

Search history

Search 1: borosilicate and glass and layer (Results 33175)
Search 2: 1 and (laminate or layer) (Results 33175)
Search 3: 2 and outer (Results 13478)
Search 4: 3 and tempered (Results 773)
Search 5: 4 and coating and thickness (Results 580)
Search 6: 5 and tac=(glass) (Results 455)
Search 7: 6 and tac=(layer or ply or coating or strat*) (Results 414)
Search 8: 7 and (laminate or film) (Results 345)
Search 9: 8 and alumin* (Results 303)
Search 10: 9 and (inner or intern*) (Results 260)
Search 11: 10 and (outer near layer) (Results 113)
Search 12: 11 and (plastic or polymer) (Results 101)
Search 13: 12 and laminate (Results 40)
Search 14: 7 and tac=(borosilicate) (Results 108)
Search 15: 14 and laminate (Results 41)
Search 16: 15 and (plastic or polymer) (Results 38)
Search 17: 16 and alumin* (Results 37)
Search 18: 17 and (glass near laminate) (Results 23)

Title: FIRE RESISTANT WINDOWS

Abstract: A window composed of a frame having at least two, parallel disposed, spaced **glass** panes. At least one of the panes is composed of fire-resistant **glass**. The fire resistant pane can be a **borosilicate** or **alumino** silicate **glass** having a compressive prestress in the peripheral edge portion thereof, and for which the product of thermal expansion α and the elastic modulus E is 1-5 kp.times. cm -2 .times. degrees centigrade -1 .

Classifications:

International (IPC 8-9): B32B17/10 C03C10/00

E06B5/16 (Advanced/Invention);

B32B17/06 C03C10/00 E06B5/10 (Core/Invention)

International (IPC 1-7): B32B17/00 C03C27/06 C03C27/12

C03C3/00 C03C3/30 E04B1/94 E04C2/38 E06B3/24 E06B5/16

CPC: Y10S428/92 Y10T428/315 B32B17/10761 B32B17/10045

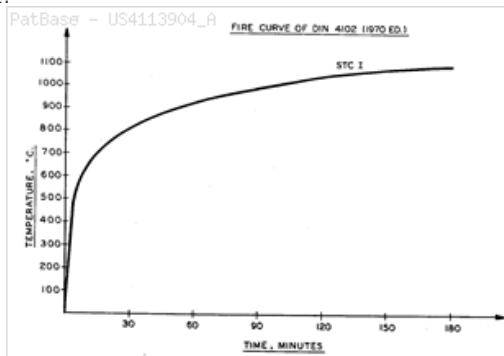
B32B17/10055 B32B17/10174 B32B17/10302 C03C10/00 E06B5/165

European: B32B17/10C4B B32B17/10C4B4 B32B17/10E10

B32B17/10E16B B32B17/10G28 C03C10/00 E06B5/16D

US: 156/109 156/99 428/34 428/410 428/426 428/920 501/69

52/171.3



Family:

Publication number	Publication date	Application number	Application date
BE836201 A	19760401	BE19756045277	19751202
DE2456991 A1	19760616	DE19742456991	19741203
FR2293536 A1	19760702	FR19750036688	19751201
FR2293536 B1	19790601	FR19750036688	19751201
GB1479566 A	19770713	GB19750049521	19751202
IT1051325 A	19810421	IT19750069969	19751202
JP51109121 A2	19760927	JP19750144560	19751202
US4113904 A	19780912	US19750637424	19751203

Priority:

DE19742456991 19741203

Probable Assignee: JENAER GLASWERK SCHOTT AND GEN

Assignee(s): (std): JENAER GLASWERK SCHOTT AND GEN

Assignee(s): JENAER GLASWERK SCHOTT ET GEN

Inventor(s): (std): BERUNAA KIIFUAA ; KIEFER W ; KIEFER WERNER ; KIEFER WERNER DIPL CHEM DR

Inventor(s): KIEFER WERNER DIPL CHEMDR ; W KIEFER

Title: FIRE-SCREENING PANEL

Abstract: A fire-screening glazing panel including a plurality of sheets of vitreous material and at least two spaced **layers** of intumescent material each sandwiched between sheets of the vitreous material. At least two of the plurality of vitreous sheets are internal vitreous sheets sandwiched between the at least two intumescent **layers**, and the at least two internal vitreous sheets are **laminated** together without intervening intumescent material.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 C03C27/12 E04B1/94 E06B5/16 (Advanced/Invention);

B32B17/06 C03C27/12 E04B1/94 (Advanced/Non-invention); B32B17/06 C03C27/12 E04B1/94 E06B5/10 (Core/Invention)

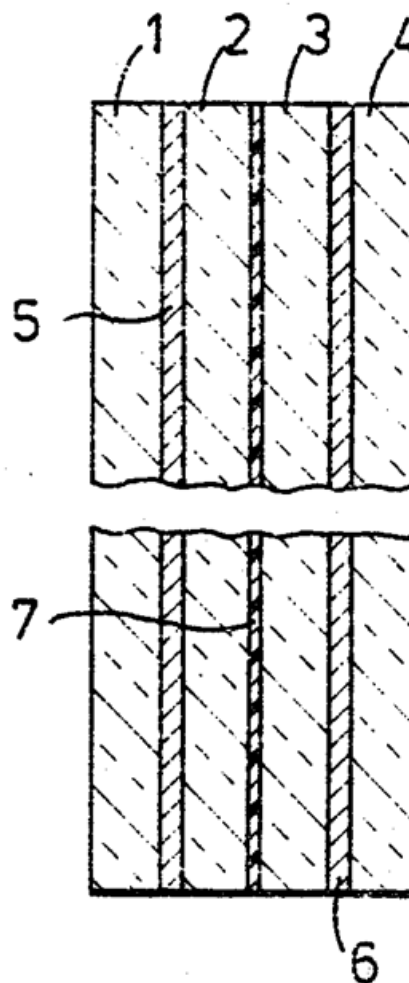
International (IPC 1-7): B32B17/06 B32B17/10 B32B31/04 B32B31/20 B32B9/00 C03C27/12 E04B1/94 E04C2/54 E06B3/66 E06B5/16

CPC: Y10S428/92 Y10S428/921 B32B17/10045 B32B17/10311 Y10T428/2495 Y10T428/24967 Y10T428/3163 B32B7/12 B32B2250/40 B32B17/10761

European: B32B17/10C4B B32B17/10E18 B32B17/10G28

US: 156/104 156/106 156/182 156/286 156/306.6 428/213 428/215 428/428 428/437 428/920 428/921 52/232 52/786.11 52/789

PatBase - US4444825_A



Family:

Publication number	Publication date	Application number	Application date
AT322282 A	19871115	AT19820003222	19820826
AT385950 B	19880610	AT19820003222	19820826
AU198287743 A1	19830303	AU19820087743	19820826
AU554275 B2	19860814	AU19820087743	19820826
BE894168 A	19830223	BE19821010577	19820823
CH651250 A	19850913	CH19820005033	19820824
DE3231975 A1	19830310	DE19823231975	19820827
DE3231975 C2	19860313	DE19823231975	19820827
FR2512008 A1	19830304	FR19820014558	19820823
FR2512008 B1	19860131	FR19820014558	19820823
GB2104838 A1	19830316	GB19810026343	19810828
GB2104838 B2	19850220	GB19810026343	19810828
IT1155915 A	19870128	IT19820068035	19820824
IT8268035 A0	19820824	IT19820068035	19820824
JP2559572 B2	19961204	JP19820147511	19820825
JP58045141 A2	19830316	JP19820147511	19820825
NL192875 B	19971201	NL19820003335	19820826
NL192875 C	19980402	NL19820003335	19820826
NL8203335 A	19830316	NL19820003335	19820826
NO158208 B	19880425	NO19820002916	19820827
NO158208 C	19880803	NO19820002916	19820827
NO822916 A	19830301	NO19820002916	19820827
SE455615 B	19880725	SE19820004915	19820827
SE455615 C	19881117	SE19820004915	19820827
SE8204915 A	19820827	SE19820004915D	19820827
SE8204915 A0	19820827	SE19820004915	19820827
SE8204915 L	19820827	SE19820004915	19820827

Priority:

GB19810026343 19810828

Probable Assignee: HELLER FINANCIAL INC

Assignee(s): (std): GLAVERBEL ; GLAVERBEL SA

Assignee(s): GLAVERBEL TE BRUSSEL ; GURABERUBERU SA ; PENSION BENEFIT GUARANTY CORP ; HELLER FINANCIAL INC ; GLAVERBEL BRUESSEL BRUXELLES BE ; GLAVERBEL S A

Inventor(s): (std): ROBERT VANDERSTUKKEN ; ROBEERU BUANDORUSUTONKAN ; R VANDERSTUKKEN ; MARUSERU DO BOURU ; MARCEL DE BOEL ; M DE BOEL ; BOEL MARCEL DE ; VANDERSTUKKEN ROBERT ; VANDERSTUKKEN R ; DE BOEL MARCEL ; DE BOEL M

Inventor(s): BOEL MARCEL DE CHATELET BE ; VANDERSTUKKEN ROBERT RANSART BE

Agent(s): FB RICE; FB RICE PTY LTD

Title: SEGMENTED GLASS LAMINATE

Abstract: A flexible laminate is disclosed which comprises a flexible support as a first layer and glass having a thickness in the range from 10 mum to 500 mum as a second layer and wherein the first or the second layer is a non-contiguous, segmented layer. In the embodiment of the Figure, a plastic foil 1 is provided with a plurality of thin adjacent glass segments 2, which are separated by a space 3. The laminate can be provided with functional layers, e.g. using a web coating or printing process, and can then be cut easily in the space between the segments so as to obtain a plurality of glass laminates.

Classifications:

International (ipc 8-9): B24D15/10 B32B17/06 B32B17/10 B32B27/32 B32B27/36 B32B7/02 B42D15/10 C03C27/00 C03C27/12 G02B1/11 G02B5/00 G02F1/00 G02F1/13 G02F1/1333 G02F1/1335 G02F1/1337 G02F1/1341 G02F1/1345 G03C1/76 G03C1/795 G03C1/85 G03C1/91 G03C7/00 G06K19/02 G06K19/04 G06K19/06 G06K19/07 G06K19/14 G09F9/00 G11B7/24 H01L21/00 H01L23/00 H01L23/48 H01L23/49 H01L23/58 H01L33/00 H01L51/00 H01L51/10 H01L51/42 H01L51/52

H05B33/02 (Advanced/Invention);

B32B17/10 B32B7/02 C03C27/10 G02F1/1333 G02F1/1335

G03C1/76 G03C1/85 G03C1/91 H01L51/42 (Advanced/Non-invention);

B32B27/32 B32B27/36 B32B7/02 C03C27/00 G02B1/10 G02F1/13

G03C1/76 G03C1/795 G03C1/91 G06K19/02 G06K19/04 G06K19/06

G06K19/07 G06K19/14 G09F9/00 G11B7/24 H01L21/00 H01L23/00 H01L23/48 H01L23/58 H01L51/00 H01L51/05 H01L51/50

H05B33/02 (Core/Invention);

G02F1/13 G03C1/76 G03C1/85 G03C1/91 H01L51/42 (Core/Non-invention)

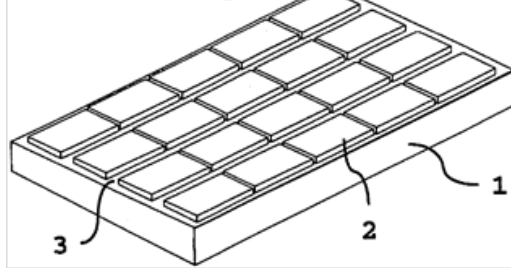
International (ipc 1-7): B05D5/06 B05D5/12 B24D15/10 B32B1/00 B32B17/06 B32B17/10 B32B23/02 B32B27/36 B32B3/00 B32B31/04 B32B7/02 B42D15/10 C03C17/34 C03C27/10 C03C27/12 D06N7/04 G02B1/11 G02B5/00 G02F1/00 G02F1/1337 G02F1/1345 G03C1/91 G03C7/00 G06K19/06 G06K19/07 G06K19/10 G09F9/00 G11B7/24 H01J1/70 H01J29/18 H01L21/00 H01L21/44

CPC: Y10S428/913 Y10S430/146 H01L51/42 G02F2001/133302 H01L27/02 H01L2924/0002 B32B2367/00 G03C1/76 B32B17/10174 B32B27/32 G03C1/7614 G03C1/795 G03C1/7954 G03C1/853 G03C1/91 Y10T428/24355 Y10T428/24752 Y10T428/24769 Y10T428/26 Y10T428/24802 Y10T428/24851 Y10T428/24868 Y10T428/24917 Y10T428/24926 Y10T428/162 Y10T428/164 Y10T428/315 B32B17/10247 B32B17/1033 B32B17/10981 G06K19/06046 G06K19/14 Y10T428/31507 Y10T428/31551 Y10T428/31598 Y10T428/31601 Y10T428/31616 Y10T428/31623 Y10T428/31634 Y10T428/31645 Y10T428/31678 Y10T428/31721 Y10T428/31855 Y10T428/31681 Y10T428/31692 Y10T428/31786 Y02P70/521 H01L51/524 H01L2924/12044 Y02E10/549 B32B17/10541 B42D25/45 B42D25/455 B42D25/20 B42D25/46 B42D25/47 B42D25/373 B32B17/10036 B42D2033/32 B32B38/145 B32B2307/202 B32B2307/412 B32B2457/20 B32B27/36 H01L51/0096 G03C8/06 G02B1/16 G02B1/10 G06K19/02 G06K19/041 G06K19/06009 H01L23/49855 H01L23/573 G02B1/116 G02F1/133305 G02F1/133502 H01L23/585 B32B7/12 B32B17/10018 B32B17/10119 B32B17/10165 G02F1/1333 H01L23/562 H01L23/564 B32B3/18

European: B32B17/10C2 B32B17/10C28 B32B17/10C4 B32B17/10E B32B17/10E10 B32B17/10E12 B32B17/10E22 B32B17/10L22 B32B27/32 B32B27/36 G02B1/11D2M G02F1/1333 G03C1/76 G03C1/795 G06K19/02 G06K19/04K G06K19/06C G06K19/06C5 G06K19/14 H01L23/498K H01L23/562 H01L23/564 H01L23/57A H01L23/58B H01L51/00S H01L51/20C H01L51/52C L32B367/00 L42D33/32 S02F1/1333A S02F1/1333B S02F1/1335A S03C1/76D S03C1/795P S03C1/85B S03C1/91 T01L27/02 T01L51/20C T01L51/42 Y02E10/50

US: 257/E23.002 257/E23.064 257/E23.194 257/E27.009 257/E51.012 313/478 313/479 348/832 369/283 369/288 427/108 427/65 428/141 428/189 428/191 428/195 428/195.1 428/201 428/203 428/209 428/210 428/220 428/332 428/332P 428/410 428/412 428/423.1 428/425.5 428/425.6 428/426 428/428 428/430 428/432 428/433 428/435 428/438 428/441 428/457 428/458 428/46 428/461 428/473.5 428/48 428/480 428/500 428/913 430/270.12 430/495.1 430/945 438/25 438/29 438/584

PatBase - US2003096106_AA

**Family:**

Publication number	Publication date	Application number	Application date
AT219725 E	20020715	AT19980948947T	19980909
AT398017 E	20080715	AT19980954398T	19981007
AU199895390 A1	19990517	AU19980095390	19980909
AU199911527 A1	19990517	AU19990011527	19981007
AU199934114 A1	20000207	AU19990034114	19990311
AU199934114 A5	20000207	AU19990034114	19990311
AU739285 B2	20011011	AU19990011527	19981007
AU751890 B2	20020829	AU19980095390	19980909
CA2304576 AA	19990506	CA19982304576	19980909
CA2304576 C	20070731	CA19982304576	19980909
CA2306044 AA	20000329	CA19982306044	19981007
CA2306044 C	20070904	CA19982306044	19981007
CN1309606 A	20010822	CN19998008612	19990311
DE69806263 D1	20020801	DE19986006263	19980909
DE69806263 T2	20090924	DE19986006263T	19980909
DE69831325 D1	20050929	DE19986031325	19980715
DE69831325 T2	20060614	DE19986031325T	19980715
DE69839611 D1	20080724	DE19986039611	19981007
DE69914761 D1	20040318	DE19996014761	19990311
DE69914761 T2	20050113	DE19996014761T	19990311
DE69919085 D1	20040909	DE19996019085	19990326
DE69919085 T2	20050721	DE19996019085T	19990326
DE69922725 D1	20050127	DE19996022725	19990303
DE69922725 T2	20051215	DE19996022725T	19990303
EP0945254 A1	19990929	EP19990200602	19990303
EP0945254 B1	20041222	EP19990200602	19990303
EP0972632 A1	20000119	EP19990200955	19990326
EP0972632 B1	20040804	EP19990200955	19990326
EP0982121 A1	20000301	EP19980202380	19980715
EP0982121 B1	20050824	EP19980202380	19980715
EP1024952 A1	20000809	EP19980948947	19980909
EP1024952 B1	20020626	EP19980948947	19980909
EP1024953 A1	20000809	EP19980954398	19981007

EP1024953 B1	20080611	EP19980954398	19981007
EP1098761 A1	20010516	EP19990915584	19990311
EP1098761 B1	20040211	EP19990915584	19990311
JP11259914 A2	19990924	JP19980302642	19981023
JP2000003139 A2	20000107	JP19990070282	19990316
JP2000057306 A2	20000225	JP19990131388	19990512
JP2000062093 A2	20000229	JP19990197632	19990712
JP2001520950 T2	20011106	JP20000517841T	19980909
JP2001520951 T2	20011106	JP20000517842T	19981007
JP2002520205 A2	20020709	JP20000559995	19990311
JP2002520205 T2	20020709	JP20000559995T	19990311
JP4264517 B2	20090520	JP19980302642	19981023
JP4302812 B2	20090729	JP19990070282	19990316
JP4328465 B2	20090909	JP20000517841T	19980909
JP4392127 B2	20091224	JP20000559995T	19990311
JP4434365 B2	20100317	JP19990197632	19990712
JP4773617 B2	20110914	JP20000517842T	19981007
KR100581249 B1	20060522	KR20007004386	20000422
KR20010031378 A	20010416	KR20007004386	20000422
KR20010031379 A	20010416	KR20007004387	19981007
KR20010079529 A	20010822	KR20017000550	19990311
US2003096106 AA	20030522	US20020327066	20021224
US6120907 A	20000919	US19980177505	19981023
US6268058 BA	20010731	US19990296381	19990423
US6287674 BA	20010911	US19980152682	19980914
US6306510 BA	20011023	US19990342104	19990629
US6309901 BA	20011030	US20000529658	20000418
US6366013 BA	20020402	US19990267676	19990315
US6861136 BB	20050301	US20020327066	20021224
WO0003870 A1	20000127	WO1999EP01623	19990311
WO9921707 A1	19990506	WO1998EP05748	19980909
WO9921707 C1	20000713	WO1998EP05748	19980909
WO9921708 A1	19990506	WO1998EP06455	19981007

Priority:

EP19970203312	19971024	US19970069419P	19971218	US19980078283P	19980317
WO1998EP05748	19980909	US19980100126P	19980914	US19980152682	19980914
EP19980954398	19981007	WO1998EP06455	19981007	US19980177505	19981023
EP19990915584	19990311	EP19990915584	19990311	WO1999EP01623	19990311
US19990267676	19990315	US19990272389	19990319	EP19990200955	19990326
US19990296381	19990423	US19990342104	19990629	KR20007004386	20000422
US20020327066	20021224				

Probable Assignee: INNOLUX CORP

Assignee(s): (std): AGFA GEVAERT ; AGFA GEVAERT NAAMLOZE VENNOOTSCHAP ; AGFA GEVAERT NV ; BEKAERT NV SA ; INNOVATIVE SPUTTERING TECH ; INNOVATIVE SPUTTERING TECHNOL ; TAHON JEAN PIERRE ; VERLINDEN BARTHOLOMEUS ; GOEDEWEECK RUDI ; CHI MEI OPTOELECTRONICS CORP ; CHI MEI OPTOELECTRONICS CORP

Assignee(s): CHIMEI INNOLUX CORP ; CHI MEI OPTOELECTRONICS CORP TAINAN ; N V BEKAERT S A ZWEVEGEM ; CHI MEI OPTOELECTRONICS CORP TAINAN ; INNOLUX CORP ; LEENDERS LUC ; NV BEKAERT SA ; VERMEULEN LEON ; INNOVATIVE SPUTTERING TECHNOLOGY KARREWEG ; INNOVATIVE SPUTTERING TECHNOLOGY ; CHI MEI OPTOELECTRONICS CORPORATION ; N V BEKAERT S A ; AGFA GEVAERT SEPTSTRAAT ; AGFA GEVAERT SEPTSTRAAT NV ; BEKAERT BEKAERTSTRAAT NVSA ; AGFA GEVAERT MORTSEL ; AGFA GEVAERT N V

Inventor(s): (std): B VERLINDEN ; BARTHOLOMEUS VERLINDEN ; GOEDEWEECK RUDI ; HERMANN VAN GOLB ; J P TAHON ; JEAN PIERRE TAHON ; L VERMEULEN ; LEENDERS LUC ; LEO VERMEULEN ; LEON VERMEULEN ; LIEVENS HUGO ; LIPPENS PAUL ; LUC LEENDERS ; MUYLLE WILFRIED ; RUDI GOEDEWEECK ; TAHON J P ; TAHON JEAN PIERRE ; VAN GORP HERMAN ; VERLINDEN B ; VERLINDEN BART ; VERLINDEN BARTHOLOMEUS ; VERLINDEN BARTHOLOMEUS B MORT ; VERMEIREN JAN ; VERMEULEN L ; VERMEULEN LEO ; VERMEULEN LEON

Inventor(s): VERLINDEN BARTHOLOMEUS B 2640 MORTSEL

Agent(s): DAVIES COLLISON CAVE ; DAVIES COLLISON CAVE PTY LTD ; BORDEN LADNER GERVAIS LLP ; NARGOLWALLA CYRA ET AL

Designated states: AT AU BE CA CH CN CY DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL NO PT SE US

Title: **LAMINATED GLASS** FLOOR TILE AND FLOORING MADE THEREFROM AND METHOD FOR MAKING SAME

Abstract: A **laminated glass** floor tile is disclosed, comprising a **glass** plate, a backing substrate and a decorative **layer** disposed between the **glass** plate and the backing substrate. A **glass** flooring made using **laminated glass** floor tiles is also disclosed, as well as, a method for making a **laminated glass** floor tile comprising the steps of placing a decorative **layer** between a backing substrate and a **glass** plate and laminating the **glass** plate, the backing substrate and the decorative **layer**.

Classifications:

International (IPC 8-9): B32B17/00 B32B17/06 B32B17/10

B32B27/06 B32B3/00 B32B3/14 B44C5/04

E04F15/08 (Advanced/Invention);

B32B27/06 B32B37/10 (Advanced/Non-invention);

B32B17/06 B32B27/06 B32B3/14 B44C5/00

E04F15/08 (Core/Invention);

B32B37/10 (Core/Non-invention)

International (IPC 1-7): B32B17/00 B32B17/06 B32B3/00 B32B3/10

B32B3/14 B32B31/00

CPC: Y10T428/162 Y10T428/166 Y10T428/24802 Y10T428/24876

B32B17/10247 B32B27/06 B32B37/1027 B32B2037/109

B32B2310/0831 B32B2451/00 B44C5/0407 B44C5/0415 B44C5/043

B44C5/0438 B44C5/0446 E04F15/08 B32B7/12 B32B2419/04

B32B3/14 B32B17/10853 B32B37/12 B32B2315/08 B32B17/065

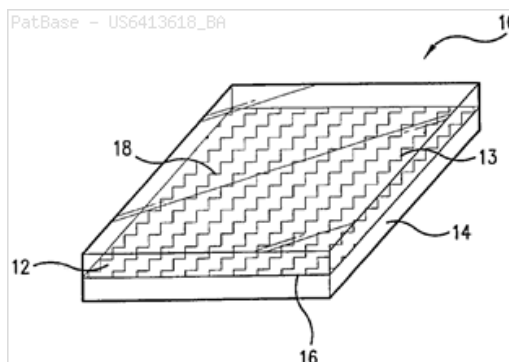
European: B32B17/06 B32B17/10E12 B32B17/10L10B2B2

B32B27/06 B32B3/14 B32B31/00A8B B32B37/12 B44C5/04C

B44C5/04D B44C5/04H B44C5/04J B44C5/04L E04F15/08

L32B31/00A5C L32B310/08B4 L32B315/08 L32B37/10C L32B37/10J L32B451/00

US: 428/195 428/195.1 428/204 428/46 428/49



Family:

Publication number	Publication date	Application number	Application date
AU200049967 A1	20001121	AU20000049967	20000510
AU200049967 A5	20001121	AU20000049967	20000510
CA2373458 AA	20011108	CA20002373458	20000510
US6413618 BA	20020702	US19990309614	19990511
WO0067999 A1	20001116	WO2000US12678	20000510

Priority:

US19990309614 19990511 WO2000US12678 20000510

Probable Assignee: CONGOLEUM CORP

Assignee(s): (std): CONGOLEUM CORP

Assignee(s): DEMPSEY ROBERT ; PARKER ANTHONY A ; ROHRBACHER PETER J ; SABO RICHARD A ; WOOTTEN SCOTT M ; SHOST JOHN A

Inventor(s): (std): WOOTTEN SCOTT M ; SHOST JOHN A ; SABO RICHARD A ; ROHRBACHER PETER J ; PARKER ANTHONY A ; DEMPSEY ROBERT

Inventor(s): ANTHONY A PARKER ; JOHN A SHOST ; PETER J ROHRBACHER ; RICHARD A SABO ; ROBERT DEMPSEY ; SCOTT M WOOTTEN

Agent(s): OSLER HOSKIN AND HARCOURT LLP

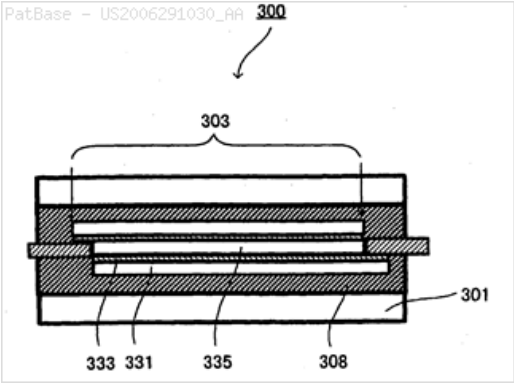
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM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

Title: LIGHT CONTROL DEVICE AND METHOD FOR PRODUCING THE SAME

Abstract: The light control device can improve visibility at the side faces of the pair of transparent substrates with transparent electrodes held in the gap between two transparent plates, irrespective of the number of the optical elements installed in the light control device. A light control device 10 according to the present invention comprises a plurality of optical elements 3 between two transparent plates 1, 2, in each of which a pair of transparent substrates 31, 32 with transparent electrodes 33, 34 are located so as to face each other and a light control **layer** 35 capable of changing the light transmitting state by electrically controlling the pair of transparent electrodes 33, 34 is disposed between the pair of transparent electrodes, wherein a transparent solid **layer** 8 is filled in a space formed in the gap between the two transparent plates 1, 2 and the transparent substrates 31, 32 have taper-shaped side faces.

Classifications:

International (IPC 8-9): E04B2/74 F21S11/00 G02B26/00 G02F1/13 G02F1/1334 G02F1/1335 G02F1/15 G09G3/36 (Advanced/Invention); E06B3/67 E06B9/24 G02F1/1333 G02F1/1334 (Advanced/Non-invention); E04B2/74 F21S11/00 G02B26/00 G02F1/01 G02F1/13 (Core/Invention)
CPC: E06B9/24 G02F1/13336 G02F1/15 G02F1/153 G02F2202/025 G02F2202/28 G02F1/133502 G02F1/133305
European: G02F1/1333N G02F1/1335A P06B9/24 S02F1/1333B S02F1/15 S02F1/153 S02F202/02B2A S02F202/28
US: 345/50 345/87 359/237 359/237P



Family:

Publication number	Publication date	Application number	Application date
EP1739473 A2	20070103	EP20060012988	20060623
EP1739473 A3	20070613	EP20060012988	20060623
JP2007004085 A2	20070111	JP20050187454	20050627
US2006291030 AA	20061228	US20060472349	20060622
US7505188 BB	20090317	US20060472349	20060622

Priority:

JP20050187454 20050627 US20060472349 20060622

Probable Assignee: ASAHI GLASS CO LTD

Assignee(s): (std): ASAHI GLASS CO LTD

Assignee(s): ASAHI GLASS COMPANY LIMITED ; N A

Inventor(s): (std): NIIYAMA SATOSHI ; ITO HIROSHIGE ; AOKI NAOKO

Agent(s): IEIRI TAKESHI; C IRVIN MCCLELLAND OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT PC;
OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT PC

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO
SE SI SK TR YU

Title: THERMOCHROMIC WINDOW STRUCTURES**Abstract:** An energy efficient, thermochromic device that may be used to allow sunlight or solar radiation into a building or structure when sunlight is absent or at high sun angles and substantially blocks solar radiation when sunlight is directly on the window.**Classifications:****International (ipc 8-9):** C07F15/04 C07F15/06 C09K9/00 C09K9/02 E06B9/24 G01K11/16 G01N31/00 G02B21/02 G02B5/23 G02F1/00 G02F1/01 G02F1/15 G02F1/17 G09G3/34 (Advanced/Invention); C07F15/04 G02F1/01 G02F1/15 G09G3/34 (Advanced/Non-invention); C07F15/00 C09K9/02 E06B9/24 G01K11/00 G02B21/02 G02B5/22 G02F1/00 G02F1/01 G09G3/34 (Core/Invention); C07F15/00 (Core/Non-invention)**International (ipc 1-7):** C07F15/04 C09K9/02**CPC:** C09K9/02 C09K2211/187 G02F1/0147 B32B17/10036

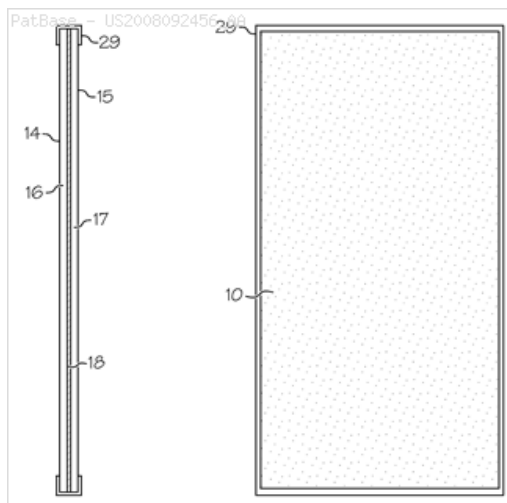
B32B17/10477 B32B17/10651 B32B17/10678 B32B17/10761

B32B17/10174

European: C09K9/02 G02F1/01T M09K211/18P**US:** 252/408.1 252/408.100P 252/583 252/583P 252/586 252/586P

345/106 359/265 359/288 359/288P 359/289 359/321 52/1 52/1P

52/204.5 52/204.500S 546/10

**Family:**

Publication number	Publication date	Application number	Application date
CA2662276 AA	20090227	CA20072662276	20070831
CA2662276 C	20151013	CA20072662276	20070831
DE602007024421 D1	20120927	DE200760024421T	20070831
EP2082005 A1	20090729	EP20070841718	20070831
EP2082005 B1	20120801	EP20070841718	20070831
EP2082005 B9	20130522	EP20070841718	20070831
EP2434000 A2	20120328	EP20110008848	20070831
EP2434000 A3	20120404	EP20110008848	20070831
EP2436750 A2	20120404	EP20110008847	20070831
EP2436750 A3	20140820	EP20110008847	20070831
IN01226KN2009 A	20090522	IN2009KN01226	20090331
JP2010502789 T2	20100128	JP20090526933T	20070831
JP2011099120 A2	20110519	JP20110034424	20110221
JP4694640 B2	20110608	JP20090526933T	20070831
US2008092456 AA	20080424	US20070849704	20070904
US2008100902 AA	20080501	US20070849574	20070904
US2008100903 AA	20080501	US20070849659	20070904
US2008105851 AA	20080508	US20070849624	20070904
US2008106781 AA	20080508	US20070849642	20070904
US2009283728 AA	20091119	US20090474932	20090529
US2011075244 AA	20110331	US20100906704	20101018
US2012001134 AA	20120105	US20110230435	20110912
US2012292581 AA	20121122	US20120477736	20120522
US7525717 BB	20090428	US20070849659	20070904
US7538931 BB	20090526	US20070849642	20070904
US7542196 BB	20090602	US20070849574	20070904
US7817328 BB	20101019	US20070849704	20070904
US8018639 BB	20110913	US20090474932	20090529
US8154788 BB	20120410	US20100906704	20101018
US8182718 BB	20120522	US20070849624	20070904
US8431045 BB	20130430	US20120477736	20120522
US9011734 BB	20150421	US20110230435	20110912
WO08028099 A2	20080306	WO2007US77333	20070831
WO08028099 A3	20080821	WO2007US77333	20070831
WO08028128 A1	20080306	WO2007US77385	20070831

Priority:

US20060841827P 20060901	EP20070841718 20070831	JP20090526933 20070831
WO2007US77385 20070831	US20070849574 20070904	US20070849624 20070904
US20070849642 20070904	US20070849704 20070904	US20070849659 20070904
US20090474932 20090529	US20100906704 20101018	US20110230435 20110912
US20120477736 20120522		

Probable Assignee: PLEOTINT LLC**Assignee(s):** (std): MILLETT FREDERICK A ; VELDKAMP BRAD S ; PLEOTINT L L C ; WINKLE DERICK D ; VANDER GRIEND DOUGLAS A ; OGBURN PAUL H JR ; MILLETT FREDERICK C ; PLEOTINT LLC ; OGBURN JR PAUL H ; BYKER HARLAN J ; BROEKHUIS JR MICHAEL D ; BROEKHUIS MICHAEL D**Assignee(s):** BYKER HARLAN ; BYKER TERRI ; KEY PORTFOLIO LLC ; OGBURN PAUL H ; PLEOTINT LLC WEST OLIVE**Inventor(s):** (std): GRIEND DOUGLAS A V ; WINKLE DERICK D ; VELDKAMP BRAD S ; VANDER GRIEND DOUGLAS A ; OGBURN PAUL H JR ; OGBURN JR PAUL H ; MILLETT FREDERICK C ; MILLETT FREDERICK A ; BYKER HARLAN J ; BROEKHUIS JR MICHAEL D ; BROEKHUIS MICHAEL D

Inventor(s): OGBURN PAUL HJR ; GRIEND DOUGLAS AV ; OGBURN PAUL H ; BROEKHUIS MICHAEL ; BYKER HARLAN ; BYKER HARLAN J WEST OLIVE ; GRIEND DOUGLAS ; GRIEND DOUGLAS A VANDER ; MILLETT FREDERICK ; MILLETT FREDERICK A GRAND HAVEN ; MILLETT FREDERICK C GRAND HAVEN ; OGBURN PAUL ; OGBURN PAUL H JR HUDSONVILLE ; VANDER GRIEND DOUGLAS ; VANDER GRIEND DOUGLAS A GRAND RAPIDS ; VELDKAMP BRAD ; VELDKAMP BRAD S ZEELAND ; WINKLE DERICK ; WINKLE DERICK D HOLLAND

Agent(s): GOWLING LAFLEUR HENDERSON LLP; BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; BARTON MATTHEW THOMAS; THOMPSON HINE LLP INTELLECTUAL PROPERTY GROUP; THOMPSON HINE LLP; THOMPSON HINE L L P; LEVY MARK P ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI 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 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: FABRICATION OF LOW DEFECTIVITY ELECTROCHROMIC DEVICES

Abstract: Prior electrochromic devices frequently suffer from high levels of defectivity. The defects may be manifest as pin holes or spots where the electrochromic transition is impaired. This is unacceptable for many applications such as electrochromic architectural **glass**. Improved electrochromic devices with low defectivity can be fabricated by depositing certain **layered** components of the electrochromic device in a single integrated deposition system. While these **layers** are being deposited and/or treated on a substrate, for example a **glass** window, the substrate never leaves a controlled ambient environment, for example a low pressure controlled atmosphere having very low levels of particles. These **layers** may be deposited using physical vapor deposition.

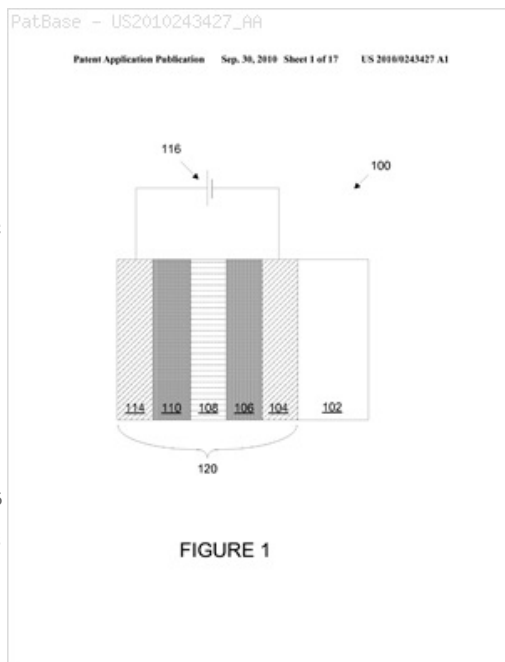
Classifications:

International (IPC 8-9): B05D5/06 B05D5/12 B23K20/10 B24B B24B37/04 C03C17/34 C03C17/36 C09K9/00 C23C10/28 C23C14/00 C23C14/02 C23C14/04 C23C14/06 C23C14/08 C23C14/14 C23C14/18 C23C14/34 C23C14/56 C23C14/58 C23C16/00 C23C16/06 C23C16/52 G02B26/00 G02F G02F1/01 G02F1/03 G02F1/13 G02F1/133 G02F1/1333 G02F1/1343 G02F1/15 G02F1/153 G02F1/155 G02F1/163 G09F9/00 G09F9/30 G09G3/38 H01B H01B13/00 H01B5/14 H01J37/32 H01J37/34 (Advanced/Invention); B05D3/12 B05D5/12 C03B27/00 C23C16/02 (Advanced/Non-invention); B05D5/12 C23C14/34 C23C16/00 C23C16/06 C23C16/52 G02F1/01 (Core/Invention); B24B G02F H01B (Subclass/Invention)

CPC: C23C14/3407 C23C14/083 C23C14/085 C23C14/568 C03C17/3417 C03C2217/94 C23C10/28 C23C14/185 C23C14/5806 C23C14/5853 C23C14/18 C23C14/56 G02F1/1309 H01J37/32 B05D5/06 C23C14/021 C23C14/022 C23C14/024 C23C14/046 C23C14/08 C23C14/086 C23C14/14 C23C14/58 G02F1/153 G02F1/155 C23C14/028 C23C14/0635 C23C14/0652 C23C14/0676 C23C14/081 C23C14/34 G02F2001/1536 G02F2001/1316 H01J37/32733 H01J37/32853 H01J37/3417 H01J37/3429 G02F1/1525 G02F1/15 C23C14/588 C23C14/5886 G02F1/1506 C23C14/3464 G02F2001/1555 G02F2001/1512 C03C2217/91 C09K9/00 C23C14/06 C23C14/0641 G02F1/133345 H01B5/14 H01B13/00 H01J37/3476 C03C2218/31 C03C17/3642 G02F1/13439 B23K20/10 G02F2201/508 B05D3/12 B05D5/12 C23C16/0254 C03B27/00 G02F1/1533 Y02P40/57 G02F1/1523 G02F2001/1502

European: C03C17/34D2 C23C10/28 C23C14/08H C23C14/08J C23C14/18B C23C14/56F C23C14/58B C23C14/58H2 M03C217/940

US: 1/1 118/696 118/696S 118/704 136/261 156/345.24 204/192.1 204/192.100P 204/192.12 204/192.15 204/192.150S 204/192.26 204/192.29 204/298.13 204/298.15 216/13 216/24 228/111.5 359/265 359/266 359/267 359/269 359/275 359/275P 427/102 427/123 427/123S 427/124 427/124S 427/126.3 427/126.4 427/126.400S 427/126.6 427/126.600S 427/58 427/58S 451/36 65/60.2

**Family:**

Publication number	Publication date	Application number	Application date
AU2014214738 AA	20140814	AU20140214738	20140207
AU2014214738 BB	20170914	AU20140214738	20140207
AU2015353823 AA	20160602	AU20150353823	20151120
AU2016294343 AA	20170119	AU20160294343	20160707
AU2017202249 AA	20170427	AU20170202249	20170405
AU2017204525 AA	20170720	AU20170204525	20170630
AU2017204525 BB	20180823	AU20170204525	20170630
CA2899607 AA	20150728	CA20142899607	20140207
CA2968832 AA	20170524	CA20152968832	20151120
CA2992423 AA	20180112	CA20162992423	20160707
CN102388340 A	20120321	CN201080015114	20100331
CN102388340 B	20160803	CN201080015114	20100331
CN102388341 A	20120321	CN201080015115	20100331
CN102388341 B	20150520	CN201080015115	20100331
CN103930954 A	20140716	CN201280054903	20120927
CN103930954 B	20170215	CN201280054903	20120927
CN104777694 A	20150715	CN201510187793	20100331
CN105074559 A	20151118	CN201480010617	20140207
CN105074559 B	20181002	CN201480010617	20140207
CN106054487 A	20161026	CN201610460770	20100331
CN106462024 A	20170222	CN201580028134	20150416
CN107015411 A	20170804	CN201610832436	20110425
CN107111199 A	20170829	CN201580072326	20151120
CN107924099 A	20180417	CN201680047325	20160707
CN108427231 A	20180821	CN201810154035	20130426
DK2414890 T3	20180108	DK20100764872T	20100331
DK2414891 T3	20170313	DK20100764874T	20100331
EP2414890 A2	20120208	EP20100764872	20100331
EP2414890 A4	20130227	EP20100764872	20100331
EP2414890 B1	20171004	EP20100764872	20100331
EP2414891 A2	20120208	EP20100764874	20100331
EP2414891 A4	20130227	EP20100764874	20100331
EP2414891 B1	20161130	EP20100764874	20100331
EP2761629 A1	20140806	EP20120837359	20120927
EP2761629 A4	20150114	EP20120837359	20120927
EP2761629 B1	20181107	EP20120837359	20120927
EP2954370 A2	20151216	EP20140749144	20140207

EP2954370 A4	20160914	EP20140749144	20140207
EP3134767 A1	20170301	EP20150783393	20150416
EP3134767 A4	20171129	EP20150783393	20150416
EP3196693 A2	20170726	EP20160200985	20100331
EP3196693 A3	20170816	EP20160200985	20100331
EP3224671 A1	20171004	EP20150863517	20151120
EP3224671 A4	20180620	EP20150863517	20151120
EP3255488 A1	20171213	EP20170179038	20100331
EP3323016 A1	20180523	EP20160824923	20160707
ES2617673 T3	20170619	ES20100764874T	20100331
ES2654764 T3	20180215	ES20100764872T	20100331
HK1167019 A1	20121116	HK20120107737	20120807
HK1167019 B	20180727	HK20120107737	20120807
HK1167020 A1	20121116	HK20120107739	20120807
HK1167020 B	20180316	HK20120107739	20120807
HK1200972 A1	20150814	HK20150101183	20150204
HK1218444 A1	20170217	HK20160106372	20160603
HK1234160 A1	20180209	HK20170107769	20170804
HK1241039 A1	20180601	HK20180100232	20120807
HK1244544 A1	20180810	HK20180103164	20180306
HK1248324 A1	20181012	HK20180107603	20120807
IN02583KN2015 A	20160205	IN2015KN02583	20150806
IN201637036596 A	20170324	IN201637036596	20161025
IN201717044876 A	20180316	IN201717044876	20171213
IN201737018863 A	20170825	IN201737018863	20170529
JP2012523018 T2	20120927	JP20120503670T	20100331
JP2012523019 T2	20120927	JP20120503671T	20100331
JP2014146049 A2	20140814	JP20140076981	20140403
JP2015187749 A2	20151029	JP20150131909	20150630
JP2016035605 A2	20160317	JP20150246682	20151217
JP2017021389 A2	20170126	JP20160215029	20161102
JP2017138628 A2	20170810	JP20170098559	20170517
JP2017538965 T2	20171228	JP20170527761T	20151120
JP2018092190 A2	20180614	JP20180028971	20180221
JP2018526665 T2	20180913	JP20170564044T	20160707
JP5860087 B2	20160216	JP20140076981	20140403
JP6037154 B2	20161130	JP20150246682	20151217
JP6147812 B2	20170614	JP20150131909	20150630
JP6297658 B2	20180320	JP20160215029	20161102
KR20150115818 A	20151014	KR20157022800	20140207
KR20170086631 A	20170726	KR20177017239	20151120
KR20180020299 A	20180227	KR20187002665	20160707
PL2414890 T3	20180330	PL20100764872T	20100331
PL2414891 T3	20170630	PL20100764874T	20100331
PT2414890 T	20171226	PT20100764872T	20100331
PT2414891 T	20170217	PT20100764874T	20100331
RU2015138108 A	20170314	RU20150138108	20140207
RU2015138108 A3	20180109	RU20150138108	20140207
RU2647998 C2	20180321	RU20150138108	20140207
TR201703008 T4	20170421	TR20170003008T	20100331
TR201721554 T4	20180122	TR20170021554T	20100331
TW201435464 A	20140916	TW20140104169	20140207
TW201719259 A	20170601	TW20160122100	20160713
TW201732405 A	20170916	TW20170118525	20110429
TW201738643 A	20171101	TW20170128807	20110429
TW201825994 A	20180716	TW20180111517	20140207
TWI628499 B	20180701	TW20140104169	20140207
US2010243427 AA	20100930	US20090645111	20091222
US2010245973 AA	20100930	US20090645159	20091222
US2011211247 AA	20110901	US20110105776	20110511
US2013107345 AA	20130502	US20120610716	20120911
US2014022621 AA	20140123	US20130763505	20130208
US2014329006 AA	20141106	US20120347227	20120927
US2015060264 AA	20150305	US20140536462	20141107
US2015131140 AA	20150514	US20150601141	20150120
US2016033840 AA	20160204	US20150885734	20151016
US2016103379 AA	20160414	US20150884683	20151015
US2016209723 AA	20160721	US20160086438	20160331
US2016327846 AA	20161110	US20160214340	20160719
US2017003564 AA	20170105	US20160204868	20160707
US2017038658 AA	20170209	US20160331526	20161021
US2017176832 AA	20170622	US20170441130	20170223
US2017299933 AA	20171019	US20170587114	20170504
US2017371221 AA	20171228	US20150527194	20151120
US2018046053 AA	20180215	US20170794805	20171026
US2018067370 AA	20180308	US20170799694	20171031
US2018081250 AA	20180322	US20170716242	20170926
US2018203320 AA	20180719	US20180916142	20180308
US2018231858 AA	20180816	US20180953327	20180413
US8243357 BB	20120814	US20110105776	20110511
US8432603 BB	20130430	US20090645159	20091222

US9923524 BB	20180144	US201307615Q1	20130728
US9429809 BB	20160830	US20120610716	20120911
US9477129 BB	20161025	US20140536462	20141107
US9664974 BB	20170530	US20090645111	20091222
US9904138 BB	20180227	US20160214340	20160719
US10054833 BB	20180821	US20170587114	20170504
US10126622 BB	20181113	US20120347227	20120927
WO10120535 A2	20101021	WO2010US29455	20100331
WO10120535 A3	20110210	WO2010US29455	20100331
WO10120537 A2	20101021	WO2010US29458	20100331
WO10120537 A3	20110210	WO2010US29458	20100331
WO13049379 A1	20130404	WO2012US57606	20120927
WO14124303 A2	20140814	WO2014US15374	20140207
WO14124303 A3	20150115	WO2014US15374	20140207
WO14124303 A4	20150212	WO2014US15374	20140207
WO15164179 A1	20151029	WO2015US26150	20150416
WO17011272 A1	20170119	WO2016US41375	20160707

Priority:

US20090165484P	20090331	US20090645111	20091222	US20090645159	20091222
CN201080015114	20100331	JP20120503671	20100331	CN201080015115	20100331
EP20100764874	20100331	EP20100764872	20100331	JP20120503671T	20100331
JP20140076981	20100331	JP20150131909	20100331	WO2010US29455	20100331
WO2010US29458	20100331	US20100772055	20100430	US20100772075	20100430
US20100814277	20100611	US20100814279	20100611	AU20110245431	20110425
CN201180027892	20110425	JP20150118553	20110425	JP20160215029	20110425
US20110105776	20110511	US20110541999P	20110930	US20120462725	20120502
HK20120107737	20120807	HK20120107739	20120807	US20120610716	20120911
US20120347227	20120927	WO2012US57606	20120927	US20130763505	20130208
CN201380031908	20130426	AU20140214738	20140207	RU20150138108	20140207
WO2014US15374	20140207	US20140982427P	20140422	AU20140210572	20140806
US20140536462	20141107	US20140085096P	20141126	US20150601141	20150120
US20150683541	20150410	WO2015US26150	20150416	JP20150131909	20150630
US20150192443P	20150714	US20150884683	20151015	US20150885734	20151016
US20150527194	20151120	WO2015US61995	20151120	JP20150246682	20151217
US20160086438	20160331	US20160204868	20160707	WO2016US41375	20160707
US20160214340	20160719	US20160331526	20161021	JP20160215029	20161102
US20170441130	20170223	AU20170202249	20170405	US20170587114	20170504
JP20170098559	20170517	AU20170204525	20170630	US20170716242	20170926
US20170794805	20171026	US20170799694	20171031	US20180916142	20180308
US20180953327	20180413				

Probable Assignee: VIEW INC

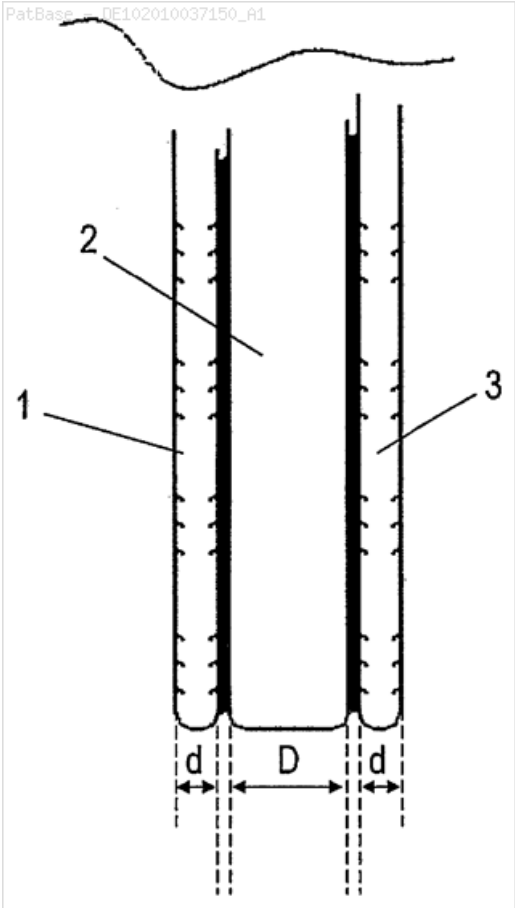
Assignee(s): (std):	BHATNAGAR YASHRAJ ; DIXON JEREMY ; KURMAN ERIC ; KOZLOWSKI MARK ; FRIEDMAN ROBIN ; KAILASAM SRIDHAR ; Mulpuri RAO ; SOLADIGM INC ; SCOBey MIKE ; ROZBICKI ROBERT ; PRADHAN ANSHU ; WANG ZHONGCHUN ; VIEW INC ; ROZBICKI ROBERT T ; VEW INC ; VYU INK
Assignee(s):	BANK OF NEW YORK MELLON TRUST CO NA ; BANK OF NEW YORK MELLON TRUST CO NA COLLATERAL AGENT AS ; N A ; STARKEY LABORATORIES INC ; PRADHAN ANSHU A ; GILLASPIE DANE ; MEHTANI DISHA ; KAILASAM SRIDHAR K
Inventor(s): (std):	ROZBICKI ROBERT ; WANG ZHONGCHUN ; KURMAN ERIC ; KOZLOWSKI MARK ; SCOBey MIKE ; DIXON JEREMY ; PRADHAN ANSHU ; ROBERT ROZBICKI ; FREDMAN ROBN ; ROZBCK ROBERT T ; KALASAM SRDHAR KARTHK ; JEREMY DIXON ; ZHONGCHUN WANG ; ANSHU PRADHAN ; MIKE SCOBey ; MARK KOZLOWSKI ; ERIC KURMAN ; MEKHTANI DISHA ; ROZBIKI ROBERT T ; PRADKHAN ANSHU A ; DZHILLESPI DEJN ; FRIDMAN ROBIN ; KAILASAM SRIDKHAR K ; WANG ZHONG CHUN ; Mulpuri RAO ; BHATNAGAR YASHRAJ ; MEHTANI DISHA ; KAILASAM SRIDHAR KARTHIK ; KURMAN ERIC W ; PRADHAN ANSHU A ; DIXON JEREMY A ; KAILASAM SRIDHAR ; FRIEDMAN ROBIN ; ROZBICKI ROBERT T ; GILLASPIE DANE ; KAILASAM SRIDHAR K
Inventor(s):	A PRADHAN, ANSHU A. ; K.
Agent(s):	SPRUSON AND FERGUSON; MARKS AND CLERK; JOHNSTON MAGNUS GEORGE; HASELTINE LAKE LLP; CARVAJAL Y ISABEL; ELLA CHEONG HONG KONG LTD; SPRUSON AND FERGUSON HONG KONG LTD; RYUKA IP LAW FIRM; OOO YURIDICHESKAYA GORODISSKIJ I PARTNER Y FA; YESIM METIN; WEAVER AUSTIN VILLENEUVE AND SAMPSON LLP; BRIAN D; GRIEDEL BRIAN D; WEAVER JEFFREY K ET AL; MARTINEZ LEMKE SHEILA ET AL; KESICH AMANDA 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

Title: Transparentes Verbundmaterial fuer Sicherheitsverglasung und ein Verfahren zu dessen Herstellung

Abstract: Source: DE102010037150B4 [DE] Transparentes Verbundmaterial fuer Sicherheitsverglasung aus mindestens drei Schichten (1, 2, 3), umfassend eine Innenschicht (2) aus transparenten Polycarbonat und zwei Aussenschichten (1, 3), deren Material ausgewaehlt ist aus Glas oder transparenter Glaskeramik, wobei die beiden Aussenschichten gleiche Schichtdicken aufweisen, wobei die Summe der Schichtdicken (d) der beiden Aussenschichten (1, 3) kleiner als die Schichtdicke (D) der Innenschicht (2) ist, wobei eine Kunststoffschicht (4) zwischen die Innenschicht (2) und die Aussenschichten (1, 3) eingebracht ist und wobei die Kunststoffschicht (4) aus einer Polyurethan-Folie (PUR-Folie) mit einer Dicke (p) zwischen 0,1 und 1,4 mm besteht, dadurch gekennzeichnet, dass die Innenschicht (2) aus einer Polycarbonatplatte mit einer Dicke (D) zwischen 3 und 9 mm besteht und dass die Aussenschichten (1, 3) entweder aus einer thermisch oder chemisch v...

Classifications:

International (IPC 8-9): B32B17/10 B32B27/36
C03C27/12 (Advanced/Invention)
CPC: B32B17/10036 B32B17/10 B32B17/10119 B32B17/1077
B32B27/36 B32B2367/00
European: B32B17/10 B32B17/10C28 B32B17/10C4 B32B17/10G30
B32B27/36 L32B367/00



Family:

Publication number	Publication date	Application number	Application date
DE102010037150 A1	20120301	DE201010037150	20100825
DE102010037150 B4	20151217	DE201010037150	20100825

Priority:

DE201010037150 20100825

Probable Assignee: SCHOTT AG

Assignee(s): (std): SCHOTT AG

Inventor(s): (std): FIEDLER HANS JOACHIM ; FREITAG RUEDIGER ; PANZNER GERRIT

Title: TRANSPARENT ARMOR WITH IMPROVED MULTI-HIT PERFORMANCE BY USE OF A THIN COVER **GLASS**

Abstract: The disclosure is directed to a transparent armor **laminate** having a **glass**, **glass**-ceramic or ceramic strike face **layer**, one or a plurality of **glass**, **glass**-ceramic ("GC"), ceramic ("C") or polymeric ("P") backing **layer** behind the strike face **layer**, one or a plurality of spall catcher ("SC") **layers** behind the backing **layer**(s), and a thin cover **glass layer laminated** to the strike face, the thin **layer** being the first **layer** to be impacted by any incoming projectile or debris. The cover **glass** has a **thickness** ≥ 3 mm. In another embodiment the cover **glass thickness** is ≥ 1 mm. Additionally, a defrosting/defogging element is **laminated** between the cover **glass** and the strike face.

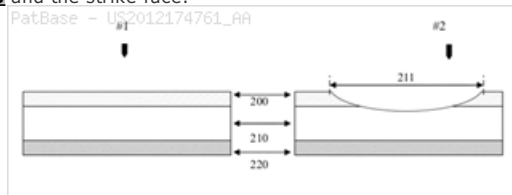
Classifications:

International (IPC 8-9): B32B17/10 C03C27/10 F41H5/02 F41H5/04 F41H5/26 (Advanced/Invention)

CPC: B32B17/10091 B32B17/10119 B32B17/10137 B32B17/10385 B32B17/1077 B32B2369/00 F41H5/0407

European: B32B17/10C22 B32B17/10C28 B32B17/10C30B B32B17/10E32B B32B17/10G30 F41H5/04B L32B369/00

US: 89/36.02 89/36.020P 89/904 89/905 89/905S



Family:

Publication number	Publication date	Application number	Application date
BR112012033421 A2	20161122	BR20121133421	20110629
EP2588309 A2	20130508	EP20110813919	20110629
EP2588309 B1	20181024	EP20110813919	20110629
JP2013535639 T2	20130912	JP20130518594T	20110629
JP5837592 B2	20151224	JP20130518594T	20110629
MX2013000035 A1	20130501	MX20130000035	20110629
US2012174761 AA	20120712	US20110169489	20110627
US8640591 BB	20140204	US20110169489	20110627
WO12044385 A2	20120405	WO2011US42269	20110629
WO12044385 A3	20120809	WO2011US42269	20110629

Priority:

US20100360232P 20100630

US20110169489 20110627

WO2011US42269 20110629

Probable Assignee: CORNING INC

Assignee(s): (std): ARMY WASHINGTON D C US SEC ; CORNING INC ; CORNING INC ; DABICH II LEONARD CHARLES ; PATEL PARIMAL J ; TIETJE STEVEN A ; SHENG HUAN HUNG ; TIETJE STEVEN ALVIN ; U S A REPRESENTED BY SECRETARY OF ARMY AS ; US ARMY ; US OF AMERICA REPRESENTED BY SECRETARY OF DEPT OF COMMERCE ; US SEC ARMY WASHINGTON D C ; ZHANG JIAN Z ; ZHANG JIAN ZHI JAY

Assignee(s): USA REPRESENTED BY SECRETARY OF ARMY AS ; SECRETARY OF DEPARTMENT OF COMMERCE US GOV ; THE SECRETARY OF ARMY WASHINGTON DC AS US GOV ; SECRETARY OF ARMY WASHINGTON DC AS US GOV ; SECRETARY OF ARMY AS US GOV ; SECRETARY OF ARMY WASHINGTON D C AS US GOV ; SECRETARY OF ARMY US GOV AS

Inventor(s): (std): PATEL PARIMAL J ; TIETJE STEVEN A ; DABICH II LEONARD CHARLES ; ZHANG JIAN Z ; SHENG HUAN HUNG ; ZHANG JIAN ZHI JAY ; TIETJE STEVEN ALVIN ; JE STEVEN ALVIN TIET ; ZHANG JIAN ZHI ; DABICH LEONARD CHARLES II

Inventor(s): PARIMAL J PATEL ; STEVEN ALVIN TIET JE ; LEONARD CHARLES DABICH II ; JIAN ZHI ZHANG ; HUAN HUNG SHENG

Agent(s): ANDERSON JAMES EDWARD GEORGE; EPPING HERMANN FISCHER; WALTER M; DOUGLAS WALTER M

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 ZA ZM ZW

Title: DELAMINATION RESISTANT PHARMACEUTICAL GLASS CONTAINERS CONTAINING ACTIVE PHARMACEUTICAL INGREDIENTS

Abstract: The present invention is based, at least in part, on the identification of a pharmaceutical container formed, at least in part, of a glass composition which exhibits a reduced propensity to delaminate, i.e., a reduced propensity to shed glass particulates. As a result, the presently claimed containers are particularly suited for storage of pharmaceutical compositions and, specifically, a pharmaceutical solution comprising a pharmaceutically active ingredient, for example, HUMIRA (Adalimumab).

Classifications:

International (IPC 8-9): A47G19/22 A61J1/00 A61J1/05 A61J1/06 A61J1/14 A61K31/403 A61K38/17 A61K38/18 A61K38/19 A61K38/28 A61K39/395 B22C9/10 B28B11/00 B28B21/00 B32B1/02 B32B17/00 B32B17/06 B32B7/02 B65D1/00 B65D1/02 B65D1/09 B65D1/40 B65D1/42 B65D23/02 B65D23/08 B65D25/00 B65D25/14 B65D25/34 B65D65/42 C03B23/207 C03B27/00 C03B27/03 C03B5/18 C03C15/00 C03C15/02 C03C17/00 C03C17/06 C03C17/22 C03C17/23 C03C17/245 C03C17/28 C03C17/30 C03C17/32 C03C17/34 C03C17/38 C03C17/42 C03C21/00 C03C23/00 C03C3/076 C03C3/078 C03C3/083 C03C3/085 C03C3/087 C03C3/089 C03C3/091 C03C3/14 C03C3/145 C03C4/00 C03C4/18 C03C4/20 C07K16/24 C08G73/10 C08L83/00 C09D179/08 F01D5/18 (Advanced/Invention);

C03B27/04 C03C21/00 (Advanced/Non-invention)

CPC: B65D1/0207 B65D25/34 B65D23/0814 B65D1/40 C03C17/00 C03C2204/00 A61K39/3955 C03C4/18 A61K38/193 A61K38/17 A61K38/1816 A61K38/28 A61K31/403 C07K16/241 C08K5/544 Y10T428/13 B65D1/09 C03C3/083 C03C3/085 C03C21/00 Y10T428/315 C03C15/02 Y10T428/131 Y10T428/1317 Y10T428/26 C03C17/3405 B65D25/00 C03C3/087 C03C17/28 C03B27/00 B65D1/42 B65D13/02 Y02A50/463 Y02A50/465 B65D85/84 B32B17/06 B65D1/0215 B65D23/02 B65D23/0835 C03B27/0413 C03C17/30 B65D23/0821 C03C17/22 B65D25/14 B65D65/42 C03C17/005 C03C17/32 C03C17/42 C03C21/002 C03C2217/78 C03C2218/111 C08G73/105 C08G73/1071 C08L77/02 C09D179/08 C09D183/08 Y10T428/1321 Y10T428/24942 Y10T428/265 Y10T428/31612 Y10T428/31623 A61J1/065 C03C4/20 C03C3/091 A61J1/06 A61J1/1468 A61J1/00

US: 1/1 128/203.12 206/216 206/438 206/524.1 206/524.3

206/524.6 206/528 215/12.1 215/12.2 215/379 220/62.11 220/62.15 252/478 424/133.1 424/142.1 424/158.1 424/85.1 427/576 428/212 428/220 428/332 428/336 428/34.1 428/34.4 428/34.6 428/34.7 428/410 428/426 428/429 428/435 501/11 501/49 501/52 501/53 501/55 501/56 501/66 501/68 501/69 501/70 501/72 514/20.9 514/210.12 514/5.9 514/7.7 524/600 65/108 65/30.14 65/31

PatBase - US2013101596_AA

Patent Application Publication Apr. 25, 2013 Sheet 1 of 4 US 2013/0101596 A1

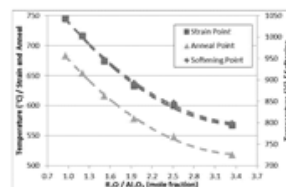


FIG. 1

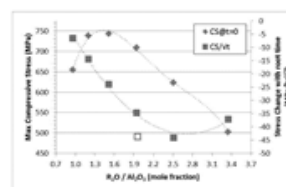


FIG. 2

Family:

Publication number	Publication date	Application number	Application date
AU2012328780 AA	20130502	AU20120328780	20121025
AU2012328780 BB	20150618	AU20120328780	20121025
AU2012328780 CA	20160218	AU20120328780	20121025
AU2013226034 AA	20130906	AU20130226034	20130228
AU2013226034 BB	20160428	AU20130226034	20130228
AU2013226034 CA	20161027	AU20130226034	20130228
AU2013271436 AA	20131212	AU20130271436	20130607
AU2013271436 BB	20170216	AU20130271436	20130607
AU2013282411 AA	20140103	AU20130282411	20130628
AU2013282411 BB	20160804	AU20130282411	20130628
AU2013282411 CA	20170209	AU20130282411	20130628
AU2013352444 AA	20140605	AU20130352444	20131126
AU2013352444 BB	20170803	AU20130352444	20131126
AU2013352510 AA	20140605	AU20130352510	20131122
AU2013352510 BB	20170216	AU20130352510	20131122
AU2013352510 CA	20170803	AU20130352510	20131122
AU2013352512 AA	20140605	AU20130352512	20131122
AU2013352512 AH	20150618	AU20130352512	20131122
AU2013352512 BB	20170330	AU20130352512	20131122
AU2013352514 AA	20140605	AU20130352514	20131122
AU2013352514 AH	20150611	AU20130352514	20131122
AU2013352514 BB	20170316	AU20130352514	20131122
AU2013352517 AA	20140605	AU20130352517	20131122
AU2013352517 BB	20170202	AU20130352517	20131122
AU2013352517 CA	20170420	AU20130352517	20131122
AU2013353429 AA	20140605	AU20130353429	20131023
AU2015218472 AA	20150917	AU20150218472	20150826
AU2015218472 BB	20160901	AU20150218472	20150826
AU2015218474 AA	20150917	AU20150218474	20150826
AU2015218474 BB	20160915	AU20150218474	20150826
AU2016206304 AA	20160811	AU20160206304	20160720
AU2016206304 BB	20180208	AU20160206304	20160720
AU2016213698 AA	20160825	AU20160213698	20160808
AU2016213698 BB	20180208	AU20160213698	20160808
AU2016247214 AA	20161110	AU20160247214	20161021
AU2016247214 BB	20180322	AU20160247214	20161021
AU2017203973 AA	20170706	AU20170203973	20170613
AU2017206194 AA	20170803	AU20170206194	20170719

AU2018200466 AA	20180208	AU20180200466	20180119
AU2018204261 AA	20180705	AU20180204261	20180614
BR112014009921 A2	20170425	BR20141109921	20121025
BR112014021321 A2	20170620	BR20141121321	20130228
BR112014021321 A8	20170718	BR20141121321	20130228
BR112014031895 A2	20170627	BR20141131895	20130628
BR112015010084 A2	20170711	BR20151110084	20131023
BR112015011407 A2	20170711	BR20151111407	20131122
BR112015012289 A2	20170711	BR20151112289	20131122
BR112015012354 A2	20170711	BR20151112354	20131122
CA2851293 AA	20140404	CA20122851293	20121025
CA2864919 AA	20140818	CA20132864919	20130228
CA2877742 AA	20141222	CA20132877742	20130628
CA2888831 AA	20150417	CA20132888831	20131023
CA2889763 AA	20150424	CA20132889763	20131122
CA2891781 AA	20150515	CA20132891781	20131122
CA2891784 AA	20150515	CA20132891784	20131122
CA2939269 AA	20130502	CA20122939269	20121025
CA2966274 AA	20130502	CA20122966274	20121025
CA2966451 AA	20130502	CA20122966451	20121025
CN103987671 A	20140813	CN201280052318	20121025
CN103987671 B	20161130	CN201280052318	20121025
CN104271346 A	20150107	CN201380022462	20130228
CN104271346 B	20171013	CN201380022462	20130228
CN104395255 A	20150304	CN201380033302	20130607
CN104520248 A	20150415	CN201380034227	20130628
CN104520248 B	20171031	CN201380034227	20130628
CN104968625 A	20151007	CN201380061171	20131023
CN104968626 A	20151007	CN201380061554	20131122
CN105050977 A	20151111	CN201380062422	20131122
CN105050977 B	20181019	CN201380062422	20131122
CN105050978 A	20151111	CN201380062546	20131126
CN105143133 A	20151209	CN201380062511	20131122
CN105143133 B	20180925	CN201380062511	20131122
CN105283427 A	20160127	CN201380062549	20131122
CN105283427 B	20181123	CN201380062549	20131122
CN106746599 A	20170531	CN201611002783	20121025
CN107540242 A	20180105	CN201710851535	20130228
CN107586048 A	20180116	CN201710909487	20130628
DE202012012875 U1	20140313	DE201220012875U	20121025
DE202012012876 U1	20140313	DE201220012876U	20121025
DE202012013126 U1	20141231	DE201220013126U	20121025
DE202013012666 U1	20180607	DE201320012666U	20130228
DE602012037886 D1	20171102	DE201260037886T	20121025
DE602012040144 D1	20171228	DE201260040144T	20121025
DE602012040890 D1	20180111	DE201260040890T	20121025
DE602012040894 D1	20180118	DE201260040894T	20121025
DE602012040900 D1	20180118	DE201260040900T	20121025
DE602012040901 D1	20180118	DE201260040901T	20121025
DE602012040902 D1	20180118	DE201260040902T	20121025
DE602012041154 D1	20180125	DE201260041154T	20121025
DE602012041163 D1	20180125	DE201260041163T	20121025
DE602013040926 D1	20180823	DE201360040926T	20131122
DE602013041311 D1	20180830	DE201360041311T	20131122
DE602013041312 D1	20180830	DE201360041312T	20131122
EP2683666 A1	20140115	EP20120781017	20121025
EP2683666 B1	20171213	EP20120781017	20121025
EP2771294 A1	20140903	EP20120783782	20121025
EP2771294 B1	20171213	EP20120783782	20121025
EP2771295 A1	20140903	EP20120787250	20121025
EP2771295 B1	20171122	EP20120787250	20121025
EP2771296 A1	20140903	EP20120787982	20121025
EP2771296 B1	20170927	EP20120787982	20121025
EP2771297 A1	20140903	EP20120787983	20121025
EP2771297 B1	20171213	EP20120787983	20121025
EP2771298 A1	20140903	EP20120787984	20121025
EP2771298 B1	20171213	EP20120787984	20121025
EP2771299 A1	20140903	EP20120787985	20121025
EP2771299 B1	20171213	EP20120787985	20121025
EP2771300 A1	20140903	EP20120787986	20121025
EP2771300 B1	20171220	EP20120787986	20121025
EP2771301 A1	20140903	EP20120795117	20121025
EP2771301 B1	20171220	EP20120795117	20121025
EP2819843 A2	20150107	EP20130709281	20130228
EP2858959 A1	20150415	EP20130732304	20130607
EP2867179 A1	20150506	EP20130735550	20130628
EP2925691 A1	20151007	EP20130786585	20131023
EP2925693 A1	20151007	EP20130812241	20131122
EP2925693 B1	20180801	EP20130812241	20131122
EP2925694 A1	20151007	EP20130812242	20131122
EP2925694 B1	20180801	EP20130812242	20131122

EP2925695 A1	20151007	EP20130814278	20131122
EP2925698 A1	20151007	EP20130814279	20131122
EP2925698 B1	20180725	EP20130814279	20131122
EP3246298 A1	20171122	EP20170170001	20170508
EP3299346 A2	20180328	EP20170198854	20121025
EP3299346 A3	20180725	EP20170198854	20121025
EP3305737 A2	20180411	EP20170198848	20121025
EP3305737 A3	20180725	EP20170198848	20121025
EP3403998 A1	20181121	EP20180175743	20131122
EP3406578 A1	20181128	EP20180176115	20131122
ID201601714 A	20160318	ID2014P0005811	20130228
ID201700783 A	20170210	ID2015P0003647	20131122
ID201701814 A	20170303	ID2015P0003616	20131023
ID201702046 A	20170310	ID2015P0000514	20130628
ID201703331 A	20170407	ID2015P0003686	20131122
ID201703398 A	20170407	ID2015P0003646	20131122
IN00147DN2015 A	20160831	IN2015DN00147	20150107
IN02656DN2014 A	20150220	IN2014DN02656	20140403
IN03393DN2015 A	20160610	IN2015DN03393	20150422
IN03588DN2015 A	20160610	IN2015DN03588	20150428
IN04171DN2015 A	20160831	IN2015DN04171	20150515
IN04515DN2015 A	20160422	IN2015DN04515	20150526
IN07086DN2014 A	20160831	IN2014DN07086	20140822
JP2015502899 T2	20150129	JP20140538997T	20121025
JP2015515433 T2	20150528	JP20140558980T	20130228
JP2015522508 T2	20150806	JP20150516238T	20130607
JP2015527965 T2	20150924	JP20150520574T	20130628
JP2016193823 A2	20161117	JP20160124363	20160623
JP2016193824 A2	20161117	JP20160124365	20160623
JP2016500045 T2	20160107	JP20150545124T	20131122
JP2016504258 T2	20160212	JP20150545129T	20131122
JP2016504259 T2	20160212	JP20150545160T	20131126
JP2016505455 T2	20160225	JP20150545127T	20131122
JP2016506348 T2	20160303	JP20150545049T	20131023
JP2016510288 T2	20160407	JP20150545120T	20131122
JP2017061408 A2	20170330	JP20160217932	20161108
JP2018076228 A2	20180517	JP20180006412	20180118
JP2018095551 A2	20180621	JP20180006413	20180118
JP2018095554 A2	20180621	JP20180019178	20180206
JP2018100218 A2	20180628	JP20180006411	20180118
JP2018165246 A2	20181025	JP20180136482	20180720
JP5960834 B2	20160802	JP20140538997T	20121025
JP6065300 B2	20170125	JP20160124363	20160623
JP6065301 B2	20170125	JP20160124365	20160623
JP6257099 B2	20180110	JP20150516238T	20130607
JP6289455 B2	20180307	JP20150520574T	20130628
JP6345601 B2	20180620	JP20140558980T	20130228
JP6396311 B2	20180926	JP20150545129T	20131122
JP6417530 B2	20181107	JP20150545127T	20131122
KR101804009 B1	20171204	KR20147013028	20121025
KR101843225 B1	20180328	KR20147027234	20130228
KR101845142 B1	20180403	KR20157017418	20131126
KR101850589 B1	20180419	KR20157002301	20130628
KR101869590 B1	20180620	KR20157017427	20131122
KR101872571 B1	20180802	KR20157017387	20131023
KR20140084194 A	20140704	KR20147013028	20121025
KR20140141614 A	20141210	KR20147027234	20130228
KR20150022022 A	20150303	KR20157002301	20130628
KR20150091142 A	20150807	KR20157017413	20131122
KR20150091144 A	20150807	KR20157017427	20131122
KR20150091367 A	20150810	KR20157017418	20131126
KR20150091369 A	20150810	KR20157017429	20131122
KR20150092224 A	20150812	KR20157017387	20131023
KR20170132360 A	20171201	KR20177033967	20121025
KR20170133517 A	20171205	KR20177033966	20121025
KR20180032685 A	20180330	KR20187008076	20130228
KR20180041259 A	20180423	KR20187010394	20130628
MX2014004972 A1	20140522	MX20140004972	20121025
MX2014010334 A1	20140922	MX20140010334	20130228
MX2014015003 A1	20150305	MX20140015003	20130607
MX2014015932 A1	20150717	MX20140015932	20130628
MX2015006887 A1	20150916	MX20150006887	20131023
MX2015006888 A1	20150916	MX20150006888	20131122
MX2015006890 A1	20150916	MX20150006890	20131122
MX2015006897 A1	20150916	MX20150006897	20131122
MX2015006899 A1	20150908	MX20150006899	20131122
MX2015006900 A1	20150916	MX20150006900	20131126
MX343430 B	20161103	MX20140004972	20121025
RU2014117028 A	20151210	RU20140117028	20121025
RU2014138998 A	20160420	RU20140138998	20130228
RU2014154053 A	20160727	RU20140154053	20130607

RU2015102576 A	20160820	RU20150102576	20130628
RU2015125693 A	20170110	RU20150125693	20131122
RU2015125706 A	20170110	RU20150125706	20131126
RU2015125783 A	20170110	RU20150125783	20131122
RU2015125911 A	20170111	RU20150125911	20131023
RU2015125912 A	20170110	RU20150125912	20131122
RU2015125913 A	20170111	RU20150125913	20131122
RU2017146886 A	20181019	RU20170146886	20130228
RU2017146886 A3	20181019	RU20170146886	20132228
RU2017146886 A3	20181019	RU20170146886	20130228
RU2634133 C2	20171024	RU20150125911	20131023
RU2634758 C2	20171103	RU20150102576	20130628
RU2641817 C2	20180122	RU20140138998	20130228
RU2652773 C2	20180428	RU20140117028	20121025
RU2657265 C2	20180609	RU20150125912	20131122
RU2658852 C2	20180625	RU20150125783	20131122
RU2659928 C2	20180704	RU20150125693	20131122
RU2667538 C2	20180921	RU20150125706	20131126
RU2671328 C2	20181030	RU20170146886	20130228
SG10201701231X A1	20170427	SG20171001231	20121025
SG10201704025V A1	20170629	SG20171004025	20130628
SG10201704148S A1	20170629	SG20171004148	20131023
SG10201705439Y A1	20170728	SG20171005439	20131122
SG10201806654P A1	20180927	SG20181006654	20130228
SG11201401736Q A1	20140529	SG20141101736	20121025
SG11201405220W A1	20140926	SG20141105220	20130228
SG11201408732U A1	20150227	SG20141108732	20130628
SG11201503964W A1	20150629	SG20151103964	20131122
SG11201504033T A1	20150629	SG20151104033	20131122
SG11201504070P A1	20150629	SG20151104070	20131122
SG11201504073W A1	20150629	SG20151104073	20131023
TW201343584 A	20131101	TW20130107286	20130301
TW201402487 A	20140116	TW20130120428	20130607
TW201406693 A	20140216	TW20130123303	20130628
TW201425254 A	20140701	TW20130143458	20131128
TW201425255 A	20140701	TW20130143262	20131127
TW201429814 A	20140801	TW20130143475	20131128
TW201431815 A	20140816	TW20130143474	20131128
TW201433311 A	20140901	TW20130143273	20131127
TW201434624 A	20140916	TW20130143473	20131128
TW201827376 A	20180801	TW20180100027	20131128
TW201829342 A	20180816	TW20180102807	20130628
TWI600626 B	20171001	TW20130120428	20130607
TWI613164 B	20180201	TW20130143262	20131127
TWI613166 B	20180201	TW20130143474	20131128
TWI617523 B	20180311	TW20130123303	20130628
TWI620725 B	20180411	TW20130143458	20131128
TWI629980 B	20180721	TW20130143273	20131127
TWI636874 B	20181001	TW20130143473	20131128
US2013101596 AA	20130425	US20120660508	20121025
US2013101764 AA	20130425	US20120660683	20121025
US2013101766 AA	20130425	US20120660450	20121025
US2013102454 AA	20130425	US20120660394	20121025
US2013171456 AA	20130704	US20130780740	20130228
US2013196094 AA	20130801	US20120660690	20121025
US2013196095 AA	20130801	US20120660695	20121025
US2013196096 AA	20130801	US20120660699	20121025
US2013196097 AA	20130801	US20120660712	20121025
US2013202823 AA	20130808	US20120660704	20121025
US2013213848 AA	20130822	US20120660708	20121025
US2013216742 AA	20130822	US20120660680	20121025
US2013224407 AA	20130829	US20130780754	20130228
US2013327740 AA	20131212	US20130912457	20130607
US2013344263 AA	20131226	US20130011376	20130827
US2014001076 AA	20140102	US20130827732	20130314
US2014001143 AA	20140102	US20130930647	20130628
US2014034544 AA	20140206	US20130052048	20131011
US2014069886 AA	20140313	US20130057697	20131018
US2014150499 AA	20140605	US20130088556	20131125
US2014151320 AA	20140605	US20130075620	20131108
US2014151321 AA	20140605	US20130075630	20131108
US2014151370 AA	20140605	US20130075593	20131108
US2014151371 AA	20140605	US20130075605	20131108
US2014272215 AA	20140918	US20140272189	20140507
US2015037571 AA	20150205	US20140520722	20141022
US2015079318 AA	20150319	US20140551773	20141124
US2015232374 AA	20150820	US20150701185	20150430
US2015329416 AA	20151119	US20150812902	20150729
US2015360999 AA	20151217	US20150812898	20150729
US2015366756 AA	20151224	US20150846184	20150904
US2015374582 AA	20151231	US20150846080	20150904
US2016095795 AA	20160407	US20150965007	20151210

US2016095796 AA	20160407	US20150966204	20151211
US2016251260 AA	20160901	US20160153295	20160512
US2017036950 AA	20170209	US20160331113	20161021
US2017036951 AA	20170209	US20160331120	20161021
US2017087058 AA	20170330	US20160374338	20161209
US2017174554 AA	20170622	US20170449761	20170303
US2017174555 AA	20170622	US20170449766	20170303
US2017320773 AA	20171109	US20170656634	20170721
US2017334604 AA	20171123	US20170656721	20170721
US2017348192 AA	20171207	US20170687059	20170825
US2018116907 AA	20180503	US20170857557	20171228
US2018244420 AA	20180830	US20180968583	20180501
US2018303708 AA	20181025	US20180024825	20180630
US2018318169 AA	20181108	US20180024824	20180630
US8551898 BB	20131008	US20120660394	20121025
US8753994 BB	20140617	US20130011376	20130827
US8980777 BB	20150317	US20120660450	20121025
US9034442 BB	20150519	US20130052048	20131011
US9186295 BB	20151117	US20120660712	20121025
US9198829 BB	20151201	US20120660690	20121025
US9241869 BB	20160126	US20120660695	20121025
US9266770 BB	20160223	US20150701185	20150430
US9272946 BB	20160301	US20130075605	20131108
US9327871 BB	20160503	US20130057697	20131018
US9340447 BB	20160517	US20150701185	20150430
US9346707 BB	20160524	US20130088556	20131125
US9428302 BB	20160830	US20130057697	20131018
US9474688 BB	20161025	US20120660680	20121025
US9474689 BB	20161025	US20120660699	20121025
US9517966 BB	20161213	US20140520722	20141022
US9617183 BB	20170411	US20140272189	20140507
US9624125 BB	20170418	US20140551773	20141124
US9668936 BB	20170606	US20150812898	20150729
US9744099 BB	20170829	US20160331113	20161021
US9763852 BB	20170919	US20130780740	20130228
US9775775 BB	20171003	US20150812902	20150729
US9918898 BB	20180320	US20130780754	20130228
US9988174 BB	20180605	US20130912457	20130607
US10023495 BB	20180717	US20130075630	20131108
US10034816 BB	20180731	US20160374338	20161209
US10117806 BB	20181106	US20130075593	20131108
WO13063238 A1	20130502	WO2012US61867	20121025
WO13063258 A1	20130502	WO2012US61911	20121025
WO13063274 A1	20130502	WO2012US61939	20121025
WO13063275 A1	20130502	WO2012US61940	20121025
WO13063277 A1	20130502	WO2012US61943	20121025
WO13063280 A1	20130502	WO2012US61946	20121025
WO13063283 A1	20130502	WO2012US61949	20121025
WO13063283 A8	20130627	WO2012US61949	20121025
WO13063287 A1	20130502	WO2012US61953	20121025
WO13063290 A1	20130502	WO2012US61956	20121025
WO13063292 A1	20130502	WO2012US61958	20121025
WO13130724 A2	20130906	WO2013US28187	20130228
WO13130724 A3	20131219	WO2013US28187	20130228
WO13185018 A1	20131212	WO2013US44686	20130607
WO14005030 A1	20140103	WO2013US48589	20130628
WO14084990 A1	20140605	WO2013US66370	20131023
WO14085242 A1	20140605	WO2013US71437	20131122
WO14085244 A1	20140605	WO2013US71447	20131122
WO14085246 A1	20140605	WO2013US71460	20131122
WO14085246 A8	20150611	WO2013US71460	20131122
WO14085249 A1	20140605	WO2013US71473	20131122
WO14085356 A1	20140605	WO2013US71776	20131126

Priority:

US20110551163P	20111025	US20120604220P	20120228	US20120656998P	20120607
US20120665682P	20120628	AU20120328780	20121025	CA20122851293	20121025
CN201280052318	20121025	EP20120781017	20121025	EP20120787250	20121025
EP20120787982	20121025	EP20120787983	20121025	EP20120787984	20121025
EP20120787985	20121025	EP20120787986	20121025	EP20120795117	20121025
EP20120783782	20121025	US20120660508	20121025	US20120660683	20121025
US20120660450	20121025	US20120660394	20121025	US20120660690	20121025
US20120660695	20121025	US20120660699	20121025	US20120660712	20121025
US20120660704	20121025	US20120660708	20121025	US20120660680	20121025
JP20140538997T	20121025	JP20160124365	20121025	WO2012US61867	20121025
WO2012US61946	20121025	WO2012US61940	20121025	WO2012US61953	20121025
WO2012US61956	20121025	WO2012US61911	20121025	WO2012US61949	20121025
WO2012US61943	20121025	WO2012US61958	20121025	US20120731767P	20121130
US20120731783P	20121130	AU20130226034	20130228	CN201380022462	20130228
JP20140558980T	20130228	EP20130709281	20130228	US20130780754	20130228
US20130780740	20130228	WO2013US28187	20130228	US20130827732	20130314
US20130912457	20130607	WO2013US44686	20130607	AU20130282411	20130628
CN201380034227	20130628	JP20150520574T	20130628	US20130930647	20130628
WO2013US48589	20130628	US20130011376	20130827	US20130052048	20131011
US20130057697	20131018	AU20130353429	20131023	WO2013US66370	20131023

US201300566279	201311008	US20130075605	201311108	US20130035634	201311108
EP20130812241	201311122	EP20130812242	201311122	EP20130814279	201311122
WO2013US71437	201311122	WO2013US71473	201311122	WO2013US71447	201311122
WO2013US71460	201311122	US20130088556	201311125	JP20150545160T	201311126
WO2013US71776	201311126	RU20170146886	20132228	US20140272189	20140507
US20140520722	20141022	US20140551773	20141124	US20150701185	20150430
US20150812902	20150729	US20150812898	20150729	AU20150218472	20150826
AU20150218474	20150826	US20150846184	20150904	US20150846080	20150904
US20150965007	20151210	US20150966204	20151211	US20160153295	20160512
JP20160124363	20160623	JP20160124365	20160623	AU20160206304	20160720
AU20160213698	20160808	CA20162851293	20160823	AU20160247214	20161021
US20160331120	20161021	US20160331113	20161021	JP20160217932	20161108
US20160374338	20161209	US20170449766	20170303	US20170449761	20170303
CA20172851293	20170516	CA20172851293	20170517	AU20170203973	20170613
AU20170206194	20170719	US20170656634	20170721	US20170656721	20170721
US20170687059	20170825	US20170857557	20171228	JP20180006412	20180118
US20180200466	20180119	US20180968583	20180501	AU20180204261	20180614
US20180024825	20180630	US20180024824	20180630		

Probable Assignee: CORNING INC

Assignee(s): (std): CHANG THERESA ; CORNING CO LTD ; DEMARTINO STEVEN EDWARD ; CORNING INC ; DANIELSON PAUL STEVEN ; DRAKE MELINDA ANN ; DANIELSON PAUL STEPHEN ; HAMILTON JAMES PATRICK ; FADEEV ANDREI GENNADYEVICH ; WEEKS WENDELL PORTER ; SCHAUT ROBERT ANTHONY ; PEANASKY JOHN STEPHEN ; MORENA ROBERT MICHAEL ; PAL SANTONA ; WEEKS WENDELL P ; SCHIEFELBEIN SUSAN LEE ; TIMMONS CHRISTOPHER LEE ; SAHA CHANDAN KUMAR ; VENKATARAMAN NATESAN ; VERKLEERAN RONALD LUCE ; VENKATARMAN NATESAN ; SICK SARA JEAN ; ADIB KAVEH ; BOOKBINDER DANA CRAIG ; CORNING INC

Assignee(s): CORNING INC CORNING ; BROOKBINDER DANA CRAIG ; VERKLEERAN RONALD LUCE ; KORNING INKORPOREJTED ; CORNING INC1 RIVERFRONT PLAZACORNINGNY14831US

Inventor(s): (std): ADIB KAVEH ; ADIB KAVEKH ; ANDREI GENNADYEVICH FADEEV ; BOOKBINDER CRAIG DANA ; BOOKBINDER DANA C ; BOOKBINDER DANA CRAIG ; BUKBINDER DANA KREJG ; CHANDAN KUMAR SAHA ; CHANG THERESA ; CHRISTOPHER LEE TIMMONS ; DANA CRAIG BOOKBINDER ; DANELSON PAUL STEPHEN ; DANIELSON I PAUL STEVEN ; DANIELSON PAUL S ; DANIELSON PAUL STEPHEN ; DANIELSON PAUL STEVEN ; DE MARTINO STEVEN EDWARD ; DEMARTINO STEVEN ; DEMARTINO STEVEN E ; DEMARTINO STEVEN EDWARD ; DRAKE MELINDA ANN ; DREJK MELINDA ENN ; FADEEV ANDRE GENNADYEVCH ; FADEEV ANDREI ; FADEEV ANDREI G ; FADEEV ANDREI GENNADYEVICH ; HAMILTON JAMES P ; HAMILTON JAMES PATRICK ; HAMLTON JAMES PATRCK ; JAMES PATRICK HAMILTON ; JOHN STEPHEN PEANASKY ; KAVEH ADIB ; KHEMILTON DZHEJMS PATRIK ; MORENA ROBERT M ; MORENA ROBERT MAJKL ; MORENA ROBERT MCHAE ; MORENA ROBERT MICHAEL ; DEMARTNO STEVEN EDWARD ; DENIELSON POL STEFEN ; DRAKE MELINDA A ; DRAKE MELINDA ANN ; NATESAN VENKATARAMAN ; PAL SANTONA ; PAUL STEPHEN DANIELSON ; PEANASKY JOHN ; PEANASKY JOHN S ; PEANASKY JOHN STEPHEN ; PEANASKY STEPHAN JOHN ; PEANASKY STEPHEN JOHN ; PINASKI DZHON STEFEN ; RONALD LUCE VERKLEEREN ; SAHA CHANDAN ; SAHA CHANDAN K ; SAHA CHANDAN KUMAR ; SAKHA CHANDAN KUMAR ; SCHAUT ANTHONY ROBERT ; SCHAUT ROBERT A ; SCHAUT ROBERT ANTHONY ; SCHEFELBEN SUSAN LEE ; SCHIEFELBEIN SUSAN L ; SCHIEFELBEIN SUSAN LEE ; SHIFELBEJN SYUZAN LI ; SUSAN LEE SCHIEFELBEIN ; T CHANG ; THERESA CHANG ; TIMMONS CHRISTOPHER L ; TIMMONS CHRISTOPHER LEE ; TIMMONS KRISTOFER LI ; TIMMONS LEE CHRISTOPHER ; TMMONS CHRSTOPHER LEE ; VERKLEERAN LUCE RONALD ; WEEKS WENDELL P ; WEEKS WENDELL PORTER ; SHOT ROBERT ENTONI ; MORLEY JAMIE LYNNE ; MORENA MICHAEL ROBERT ; HOFF KYLE CHRISTOPHER ; FADEEV GENNADYEVICH ANDREI ; FADEEV ANDREJ GENNADEVICH ; DEMARTINO STIVEN EDVARD ; DEMARTINO EDWARD STEVEN ; DANIELSON STEPHEN PAUL ; CHANG TEREZA ; C L DEMONS ; BUKBAJNDER DANA KREJG ; VERKLEREN RONALD LYUS ; VERKLEERAN RONALD LUCE ; VERKLEERAN RONALD LUCE ; VENKATARMAN NATESAN ; VENKATARAMAN NATESAN ; TIMMONS CHRISTOPHER ; TIMMONS C L ; STEVEN EDWARD DEMARTINO ; SIK SARA DZHIN ; SICK SARA JEAN ; SANTONA PAL ; ROBERT MICHAEL MORENA ; ROBERT ANTHONY SCHAUT ; R A SAUTER ; MELINDA ANN DRAKE ; WECHLEEZEN R L ; PARR S ; MOLINARI R M ; DEMARTINO E S ; DANIELSON P S ; BOOKBNDER DANA CRAG ; BOOKBINDER DANA ; BAYNE JOHN FREDERICK ; ADB KAVEH

Inventor(s): WEEKS WENDELL PORTER CORNING ; PAL PEANASKY JOHN STEPHEN ; AKE MELINDA ANN ; BROOKBINDER DANA CRAIG ; WEEKS WENDELL P CORNING ; VERKLEERAN RONALD LUCE HORSEHEADS ; VENKATARAMAN NATESAN PAINTED POST ; TIMMONS CHRISTOPHER LEE BIG FLATS ; TIMMONS CHRISTOPHER LEEUS ; SCHAUT ROBERT ANTHONY PAINTED POST ; SAHA CHANDAN KUMARUS ; ROBERT ANTHONYSCHAUT ; PEANASKY JOHN STEPHEN BIG FLATS ; PEANASKY JOHN STEPHENUS ; PAL SANTONA PAINTED POST ; PAL SANTONAUS ; DRAKE MELINDA ANN CORNING ; MORENA ROBERT MICHAEL LINDLEY ; FADEEV ANDREI GENNADYEVICH ELMIRA ; FADEEV ANDREI GENNADYEVICHUS ; DEMARTINO STEVEN EDWARD PAINTED POST ; DEMARTINO STEVEN EDWARDUS ; DANIELSON PAUL STEPHEN DUNDEE ; CHANG THERESA PAINTED POST ; CHANG THERESAUS ; BOOKBINDER DANA CRAIGUS

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; HERNANDEZ YORCK DIPL ING; GREENE SIMON KENNETH; OLDROYD RICHARD DUNCAN; KINGSBURY OLIVER WILLIAM; GUNNING JACK PETER; SCOTT MARK ANDREW; SCHEUERMANN ERIK; FAHMI ASSEGAF SH MH; LANNY SETIAWAN MBA MGMT MA LPC MA LMFT; YURIDICHESKAYA GORODISSKIY I PARTNERY OOO FA; OOO YURIDICHESKAYA GORODISSKIY I PARTNERY FA; SPRUSON AND FERGUSON ASIA PTE LTD; DINSMORE AND SHOHL LLP; MICHAEL G; DINSMORE AND SHOL LLP; SCHAEBERLE TIMOTHY M; BUTLER GREGORY B; INGLE CORY J ET AL; SPARKS JONATHAN M ET AL; TENT BRIAN A ET AL; TENT BRIAN 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 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

Title: COMPOSITE ELEMENT AND USE THEREOF

Abstract: A lightweight composite panel is provided that includes at least one mineral **glass** or **glass**-ceramic panel and at least one organic **layer**. The weight per unit area of the lightweight composite panel is in the range from 0.5 k grams per square metre to 5.5 k grams per square metre, the ratio of the total **thickness** of the one or more mineral **glass** or **glass**-ceramic panels to the total **thickness** of all of the organic **layers** is from 1:0.01 to 1:1 and the total **thickness** of all of the organic **layers** is less than or equal to 350 micro m. The lightweight composite panel complies with the thermal safety requirements of the air travel authorities and its "Total Heat Release," measured in accordance with JAR/FAR/CS 25, App. F, Part IV and AITM 2.0006, is less than 65 kWxmin/m2 and its flame time after removal of the flame in the "Vertical Bunsen Burner Test", measured in accordance with FAR/JAR/CS 25, App. F, Part 1 and AITM 2.0002A, is less than 15 s.

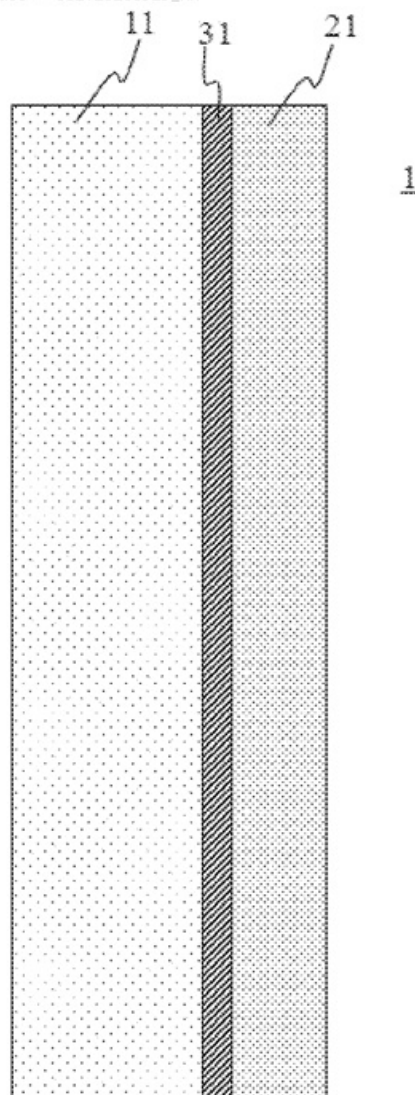
Classifications:

International (IPC 8-9): B29C65/00 B32B17/06 B32B17/10 B32B37/10 B32B37/16 B32B38/10 B32B7/12 B60J1/00 B64C1/14 C03C17/28 C03C27/12 E04B2/74 (Advanced/Invention)

CPC: B32B17/064 B32B17/10018 B32B17/10119 B32B17/10862 B32B17/10935 B64C1/1484 C03C3/083 C03C3/091 C03C21/002 C03C27/10 B32B7/12 B32B17/10779 B32B17/10137 B32B17/10816 B32B37/1018 B32B37/10 B32B37/16 B32B38/10 B29C66/45 B29C66/7465 B29C66/0224 B32B2255/26 B32B2307/412 B32B2307/54 B32B2307/542 B32B2307/536 B32B2307/3065 B32B2419/00 B32B2605/18 B32B2309/02 B32B2315/08 B29L2031/778 B32B2367/00 B32B2375/00 B32B2383/00 B32B17/1077 B32B17/10036 B32B17/10798

US: 156/249 428/213

PatBase - US2016136929_AA



Family:

Publication number	Publication date	Application number	Application date
BR112016001571 A2	20170725	BR20161101571	20140711
CA2919071 AA	20160122	CA20142919071	20140711
CN105408107 A	20160316	CN201480041938	20140711
DE102013214422 A1	20150129	DE201310214422	20130724
DE112014003401 A5	20160519	DE201411003401T	20140711
JP2016531067 T2	20161006	JP20160528401T	20140711
JP6407277 B2	20181017	JP20160528401T	20140711
US2016136929 AA	20160519	US20160006196	20160126
WO15010922 A1	20150129	WO2014EP64887	20140711

Priority:

DE201310214422 20130724 WO2014EP64887 20140711

Probable Assignee: SCHOTT AG

Assignee(s): (std): SCHOTT AG

Assignee(s): OTTERMANN CLEMENS ; LIEBALD RAINER ; ORTNER ANDREAS ; MEISS JENS ; ESEMANN HAUKE ; FECHNER JOERG HINRICH ; HEISS CHOUQUET MARKUS ; KUREK KLAUS PETER

Inventor(s): (std): ESEMANN HAUKE ; FECHNER JOERG HINRICH ; HEISS MARKUS ; KUREK KLAUS PETER ; LIEBALD RAINER ; MEISS JENS ; ORTNER ANDREAS ; OTTERMANN CLEMENS ; HEISS CHOUQUET MARKUS

Inventor(s): HAUKE ESEMANN ; CLEMENS OTTERMANN ; ANDREAS ORTNER ; RAINER LIEBALD ; MARKUS HEISS CHOUQUET ; KLAUS PETERKUREK ; JOERG HINRICH FECHNER ; JENS MEISS

Agent(s): MARKS AND CLERK

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 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 PROVIDED WITH A **COATING** BASED ON A **GLASS** FLUX, **GLASS** FLUX MATERIAL, AND METHOD FOR **COATING** A **GLASS** OR **GLASS** CERAMIC SUBSTRATE

Abstract: A **glass** flux material for applying an opaque **coating** is provided. The **glass** flux material includes at least one pigment and a **glass** component with the following composition:

- SiO₂ 55-70 mol percent,
- Al₂O₃ 2.5-8 mol percent,
- Bi₂O₃ 0.5-<4 mol percent,
- B₂O₃ 14-27 mol percent,
- with at least 2.5 mol percent of at least one oxide of the group Li₂O, Na₂O, and K₂O, wherein the ratio of alkali oxides to **aluminum** oxide SR₂O/Al₂O₃ is less than 6.

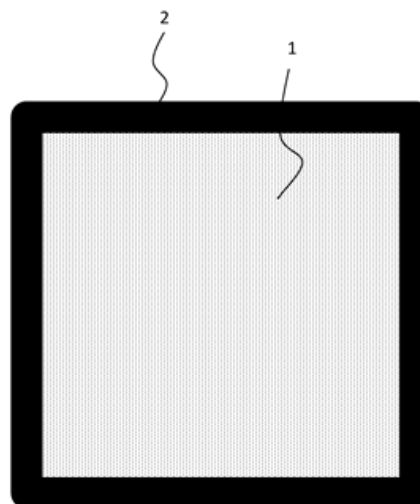
Classifications:

International (IPC 8-9): C03C17/04 C03C3/091 C03C3/093 C03C8/02 C03C8/04 C03C8/14 C03C8/20 (Advanced/Invention)

CPC: C03C2209/00 C03C2209/02 C03C8/20 C03C2217/213 C03C2217/214 C03C2217/228 C03C2217/29 C03C2218/119 C03C2218/32 C03C17/04 C03C3/091 C03C3/093 C03C8/02 C03C8/14 C03C2204/04 C03C2205/02

US: 428/220

PatBase - US2016340232_AA



Family:

Publication number	Publication date	Application number	Application date
CA2938163 AA	20160728	CA20142938163	20141218
DE102014101140 A1	20150730	DE201410101140	20140130
DE502014006439 D1	20180104	DE201450006439T	20141218
EP3099641 A1	20161207	EP20140815709	20141218
EP3099641 B1	20171129	EP20140815709	20141218
EP3099641 B8	20180214	EP20140815709	20141218
EP3099641 B9	20180321	EP20140815709	20141218
ES2658411 T3	20180309	ES20140815709T	20141218
MX2016009756 A1	20170320	MX20160009756	20141218
PL3099641 T3	20180530	PL20140815709T	20141218
PT3099641 T	20180227	PT20140815709T	20141218
TR201801683 T4	20180221	TR20180001683T	20141218
US2016340232 AA	20161124	US20160225555	20160801
WO15113707 A1	20150806	WO2014EP78448	20141218

Priority:

DE201410101140 20140130 EP20140815709 20141218 WO2014EP78448 20141218

Probable Assignee: SCHOTT AG

Assignee(s): (std): SCHOTT AG

Assignee(s): SIEBERS FRIEDRICH ; SEYFARTH MATTHIAS ; STORCH ALEXANDER ; SCHWALL MICHAEL ; BOCKMEYER MATTHIAS ; JOEST INA ; MITRA INA

Inventor(s): (std): BOCKMEYER MATTHIAS ; FRIEDRICH SIEBERS ; INA JOEST ; INA MITRA ; JOEST INA ; MATTHIAS BOCKMEYER ; MITRA INA ; SCHWALL MICHAEL ; SEYFAHRTH MATTHIAS ; SEYFARTH MATTHIAS ; SIEBERS FRIEDRICH ; STORCH ALEXANDER ; MICHAEL SCHWALL ; MATTHIAS SEYFAHRTH ; ALEXANDER STORCH

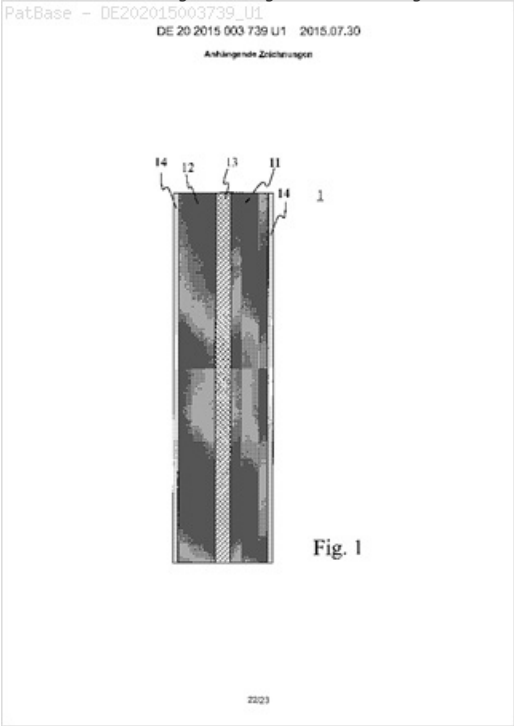
Agent(s): MARKS AND CLERK; BLUMBACH ZINNGREBE; BLUMBACH ZINNGREBE PATENT U RECHTSANWAELTE; ELZABURU SLP ELZABURU SLP; FULYA SUEMERALP

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

Title: VERBUNDSCHEIBE FUER SCHUTZVERGLASUNG MIT FUNKTIONSBESCHICHTUNG

Abstract: Source: DE202015003739U1 [DE] Verbundscheibe fuer eine Schutzverglasung, bevorzugt eine Bild-, Vitrinen-, oder Schaufenster erglasung, umfassend eine erste und eine zweite mineralische Glasscheibe und zumindest eine organische UV-absorbierende Schicht A, welche zwischen der ersten und der zweiten mineralische Glasscheibe angeordnet ist dadurch gekennzeichnet, dass das Flaechengewicht der Verbundscheibe eine untere Grenze von 0,6 k grams per square metre und eine obere Grenze von 7,5 k grams per square metre aufweist, der Quotient aus der Gesamtdicke aller organischen Schichten zu der Gesamtdicke der ersten und zweiten mineralischen Glasscheibe 0,1 bis 31 betraegt, die Gesamtdicke aller organischen Schichten kleiner gleich 3,1 mm betraegt, die Verbundscheibe eine antireflektierende Beschichtung, insbesondere eine interferenzoptische Beschichtung aufweist, die Verbundscheibe eine Beschichtung und/oder Folie umfasst, die eine Filterwirkung und/oder Absorption fuer elektromagnetische Strahlung im Wellenlaengenbereich kleiner 380 nm aufweist und die UV-Durchlaessigkeit der Verbundscheibe bei einer Wellenlaenge von 300 bis 380 nm bevorzugt kleiner gleich 3 percent betraegt und der allgemeine Farbwiedergabeindex Ra r Verbundscheibe groesser gleich 98 betraegt.

Classifications:
International (ipc 8-9): C03C27/12 (Advanced/Invention)
CPC: B32B17/10678 B32B17/10036 B32B17/10201



Family:

Publication number	Publication date	Application number	Application date
CH710243 A2	20160415	CH20150001348	20150917
DE102015006644 A1	20160407	DE201510006644	20150522
DE202015003739 U1	20150730	DE201520003739U	20150522
FR3026736 A1	20160408	FR20150058953	20150922

Priority:

DE201410219901 20141001 DE201510006644 20150522 DE201520003739U 20150522

Probable Assignee: SCHOTT AG

Assignee(s): (std): SCHOTT AG

Inventor(s): (std): ARNE LANGE ; CARSTEN RENZ ; HUBER REINHOLD ; LANGE ARNE ; REINHOLD HUBER ; RENZ CARSTEN

Agent(s): CABINET PLASSERAUD

Title: THERMALLY **TEMPERED GLASS** AND METHODS AND APPARATUSES FOR THERMAL **TEMPERING** OF **GLASS**

Abstract: A strengthened **glass** sheet product as well as process and an apparatus for making the product. The process comprises cooling the **glass** sheet by non-contact thermal conduction for sufficiently long to fix a surface compression and central tension of the sheet. The process results in thermally strengthened **glass** sheets having improved breakage properties.

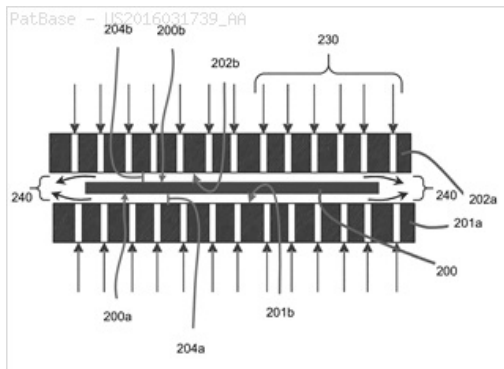
Classifications:

International (IPC 8-9): B32B1/00 B32B17/00 B32B17/10 B60J1/00 C03B27/012 C03B27/016 C03B27/04 C03B27/044 C03B27/048 C03B27/052 C03B29/12 C03B29/16 C03B35/14 C03B35/24 C03C17/23 C03C21/00 C03C23/00 C03C27/06 C03C27/12 C03C3/11 E04C2/54 E06B3/54 E06B3/66 E06B3/663 E06B3/67 G06F3/01 G06F3/041 G09F9/00 (Advanced/Invention)

International (IPC 1-7): C03B27/016 C03B27/04 C03B27/048 C03B27/052 C03B29/12 C03B29/16 C03B35/24 C03C23/00 C03C3/11 E06B3/54 E06B3/66 E06B3/67

CPC: C03B27/0413 C03B27/044 C03B27/04 C03C21/002 C03B27/052 C03B29/16 C03B35/24 C03C3/11 C03B27/012 C03B27/016 C03B27/0526 Y10T428/315 C03C23/007 E06B3/6715 G06F3/041 C03B35/147 B32B17/06 B32B17/10055 B32B17/10137 B32B17/10743 B32B17/10761 B32B17/1077 B32B17/10788 Y02P40/57 E06B3/66304 G06F3/016 B32B17/10302 E04C2/54 E06B3/6612 E06B3/66309 B32B17/10036 B32B17/10091 B32B17/101 B32B17/10752 C03C21/00 B32B2315/08 B32B2605/00 C03C3/078 C03C3/083 C03C3/085 C03C3/087 C03C3/095 E06B3/5409 E06B3/5436 C03B27/048 C03B29/12 C03B27/0404

US: 1/1 428/141 428/156 428/220 428/410 428/426 65/114 65/115 65/157 65/32.1 65/348 65/349



Family:

Publication number	Publication date	Application number	Application date
AU2015296243 AA	20160204	AU20150296243	20150730
BR112017002106 A2	20171121	BR20171102106	20150730
BR112018002058 A2	20180918	BR20181102058	20160728
BR112018002063 A2	20180918	BR20181102063	20160801
CA2956929 AA	20170131	CA20152956929	20150730
CA2994236 AA	20180130	CA20162994236	20160728
CA2994284 AA	20180130	CA20162994284	20160801
CN106795036 A	20170531	CN201580053189	20150730
CN108025939 A	20180511	CN201680053655	20160728
CN108431725 A	20180821	CN201680054630	20160728
CN108431726 A	20180821	CN201680055715	20160801
CN108883977 A	20181123	CN201680055008	20160728
EP3174835 A1	20170607	EP20150757030	20150730
EP3328803 A1	20180606	EP20160754030	20160728
EP3328807 A1	20180606	EP20160751079	20160728
EP3329348 A1	20180606	EP20160751081	20160728
EP3365750 A2	20180829	EP20160750337	20160801
IN201717004717 A	20170505	IN201717004717	20170209
IN201817003418 A	20180511	IN201817003418	20180130
IN201817004962 A	20180511	IN201817004962	20180209
JP2017523114 T2	20170817	JP20170505499T	20150730
JP2018526314 T2	20180913	JP20180504923T	20160801
JP2018528918 T2	20181004	JP20180504919T	20160728
JP2018529611 T2	20181011	JP20180504922T	20160728
JP2018531861 T2	20181101	JP20180504918T	20160728
KR20170036091 A	20170331	KR20177005630	20150730
KR20180033294 A	20180402	KR20187005874	20160801
KR20180033583 A	20180403	KR20187005873	20160728
KR20180035862 A	20180406	KR20187005875	20160728
KR20180036746 A	20180409	KR20187005865	20160728
MX2017001386 A1	20170821	MX20170001386	20150730
TW201623168 A	20160701	TW20150124988	20150731
TW201623169 A	20160701	TW20150124991	20150731
US2016031739 AA	20160204	US20150814232	20150730
US2016031740 AA	20160204	US20150814274	20150730
US2016031741 AA	20160204	US20150814293	20150730
US2016031742 AA	20160204	US20150814319	20150730
US2016031743 AA	20160204	US20150814335	20150730
US2016031744 AA	20160204	US20150814363	20150730
US2016031752 AA	20160204	US20150814181	20150730
US2016031753 AA	20160204	US20150814303	20150730
US2016207821 AA	20160721	US20160082872	20160328
US9296638 BB	20160329	US20150814232	20150730
US9776905 BB	20171003	US20150814274	20150730
US9783448 BB	20171010	US20150814303	20150730
US9802853 BB	20171031	US20150814293	20150730
US9975801 BB	20180522	US20150814319	20150730
US10005691 BB	20180626	US20150814363	20150730
US10077204 BB	20180918	US20150814335	20150730
WO16019167 A1	20160204	WO2015US42955	20150730
WO16019171 A1	20160204	WO2015US42965	20150730
WO17019837 A1	20170202	WO2016US44401	20160728

WO17019840 A1	20170202	WO2016US44406	20160728
WO17019851 A1	20170202	WO2016US44445	20160728
WO17020040 A2	20170202	WO2016US45022	20160801
WO17020040 A3	20170309	WO2016US45022	20160801
WO17020041 A1	20170202	WO2016US45025	20160801

Priority:

US20140031856P 20140731	US20140074838P 20141104	US20150147289P 20150414
US20150814181 20150730	US20150814232 20150730	US20150814274 20150730
US20150814293 20150730	US20150814319 20150730	US20150814335 20150730
US20150814363 20150730	US20150814303 20150730	WO2015US42955 20150730
US20150236296P 20151002	US20150236296P 20151002	US20160286192P 20160122
US20160281971P 20160122	US20160288851P 20160129	US20160288669P 20160129
US20160288755P 20160129	US20160082872 20160328	WO2016US44401 20160728
WO2016US44406 20160728	WO2016US44445 20160728	WO2016US45022 20160801

Probable Assignee: CORNING INC

Assignee(s): (std): CORNING CO LTD ; CORNING INC

Assignee(s): LEZZI PETER JOSEPH ; WASSON KEVIN LEE ; MASCHMEYER RICHARD ORR ; THOMAS JOHN CHRISTOPHER

Inventor(s): (std): JOHN CHRISTOPHER THOMAS ; KEVIN LEE WASSON ; LEZZI PETER JOSEPH ; MASCHMEYER RICHARD ORR ; PETER JOSEPH LEZZI ; RICHARD ORR MASCHMEYER ; THOMAS JOHN CHRISTOPHER ; WASSON KEVIN LEE

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GOWLING WLG CANADA LLP; SCOTT MARK ANDREW; GREGORY V; BEAN GREGORY V; MAGAZINER RUSSELL S; WEGMANN ZACHARY J ET AL; WEGMANN ZACHARY J; PATEL PAYAL 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 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

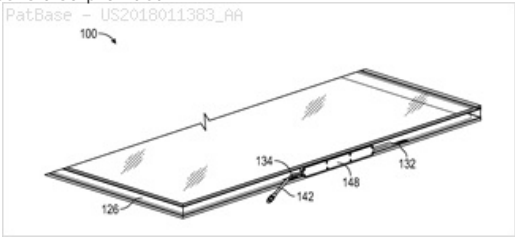
Title: ELECTROCHROMIC DEVICE ASSEMBLIES

Abstract: An electrochromic device is provided. The device includes a first substrate and a second substrate. The device includes electrochromic material, with the first substrate, the electrochromic material and the second substrate forming a **laminate**, the first substrate offset in a lateral direction from the second substrate along at least a portion of an edge of the electrochromic device. The device includes a plurality of terminals coupled to the electrochromic material, with at least two of the plurality of terminals exposed on the first substrate by the first substrate being offset in the lateral direction from the second substrate. A method of manufacturing an electrochromic device is also provided.

Classifications:

International (IPC 8-9): G02F1/15 G02F1/153 G02F1/155
G02F1/163 (Advanced/Invention)

CPC: G02F1/13452 G02F1/13458 G02F1/163 G02F1/153



Family:

Publication number	Publication date	Application number	Application date
■ CN108027542 A	20180511	CN201680055290	20160805
■ EP3332288 A1	20180613	EP20160835712	20160805
■ JP2018528461 T2	20180927	JP20180506413T	20160805
■ US2018011383 AA	20180111	US20160230157	20160805
■ WO17027407 A1	20170216	WO2016US45864	20160805
■ WO17027407 A9	20171130	WO2016US45864	20160805

Priority:

US20150202517P 20150807 US20160230157 20160805 WO2016US45864 20160805

Probable Assignee: KINESTRAL TECH INC

Assignee(s): (std): KINESTRAL TECH INC

Assignee(s): KINESTRAL TECHNOLOGIES INC ; GPB DEBT HOLDINGS II LLC

Inventor(s): (std): GALLIPEO JOHN ; HIGASHIHARA KEN

Agent(s): HARGREAVES TIMOTHY EDWARD; DESHIMARU TAKESHI; MATSUSHITA MITSURU; KURASAWA ICHIRO;
GENCARELLA MICHAEL L

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

Title: TRANSPARENTER SCHUTZVERBUND TRANSPARENT PROTECTION FEDERATION (Machine translation)

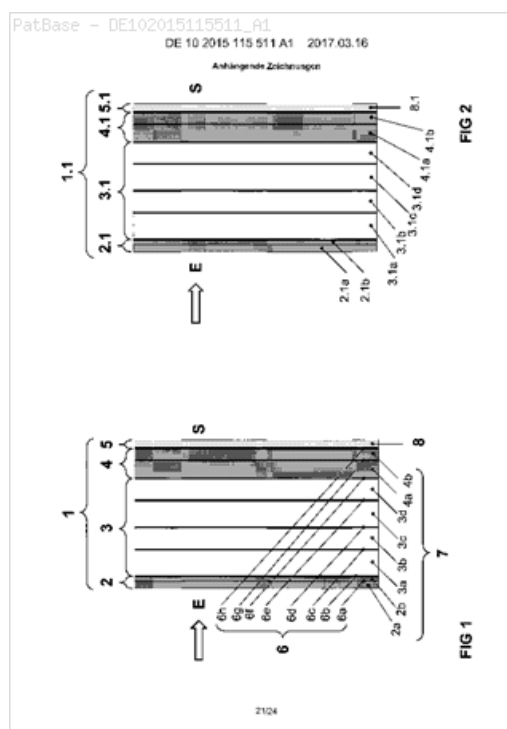
Abstract: Source: DE102015115511A1 [DE] Transparenter Verbund, der durch transparente Kunststofflagen flächig miteinander verbundene Sproedbruchmaterialscheiben aufweist, umfassend einen einwirkungsseitig angeordneten einwirkungsseitigen Verbundteil und einen der Einwirkungsseite (E) abgewandt angeordneten Spall-Liner-Verbundteil, und weiter umfassend einen zwischen innerem Verbundteil und dem Spall-Liner-Verbundteil angeordneten rückwärtigen Verbundteil, wobei der rückwärtige Verbundteil wenigstens eine erste Sproedbrucheinzelscheibe umfasst, die mit dem Spall-Liner-Verbundteil verbunden ist, und wobei diese Sproedbruchmaterialeinzelscheibe des rückwärtigen Verbundteiles eine vorgespannte, insbesondere chemisch vorgespannte, Glasscheibe ist, und wobei der innere Verbundteil wenigstens eine erste, der Einwirkungsseite (E) zugewandt angeordnete Sproedbruchmaterialeinzelscheibe und eine zweite, der Sproedbruchmaterialeinzelscheibe nachfolgend angeordnete Sproedbruchmaterialeinzelscheibe umfasst, die durch eine Kunststofflage miteinander verbunden sind, und wobei ein Dickenverhältnis der Dicke der ersten Sproedbruchmaterialeinzelscheibe des inneren Verbundteils und der Dicke der zweiten Sproedbruchmaterialeinzelscheibe des inneren Verbundteils 1,2:1 bis 4:1 beträgt. **Machine translation:** Transparent composite which has extensively interconnected brittle fracture material slices, with layers of transparent plastic comprehensively one effects side children exposure to side composite part and one turned away comprehensively arranged Spall liner composite part, and on the action side (E) between exposure-side part of the Federation and the Spall liner composite part comprehensively arranged interior part of Federation, and on a rear part of Federation arranged between the inner part of the Federation and the Spall liner composite part, where the rear part of the Federation includes at least a first brittle fracture single disc, which is connected with the Spall liner composite part, and where these brittle fracture material single pane of the rear part of the composite is a preloaded, in particular chemically prestressed glass plate, and where the inner part of the Federation on brittle fracture material single disc includes at least a first which facing arranged brittle fracture material single disc and a second action page (S), hereinafter the brittle fracture material single disc, which are connected to each other, and through a plastic sheet a thickness ratio first brittle fracture material single wheel thickness of the Interior of the Federation and second brittle fracture material single wheel thickness of the inner composite part 1.2: 1 to 4:1.

Classifications:

International (IPC 8-9): C03C27/12 F41H5/04

F41H5/26 (Advanced/Invention)

CPC: F41H5/0407 B32B17/10064 B32B17/10119 B32B17/10137 B32B17/1055



Family:

Publication number	Publication date	Application number	Application date
DE102015115511 A1	20170316	DE201510115511	20150915

Priority:

DE201510115511 20150915

Probable Assignee: SCHOTT AG

Assignee(s): (std): SCHOTT AG

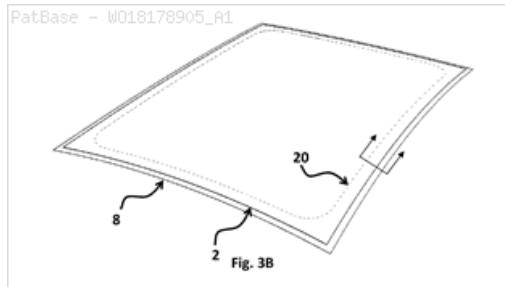
Inventor(s): (std): FENSKE PATRICK ; GOETZ HELGA ; KAHL STEPHAN ; SEYFARTH MATTHIAS ; ZACHAU THILO

Title: OPAQUE LAMINATED VEHICLE ROOF WITH PANORAMIC GLAZED APPEARANCE

Abstract: The laminated glass panoramic roof is a popular although expensive option offered on a growing number of automobiles. Much of its appeal comes from the sleek modern appearance that it gives to the vehicle. The opaque laminated vehicle roof, by removing vision and optical requirements can be produced at a lower cost. The opaque laminated roof, by retaining a glass outer surface, maintains the same exterior appearance, aesthetic and much of the appeal of a conventional laminated glass panoramic roof. The opaque laminated vehicle roof also allows for the use of alternate materials which can further reduce cost and weight while adding additional features such as installation hardware, fasteners, lighting, antennas and solar cells to the roof.

Classifications:

International (IPC 8-9): B32B17/06 B60J7/00 B60J7/02 B60J7/04 B60J7/043 B60J7/057 B60J7/19 B62D25/06 (Advanced/Invention)
CPC: B62D25/06 B32B17/061 B32B17/064 B32B17/10018 B32B17/10091 B32B17/10119 B32B17/10137 B32B17/10174 B32B17/10348 B32B17/10541 B32B17/10651 B32B17/10761



Family:

Publication number	Publication date	Application number	Application date
CO20170007443 A1	20171010	CO20170007443	20170727
WO18178905 A1	20181004	WO20181852152	20180328

Priority:

US20170479288P 20170330 CO20170007443 20170727

Probable Assignee: AGP AMERICA SA

Assignee(s): (std): AGP AMERICA SA

Inventor(s): (std): MANNHEIM ASTETE MARIO ARTURO ; SUAREZ JUAN PABLO ; VOELTZEL CHARLES STEPHEN

Inventor(s): MARIO ARTURO MANNHEIM ASTETE ; CHARLES STEPHEN VOELTZEL ; JUAN PABLO SUAREZ

Agent(s): CARLOS REINALDO OLARTE GARCIA; URDANETA DANIEL

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

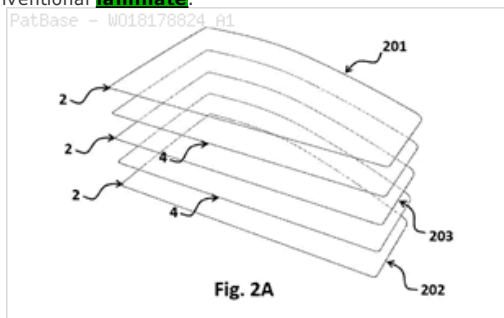
Title: TRIPLE LAYER AUTOMOTIVE LAMINATE WITH IMPROVED ACOUSTIC PERFORMANCE

Abstract: As the use of laminated glass in vehicles has extended beyond just the windshield, the total glazed area and size of the glass parts has been increasing. It is also noted that the thickness of the glass decreasing with the introduction of new technologies such as chemical tempering being used as the automotive OEMs strive to reduce weight to improve efficiency. Unfortunately, as the mass of the glazing decreases and the area increases, the sound dampening ability of the glazing decreases. The invention substantially improves acoustic performance by distributing the mass of the laminated glass across three equivalent layers rather than just two as in a conventional laminate.

Classifications:

International (IPC 8-9): B32B17/10 C03B9/00 (Advanced/Invention)

CPC: B32B17/10045 B32B17/10761



Family:

Publication number	Publication date	Application number	Application date
CO20170007566 A1	20171110	CO20170007566	20170727
WO18178824 A1	20181004	WO20181B51956	20180322

Priority:

US20170480141P 20170331

Probable Assignee: AGP AMERICA SA

Assignee(s): (std): AGP AMERICA SA

Inventor(s): (std): KOC LI ALFREDO DANIEL ; MANNHEIM ASTETE MARIO ARTURO ; SARMIENTO SANTOS ANDRES FERNANDO ; VOELTZEL CHARLES STEPHEN

Inventor(s): MARIO ARTURO MANNHEIM ASTETE ; ALFREDO DANIEL KOC LI ; ANDRES FERNANDO SARMIENTO SANTOS ; CHARLES STEPHEN VOELTZEL

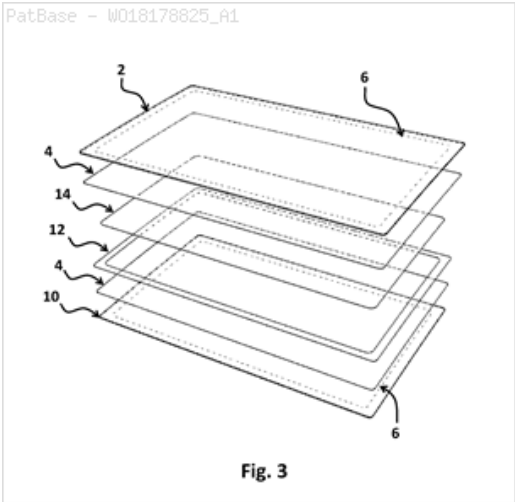
Agent(s): CARLOS REINALDO OLARTE GARCIA; URDANETA DANIEL

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

Title: INTRUSION RESISTANT LAMINATED AUTOMOTIVE GLAZING

Abstract: Improved automotive security has led to an increase in carjacking and smash and grab crimes. Tempered glass offers little resistant to attacks. Laminated glass improves penetration resistance but only by several seconds. By including a stiff frame in the laminate and a plastic interior layer, the present invention significantly increases the amount of time that an occupant has to react and possibly escape an attack by driving off or for the attack to be detected. In the event of an accident, the invention also provides improved occupant retention, especially for movable glass that is not bonded to the vehicle.

Classifications:
International (IPC 8-9): B32B17/06 B32B17/10
B32B18/00 (Advanced/Invention)
CPC: B32B17/10018 B32B17/10091 B32B17/10119 B32B17/10137
B32B17/10174 B32B17/10761 B32B17/1077 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
CO20170007432 A1	20171110	CO20170007432	20170726
WO18178825 A1	20181004	WO20181B51957	20180322

Priority:

US20170477399P 20170327

Probable Assignee: AGP AMERICA SA

Assignee(s): (std): AGP AMERICA SA

Inventor(s): (std): CUSTODIO SHEEN EDWARD ENRIQUE ; MANNHEIM ASTETE MARIO ARTURO ; VOELTZEL CHARLES STEPHEN

Inventor(s): CHARLES STEPHEN VOELTZEL ; MARIO ARTURO MANNHEIM ASTETE ; EDWARD ENRIQUE CUSTODIO SHEEN

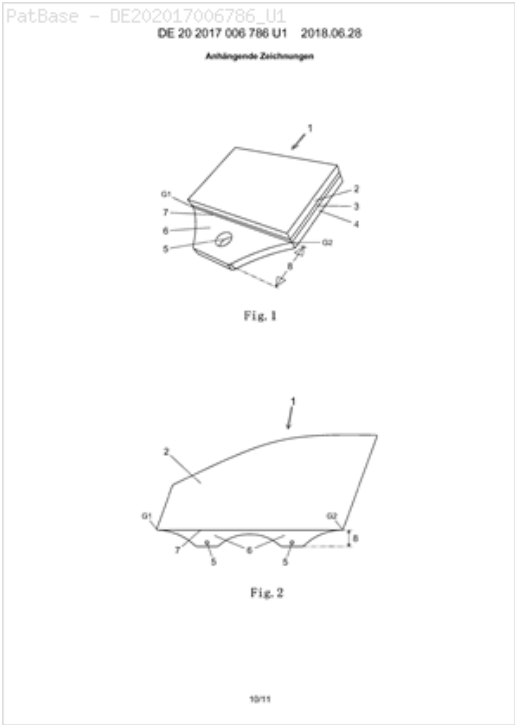
Agent(s): CARLOS REINALDO OLARTE GARCIA; URDANETA DANIEL

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

Title: VERBUNDGLAS-SEITENSCHIEBE Composite **Glass**-SIDE WINDOW (Machine translation)

Abstract: Source: DE202017006786U1 [DE] Verbundglas-Seitenscheibe (1) fuer ein Fahrzeug, umfassend ein Laminat aus einer ersten Scheibe (4), einer zweiten Scheibe (2) und mindestens einer polymeren Zwischenschicht (3) zwischen der ersten und zweiten Scheibe, dadurch gekennzeichnet, dass mindestens eine Teilflaeche (6) der ersten Scheibe (4) an einer Seite des Laminats uebersteht und die ueberstehende Teilflaeche (6) mindestens ein Durchgangsloch (5) aufweist. **Machine translation:** **Laminated glass** side window (1) for a vehicle, comprising a **laminated** formed from a first plate, a second plate (4) (2) and at least one polymeric interlayer (3) between the first and second disc, characterized in that at least a partial area (6) of the first **glass** (4) on one side of the **laminated** and the projecting part surface (6) at least one through-hole (5).

Classifications:
International (IPC 8-9): B60J1/00 C03C27/12 (Advanced/Invention)
CPC: B60J1/00



Family:

Publication number	Publication date	Application number	Application date
DE202017006786 U1	20180628	DE201720006786U	20170428

Priority:

DE201720006786U 20170428 EP20170168674 20170428

Probable Assignee: SAINT GOBAIN

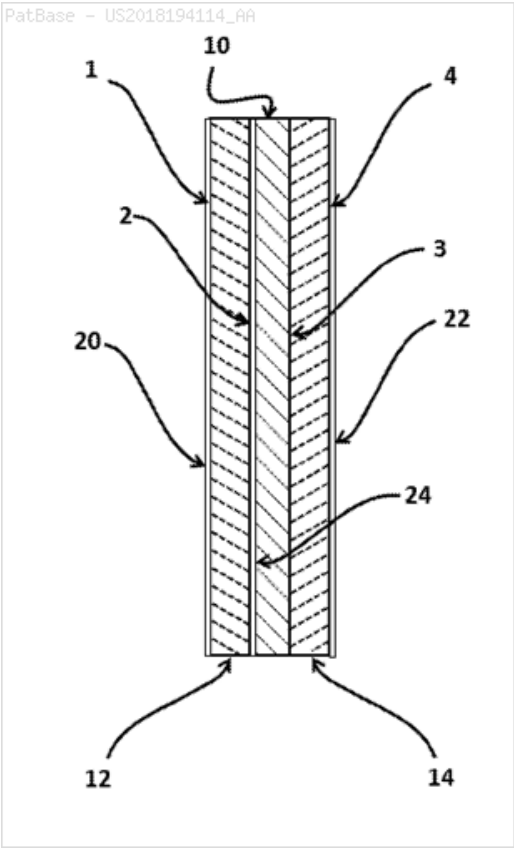
Assignee(s): (std): SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE

Title: LIGHTWEIGHT AUTOMOTIVE LAMINATE WITH HIGH RESISTANCE TO BREAKAGE

Abstract: Working with the traditional soda lime float glass, there is a limit on how thin an automotive laminate can be while still meeting all of the functional and safety requirements. By using alternate glass compositions and chemical tempering, a thinner lightweight automotive laminate, which meets all requirements, and with high resistance to stone chips, has been produced.

Classifications:

International (IPC 8-9): B32B17/10 B60J1/02 B64C1/14 C03C21/00 (Advanced/Invention)
CPC: C03C21/002 B32B2250/03 B32B2250/40 B32B2605/006 B32B17/10174 B60J1/02 B32B17/10137 B32B17/10036 B32B17/10119 B32B17/10761



Family:

Publication number	Publication date	Application number	Application date
US2018194114 AA	20180712	US20170859427	20171230
WO18122769 A1	20180705	WO20171B58468	20171228
WO18122769 A9	20181108	WO20171B58468	20171228

Priority:

US20160440453P 20161230 US20170859427 20171230

Probable Assignee: AGP AMERICA SA

Assignee(s): (std): AGP AMERICA S A ; AGP AMERICA SA

Inventor(s): (std): MANNHEIM ASTETE MARIO ARTURO ; VOELTZEL CHARLES STEPHEN

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

Title: AUTOMOTIVE LAMINATE WITH HOLE

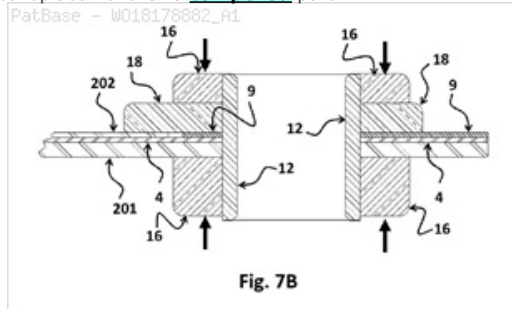
Abstract: Laminated glazing, once limited to just the windshield, is finding more and more application in other positions on the vehicle due to its ability to improve passenger safety, security and comfort. Problems are encountered when producing a laminated version of a tempered part with holes, because tempered glass is 4 to 5 times stronger than annealed glass. The laminate of the invention has a hole in the exterior glass layer. An insert is bonded to a cutout in the area of the hole on the interior glass layer so as to reinforce the hole and distribute the load over a wider area. The result is a laminated glazing with one or more holes that has the reliability of and is a direct replacement for a tempered part.

Classifications:

International (IPC 8-9): B32B17/10 B60J1/10 B60J1/17

C03B9/00 (Advanced/Invention)

CPC: B32B17/10036 B32B17/10293 B32B17/10761 B60J1/10 B60J1/17



Family:

Publication number	Publication date	Application number	Application date
CO20170007445 A1	20180719	CO20170007445	20170727
WO18178882 A1	20181004	WO20181B52106	20180327

Priority:

US20170478561P 20170329 CO20170007445 20170727

Probable Assignee: AGP AMERICA SA

Assignee(s): (std): AGP AMERICA S A ; AGP AMERICA SA

Inventor(s): (std): MANNHEIM ASTETE MARIO ARTURO BENJAMIN ; MANNINO VINCENZO ; MANNHEIM ASTETE MARIO ARTURO ; SUAREZ JUAN PABLO ; VOELTZEL CHARLES STEPHEN

Inventor(s): VINCENZO MANNINO ; MARIO ARTURO BENJAMIN MANNHEIM ASTETE ; CHARLES STEPHEN VOELTZEL ; JUAN PABLO SUAREZ

Agent(s): CARLOS REINALDO OLARTE GARCIA; URDANETA DANIEL

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

Title: MULTI-LAYER STRUCTURE AND METHOD OF MAKING SAME

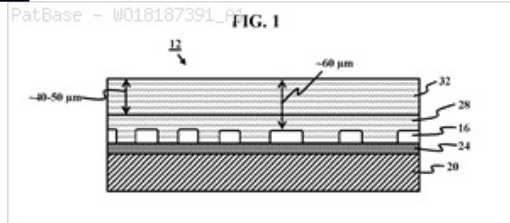
Abstract: A multi-layer and method of making the same are provided. The multi-layer, such as a sensor, can include a high strength glass overlay and a lamination layer on a substrate layer. The overlay can be less than 250 micrometers thick and have at least one tempered surface incorporating a surface compression layer of at least 5 micrometers deep and a surface compressive stress of at least 200 MPa. The overlay can exhibit a puncture factor of at least 3000 N/micrometres² at B10 (10th percentile of the probability distribution of failure) in a multi-layer structure, an apparent thickness of less than 0.014 mm, and a pencil hardness greater than 6H. The method can include ion-exchange tempering at least one major surface of a glass sheet, light etching the major surface to remove flaws and laminating the glass sheet on the tempered and lightly etched major surface to a substrate layer.

Classifications:

International (IPC 8-9): C03C15/00 C03C21/00 C03C23/00

C03C27/06 C03C27/10 C03C27/12 (Advanced/Invention)

CPC: C03C15/00 C03C21/00 C03C23/00 C03C27/06 C03C27/10



Family:

Publication number	Publication date	Application number	Application date
WO18187391 A1	20181011	WO2018US25975	20180404

Priority:

US20170481387P 20170404

Probable Assignee: CORNING INC

Assignee(s): (std): CHAPARALA SATISH CHANDRA ; CORNING INC ; ECKART KRISTEN LORRAINE ; GERBER KURT EDWARD ; HUANG MING HUANG ; SHASHIDHAR NAGARAJA ; SHENG HUAN HUNG ; SORESEN MICHAEL LESLEY ; SUBRAMANIAN ANANTHANARAYANAN

Inventor(s): (std): CHAPARALA SATISH CHANDRA ; ECKART KRISTEN LORRAINE ; GERBER KURT EDWARD ; HUANG MING HUANG ; SHASHIDHAR NAGARAJA ; SHENG HUAN HUNG ; SORESEN MICHAEL LESLEY ; SUBRAMANIAN ANANTHANARAYANAN

Agent(s): MAGAZINER RUSSELL SCOTT

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