ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE (CRVC) SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET AL CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SA

Inventor(s): (std): MURPHY NESTOR P ; LEMMER JEAN MARC ; BLACKER RICHARD ; MCLEAN DAVID D ; GUARDIAN INDUSTRIES CORP ; MAKLIN DEVID D ; MERFI NESTOR P ; BLEKER RICHARD ; LEMMER ZHAN MARK ; PALLOTTA PIERRE ; MURPHY NESTOR ; BOURQUE TIMOTHY ; HOBBS CHRISTOPHER ; MAIKOWSKI DAVID P ; MCCLEAN DAVID D ; RICHARD BLACKER ; JEAN MARC LEMMER ; DAVID D MCLEAN ; MCLEAN DAVID ; PIERRE PALLOTTA ; JOSE FERREIRA ; HERBERT LAGE ; NESTOR MURPHY ; PALLOTTA PER ; FERREIRA ZHOZE ; LAGE KHERBERT ; MERFI NESTOR ; GUARDIAN IND CORP ; LAGE HERBERT ; PALLOTTA PIERRE ; FERREIRA JOSE

Inventor(s): FERREIRA JOSELU ; MURPHY NESTORUS ; BLACKER RICHARDUS ; LEMMER JEAN MARCUS ; MCLEAN DAVID DUS ; PALLOTTA PIERREFR ; LAGE HERBERTLU ; NESTOR P MURPHY ; LEMMER JEAN MARC ANN ARBOR ; MURPHY NESTOR P WEST BLOOMFIELD ; MCLEAN DAVID D ROYAL OAK ; BLACKER RICHARD LINO LAKES

Agent(s): MACPHERSON LESLIE AND TYERMAN LLP ; MLT AIKINS LLP ; MARKS AND CLERK LUXEMBOURG LLP ; HESS PETER K G ; HOYNG ROKH MONEGIER LLP ; RIZZO SERGIO ; YURIDICHESKAYA GORODISSKIJ I PARTNER Y OOO FA ; OOO YURIDICHESKAYA GORODISSKIJ I PARTNER Y FA ; TOLGA CAYLAK ; NIXON AND VANDERHUYE PC ; NIXON AND VANDERHUYE P C ; RHOA JOSEPH A

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 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 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

8) Family number: 66781731 (WO17144823A1)

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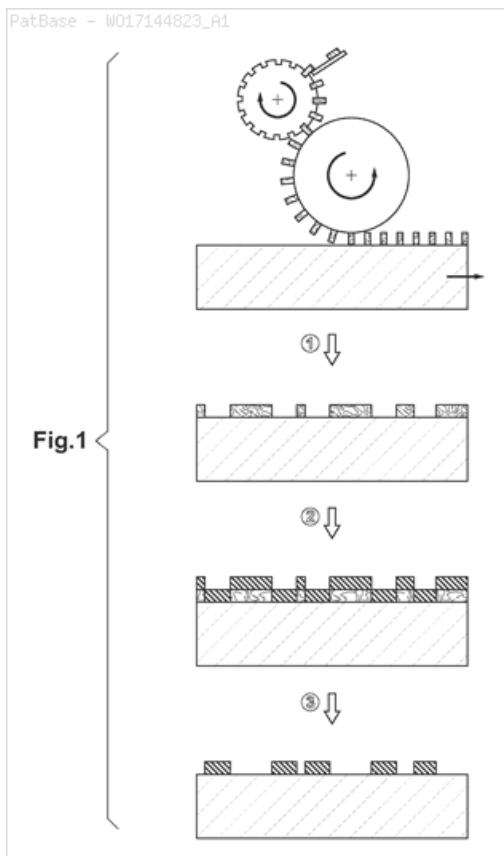
Title: METHOD FOR THE SELECTIVE ETCHING OF A LAYER OR A STACK OF LAYERS ON A GLASS SUBSTRATE

Abstract: The invention relates to a method for depositing one or more functional mineral layers on a glass substrate, comprising steps consisting in: depositing an organic coating on part, but not all of the surface of the substrate, according to a pattern; depositing one or more functional mineral layer(s) on the thus coated substrate; subjecting the assembly to a heat treatment for combustion of the organic coating; and subsequently removing said coating and the functional mineral layer(s) covering same, by wiping with a cloth and/or gas jet and/or washing, such that the remaining functional mineral layer(s) are arranged in a pattern corresponding to the negative of that made with the organic coating. The invention also relates to an intermediate product of the method, and to the use of the glass obtained to allow radio frequencies to pass therethrough.

Classifications:

International (IPC 8-9): C03C17/36 C03C17/42
H01L21/027 (Advanced/Invention)

CPC: C03C17/366 C03C2217/72 C03C2218/328 C03C2218/34
C03C17/36 C03C17/3639 C03C17/3644

**Family:**

Publication number	Publication date	Application number	Application date
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WO17144823 A1	20170831	WO2017FR50405	20170223

Priority:

FR20160051629 20160226 WO2017FR50405 20170223

Probable Assignee: SAINT GOBAIN SA**Assignee(s):** (std): SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN SA**Inventor(s):** (std): NADAUD NICOLAS ; GUILLEMOT FRANCOIS ; RACHET VINCENT ; BRUDIEU BARBARA ; NICOLAS NADAUD ; VINCENT RACHET ; FRANCOIS GUILLEMOT ; BARBARA BRUDIEU**Agent(s):** SAINT GOBAIN RECHERCHE

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 JP KE KG KH KM KN KP KR KW 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 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

9) Family number: 57944737 (US2016122236A)

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Title: LOW-EMISSION AND ANTI-SOLAR GLAZING

Abstract: The invention relates to low-emissivity and anti-solar glazing systems that change only very little in properties when they are subjected to a heat treatment. They comprise a stack of thin layers comprising an alternating arrangement of n infrared radiation reflecting functional layers and n+ 1 dielectric coatings, characterised in that: (i) the first dielectric coating comprises a layer made from an oxide in contact with the substrate, (ii) the portion of the coating stack between two functional layers comprises, in order: a barrier layer, a zinc oxide-based layer, a layer of zinc-tin mixed oxide, a nucleation layer, and (iii) the last dielectric coating comprises a layer made from an oxide other than silicon oxide with a thickness greater than 3 nm overlaid with a layer made from a silicon nitride or a silicon oxide with a thickness greater than 10 nm superposed thereon.

Classifications:

International (IPC 8-9): B32B15/04 B32B17/06 B32B7/02 B32B9/00 C03C17/00 C03C17/22 C03C17/245 C03C17/36 C23C14/06 C23C14/35 C23C16/42 G02B1/14 G02B5/20 G02B5/26 (Advanced/Invention); C03C17/36 (Core/Invention)

CPC: C03C17/3681 G02B5/26 G02B5/208 G02B1/14 C03C2217/70 C03C2218/156 C03C17/3642 C23C14/35 C03C2218/153 C03C17/366 C03C17/3618 C03C17/3626 C03C17/3639 C03C17/3644

US: 204/192.15 359/359 427/160 428/332 428/336 428/448

Family:

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Priority:

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Probable Assignee: AGC GLASS EUROPE

Assignee(s): (std): AGC FLAT GLASS NA INC ; AGC GLASS CO NORTH AMERICA ; AGC GLASS EUROPE

Assignee(s): AGC GLASS EUROPE SA ; AGC FLAT GLASS NORTH AMERICA INC

Inventor(s): (std): BAUDOUIN ANNE CHRISTINE ; DEPAUW JEAN MICHEL ; HAUPTMANN MARC ; MAHIEU STIJN ; ANNE CHRISTINE BAUDOUIN ; MARC HAUPTMANN ; JEAN MICHEL DEPAUW ; STIJN MAHIEU ; KAPPERTZ OLIVIER ; MICHAEL PURWINS ; ERIC MATHIEU ; HANSJOERG WEIS ; WEIS HANSJOERG ; PURWINS MICHAEL ; MATHIEU ERIC ; ROQUINY PHILIPPE ; MOENNEKES JOERG ; LIN YUPING ; KAPPERTZ OLIVER

Inventor(s): PHILIPPE ROQUINY ; OLIVIER KAPPERTZ ; JOERG MOENNEKES ; YUPING LIN ; JORG MONNEKES ; LIN YUPING TUCKER ; HANSJOERGWEIS

Agent(s): AGUSTSSON SVEINN OTTO; LEHMANN MARIA ISABEL; ANDROMEDA BA SH; TOLGA CAYLAK; OBLON MCCLELLAND MAIER AND NEUSTADT LLP; LARANGE FRANCOISE

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 IR 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 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

10) Family number: 28168778 (US2002018281A) © PatBase

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:

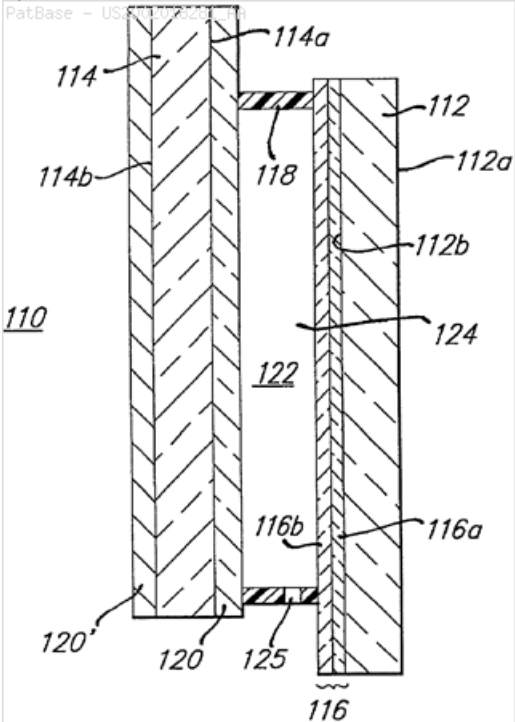
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Probable Assignee: GENTEX CORP

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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

11) Family number: 57351881 (US2017121219A)

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Title: PLANARISATION OF A COATING

Abstract: Methods are disclosed for planarisation of a coated glass substrate by deposition of a silazane based layer thereon. Coated substrates according to the invention exhibit improved properties in terms of reduced roughness, lower haze and higher visible light transmission and the coated surface may be exposed to the external environment, for example as surface 1 or surface 4 of a double glazing unit. The resulting smooth surface is less susceptible to marking and scratch damage, and offers enhanced surface energy (improved hydrophobicity).

Classifications:

International (IPC 8-9): B32B17/06 C03C17/34 C03C17/36

C03C17/38 C03C17/42 (Advanced/Invention)

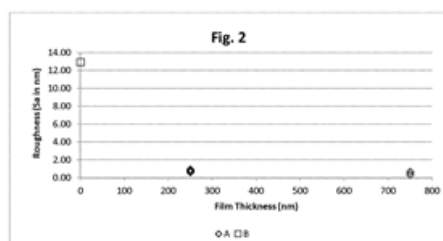
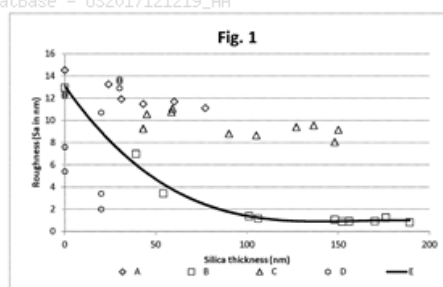
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C03C17/3411 C03C2217/70

US: 428/141

PatBase - US2017121219_AA



Family:

Publication number	Publication date	Application number	Application date
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WO16001661 A3	20160225	WO2015GB51919	20150630

Priority:

GB20140011822 20140702 WO2015GB51919 20150630

Probable Assignee: PILKINGTON GROUP LTD

Assignee(s): (std): PILKINGTON GROUP LTD

Inventor(s): (std): VARMA KARIKATH SUKUMAR ; HURST SIMON JAMES ; SIMON JAMES HURST ; KARIKATH SUKUMAR VARMA

Agent(s): TEASDALE NICOLA JOANNE; HAZZARD ALAN DAVID 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 IR 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 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

12) Family number: 59067948 (US2016229741A)

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Title: METHOD FOR PRODUCING A SUBSTRATE COATED WITH A STACK INCLUDING A CONDUCTIVE TRANSPARENT OXIDE FILM

Abstract: A process for obtaining an item including a substrate made of glass or glass ceramic coated on at least one portion of at least one of its faces with a stack of thin-layers including no silver layers and including at least one thin layer of a transparent electrically conductive oxide, the process including: a step of depositing the stack, in which step the thin layer of a transparent electrically conductive oxide and at least one thin homogenizing layer are deposited, the thin homogenizing layer being a metal layer or a layer based on a metal nitride other than aluminum nitride, or a layer based on metal carbide; then a heat treatment step in which the stack is exposed to radiation.

Classifications:

International (IPC 8-9): B32B15/04 B32B17/06 B32B18/00 B32B7/02 B32B9/04 C03C C03C17/34 C03C17/36 C03C23/00 C23C C23C14/06 C23C14/08 C23C14/18 C23C14/35 C23C14/58 H01L51/50 H05B33/02 H05B33/10 H05B33/26 H05B33/28 (Advanced/Invention);

C03C17/34 C03C17/36 C23C14/08 C23C14/58 (Core/Invention)

CPC: C03C17/3423 C23C14/185 C23C14/0641 C23C14/0635

C23C14/35 C03C2218/156 C03C17/3668 C03C17/3435

C03C17/3441 C03C17/3626 C03C17/3649 C03C17/3689

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US: 427/554

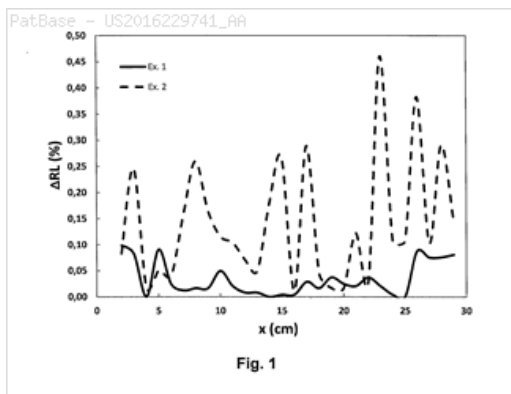


Fig. 1

Family:

Publication number	Publication date	Application number	Application date
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CN105658592 B	20181207	CN201480056823	20141014
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ZA201602376 A	20161221	ZA20160002376	20160408

Priority:

FR20130060092 20131017 FR20140053402 20140416 WO2014FR52615 20141014

Probable Assignee: SAINT GOBAIN SA

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Agent(s): GRIFFITH HACK; GOUDREAU GAGE DUBUC; LAVERY DE BILLY LLP; PRINCIVALLE XAVIER EDMOND

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 IR 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 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

13) Family number: 44049957 (US2009295687A)

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Title: PLASMA DISPLAY PANEL INCLUDING TCC EMI FILTER, AND/OR METHOD OF MAKING THE SAME

Abstract: A plasma display panel (PDP) includes an EMI filter supported by a glass substrate for blocking/shielding substantial amounts of electromagnetic waves, with the filter being supported by a side of the substrate opposite a viewer. In certain example embodiments, a black frit and a silver frit comprise a filter frame and are supported by the filter such that the filter is closer to the glass substrate than either or both of the frits. Alternatively, in certain example embodiments, a conductive black frit comprises a filter frame and is supported by the filter such that the filter is closer to the glass substrate than the frit. The filter has high visible transmission, and is capable of blocking/shielding electromagnetic waves. Advantageously, a transparent conductive coating (TCC) can be coated on a stock, non-cut glass sheet.

Classifications:

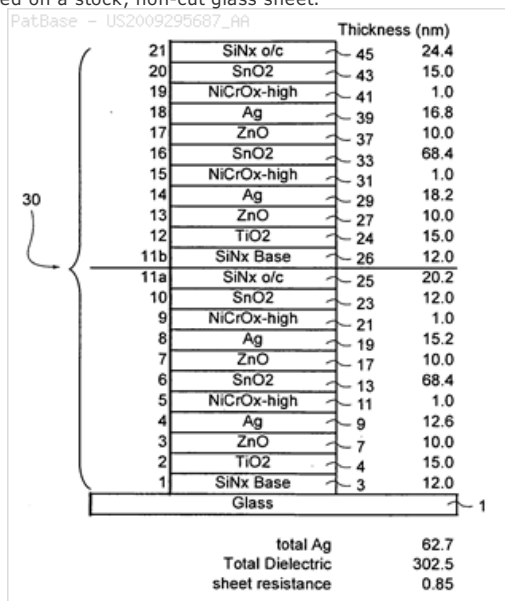
International (IPC 8-9): B32B15/04 B32B17/06 B32B7/00 B32B7/02 C03C17/36 G02B1/11 G02B5/20 G09F9/00 G09G3/28 H01J1/52 H01J17/16 H01J17/49 H01J9/00 H01J9/24

H05K9/00 (Advanced/Invention); C03C17/36 G02B1/11 H01J17/49 H05K9/00 (Advanced/Non-invention); B32B15/04 B32B17/06 B32B7/02 C03C17/36 G02B1/10 G09G3/28 H01J1/00 H01J17/02 H01J17/49 H01J9/00 H05K9/00 (Core/Invention); H01J17/49 (Core/Non-invention)

CPC: Y10T428/12549 Y10T428/2495 C03C17/3618 C03C17/3626 C03C17/3639 C03C17/3652 G02B1/116 C03C17/3644 C03C17/366 C03C2217/734 H01J11/10 H01J2211/444 H01J2211/446 C03C17/3657 H05K9/0088 C03C17/36 H01J11/44 G02B1/00 G02B1/11 G02B5/28 C03C17/3676 H05K9/0096

European: C03C17/36 C03C17/36B320 C03C17/36B332 C03C17/36B339 C03C17/36B346 C03C17/36B354M G02B1/11D2M H01J11/10 H01J11/44 H05K9/00M4E H05K9/00M5B T01J211/44D T01J211/44F

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Priority:

US20080071936P	20080527	US20080129404P	20080624	US20080230034	20080821
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Agent(s): BARDEHLE PAGENBERG PARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; HESS PETER K G; FABREGA XAVIER; VALLEJO JUAN PEDRO; NIXON AND VANDERHUE PC; NIXON AND VANDERHUE PC; RHOA JOSEPH A

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 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