

1) Family number: 15080632 (US5563734A)

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Title: Durable low-emissivity solar control thin film coating

Abstract: An infrared reflecting interference filter capable of transmitting a desired proportion of visible radiation while reflecting a large portion of incident solar radiation is provided. The filter comprises a transparent substrate onto which is deposited a dielectric layer, followed by metal and dielectric layers. In between each of the dielectric and metal layers is deposited a precoat layer that promotes adhesion between the dielectric and the metal. One aspect of the invention is the use of a film comprising nickel and chromium nitride for each of the metal precoat layers. These precoat layers are thin so that there is less absorption of visible light but yet maintains good adhesive properties. Another aspect of the invention is the use of silver as the metal layer. Specifically, silver is sputtered in an atmosphere containing a mixture of nitrogen and argon or other inert gas. It was found that the presence of nitrogen produces a silver layer that is more durable than silver films sputtered in an atmosphere containing essentially pure inert gas. In one embodiment, the interference filter comprises a glass substrate onto which is deposited a thin-film design consisting of five layers, namely: titanium dioxide, nickel-chromium nitride, silver, nickel-chromium nitride, and silicon nitride.

Classifications:**International (ipc 8-9):** C03C17/36 C23C14/14 C23C14/34

G02B1/10 G02B5/28 (Advanced/Invention);

G02B1/10 (Advanced/Non-invention);

C03C17/36 G02B1/10 G02B5/28 (Core/Invention)

International (ipc 1-7): B32B17/06 C03C17/36 C23C14/14

C23C14/34 C23C14/35 F21V9/04 G02B1/10 G02B5/28 G02C7/10

CPC: C03C17/36 C03C17/3618 C03C17/3626 C03C17/3644

C03C17/366 C03C17/3681 C03C2217/24 C03C2217/242

C03C2217/78 G02B5/282

European: C03C17/36 C03C17/36B320 C03C17/36B332

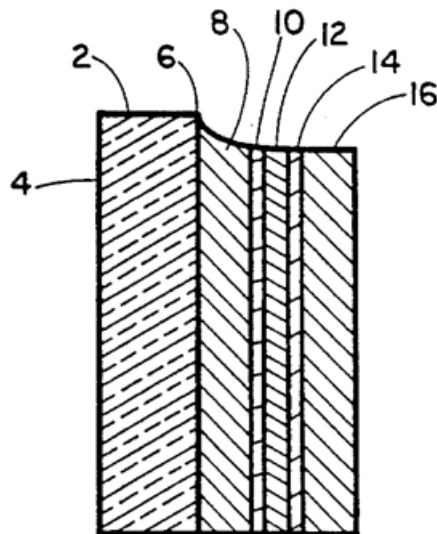
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M03C217/240 M03C217/242 M03C217/780

US: 204/192.27 204/298.21 359/360 359/584 359/585 359/589

427/163.1

PatBase - US5563734_A

**Family:**

Publication number	Publication date	Application number	Application date
AT186991 E	19991215	AT19940303054T	19940427
AU199459349 A1	19941103	AU19940059349	19940411
AU678207 B2	19970522	AU19940059349	19940411
CA2120875 AA	19941029	CA19942120875	19940408
CA2120875 C	19990706	CA19942120875	19940408
CN1100812 A	19950329	CN19941004654	19940428
DE69421746 D1	19991230	DE19946021746	19940427
DE69421746 T2	20000706	DE19946021746T	19940427
EP0622645 A1	19941102	EP19940303054	19940427
EP0622645 B1	19991124	EP19940303054	19940427
ES2139050 T3	20000201	ES19940303054T	19940427
JP2625079 B2	19970625	JP19940088680	19940426
JP6347640 A2	19941222	JP19940088680	19940426
US5563734 A	19961008	US19940337686	19941110

Priority:

US19930054521 19930428

CA19942120875 19940408

US19940337686 19941110

Probable Assignee: BOC GROUP INC**Assignee(s):** (std): BOC GROUP INC ; THE BOC GROUP INC

Assignee(s): BOC GROUP INC THE ; COATING IND INVESTMENT CORP ; LAIRD RONALD E ; WOLFE JESSE D ; COATING IND ; VON ARDENNE ANLAGENTECHNIK GMBH ; APPLIED FILMS CORP ; APPLIED MATERIALS INC ; BELKIND ABRAHAM I

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Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; GOWLING LAFLEUR HENDERSON LLP**Designated states:** AT BE CH DE ES FR GB IT LI LU NL SE**2) Family number: 8807446** (US5688585A)

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Title: MATCHABLE, HEAT TREATABLE, DURABLE, IR-REFLECTING SPUTTER-COATED GLASSES AND METHOD OF MAKING SAME

Abstract: A sputter-coated layer system including a non-nitrided and non-oxidized nickel or nickel alloy layer located between two layers of Si₃N₄ of the requisite thicknesses and used for architectural and automotive glass substrates so as to be heat treatable and have DELTA E characteristics sufficiently low to render the products matchable as between heat treated and non-heat treated products having the same coating thereon.

Classifications:

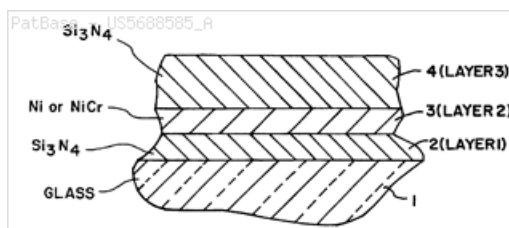
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International (IPC 1-7): B32B17/00 B32B17/06 B60J1/00 C03B23/023 C03B23/023 C03B25/02 C03C C03C10/00 C03C15/00 C03C17/00 C03C17/06 C03C17/34 C03C17/36 C03C17/44 C03C21/00 C03C25/04 C23C14/00 C23C14/06 C23C14/10 C23C14/18 C23C14/23 C23C14/34 C23C14/58 C23C15/00 C23C16/34 C23C17/34 G02B1/10

CPC: C03C17/3435 C03C17/3605 Y10T428/24975 Y10T428/265 C03C17/361 C03C17/36 C03C17/3613 C03C17/3615 C03C17/3618 C03C17/3626 C03C17/3639 C03C17/3649 C03C17/366 C03C17/3681 C03C2217/78 C03C2218/154 C23C14/0652 C23C14/185

European: C03C17/34D4B C03C17/36 C03C17/36B310 C03C17/36B314 C03C17/36B316 C03C17/36B318 C03C17/36B320 C03C17/36B332 C03C17/36B339 C03C17/36B344 C03C17/36B352L C03C17/36B356 C23C14/06F4 C23C14/18B M03C217/780 M03C218/154

US: 204/192.1 204/192.15 204/192.2 204/192.22 204/192.25 204/192.26 359/359 359/360 359/585 359/586 427/162 427/164 427/165 427/166 427/167 427/372.2 427/376.2 427/376.6 427/380 427/383.1 427/383.5 427/397.7 427/419.7 427/585 428/216 428/336 428/426 428/428 428/432 428/433 428/469 428/472 428/698 65/60.1 65/60.2 65/60.3 65/60.4 65/60.8 65/63



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ZA9610540 A	19970624	ZA19960010540	19961213

Priority:

US19930102281 19930805 US19950486643 19950607 US19950572061 19951214
CA19962176520 19960514 CA19962192876 19961213 EP19960120113 19961213
CA19962192876 19961213 US19970908180 19970807 US19990332897 19990615

Probable Assignee: GUARDIAN GLASS LLC

Assignee(s): (std): GUARDIAN IND CORP AUBURN HILLS ; GUARDIAN IND ; GUARDIAN IND CORP

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Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; VERMETTE CLIFFORD W; HARNECKER; ERNESTO CAVELIER; HESS PETER K G

Designated states: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT SE SI

3) Family number: 28145250 (US2001041252A)

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Title: LOW-EMISSION GLASS COATINGS HAVING A LAYER OF NITRIDED NICHROME AND METHODS OF MAKING SAME

Abstract: Low-E glass coated glass articles are comprised of a glass substrate and a multiple layer coating on a surface of the glass substrate. Relatively high light transmissivity of greater than about 72 percent and satisfactory color characteristics are achieved. The coating includes a layer of a transparent dielectric material adjacent the surface of the glass substrate, and respective layers of nitrided nichrome and silver each of which are formed by sputter-coating onto the glass substrate in a nitrogen-containing atmosphere. Most preferably, the coating also includes a layer of silicon oxynitride interposed between the layer of dielectric material and the layer of nitrided nichrome. The silicon oxynitride layer may include an oxygen gradient layer wherein the concentration of oxygen decreases from one location in the silicon oxynitride layer to another location at a different depth in that same layer. If present, the oxygen gradient is most preferably such that the greater amount of oxygen concentration is nearer the bottom of the layer (i.e., towards the glass substrate) with the lesser amount of oxygen concentration being nearer the top of the layer (i.e., away from the glass layer).

Classifications:

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

International (IPC 1-7): B32B15/04 B32B17/06 C03C17/36

CPC: Y10T428/24975 Y10T428/265 C03C17/3618 C03C17/36

C03C17/3626 C03C17/3644 C03C17/3652 C03C17/366

C03C17/3694 C03C2217/78

European: C03C17/36 C03C17/36B320 C03C17/36B332

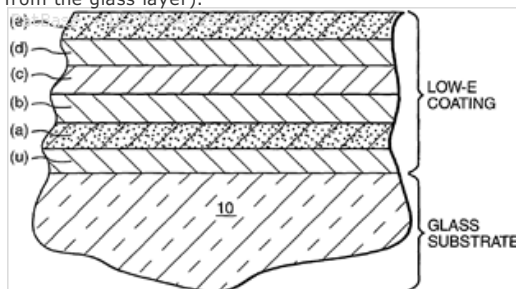
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M03C217/780

US: 428/216 428/216P 428/336 428/336S 428/428 428/432

428/432S 428/469 428/472 428/472S 428/698 428/698S 428/701

428/702 428/702S



Family:

Publication number	Publication date	Application number	Application date
AU2001243417 AA	20010917	AU20010243417	20010305
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AU200143417 A5	20010917	AU20010043417	20010305
US2001041252 AA	20011115	US20010797903	20010305
US6623846 BB	20030923	US20010797903	20010305
US6623846 C1	20130208	US20010797903	20010305
WO0166483 A1	20010913	WO2001US06964	20010305

Priority:

US20000187039P 20000306 US20010797903 20010305 WO2001US06964 20010305

Probable Assignee: GUARDIAN GLASS LLC

Assignee(s): (std): GUARDIAN INDUSTRIES ; GUARDIAN IND

Assignee(s): GUARDIAN IND CORP ; GUARDIAN IND INC ; GUARDIAN GLASS LLC ; GUARDIAN INDUSTRIES CORP ; GUARDIAN INDUSTRIES INC ; LAIRD RONALD E

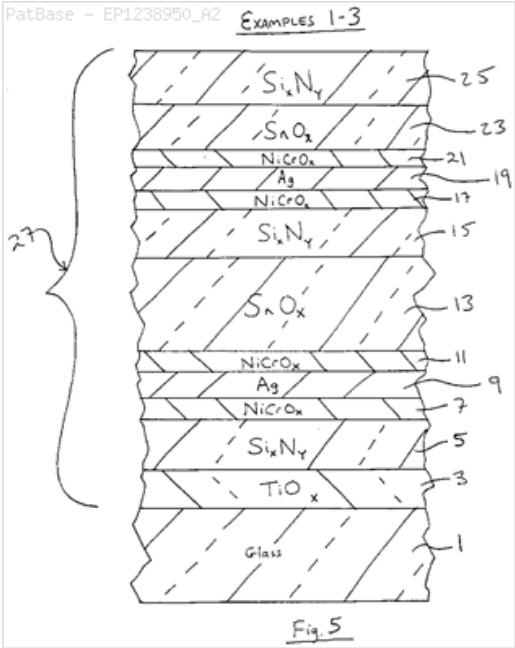
Inventor(s): (std): LAIRD RONALD E
Inventor(s): RONALD E LAIRD
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN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

4) Family number: 46846519 (EP1238950A2) © PatBase

Title: Heat treatable low-E coated articles and methods of making same

Abstract: A heat treatable coated article (e.g., vehicle windshield, IG unit, etc.) is provided with a dual-silver low-E coating. Before and/or after heat treatment (HT), the coating and/or coated article has a visible transmittance of at least 70 percent, more preferably at least 75 percent. Moreover, the coating and/or coated article is designed so as to have approximately the same color when viewed over a wide range of viewing angles. In certain embodiments, at least one contact layer (e.g., of or including NiCrOx) that contacts an infrared (IR) reflecting layer (e.g., Ag) is oxidation graded so that it progressively becomes less oxidized through its thickness as it nears the IR reflecting layer. In still other embodiments, a Si-rich silicon nitride layer(s) may be utilized to reduce haze.

Classifications:
International (IPC 8-9): B32B17/10 C03C17/36 C23C14/00 C23C14/06 C23C14/34 (Advanced/Invention); B32B17/06 C03C17/36 C23C14/00 C23C14/06 C23C14/34 (Core/Invention)
International (IPC 1-7): C03C17/36 C23C14/34
CPC: B32B17/10009 B32B17/10174 C03C17/36 C03C17/3618 C03C17/3626 C03C17/3639 C03C17/3644 C03C17/3652 C03C17/366 C03C17/3681 C03C17/3694 C03C2217/78 C23C14/0015 C23C14/0084 C23C14/0652 B32B17/10036 B32B17/10761 C23C14/08 C23C14/562 C23C14/568 Y10T428/12458 Y10T428/12847 Y10T428/12896 Y10T428/12944
European: B32B17/10C B32B17/10E10 C03C17/36 C03C17/36B320 C03C17/36B332 C03C17/36B339 C03C17/36B342 C03C17/36B346 C03C17/36B352L C03C17/36B356 C03C17/36B374 C23C14/00E C23C14/00F2N C23C14/06F4 M03C217/780



Family:

Publication number	Publication date	Application number	Application date
EP1238950 A2	20020911	EP20020009226	20010710
EP1238950 A3	20030102	EP20020009226	20010710
EP1238950 B1	20070411	EP20020009226	20010710
EP1238950 B2	20140827	EP20020009226	20010710
EP1787965 A2	20070523	EP20070002820	20010710
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PL220027 B1	20150831	PL20010388500	20010703

Priority:
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EP20010115761 20010710

Probable Assignee: GUARDIAN INDUSTRIES

Assignee(s): (std): CT LUXEMBOURGEOIS RECH VERRE ; GUARDIAN INDUSTRIES ; GUARDIAN IND
Assignee(s): CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE SA ; GUARDIAN IND CORP ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE S A ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE S A ; GUARDIAN INDUSTRIES CORP
Inventor(s): (std): ANTON DIETRICH ; JEAN MARC LEMMER ; PHILIP J LINGLE ; RONALD E LAIRD ; LEMMER JEAN MARC ; DIETRICH ANTON ; LINGLE PHILIP J ; LAIRD RONALD E
Agent(s): HESS PETER K G ; RIZZO SERGIO
Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

5) Family number: 28542997 (US2003104221A) © PatBase

Title: COATED ARTICLE WITH IMPROVED BARRIER LAYER STRUCTURE AND METHOD OF MAKING THE SAME

Abstract: A coated article, and a corresponding method of making the same are provided. The coated article includes a coating supported by a substrate, the coating including a thin metal or metal nitride contact layer (e.g., NiCr, Ni, Cr, CrNx, or NiCrNx) located directly between and contacting an infrared (IR) reflecting layer (e.g., Ag) and an oxide barrier layer (e.g.,

NiCrOx).

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 C03C17/36

C23C14/00 C23C14/32 C23C14/34 G02B1/10 (Advanced/Invention)

International (IPC 1-7): B32B17/06 B32B17/10 B32B9/04

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G02B1/10

CPC: Y10T428/12854 Y10T428/12896 Y10T428/12944

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European: C03C17/36 C03C17/36B320 C03C17/36B332

C03C17/36B339 C03C17/36B342 C03C17/36B346 C03C17/36B352L

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C23C14/08J C23C14/18B M03C217/780

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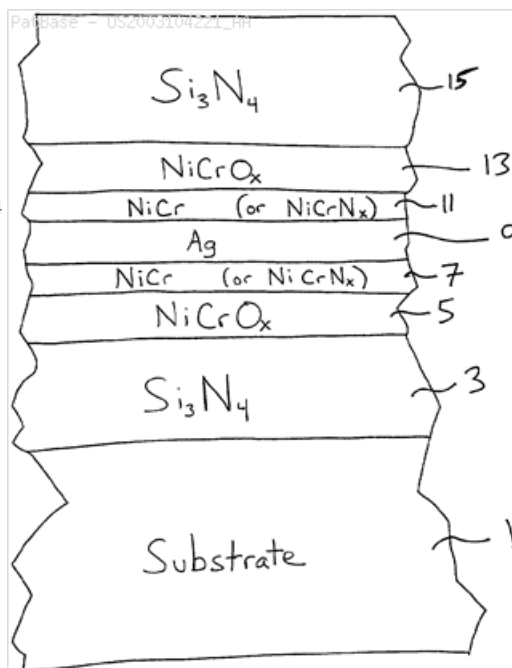
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Family:

Publication number	Publication date	Application number	Application date
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WO03042122 A2	20030522	WO2002US35638	20021107
WO03042122 A3	20031016	WO2002US35638	20021107
WO03042122 C2	20040219	WO2002US35638	20021107

Priority:

US20010331160P 20011109 US20010986985 20011113 WO2002US35638 20021107
US20030404118 20030402 US20040892230 20040716 US20050254672 20051021

Probable Assignee: GUARDIAN GLASS LLC

Assignee(s): (std): GUARDIAN IND ; STACHOWIAK GRZEGORZ

Assignee(s): GUARDIAN GLASS LLC ; GUARDIAN IND CORP ; GUARDIAN IND CORP AUBURN HILLS

Inventor(s): (std): STACHOWIAK GRZEGORZ

Inventor(s): GRZEGORZ STACHOWIAK

Agent(s): MACPHERSON LESLIE AND TYERMAN LLP; MLT AIKINS LLP; NIXON AND VANDERHYTE PC

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 LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

6) Family number: 34036778 (US2006292381A)

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Title: BLUE COLORED COATED ARTICLE WITH LOW-E COATING

Abstract: A coated article is provided with at least one infrared (IR) reflecting layer, and is designed so as to realize good blue glass side reflective coloration in combination with desired solar control characteristics. In certain example embodiments, the coated is designed to realize rather negative glass side reflective bss values, in combination with fairly neutral glass side reflective ass color values and good sheet resistance and/or emissivity. The coated article may be used in the context of architectural or other types of window units in certain example embodiments of this invention.

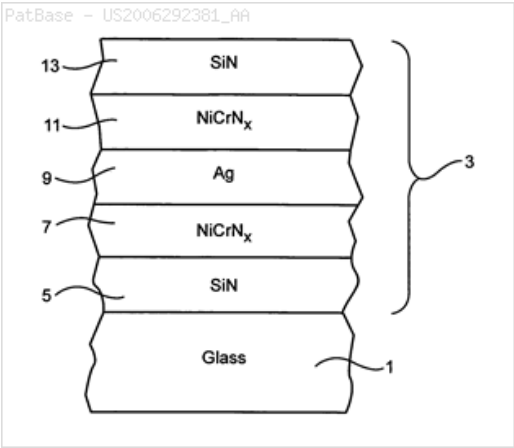
Classifications:

International (IPC 8-9): B01F3/08 B32B15/04 B32B17/06 B32B17/10

B32B9/00 C03C17/34 C03C17/36 E06B3/67 (Advanced/Invention);

B01F3/08 B32B15/04 B32B17/06 B32B9/00 C03C17/34 C03C17/36

E06B3/66 (Core/Invention)
CPC: Y10T428/31678 C03C17/36 C03C17/3618 C03C17/3626 C03C17/3652 C03C17/366 C03C17/3681
European: C03C17/36 C03C17/36B320 C03C17/36B332 C03C17/36B346 C03C17/36B352L C03C17/36B356
US: 428/428 428/432 428/446 428/448 428/457 428/697 428/698 428/699 428/701 428/702 428/704



Family:

Publication number	Publication date	Application number	Application date
CA2612170 AA	20071213	CA20062612170	20060626
CA2612170 C	20100914	CA20062612170	20060626
EP1926690 A2	20080604	EP20060847266	20060626
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US2006292381 AA	20061228	US20050166347	20050627
US7166359 BB	20070123	US20050166347	20050627
WO07072223 A2	20070628	WO2006IB04027	20060626
WO07072223 A3	20080313	WO2006IB04027	20060626

Priority:

US20050166347 20050627 WO2006IB04027 20060626

Probable Assignee: GUARDIAN EUROPE RL SA

Assignee(s): (std): BUTZ JOCHEN ; GUARDIAN INDUSTRIES ; CT LUXEMBOURGEOIS RECH VERRE ; GUARDIAN IND ; GUARDIAN EUROPE S A R L ; KRILTZ UWE

Assignee(s): GUARDIAN INDUSTRIES CORP ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SARL ; GUARDIAN EUROPE RL SA ; GUARDIAN EUROPE SARL ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE S A C R ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE ; 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 LA CERAMIQUE RL SA ; GUARDIAN IND CORP

Inventor(s): (std): BUTZ JOCHEN ; KRILTZ UWE

Agent(s): MACPHERSON LESLIE AND TYERMAN LLP; HESS PETER K G; NIXON AND VANDERHYE PC

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 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 MW MX 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 SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

7) Family number: 48960532 (WO11062574A1) © PatBase

Title: BRONZE COLORED COATED ARTICLE WITH LOW-E COATING

Abstract: A coated article is provided with at least one infrared (IR) reflecting layer, and is designed so as to realize good bronze glass side reflective coloration in combination with desired solar control characteristics and/or transmissive optics. In certain example embodiments, the coated is designed to realize glass side reflective coloration of red ass and yellow bss, for an overall bronze glass side reflective coloration. The coating may be used in monolithic of IG window units. The coated article may be used in the context of architectural or other types of window units in certain example embodiments of this invention.

Classifications:

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

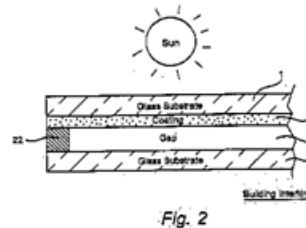
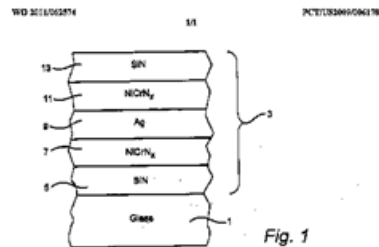
International (IPC 1-7): C03C17/36

CPC: C03C17/36 C03C17/3618 C03C17/3626 C03C17/3644

C03C17/3652 C03C17/366 C03C17/3681

European: C03C17/36 C03C17/36B320 C03C17/36B332

C03C17/36B342 C03C17/36B346 C03C17/36B352L C03C17/36B356

**Family:**

Publication number	Publication date	Application number	Application date
BR112012009731 A2	20160517	BR20121109731	20091119
BR112012009731 B1	20190129	BR20121109731	20091119
DE602009046503 D1	20170720	DE200960046503T	20091119
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ES2634250 T3	20170927	ES20090764342T	20091119
IN00645DN2012 A	20150821	IN2012DN00645	20120123
MX2012004615 A1	20120613	MX20120004615	20091119
MX351708 B	20171026	MX20120004615	20091119
PL2501660 T3	20170929	PL20090764342T	20091119
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TR201712652 T4	20171023	TR20170012652T	20091119
WO11062574 A1	20110526	WO2009US06178	20091119

Priority:

BR20121109731 20091119 EP20090764342 20091119 WO2009US06178 20091119

Probable Assignee: GUARDIAN EUROPE SARL

Assignee(s): (std): CENTRE LUXEMBOURGEOIS DE RECH POUR LE VERRE ET LA CERAMIQUE S A C R V C ; CT LUXEMBOURGEOIS RECH VERRE ; GUARDIAN INDUSTRIES ; KNOLL HARTMUT ; SANTR LUKSAMBURZHUA DE RESHERSH PUR LE VERR EH LJA SERAMIK S A S R V S ; GUARDIAN IND ; GUARDIAN EUROPE S A R L

Assignee(s): SANTR LUKSAMBURZHUA DE RESHERSH PUR LE VERR EH LJA SERAMIK SRVS SA ; GUARDIAN IND CORP ; GUARDIAN EUROPE SARL ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET 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 ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE CRVC SA ; GUARDIAN INDUSTRIES CORP

Inventor(s): (std): KNOLL KHARTMUT ; KNOLI HARTMUT ; KNOLL HARTMUT

Inventor(s): HARTMUT KNOLL

Agent(s): MARKS AND CLERK LUXEMBOURG LLP; HESS PETER K G; VALLEJO JUAN PEDRO; TOLGA CAYLAK; 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 RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW