

1) Family number: 28848703 (US2004160688A)

© PatBase

Title: VEHICLE-USE SHATTER-PROOF GLASS AND PRODUCTION METHOD THEREFOR

Abstract: The present invention provides a laminated glass for vehicles exerting the functions that are difficult to be made compatible in combinations such as (1) a shade band in an interlayer and an optical device such as a CCD camera, (2) a heat shielding interlayer and an optical device, and (3) a heat shielding interlayer and a combiner. In this laminated glass for vehicles, the interlayer includes a first region and a second region that is either enclosed by the first region or formed by partially recessing an edge portion of the first region. The first region is provided with a light reducing function that imparts a light transmittance loss at least of visible light, and in the second region, the interlayer has a light transmittance loss of visible light that is smaller than that in the first region.

Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 B60J1/02 B60S1/08 C03C27/12 G02B17/00 G02B27/00 G02B5/08 (Advanced/Invention); C03C27/12 (Advanced/Non-invention);

B32B17/06 B60J1/00 B60J1/02 B60S1/08 C03C27/12 G02B17/00 G02B27/00 G02B5/08 (Core/Invention)

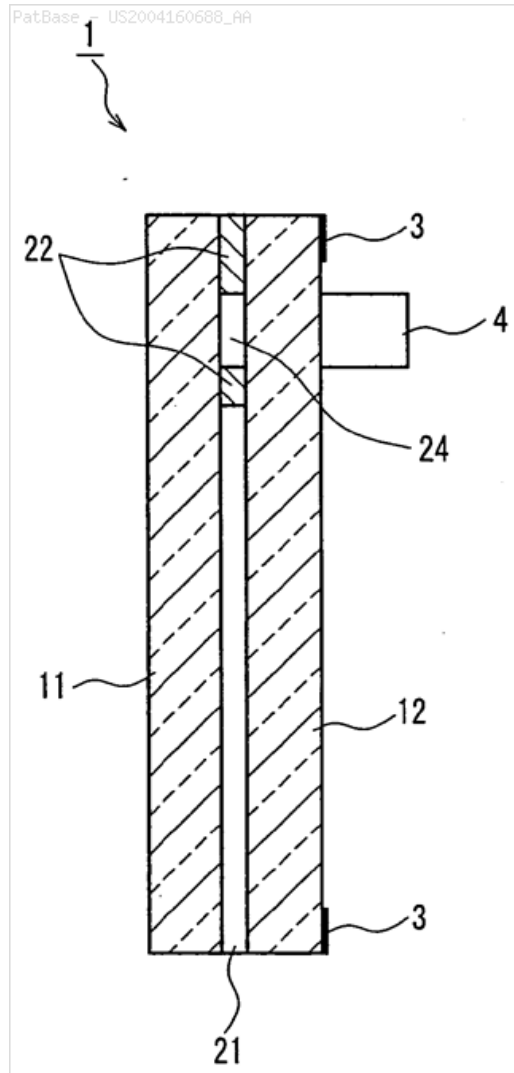
International (IPC 1-7): B60J1/00 B60J3/00 C03C27/12 G02B5/08

CPC: Y10S359/90 B32B17/1066 B32B17/10036 B32B17/10293 B32B17/1055 B32B17/10761 B32B17/10633 B32B17/1011

European: B32B17/10C4 B32B17/10E16 B32B17/10G

B32B17/10G28 B32B17/10G8B

US: 296/96.19 359/601 359/603 359/879 359/879S 359/883 359/883P 359/900 359/900S

**Family:**

Publication number	Publication date	Application number	Application date
AT461038 E	20100415	AT20030701055T	20030110
AU2003202500 AA	20030730	AU20030202500	20030110
DE60331720 D1	20100429	DE20036031720	20030110
EP1464632 A1	20041006	EP20030701055	20030110
EP1464632 A4	20060419	EP20030701055	20030110
EP1464632 B1	20100317	EP20030701055	20030110
ES2341233 T3	20100617	ES20030701055T	20030110
JP2003059837 A1	20050519	JP20030559946T	20030110
JP4442863 B1	20100331	JP20030559946T	20030110
JP4442863 B2	20100331	JP20030559946T	20030110
US2004160688 AA	20040819	US20030479146	20031125
US2006250711 AA	20061109	US20060481500	20060706
US7175290 BB	20070213	US20060481500	20060706
US7258454 BB	20070821	US20030479146	20031125
WO03059837 A1	20030724	WO2003JP00143	20030110

Priority:

JP20020005379 20020111

JP20020005380 20020111

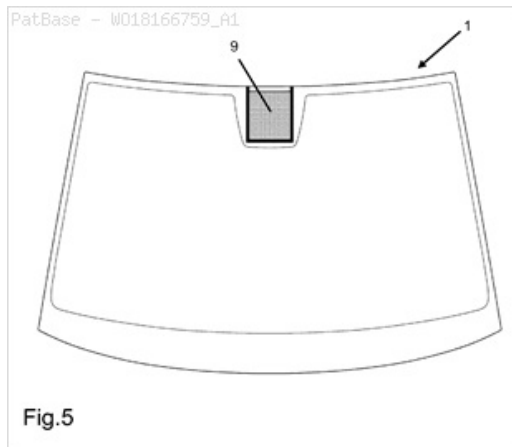
US20030479146 20030110

Probable Assignee: NIPPON SHEET GLASS CO LTD**Assignee(s):** (std): FURUSAWA SATOSHI ; NIPPON SHEET GLASS CO LTD ; NIPPON SHEET GLASS COMPANY LTD ; NOGUCHI TATSUYA**Assignee(s):** NIPPON SHEET GLASS COMPANY LIMITED ; NIPPON SHEET GLASS CO**Inventor(s):** (std): FURUSAWA SATOSHI ; NOGUCHI TATSUYA ; SATOSHI FURUSAWA ; TATSUYA NOGUCHI**Inventor(s):** NOGUCHI TATSUYA C O NIPPON SHEET GLASS CO LTD ; FURUSAWA SATOSHI C O NIPPON SHEET GLASS CO LTD**Agent(s):** TOWLER PHILIP DEAN; HAMRE SCHUMANN MUELLER AND LARSON PC**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW**2) Family number: 71239888 (WO18166759A1)**

© PatBase

Title: LAMINATED PANE COMPRISING AN ELECTRIC CONSUMER**Abstract:** The invention relates to a laminated pane (1) comprising an electric consumer (9), an outer sheet (3) and an inner sheet (5) which are bonded to each other by means of a thermoplastic intermediate layer (4), wherein • the thermoplastic intermediate layer (4) has a cutout (6) which includes an insertion hole (8), • the insertion hole (8) is sized such that the electric consumer (9) can be inserted into the cutout (6) through the insertion hole (8) and the electric consumer (9) is placed in the cutout (6).**Classifications:****International (IPC 8-9):** B32B17/10 (Advanced/Invention)**CPC:** B32B17/10036 B32B17/10293 B32B17/10541 B32B17/10761 B32B17/1077 B32B17/10788 B32B2457/20

PatBase - WO18166759_A1

**Fig.5****Family:**

Publication number	Publication date	Application number	Application date
■ CN108883611 A	20181123	CN201880000321	20180220
■ WO18166759 A1	20180920	WO2018EP54055	20180220

Priority:

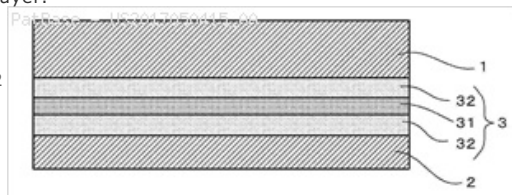
EP20170161056 20170315 WO2018EP54055 20180220

Probable Assignee: SAINT GOBAIN**Assignee(s):** (std): SAINT GOBAIN**Assignee(s):** SAINT GOBAIN GLASS FRANCE**Inventor(s):** (std): KLEIN MARCEL**Agent(s):** WEBER SOPHIE**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**3) Family number: 60160361 (US2017050415A)**

© PatBase

Title: LAMINATED GLASS**Abstract:** A laminated glass according to the present invention includes an outer glass sheet, an inner glass sheet that is arranged opposite to the outer glass sheet and has a smaller thickness than that of the outer glass sheet, and an interlayer sandwiched between the outer glass sheet and the inner glass sheet. A transmittance with respect to light having a wavelength of 850 to 950 nm is 30 to 80 percent. The outer glass sheet has a thickness of 1.8 to 2.3 mm. The inner glass sheet has a thickness of 0.6 to 2.0 mm. The interlayer includes a plurality of layers including at least a core layer. The core layer has a Young's modulus of 1 to 20 MPa at a frequency of 100 Hz and a temperature of 20 degrees centigrade, the Young's modulus being lower than the Young's modulus of the other layer.**Classifications:****International (IPC 8-9):** B32B17/06 B32B17/10 B32B7/02 B60J1/00 B60J1/02 B60S1/58 C03C27/12 E06B3/66 (Advanced/Invention)**CPC:** B60J1/008 C03C27/10 B32B17/06 B32B2307/412 B32B2309/02 B60J1/001 B60J1/02 B32B17/10036 B32B17/10633 B32B17/10761 B32B2307/56 B32B2250/03 B32B2307/102**US:** 428/215

PatBase - US2017050415A



Family:

Publication number	Publication date	Application number	Application date
■ CN105980325 A	20160928	CN201580008414	20150213
■ CN105980325 B	20180525	CN201580008414	20150213
■ EP3106443 A1	20161221	EP20150749265	20150213
■ EP3106443 A4	20170830	EP20150749265	20150213
■ JP2015151308 A2	20150824	JP20140027049	20140214
■ JP2015151309 A2	20150824	JP20140027050	20140214
■ JP2015160779 A2	20150907	JP20140037626	20140227
■ JP2015168584 A2	20150928	JP20140042214	20140304
■ JP2015168585 A2	20150928	JP20140042215	20140304
■ JP2015168586 A2	20150928	JP20140042217	20140304
■ JP2015168592 A2	20150928	JP20140043802	20140306
■ JP2015168598 A2	20150928	JP20140044445	20140306
■ JP2015168599 A2	20150928	JP20140044705	20140307
■ JP6178738 B2	20170809	JP20140037626	20140227
■ JP6193777 B2	20170906	JP20140027049	20140214
■ JP6267006 B2	20180124	JP20140042214	20140304
■ JP6267007 B2	20180124	JP20140042215	20140304
■ JP6267008 B2	20180124	JP20140042217	20140304
■ JP6295096 B2	20180314	JP20140027050	20140214
■ JP6295104 B2	20180314	JP20140043802	20140306
■ US2017050415 AA	20170223	US20150118735	20150213
■ WO15122507 A1	20150820	WO2015JP54044	20150213

Priority:

JP20140027049	20140214	JP20140027050	20140214	JP20140037626	20140227
JP20140042214	20140304	JP20140042215	20140304	JP20140042217	20140304
JP20140043802	20140306	JP20140044445	20140306	JP20140044705	20140307
WO2015JP54044	20150213				

Probable Assignee: NIPPON SHEET GLASS CO LTD**Assignee(s):** (std): NIPPON SHEET GLASS CO LTD**Assignee(s):** NIPPON SHEET GLASS CO**Inventor(s):** (std): OGAWA HISASHI ; OGAWA NAGAFUMI ; KANKI SATOSHI ; KAMIYOSHI SATORU ; ASAKA HISASHI ; ASAI TAKAHIRO**Agent(s):** WEBSTER JEREMY MARK; TACHIBANA KENJI; TANAKA JUNYA; YAMADA IICHIRO 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 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

4) Family number: 46398651 (US2011199674A)

© PatBase

Title: LAMINATE THAT SCREENS INFRARED RADIATION, IS TRANSPARENT TO VISIBLE LIGHT, AND HAS AN OPTICAL WINDOW THAT ALLOWS INFRARED LIGHT TO PASS, METHOD FOR THE PRODUCTION THEREOF, AND USE THEREOF

Abstract: A laminate adapted to filter out infrared radiation, yet transparent to visible light. The laminate further comprises an optical window that is permeable to infrared radiation. A method of manufacturing the laminate is also described.

Classifications:**International (IPC 8-9):** B32B17/10 B32B37/00 B32B38/04

C03C27/12 C08K3/22 G02B5/20 (Advanced/Invention);

B32B17/06 C08K3/00 (Core/Invention)

CPC: Y10T156/10 Y10T156/1062 B32B17/10036 B32B17/10633

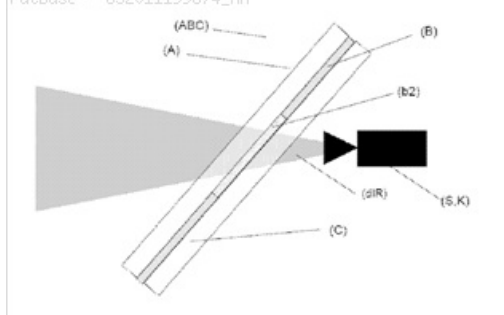
B32B17/10651 B32B17/10761 B60J3/007

European: B32B17/10C4 B32B17/10G28 B32B17/10G6D

B32B17/10G8 B60J3/00C

US: 156/256 156/256S 156/60 156/60S 359/359 359/359P

PatBase - US2011199674_AA

**Family:**

Publication number	Publication date	Application number	Application date
■ CN202986244 U	20130612	CN201090000661U	20100118
■ DE102009006062 A1	20100729	DE200910006062	20090124
■ DE102009019622 A1	20101104	DE200910019622	20090430
■ EP2382089 A1	20111102	EP20100700746	20100118
■ US2011199674 AA	20110818	US20100126749	20100118
■ WO10084092 A1	20100729	WO2010EP50507	20100118

Priority:

DE200910006062	20090124	DE200910019622	20090430	WO2010EP50507	20100118
----------------	----------	----------------	----------	---------------	----------

Probable Assignee: SAINT GOBAIN GLASS FRANCE

Assignee(s): (std): DROSTE STEFAN ; MANZ FLORIAN ; MELCHER MARTIN ; MEULEN UWE VAN D ; OFFERMANN VOLKMAR ; SAINT GOBAIN ; VAN DER MEULEN UWE ; WOHLFEIL DIRK ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN SEKURIT D GMBH

Assignee(s): SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN SEKURIT DEUTSCHLAND GMBH AND CO KG

Inventor(s): (std): DROSTE STEFAN ; MANZ FLORIAN ; MELCHER MARTIN ; MEULEN UWE VAN D ; MEULEN UWE VAN DER ; MEULEN VAN D ; MEULEN VAN DER ; OFFERMANN VOLKMAR ; WOHLFEIL DIRK ; S DROSTE ; M MELCHER ; F MANTZ ; D VAULFAHYRE ; VAN DER MEULEN UWE ; V OFFERMAN ; U VAN D MEULEN

Inventor(s): SDROSTE ; UVAN DER MEULEN ; MMELCHER ; FMANTZ ; DVAULFAHYRE ; VOFFERMAN

Agent(s): LENDVAI TOMAS

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

5) Family number: 10871818 (US5620799A) © PatBase

Title: ELECTROMAGNETIC RADIATION PERMEABLE GLAZING

Abstract: A glazing for an enclosed space includes at least one sheet of glass having a precisely delimited surface region and a transmitter and/or a receiver for electromagnetic radiation in a non-visible portion of the spectrum. The transmitter and/or receiver are positioned for respectively transmitting and receiving radiation in a non-visible portion of the spectrum via the precisely delimited surface region. The transmissivity of said precisely delimited surface region for electromagnetic radiation in said non-visible portion of the spectrum is higher than that of a remainder of the at least one sheet of glass for electromagnetic radiation in the non-visible portion of the spectrum.

Classifications:

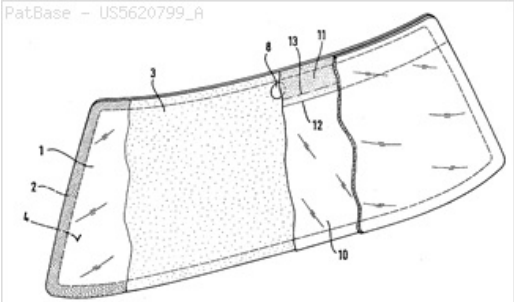
International (IPC 8-9): B32B17/10 B60J1/00 C03C17/36 C03C27/12 E06B5/18 G02B1/10 G02B6/42 H01Q1/12 H01Q15/00 H04B10/00 H04B10/22 (Advanced/Invention); B32B17/06 B60J1/00 C03C17/36 C03C27/12 E06B5/10 G02B1/10 G02B6/42 H01Q1/12 H01Q15/00 H04B10/00 H04B10/22 (Core/Invention)

International (IPC 1-7): B32B9/00 B60J1/00 C03C17/00 C03C17/36 C03C27/12 E06B5/18 G02B1/10 G02B6/42 G12B17/04 H01Q1/12 H01Q15/00 H01Q15/00 H04B10/00 H04B10/22

CPC: Y10S428/913 H01Q15/0013 H01Q1/1271 B32B17/10036 B32B17/10174 B32B17/10761 Y10T428/162 Y10T428/24777 Y10T428/24926 Y10T428/31601 Y10T428/3163

European: B32B17/10C4 B32B17/10E10 B32B17/10G28 H01Q1/12G H01Q15/00C

US: 359/270 359/273 359/275 428/192 428/210 428/38 428/425.6 428/426 428/432 428/437 428/46 428/913 52/171.3 52/173.3 52/788.1



Family:

Publication number	Publication date	Application number	Application date
DE4433051 A1	19960321	DE19944433051	19940916
DE4433051 C2	19960711	DE19944433051	19940916
DE69525402 D1	20020321	DE19956025402	19950907
DE69525402 T2	20020905	DE19956025402T	19950907
EP0702423 A1	19960320	EP19950402023	19950907
EP0702423 B1	20020213	EP19950402023	19950907
ES2172564 T3	20021001	ES19950402023T	19950907
JP8210042 A2	19960813	JP19950236982	19950914
US5620799 A	19970415	US19950529570	19950918

Priority:

DE19944433051 19940916 DE19956025402 19950907

Probable Assignee: SAINT GOBAIN VITRAGE

Assignee(s): (std): SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN VITRAGE ; SEKURIT SAINT GOBAIN DEUTSCH

Assignee(s): SEKURIT SAINT GOBAIN DEUTSCHLAND GMBH AND CO 52066 AACHEN DE KG ; SEKURIT SAINT GOBAIN DEUTSCHLAND GMBH AND CO KG ; SEKURIT SAINT GOBAIN DEUTSCHLAND GMBH AND CO KG 52 ; SEKURIT SAINT GOBAIN DEUTSCHLAND GMBH AND CO KG 52066 AACHEN DE ; SAINT GOBAIN VITRAGE LES MIROIRS ; SAINT GOBAIN GLASS FRANCE COURBEVOIE

Inventor(s): (std): GERUTO SAUERU ; SAUER GERD

Inventor(s): SAUER GERD 52224 STOLBERG DE

Designated states: BE DE ES FR GB IT LU SE

6) Family number: 55306180 (US2015151611A) © PatBase

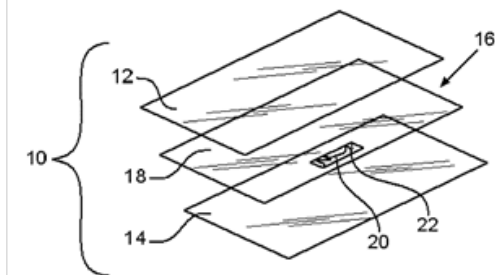
Title: COMPOSITE PANE FOR A MOTOR VEHICLE AND MOTOR VEHICLE HAVING SUCH A COMPOSITE PANE

Abstract: A composite pane for a motor vehicle, in particular the front pane, is formed from a first pane and a second pane, which are adhered to one another by way of a film. A coating reflecting infrared rays is applied to the film. The coating has at least one cut-out, within which a transponder is arranged between the two panes. A motor vehicle has a composite pane as described above.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B3/24 B60J1/00 B60J1/02 B60J1/20 C03C27/12 G02B5/08 G06K19/077 H01Q1/12 H01Q1/22 H01Q1/32 (Advanced/Invention); B32B3/26 H04B7/00 (Advanced/Non-invention)

CPC: B60J1/001 G02B5/0808 B32B3/266 B32B17/06 B32B17/10 B32B17/10449 B32B17/1055 B32B17/10935 B32B17/10981 B32B2250/04 B32B2307/30 B32B2307/412 B32B2519/02 B32B2605/006 B60J1/02 B60J1/20 H01Q1/325 H04B7/00 Y10T428/24851 Y10T428/24868 B32B17/10036 B32B17/10183 B32B17/10201 H01Q1/1271 H01Q1/2208 B32B2367/00 Y10T428/24331

**Family:**

Publication number	Publication date	Application number	Application date
■ CN103889713 A	20140625	CN201380003367	20130612
■ CN103889713 B	20150617	CN201380003367	20130612
■ DE102012012566 B3	20131205	DE201210012566	20120623
■ DE502013010268 D1	20180628	DE201350010268T	20130612
■ EP2864118 A1	20150429	EP20130730483	20130612
■ EP2864118 B1	20180530	EP20130730483	20130612
■ US2015151611 AA	20150604	US20130410757	20130612
■ US9758021 BB	20170912	US20130410757	20130612
■ WO13189577 A1	20131227	WO2013EP01725	20130612

Priority:

DE201210012566 20120623 EP20130730483 20130612 WO2013EP01725 20130612

Probable Assignee: AUDI AG

Assignee(s): (std): AUDI AG ; AUDI NSU AUTO UNION AG

Inventor(s): (std): GANSEN TOBIAS ; NEUDECKER MARCUS ; PFALLER DANIEL

Agent(s): SCHUSTER SIMON; STAAS AND HALSEY LLP; BRANDT KAI

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

7) Family number: 749897 (US3597050A)

© PatBase

Title: TRANSPARENT ARTICLE HAVING MODIFIED RADIATION-TRANSMITTING PROPERTIES

Abstract: 1,215,471. Transparent laminates. GLAVERBEL. 14 Nov., 1967 [30 Dec., 1966], No. 51843/67. Heading B5N. [Also in Divisions B2, B7 and E1] A transparent panel-like article, e.g. a vehicle windscreen, is made by applying or connecting a transparent screen to a transparent panel, the resultant combination being less transparent in part of the ultra-violetvisible-infra-red spectrum than the panel alone, and then reducing but not completely eliminating the transparency attenuating effect of the screen in at least one zone of the article. The panel may be of glass and the screen in the form of a coating. The windscreen shown in Fig. 2 comprises glass layers 4 and 9 and layers 7a-7d of polyvinyl butyral. Layer 4 is coated with titanium oxide 5, this coating being semi-reflective and thus reducing the transparency of the laminate. At a zone 3, the windscreen is made more transparent than surrounding areas by coating the titanium oxide coating with silicon monoxide 10a, which is slightly light-absorptive, and by forming apertures 11a and 12a in polyvinyl butyral layers 7e and 7d. These apertures may be filled with a material having particular optical properties, e.g. good transmission of yellow light. Apertures 11a and 11b are of different sizes to make the change in optical properties across the boundary of zone 3 more gradual. Zone 3 is elliptical and the windscreen may be formed with a further relatively transparent zone; (2) of circular form, but otherwise similar to zone 3, Fig. 1 (not shown). The windscreen shown in Fig. 4 comprises a layer of glass 21 coated with titanium 22. Zone 25, which is to be more transparent than the rest of the laminate, is then coated with a peelable varnish, the upper and lower parts of the windscreen being covered with masks at this time. The masks are then removed and coatings 23 and 24 are applied. Coating 23 reflects ultra-violet radiation and is composed of 70% TiO₂ and 30% Fe₂O₃. Coating 24 is of titanium oxide. On peeling the varnish from zone 25, some of the titanium coating 22 is peeled away therewith to leave a thinner and consequently more transparent coating in zone 25. Also, the thin titanium coating left in zone 25 is partly converted into titanium oxide, which reduces its reflective properties. A further glass sheet or a plastics sheet can be applied to the coated side of the windscreen. This further sheet may be spaced from the coated glass layer 21 to form a sealed doubleglazing unit. Zone 25 extends over the whole width of the windscreen, Fig. 3 (not shown).

Classifications:

International (IPC 8-9): B32B17/10 B32B27/00 B60J1/00 B60J3/00 C03C17/09 C03C23/00 C03C27/12 (Advanced/Invention); B32B17/06 B32B27/00 B60J1/00 B60J3/00 C03C17/06 C03C23/00 C03C27/12 (Core/Invention)

International (IPC 1-7): B29C B29D11/00 B60J1/02 C03C11/00 C03C17/00 C03C27/00 C03C27/10 C03C27/12 E04D F21V11/00 G02B1/10

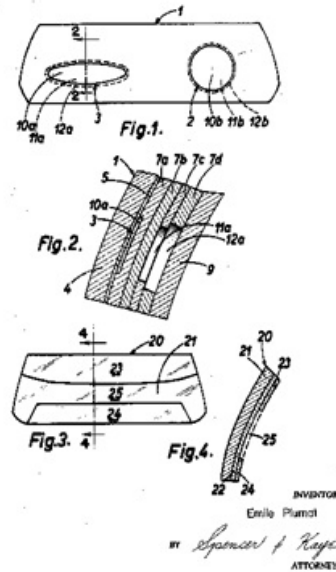
CPC: B32B17/10018 B32B17/10036 B32B17/10174 B32B17/10761 B32B27/00 B60J1/002 B60J3/007 C03C23/00

European: B32B17/10C2 B32B17/10C4 B32B17/10E10 B32B17/10G28 B32B27/00 B60J1/00C B60J3/00C C03C23/00

US: 359/580 359/614

PATENTED AUG 3 1970

3,597,050

**Family:**

Publication number	Publication date	Application number	Application date
AT301083 B	19720825	AT19670011052	19671206
BE707394 A	19680416		19671201
DE1596832 A1	19710401	DE19671596832	19671215
ES346197 A1	19690516	ES19670346197	19671018
FR1567091 A	19690516		19671124
GB1215471 A	19701209	GB19670051843	19671114
IL29062 A1	19710128	IL19670029062	19671204
JP48031736 B4	19731001	JP19670083953	19671226
LU52726 A	19680805	LU19660052726	19661230
NL6716915 A	19680701	NL19670016915	19671212
US3597050 A	19710803		19680102

Priority:

BE19660052726 19661230 LU19660052726 19661230

Probable Assignee: GLAVERBEL**Assignee(s):** (std): GLAVERBEL**Assignee(s):** GLAVERBEL SA ; FIRMA GLAVERBEL**Inventor(s):** (std): PLUMAT EMILE**Inventor(s):** EMILE PLUMAT**8) Family number: 66270268** (US2017190151A)

© PatBase

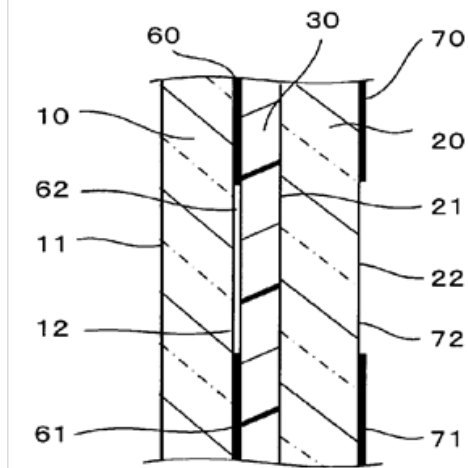
Title: LAMINATED GLASS

Abstract: A laminated glass includes a first glass plate, a second glass plate, and an interlayer interposed between the first glass plate and the second glass plate. The first glass plate includes a first main surface arranged on a side opposite to the interlayer and a second main surface in contact with the interlayer, while the second glass plate includes a third main surface in contact with the interlayer and a fourth main surface arranged on a side opposite to the interlayer. The laminated glass includes a first region located on the first main surface and a second region which is located on the fourth main surface and at least a part of which overlaps the first region in a plane view. The first region and the second region have a given glass-surface smoothness.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/18
B32B27/42 B32B3/08 B32B33/00 B60J1/00 B60J1/02 C03C19/00
C03C27/12 G01S17/93 G01S7/481 (Advanced/Invention)

CPC: B32B17/06 B32B2307/418 B32B2605/006 B32B17/10036
G01S2013/9392 B32B17/10761 B32B17/10788 B32B2605/08
G01S2013/9367 B32B17/1055 B32B3/08 B32B17/10165 B32B27/18
B32B27/42 B32B33/00 B60J1/02 G01S7/4813

**Family:**

Publication number	Publication date	Application number	Application date
■ CN106946476 A	20170714	CN201710011137	20170106
■ EP3189964 A1	20170712	EP20160002749	20161228
■ JP2017122022 A2	20170713	JP20160000982	20160106
■ US2017190151 AA	20170706	US20160395312	20161230

Priority:

JP20160000982 20160106

Probable Assignee: AGC INC**Assignee(s):** (std): ASAHI GLASS CO LTD**Assignee(s):** N A ; AGC INC**Inventor(s):** (std): HAMANO SUNAO ; HAMANO TADASHI ; YAJIMA TOSHIMI**Agent(s):** MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; EIKOH PATENT FIRM 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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR