

PatBase - Search results 08 August 2018

Search query (5): fn=(63295009:565 or 66936062:220 or 47204381:200 or 34852904:190 or 68240719:180 or 67136599:180 or 62699254:180 or 42245233:175 or 54254833:170 or 56032930:165 or 66712697:160 or 62658196:160 or 60612274:160 or 55375981:160 or 67651876:150 or 66936069:150 or 66936068:150 or 66399120:150 or 60356260:150 or 60278405:150 or 59402909:150 or 34253169:150 or 34068540:150 or 68162028:140 or 67076297:140 or 66270268:140 or 64987232:140 or 62079765:140 or 62065982:140 or 61132757:140 or 60747034:140 or 59402912:140 or 54512309:140 or 54183302:140 or 34852846:140 or 67916608:130 or 67736328:130 or 67555514:130 or 67013760:130 or 66936071:130 or 65316109:130 or 64866470:130 or 64288821:130 or 64061266:130 or 62699255:130 or 61604257:130 or 59510023:130 or 59448808:130 or 58643807:130 or 56035518:130 or 55352807:130 or 53989587:130 or 50481688:130 or 49513683:130 or 32753059:130 or 29419970:130 or 1141926:130 or 70562240:120 or 70339619:120 or 68046629:120 or 67652572:120 or 67232536:120 or 66282837:120 or 66162022:120 or 66162018:120 or 65392970:120 or 65373375:120 or 65373371:120 or 65373345:120 or 64814422:120 or 64428271:120 or 64048942:120 or 62650862:120 or 62552726:120 or 62412101:120 or 61701158:120 or 61594139:120 or 61131200:120 or 60591537:120 or 60055414:120 or 59416282:120 or 59089064:120 or 57409499:120 or 30753333:120 or 20645670:120 or 58631254:115 or 69563658:110 or 67010770:110 or 66944805:110 or 66944804:110 or 66860350:110 or 66161738:110 or 66084185:110 or 65806818:110 or 65706922:110 or 65493416:110 or 65371678:110 or 65174778:110 or 64814426:110 or 64694702:110)

Results: 100

Search history

Search SFT=((glass laminated) and automotive and (plastic layer) and obscuration) (Results 2)

1:

Search PN=(US201615393584) (Results 0)

2:

Search PN=(US2017232713) (Results 1)

3:

Search [SP]: 1. a laminate comprising: at least two glass layers at least two plastic interlayers at least one film layer film layer, printed obscuration, 4: the plastic interlayers positioned between each set of glass and film layers and serving to attached glass layers to film layers and at least one obscuration produced by printing said obscuration onto a film layer. 2. the laminate of claim 1 further comprising a pet film layer. 3. the laminate of claim 1 further comprising at least one wedge interlayer. 4. the laminate of claim 1 further comprising a performance film plastic layer. 5. the laminate of claim 1 further comprising a color correction filter printed on the film layer. 6. the laminate of claim 1 further comprising an equipment obscuration separate from and spaced from the black band obscuration. 7. the laminate of claim 1 further comprising at least one obscuration screen printed on the film layer. 8. the laminate of claim 1 further comprising at least one obscuration printed with a uv cured ink. 9. a vehicle utilizing the laminate of claim 1. 10. a laminate comprising: a. at least two glass layersb. at least one plastic interlayer,c. at least one obscuration,d. said at one plastic interlayer is positioned between each set of said glass layers and serving to bond said glass layers to each other,e. said least one obscuration produced by printing said obscuration onto said plastic interlayer. 11. the laminate of claim 10 further comprising a pet film layer. 12. the laminate of claim 10 further comprising at least one wedge interlayer. 13. the laminate of claim 10 further comprising a performance film plastic layer. 14. the laminate of claim 10 further comprising a color correction filter printed on a film layer. 15. the laminate of claim 10 further comprising an equipment obscuration separate from and spaced from a black band obscuration. 16. the laminate of claim 10 further comprising at least one obscuration screen printed on the film layer. 17. the laminate of claim 10 further comprising at least one obscuration printed with a uv cured ink. 18. a vehicle comprising the laminate of claim 10. (Results 0)

Search fn=(63295009:565 or 66936062:220 or 47204381:200 or 34852904:190 or 68240719:180 or 67136599:180 or 62699254:180 or 42245233:175 or 54254833:170 or 56032930:165 or 66712697:160 or 62658196:160 or 60612274:160 or 55375981:160 or 67651876:150 or 66936069:150 or 66936068:150 or 66399120:150 or 60356260:150 or 60278405:150 or 59402909:150 or 34253169:150 or 34068540:150 or 68162028:140 or 67076297:140 or 66270268:140 or 64987232:140 or 62079765:140 or 62065982:140 or 61132757:140 or 60747034:140 or 59402912:140 or 54512309:140 or 54183302:140 or 34852846:140 or 67916608:130 or 67736328:130 or 67555514:130 or 67013760:130 or 66936071:130 or 65316109:130 or 64866470:130 or 64288821:130 or 64061266:130 or 62699255:130 or 61604257:130 or 59510023:130 or 59448808:130 or 58643807:130 or 56035518:130 or 55352807:130 or 53989587:130 or 50481688:130 or 49513683:130 or 32753059:130 or 29419970:130 or 1141926:130 or 70562240:120 or 70339619:120 or 68046629:120 or 67652572:120 or 67232536:120 or 66282837:120 or 66162022:120 or 66162018:120 or 65392970:120 or 65373375:120 or 65373371:120 or 65373345:120 or 64814422:120 or 64428271:120 or 64048942:120 or 62650862:120 or 62552726:120 or 62412101:120 or 61701158:120 or 61594139:120 or 61131200:120 or 60591537:120 or 60055414:120 or 59416282:120 or 59089064:120 or 57409499:120 or 30753333:120 or 20645670:120 or 58631254:115 or 69563658:110 or 67010770:110 or 66944805:110 or 66944804:110 or 66860350:110 or 66161738:110 or 66084185:110 or 65806818:110 or 65706922:110 or 65493416:110 or 65371678:110 or 65174778:110 or 64814426:110 or 64694702:110) (Results 100)

Title: OBSCURATION HAVING SUPERIOR STRENGTH AND OPTICAL QUALITY FOR A LAMINATED AUTOMOTIVE WINDSHIELD

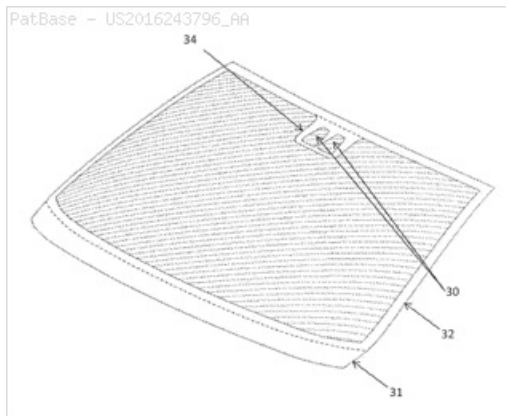
Abstract: Laminated automotive glazing including plastic layers and glass having an obscuration area produced by printing on the plastic layers of the laminate rather than printing and firing a black enamel frit onto the glass. This results in an obscuration having superior optical quality, higher strength and a lower probability of breakage as compared to a black enamel frit obscuration.

Classifications:

International (IPC 8-9): B32B17/10 B32B7/12 B41J11/00 B41J2/01 B41M1/30 B41M5/00 B44F1/06 B60J1/02 B60J3/00 E06B3/663 (Advanced/Invention)

CPC: B32B17/10348 B32B17/1077 B60J1/02 B32B2250/03 B32B2255/10 B32B2307/41 B32B37/182 B32B38/145 B32B17/10036 B32B17/10779 E06B3/66304 B60J3/007 B32B2605/08 B32B2307/42 B32B17/10284 B32B17/10568 B32B17/10651 B32B2605/006 B32B17/10266 B32B17/10275 B32B2255/26 B32B17/10761 B32B17/10788

US: 428/203



Family:

Publication number	Publication date	Application number	Application date
CO20170008445 A1	20180131	CO20170008445	20170818
US2016243796 AA	20160825	US20150625952	20150219
US2017232713 AA	20170817	US20160393584	20161229
US2017297310 AA	20171019	US20170498852	20170427
US9623634 BB	20170418	US20150625952	20150219
WO18122770 A1	20180705	WO20171B58469	20171228

Priority:

US20150625952 20150219 US20160393584 20161229 US20170498852 20170427

Probable Assignee: AGP AMERICA SA

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

Assignee(s): AGP AMERICA SA ; CREDIT SUISSE CAYMAN ISLANDS BRANCH AG

Inventor(s): (std): DENTON GORDON PHILIP ; GORDON PHILIP DENTON ; GRANADOS CARO LAURA ; MANNHEIM ASTETE ARTURO ; MANNHEIM ASTETE MARIO ARTURO ; MANNINO VINCENZO ; MENDOZA CARRANZA ELENA ; MENDOZA CARRANZA ELENA K ; VOELTZEL CHARLES STEPHEN ; VOETZEL CHARLES S ; VOELTZEL CHARLES S

Inventor(s): CHARLES STEPHEN VOELTZEL ; PHILIP DENTON GORDON ; VINCENZO MANNINO ; MARIO ARTURO MANNHEIM ASTETE ; LAURA GRANADOS CARO ; ELENA K MENDOZA CARRANZA

Agent(s): CARLOS REINALDO OLARTE GARCIA; JACOBSON HOLMAN PLLC

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: CELLULOSE ESTER MULTILAYER INTERLAYERS

Abstract: An interlayer structure having a cellulose ester layer for use in structural laminates is described herein. The cellulose ester layer provides rigidity and support to multilayer interlayers comprising an array of different layers. Due to the diverse properties of the cellulose ester layers, the present interlayers can be useful in producing structural laminates having high stiffness and which possess good optical clarity for a variety of applications, including outdoor structural applications.

Classifications:

International (IPC 8-9): B32B17/08 B32B17/10 B32B23/08 B32B23/14 B32B23/16 B32B23/18 B32B23/20 B32B27/08 B32B27/22 B32B27/30 B32B27/36 B32B27/40 B32B27/42 B32B37/10 B32B37/15 B32B7/02 B32B7/12 (Advanced/Invention)

CPC: B32B17/08 B32B17/10036 B32B17/10761 B32B23/20 B32B17/1077 B32B23/14 B32B17/10743 B32B17/10788 B32B37/1018 B32B23/08 B32B27/306 B32B27/22 B32B2307/102 B32B3/02 B32B7/02 B32B7/12 B32B17/00 B32B23/16 B32B27/08 B32B27/308 B32B27/40 B32B27/42 B32B2250/03 B32B2250/05 B32B2250/40 B32B2255/10 B32B2255/26 B32B2270/00 B32B2307/30 B32B2307/412 B32B2307/542 B32B2307/558 B32B2419/00 B32B2571/00 B32B2317/18 B32B2331/04 B32B2329/06 B32B2375/00 B32B2605/08 B32B2605/18 B32B27/30 B32B2605/006 B32B2457/12 B32B2307/54 B32B27/36 B32B17/10779 B32B17/10605 B32B37/153 B32B23/06 B32B2250/04

PatBase - US2017259530_AA



Family:

Publication number	Publication date	Application number	Application date
US2017259530 AA	20170914	US20170453758	20170308
US2017259534 AA	20170914	US20170453466	20170308
US2017259535 AA	20170914	US20170453522	20170308
US2017259536 AA	20170914	US20170453613	20170308
US2017259539 AA	20170914	US20170453636	20170308
WO17156361 A2	20170914	WO2017US21726	20170310
WO17156361 A3	20180726	WO2017US21726	20170310
WO17156361 A8	20171026	WO2017US21726	20170310
WO17156364 A2	20170914	WO2017US21729	20170310
WO17156364 A3	20180726	WO2017US21729	20170310

Priority:

US20160306748P 20160311	US20160306752P 20160311	US20160306765P 20160311
US20160306762P 20160311	US20160306757P 20160311	US20160306756P 20160311
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US20170453748 20170308		

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

Inventor(s): (std): CUI WEIHONG ; DONELSON MICHAEL ; DONELSON MICHAEL EUGENE ; KARAGIANNIS ARISTOTELIS ; KARAGIANNIS ARISTOTELLIS ; TRAN KHANH ; TRAN KHANH DUC ; WADE BRUCE ; WADE BRUCE EDWARD

Agent(s): BUGBEE MICHELLE; OWEN STEVEN 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 DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC 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: TRANSPARENT LAMINATED GLASS AND USE THEREOF

Abstract: the present invention relates to a transparent laminated glass comprising a transparent outer pane (1) with a thickness of 1.45 mm to 1.8 mm, at least one polymer layer (2) with a thickness of 0.5 mm to 4.0 mm and a transparent inner pane (3) with a thickness of 1.0 mm to 1.4 mm, wherein the at least one polymer layer contains ethylene vinyl acetates, plasticized polyvinyl butyral, polyurethanes, polycarbonates, polyethylene terephthalates, and/or ionomers as wet as copolymers and/or combinations thereof, and the ratio of the thickness of the transparent outer pane (1) to the sum of the thickness of the transparent outer pane (1) and the transparent inner pane (3) is 0.509 to 0.643.

Classifications:

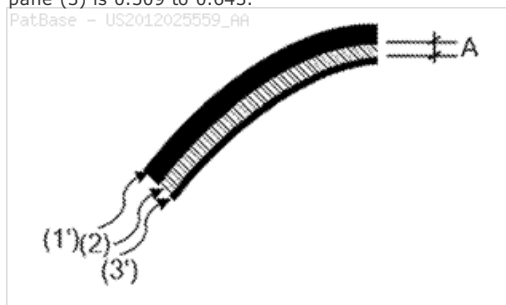
International (IPC 8-9): B32B17/10 B32B37/18 B32B38/00 B32B7/02 B60G1/00 B60J1/00 B60J1/02 C03C27/00

C03C27/12 (Advanced/Invention)

CPC: B32B17/10174 B32B17/1055 B32B17/10183 B32B17/1022 B32B17/10752 B32B17/10761 B32B17/1077 B32B17/10779 B32B17/10788 Y10T428/24967 B32B17/10064 B32B38/0012 B32B37/182 B32B2250/03 B32B2307/412 B32B2605/006 B60J1/001 B32B17/10743 B60J1/02 B32B17/10036 Y10T428/24628

European: B32B17/10C4 B32B17/10E10 B32B17/10G

US: 1/1 156/102 156/99 296/84.1 296/84.100P 428/174 428/215 428/215S



Family:

Publication number	Publication date	Application number	Application date
BRPI1007549 A2	20160216	BR2010PI07549	20100419
CA2748596 AA	20101028	CA20102748596	20100419
CA2748596 C	20151229	CA20102748596	20100419
CN202826594 U	20130327	CN201090000846U	20100419
DE102009017805 A1	20101021	DE200910017805	20090420
DE102009017805 B4	20120516	DE200910017805	20090420
DE502010003365 D1	20130711	DE201050003365T	20100419
EP2421704 A1	20120229	EP20100715217	20100419
EP2421704 B1	20130515	EP20100715217	20100419
EP2421704 B9	20130821	EP20100715217	20100419
ES2413454 T3	20130716	ES20100715217T	20100419
IN02676KN2011 A	20120113	IN2011KN02676	20110628
JP2013525235 T2	20130620	JP20120505184T	20100419
JP5809132 B2	20151110	JP20120505184T	20100419
KR20120004415 A	20120112	KR20117021783	20100419
MX2011010994 A1	20111102	MX20110010994	20100419
PT2421704 T	20130712	PT20100715217T	20100419
US2012025559 AA	20120202	US20100147192	20100419
US2015231949 AA	20150820	US20150700003	20150429
US2015239215 AA	20150827	US20150699995	20150429
US9044919 BB	20150602	US20100147192	20100419
US9694563 BB	20170704	US20150699995	20150429
US9694653 BB	20170704	US20150700003	20150429
WO10121986 A1	20101028	WO2010EP55108	20100419

Priority:

DE200910017805 20090420	EP20100715217 20100419	WO2010EP55108 20100419
US20110147192 20111011	US20150700003 20150429	US20150699995 20150429

Probable Assignee: SAINT GOBAIN GLASS FRANCE

Assignee(s): (std): DUNKMANN BENNO ; OFFERMANN VOLKMAR ; SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN SEKURIT D GMBH ; SAINT GOBAIN GLASS PRANCE ; SAINT GOBAIN SA

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

Inventor(s): (std): DUNKMANN BENNO ; OFFERMANN VOLKMAR ; OFFERMANN VOLKMAR DR ; VOLKMAR OFFERMANN ; BENNO DUNKMANN

Agent(s): GOUDREAU GAGE DUBUC ; LENDVAI TOMAS DIPL CHEM DRRERNAT; LENDVAI TOMAS; DE ELZABURU ALBERTO ; KAWAGUTI AND PARTNERS; STEINFL AND BRUNO LLP

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: SOLAR CONTROL LAMINATES

Abstract: Provided is a solar control composition comprising an infrared absorbing phthalocyanine compound or naphthalocyanine compound and a resin having a modulus from 20,000 psi (138 MPa) to 1000 psi (7 MPa) and solar control laminates comprising the solar control composition of the invention.

Classifications:

International (ipc 8-9): B32B17/10 B32B27/20 B32B27/30 B32B9/04 C03C27/12 C08K5/00 C08K5/3467 C08L101/12 C08L23/08 C08L29/14 C08L31/04 C09B67/00 C09D123/08 C09D129/04 C09D129/14 C09D131/04 C09D17/00 C09D5/32 F21V9/00 F21V9/04 F21V9/06 (Advanced/Invention); B32B17/10 C08K5/00 C09B47/04 C09B47/18 C09B67/00 C09D17/00 (Advanced/Non-invention); B32B17/06 B32B27/20 B32B27/30 B32B9/04 C03C27/12 C08K5/00 C08L101/00 C08L29/00 C08L31/00 C09B67/00 C09D129/00 C09D131/00 C09D17/00 C09D5/32 F21V9/00 (Core/Invention); C08K5/00 C09B47/04 C09B67/00 C09D17/00 (Core/Non-invention)
CPC: B32B27/22 B32B27/28 B32B27/306 B32B2307/412 B32B2307/518 B32B17/10633 B32B17/10651 B32B17/10788 C08K5/0041 B29C47/0021 B29C47/0057 B29C47/043 B29C47/065 B29C47/067 B29K2105/256 C09B67/0064 C09D5/32 Y10T428/31504 Y10T428/3163 Y10T428/31935 Y10T428/31942 Y10T428/31627 Y10T428/31645 Y10T428/31649 Y10T428/31855 B32B17/10036 B32B17/10761 B32B27/36 B32B17/10 B32B27/08 B32B27/18 B32B27/30 B32B23/04 B32B23/20 B32B27/16 B32B27/20 B32B27/285 B32B27/286 B32B27/302 B32B27/304 B32B27/308 B32B27/32 B32B27/325 B32B27/327 B32B27/34 B32B27/365 B32B27/40 B32B2255/10 B32B2255/24 B32B2255/26 B32B2307/40 B32B2307/50 B32B2307/71 B32B2419/00 B32B2605/00 B32B2605/006 B32B27/06 Y10T428/249921 E06B9/24 E06B2009/2405 B32B7/12 B32B9/045 B32B2307/42 B32B2551/00 B32B17/10275
European: B32B17/10 B32B17/10C4 B32B17/10E12 B32B17/10E26 B32B17/10G28 B32B17/10G36 B32B17/10G6D B32B17/10G8 B32B27/06 B32B27/08 B32B27/18 B32B27/30 B32B27/36 C08K5/00P4 C09B67/00N3B C09D5/32 L29C47/00J5 L29C47/00L8 L29C47/04A L29C47/06P L29C47/06Q L29K105/25C4
US: 252/587 252/587P 252/587S 252/589 252/589P 359/355 359/356 359/361 427/160 427/160P 427/407.1 427/407.100S 428/221 428/221S 428/411.1 428/411.100S 428/436 428/437 428/437S 428/441 428/442 428/500 428/500S 428/522 428/522S 428/524 428/524S 523/135

Family:

Publication number	Publication date	Application number	Application date
CN101351330 A	20090121	CN200680050093	20061229
CN101351330 B	20130327	CN200680050093	20061229
DE602006048488 D1	20160512	DE200660048488T	20061229
EP1976691 A2	20081008	EP20060848370	20061229
EP1976691 B1	20160330	EP20060848370	20061229
JP2009526872 T2	20090723	JP20080548777T	20061229
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KR101337818 B1	20131212	KR20087018621	20061229
KR20080106403 A	20081205	KR20087018621	20061229
US2007228341 AA	20071004	US20060646649	20061228
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WO07079248 A2	20070712	WO2006US49630	20061229
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Priority:

US20050755487P 20051230	US20050755492P 20051230	US20060755487P 20060103
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Probable Assignee: KURARAY CO LTD

Assignee(s): (std): EIDU PONT DE NEMOURS AND CO ; FUGIEL RICHARD A ; SILVERMAN LEE A ; HAYES RICHARD A ; PHILLIPS THOMAS R ; WALL JASON S ; HAYES RICHARD ALLAN ; KURARAY AMERICA INC ; DU PONT ; KURARAY CO LTD

Assignee(s): E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; E I DU PONT DE NEMOURS CO ; EI DU PONT DE NEMOURS AND CO ; KURARAY AMERICA INC HOUSTON

Inventor(s): (std): FUGIEL RICHARD A ; HAYES RICHARD A ; HAYES RICHARD ALLAN ; PHILLIPS THOMAS R ; SILVERMAN LEE A ; WALL JASON S

Inventor(s): FUGIEL RICHARD ; SILVERMAN LEE A NEWARK ; WALL JASON ; PHILLIPS THOMAS R VIENNA ; SILVERMAN LEE ; PHILLIPS THOMAS ; HAYES RICHARD A BEAUMONT ; FUGIEL RICHARD A LONG GROVE ; HAYES RICHARD

Agent(s): ABITZ AND PARTNER PATENTANWALTE MBB; DANNENBERGER OLIVER ANDRE; KUMAKURA YOSHIO; OGAWA NOBUO; HAKODA ATSUSHI; HIRAYAMA KOJI; ASAI KENJI; E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER; E I DU PONT DE NEMOURS AND CO LEGAL PATENT RECORDS CENTER; E I DU PONT DE NEMOURS AND COMPANY,LEGAL PATENT RECORDS CENTER; KELLY LAW REGISTRY; MARIA M

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR 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: LAMINATED GLASS

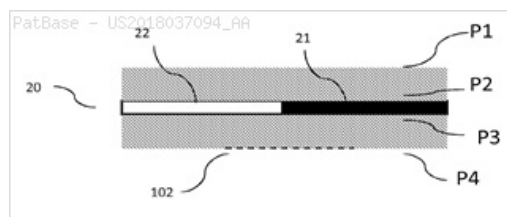
Abstract: The invention relates to laminated glass comprising first (11) and second (12) sheets of glass laminated using at least one thermoplastic interlayer (20). According to the invention, such glass comprises at least one thermoplastic interlayer (20) including a zone that is opaque at visible wavelengths (21).

Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 B60J1/02

C03C27/12 (Advanced/Invention)

CPC: B32B17/10036 B32B17/1066 B32B2605/003 B32B2605/08 B60J1/02 B32B17/10348 B60J1/001 B32B2605/006 B32B2307/41 B32B17/10651 B32B17/10761



Family:

Publication number	Publication date	Application number	Application date
CN107000388 A	20170801	CN201580068808	20151216
EA201791307 A1	20171031	EA20170091307	20151216
EP3034296 A1	20160622	EP20140199137	20141219
EP3233479 A1	20171025	EP20150820466	20151216
JP2018506495 T2	20180308	JP20170532907T	20151216
US2018037094 AA	20180208	US20150537249	20151216
WO16097044 A1	20160623	WO2015EP80083	20151216

Priority:

EP20140199137 20141219 WO2015EP80083 20151216

Probable Assignee: AGC GLASS EUROPE

Assignee(s): (std): AGC GLASS EUROPE

Inventor(s): (std): LEGRAND DENIS

Agent(s): CHABOU SAMIA

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

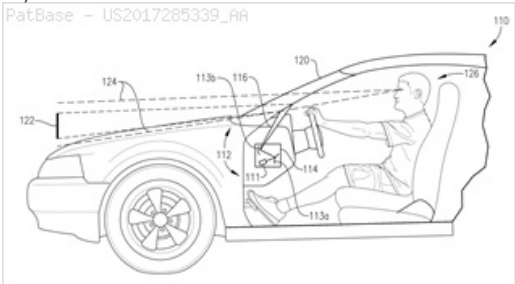
Title: INTERLAYERS HAVING ENHANCED OPTICAL PERFORMANCE

Abstract: A tapered interlayer and windshield employing the same are provided. Unlike conventional windshields, which are optimized to reduce ghost images for a single driver height, the windshields of the present invention may exhibit reduced ghosting for drivers of multiple heights, including very tall or very short drivers, while also providing desirable image clarity for average-height drivers. Windshields as described herein may be used in a variety of applications, including automotive, aircraft, marine, and recreational vehicles that employ HUD projection systems.

Classifications:

International (IPC 8-9): B32B17/10 B32B37/06 B32B37/18 B60J1/02 B60K35/00 G02B27/01 (Advanced/Invention)

CPC: G02B27/0101 B60K35/00 B60J1/02 B32B37/06 B32B37/182 B60K2350/2052 B60K2350/901 B60K2350/921 G02B2027/013 B32B2605/006 B32B17/10036 B32B17/10559 B32B17/10568 B32B17/10761 B32B17/1077 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
US2017285339 AA	20171005	US20170440263	20170223
WO17176452 A1	20171012	WO2017US23298	20170321

Priority:

US20160318128P 20160404 US20170440263 20170223

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

Inventor(s): (std): HURLBUT JEFFREY B ; SPANGLER LORA LEE

Agent(s): BUGBEE MICHELLE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC 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

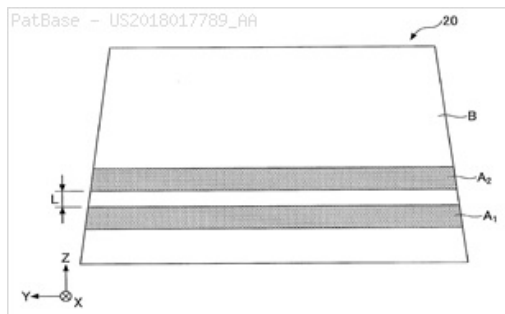
Title: LAMINATED GLASS

Abstract: A laminated glass includes first and second glass plates to be arranged on a vehicle inner side and outer side, respectively; and an intermediate film positioned between the first and second glass plates and bonded to the glass plates. The laminated glass includes a first region, a transition region, and a second region, from a lower side of the laminated glass. Each of the first and second regions includes a region having a wedge-shaped cross section, in which an upper edge side thickness is greater than a lower edge side thickness, or having a thickness that is constant. The transition region connects the first and second regions, and includes a region having a wedge-shaped cross section, in which an upper edge side thickness is greater than a lower edge side thickness. At least one of the first and second regions includes a region used for a head up display.

Classifications:

International (IPC 8-9): B32B17/00 B32B17/10 B32B27/00 B60J1/00 B60J1/02 C03C27/12 G02B27/00 G02B27/01 (Advanced/Invention); B60K35/00 (Advanced/Non-invention)

CPC: G02B27/0101 G02B27/0018 B60J1/02 B60K35/00 G02B2027/012 G02B2027/0194 B32B17/10174 B32B17/10348 B32B17/10568 B32B17/10761 B32B17/1077 B32B17/10779 B32B17/10788 G02B27/01 B32B17/10036 G02B2027/0121



Family:

Publication number	Publication date	Application number	Application date
CN107618234 A	20180123	CN201710565894	20170712
EP3269547 A1	20180117	EP20170001153	20170705
JP2018008862 A2	20180118	JP20160140812	20160715
US2018017789 AA	20180118	US20170641446	20170705

Priority:

JP20160140812 20160715

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): AOKI TOKIHIKO ; AYAKA Ikegami ; Ikegami Ayaka ; Matsuzaki Ayaka ; Sadakane Shunsuke ; Shunsuke Sadakane ; Tokihiro Aoki

Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; ITOH TADASHIGE; ITOH TADASHI

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

Title: NON-AQUEOUS INKJET INK SET

Abstract: This invention pertains to an ink set for inkjet printing, in particular to a non-aqueous ink set comprising one or more inks based on certain pigment colorants. The invention also pertains to a method of inkjet printing with this ink set.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/06 B32B27/30 B32B3/00 B32B3/22 B32B37/00 B32B37/02 B32B37/14 B32B37/16 B32B38/14 B41J2/01 B41M1/30 B41M5/00 B41M5/50 B41M5/52 B41M7/00 B44C3/02 B44C5/04 B44F1/06 C03C27/04 C03C27/12 C09D11/00 C09D11/02 G01D11/00 (Advanced/Invention); B44C3/08 B44C3/12 C03C27/10 C03C27/12 (Advanced/Non-invention); B32B17/06 B32B27/06 B32B27/30 B32B3/00 B41J2/01 B41M5/00 B41M5/50 B41M7/00 C03C27/12 C09D11/00 (Core/Invention)

International (IPC 1-7): B32B17/10 B32B27/06 B32B27/30 B32B3/00 B32B31/00 B41J2/01 B41J2/17 B41M5/00 C03C27/12 C09D11/00 C09D11/02

CPC: B32B17/10825 B41M5/0017 B41M7/0018 C09D11/30 C09D11/36 C09D11/54 B32B17/10577 B41M5/0047 Y10T156/1002 Y10T156/1039 Y10T428/24868 Y10T428/24884 B32B17/10247 B41M5/0023 B41M5/0064 B41M7/0027 C09D11/322 C09D11/40 Y10T428/24851 Y10T156/1089 Y10T428/249921 B32B38/145 B32B2398/20 B32B2451/00 B32B17/10036 B32B17/10275 B32B17/10761 B32B17/1077 B32B17/10788 B32B27/06 B44F1/066

European: B32B17/10C4 B32B17/10E12 B32B17/10E12B4 B32B17/10G28 B32B17/10G2D B32B17/10G30 B32B17/10G36 B32B17/10L10B B32B27/06 B41M5/00F B41M5/00S2 B41M5/00S8 B41M7/00C B44F1/06D C09D11/30 C09D11/322 C09D11/36 C09D11/40 C09D11/54

US: 101/491 106/31.27 106/31.6 106/31.600P 156/100 156/100S 156/102 156/196 156/219 156/277 156/277S 156/297 156/99 347/100 347/100S 347/95 347/95P 428/201 428/201P 428/203 428/203S 428/205 428/205P 428/221 428/221S 428/32.18 428/32.180P

Family:

Publication number	Publication date	Application number	Application date
AT355342 E	20060315	AT20040756104T	20040623
AT366290 E	20070715	AT20040758351T	20040325
AU2003259970 AA	20040311	AU20030259970	20030820
AU2003259970 BB	20090326	AU20030259970	20030820
CA2495946 AA	20050218	CA20032495946	20030820
CN100457444 C	20090204	CN20038019863	20030820
CN1675060 A	20050928	CN20038019863	20030820
DE602004005040 D1	20070412	DE200460005040T	20040623
DE602004005040 T2	20071108	DE200460005040T	20040623
DE602004007366 D1	20070816	DE200460007366T	20040325
DE602004007366 T2	20080313	DE200460007366T	20040325
DE60317083 D1	20071206	DE20036017083	20030820
DE60317083 T2	20080807	DE20036017083T	20030820
EP1539487 A1	20050615	EP20030793220	20030820
EP1539487 B1	20071024	EP20030793220	20030820
EP1611214 A2	20060104	EP20040758351	20040325
EP1611214 B1	20070704	EP20040758351	20040325
EP1636320 A1	20060322	EP20040756104	20040623
EP1636320 B1	20070228	EP20040756104	20040623
JP2005536375 T2	20051202	JP20040529779T	20030820
JP2006523263 T2	20061012	JP20060509298T	20040325
JP2007521368 T2	20070802	JP20060517660T	20040623
JP4452618 B2	20100421	JP20040529779T	20030820
MXPA05001871 A1	20050603	MX2005PA01871	20030820
US2004187732 AA	20040930	US20030644323	20030820
US2005030360 AA	20050210	US20040801466	20040316
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US2005271865 AA	20051208	US20030521500	20030820
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US2011165390 AA	20110707	US20110051340	20110318
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US9011628 BB	20150421	US20110051340	20110318
WO04018197 A1	20040304	WO2003US26193	20030820
WO04087824 A2	20041014	WO2004US09184	20040325
WO04087824 A3	20041125	WO2004US09184	20040325
WO05003244 A1	20050113	WO2004US20418	20040623

Priority:

US20020404700P 20020820	US20030458483P 20030328	US20030483515P 20030626
US20030483516P 20030626	US20030521500 20030820	US20030644323 20030820
WO2003US26193 20030820	US20040801466 20040316	WO2004US09184 20040325
WO2004US20418 20040623	US20040878582 20040628	US20050521500 20050111
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Probable Assignee: KURARAY CO LTD

Assignee(s): (std): BAUER RICHARD DOUGLAS ; DU PONT ; ROMAN RONALD ; ELWAKIL HAMDY A ; ELWAKIL HAMDY ; HERMANSKY CLARENCE GAETANO ; EIDU PONT DE NEMOURS AND CO ; KURARAY AMERICA INC ; KURARAY CO LTD ; SMITH REECCA L ; TANG CHAUCER C ; SMITH REBECCA L

Assignee(s): EI DU PONT DE NEMOURS AND CO ; EI DUPONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; E I DU PONT DE NEMOURS CO ; E I DUPONT DE NEMOURS AND COMPANY ; E I DUPONT DE NEMOURS AND CO

Inventor(s): (std): SMITH REECCA L ; SMITH REBECCA L ; TANG CHAUCER C ; BAUER RICHARD DOUGLAS ; HERMANSKY CLARENCE GAETANO ; ELWAKIL HAMDY A ; ROMAN RONALD ; RONALD ROMAN ; HAMDY ELWAKIL ;

ELWAKIL HAMDY ; HERMAN SKY CLARENCE ; BAUER RICHARD

Inventor(s):

SMITH REBECCA ; SMITH REECCA ; TANG CHAUCER ; CHAUCER C TANG ; REBECCA L SMITH

Agent(s):

CALLINANS; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; TORYS LLP; ABE KAZUO;
TANI YOSHIKAZU; E I DU PONT DE NEMOURS AND CO LEGAL PATENT RECORDS CENTER; KEVIN S
DOBSON, E I DU PONT DE NEMOURS AND COMPANY; KEVIN S DOBSON E I DU PONT DE NEMOURS
AND CO; E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER; BART E; KEVIN
S; MARK D; OBLON MCCLELLAND MAIER AND NEUSTADT LLP

Designated states:

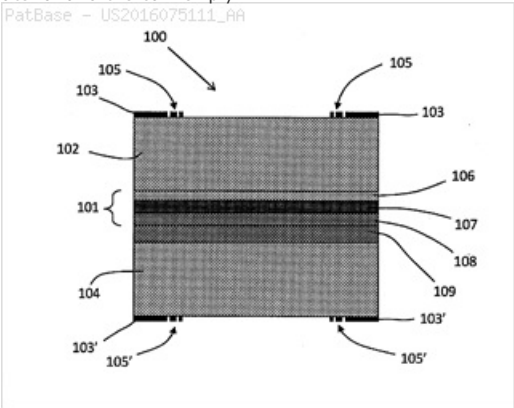
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KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM
PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU
ZA ZM ZW

Title: LAMINATED GLAZING

Abstract: A laminated glazing is described comprising a first pane of glazing material having a first major surface and an opposing second major surface, there being an obscuration band on the second major surface extending around a portion of the periphery of the first pane such that the second major surface is not smooth. A first adhesive layer having a thickness of between 6 micro m and 100 micro m contacts a portion of the second major surface of the first pane of glazing material and a portion of the obscuration band. The laminated glazing also has a carrier ply carrying an infra red reflecting coating wherein the first adhesive layer is between the first pane of glazing material and the carrier ply.

Classifications:

International (IPC 8-9): B32B15/08 B32B17/10 B32B27/30
B32B3/10 B32B37/12 B32B7/12 B60J1/00 B60J1/02 B60J3/02
C03C27/12 (Advanced/Invention)
CPC: B32B7/12 B32B17/1077 B32B37/12 B32B2605/08
B32B2605/006 B32B2307/202 B32B17/10174 B32B17/10036
B32B17/10348 B32B17/10761 B32B17/10532 B32B17/10
B32B2367/00 B32B17/10266
US: 156/109 428/172 428/192



Family:

Publication number	Publication date	Application number	Application date
CN105263706 A	20160120	CN201480031402	20140425
EP2988930 A1	20160302	EP20140719844	20140425
GB201307495 A0	20130612	GB20130007495	20130425
JP2016525951 T2	20160901	JP20160509552T	20140425
US2016075111 AA	20160317	US20140786863	20140425
US9895864 BB	20180220	US20140786863	20140425
WO14174308 A1	20141030	WO2014GB51296	20140425

Priority:

GB20130007495 20130425 WO2014GB51296 20140425

Probable Assignee: PILKINGTON GROUP LTD

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

Inventor(s): (std): DIXON JONATHAN BARCLAY

Agent(s): STANLEY ANDREW THOMAS; BUCHANAN INGERSOLL AND ROONEY PC; STANLEY ANDREW THOMAS 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: MULTI-LAYERED DECORATIVE PANEL AND METHOD FOR MANUFACTURING A MULTI-LAYERED DECORATIVE PANEL

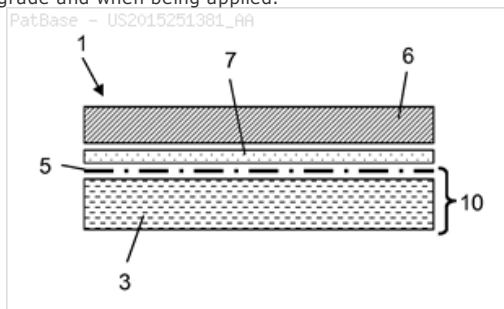
Abstract: A multi-layered decorative panel comprises a digitally printed rigid panel including a digitally printed image digitally printed onto a rigid panel and at least one other rigid panel. At least one of the rigid panels is transparent with a solid adhesive layer adapted to bond the digitally printed rigid panel and the other rigid panel together. The digitally printed image faces the solid adhesive layer, and the solid adhesive layer is composed of a cured adhesive resin that is liquid at a temperature of between 20 degrees centigrade and 25 degrees centigrade and when being applied.

Classifications:

International (IPC 8-9): B32B15/082 B32B15/09 B32B15/20 B32B17/06 B32B17/10 B32B37/16 B32B7/12 B41M5/00 B44C5/04 B44F1/06 C03C27/10 (Advanced/Invention)

CPC: B32B7/12 B32B17/064 B32B15/20 B32B15/082 B32B15/09 B32B37/16 B32B2255/26 B32B2451/00 B32B2255/28 B32B2307/4023 B32B2255/06 B32B2305/72 B32B2307/75 B32B17/10018 B32B17/10036 B32B17/10256 B32B17/10266 B32B17/10284 B32B17/10733 B32B17/10743 B32B17/1077 B32B17/10779 B32B17/10798 B32B17/10807 B32B2323/00 B32B2327/06 B32B2333/04 B32B2369/00 B32B2375/00 B41M5/0047 B41M5/007 B44C5/0407 B44F1/066 C03C27/10 Y10T428/24868 Y10T428/24884

US: 1/1 156/327 428/203 428/205



Family:

Publication number	Publication date	Application number	Application date
BR112015006291 A2	20170704	BR20151106291	20130604
CN104661978 A	20150527	CN201380049826	20130604
CN104661978 B	20180213	CN201380049826	20130604
EP2711346 A1	20140326	EP20120185943	20120925
EP2900615 A1	20150805	EP20130726554	20130604
US2015251381 AA	20150910	US20130430972	20130604
US9434132 BB	20160906	US20130430972	20130604
WO14048589 A1	20140403	WO2013EP61520	20130604

Priority:

EP20120185943 20120925 EP20130726554 20130604 WO2013EP61520 20130604

Probable Assignee: FALCO TECHNOLOGIES BVBA

Assignee(s): (std): FALCO TECH BVBA ; FALCO TECHNOLOGIES BVBA

Inventor(s): (std): ANTONIUS WILHELMUS VAN DUFFEL ; BART VAN DUFFEL ; VAN DUFFEL ANTONIUS WILHELMUS ; VAN DUFFEL BART

Agent(s): IP HILLS NV; PLAS AXEL IVO MICHEL; WORKMAN NYDEGGER

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

Title: HEAT SHIELDING LAMINATION STRUCTURE

Abstract: A heat-ray shielding lamination structure composed of two laminated plates of plate glass, plastic, or plastic containing particles having a heat-ray shielding function, metal salts of carboxylic acids, metal carbonate, metal hydroxides carbonates, and metal hydroxides, interposing an interlayer containing particles having a heat-ray shielding function and one or more kinds of metal salts of carboxylic acids, metal carbonate, metal hydroxides carbonates, and metal hydroxides, wherein the particles are composite tungsten oxide particles expressed by general formula MYWOZ ($0.001 \leq Y \leq 1.0$, $2.2 \leq Z \leq 3.0$), element M is one or more kinds of Cs, Rb, K, Tl, having a hexagonal crystal structure, with a particle size between 1 and 800 nm, and the metal salts of carboxylic acids, metal carbonate, metal hydroxides carbonates, and metal hydroxides, are contained in an amount between 1 parts by weight and 100 parts by weight based on 100 parts by weight of the composite tungsten oxide particles.

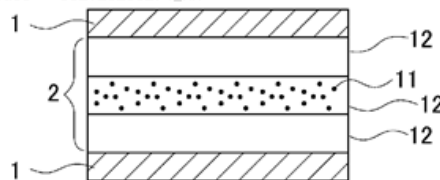
Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/18
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C08J5/18 C08K3/22 C08K5/098 C08L101/00
C09K3/00 (Advanced/Invention);
B60J1/00 (Advanced/Non-invention)

CPC: B32B27/306 B32B27/308 B32B27/32 B32B27/36 B32B27/365

B32B2264/104 B32B2264/105 B32B2307/30 B32B2307/40
B32B2307/712 B32B2605/006 B32B2605/10 B32B17/10761
B32B17/10779 B32B2250/05 B32B2250/40 B32B2255/10
B32B2255/26 B32B2307/416 B32B2419/00 B32B17/10165
B32B2605/18 Y10T428/256 B32B7/12 B32B27/20 B32B2307/306
B32B2605/00 B32B17/10633 B32B17/10788 B32B27/08 B32B2264/102 B32B2605/08
US: 428/328

PatBase - US2015158274_AA

**Family:**

Publication number	Publication date	Application number	Application date
CN104487397 A	20150401	CN201380030834	20130610
EP2860163 A1	20150415	EP20130803907	20130610
EP2860163 A4	20160127	EP20130803907	20130610
JP2014114202 A2	20140626	JP20130094673	20130426
JP2014193786 A2	20141109	JP20130070667	20130328
JP2014193787 A2	20141109	JP20130070668	20130328
JP2016164123 A2	20160908	JP20160099520	20160518
JP2016164276 A2	20160908	JP20160099519	20160518
JP2016164277 A2	20160908	JP20160099521	20160518
JP5939188 B2	20160622	JP20130070667	20130328
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JP6142945 B2	20170607	JP20160099520	20160518
JP6187634 B2	20170830	JP20160099521	20160518
JP6201127 B2	20170927	JP20160099519	20160518
KR20150022930 A	20150304	KR20147036816	20130610
TW201402316 A	20140116	TW20130120639	20130610
TWI576238 B	20170401	TW20130120639	20130610
US2015158274 AA	20150611	US20130407328	20130610
WO13187350 A1	20131219	WO2013JP65932	20130610

Priority:

JP20120131559 20120611	JP20120252591 20121116	JP20130070667 20130328
JP20130070668 20130328	JP20130094673 20130426	WO2013JP65932 20130610
JP20160099519 20160518	JP20160099520 20160518	JP20160099521 20160518

Probable Assignee: SUMITOMO METAL MINING CO LTD**Assignee(s):** (std): SUMITOMO METAL MINING CO**Assignee(s):** SUMITOMO METAL MINING CO LTD**Inventor(s):** (std): TOFUKU ATSUSHI ; TOFUKU JUNJI ; YABUKI KAYO**Agent(s):** BETTEN AND RESCH; ANIYA SETUO; YUI TOHRU; KIYONO HITOSHI; ANIYA SETUO ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID
IE IL IN IS IT 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

Title: COMPOSITE GLASS WITH THIN INNER PANE

Abstract: A vehicle composite glass for separating a vehicle interior from an external environment is presented. The vehicle composite glass has a stack configuration that includes an inner pane made of glass, and outer pane made of glass, and a thermoplastic intermediate layer placed between the two panes bonding the inner pane to the outer pane. In one case, the thickness of the inner pane is 0.1 mm to 0.4 mm and the thickness of the outer pane is 1.0 mm to 1.8 mm.

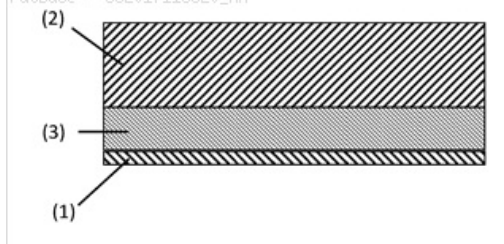
Classifications:

International (IPC 8-9): B32B17/10 B32B27/30 B32B7/10 B60J1/00 B60J3/00 C03C21/00 C03C27/12 C03C3/085 C08F1/00 (Advanced/Invention); B32B17/10 (Core/Invention)

CPC: B32B17/1077 B32B17/10788 B32B27/306 C03C3/085 B32B2315/08 B32B2605/08 B60J3/007 B60J1/00 B32B2605/006 B32B17/10036 B32B17/10119 B32B17/10137 B32B17/10174 B32B17/10761

US: 428/215

PatBase - US2017113520_AA



Family:

Publication number	Publication date	Application number	Application date
BR112016022689 A2	20170815	BR20161122689	20150309
CA2944082 AA	20160927	CA20152944082	20150309
CN106458743 A	20170222	CN201580019621	20150309
EA201692058 A1	20170228	EA20160092058	20150309
EP3131753 A1	20170222	EP20150709461	20150309
ID201707654 A	20170721	ID2016P0006886	20150309
IN201637033749 A	20170310	IN201637033749	20161003
JP2017518246 T2	20170706	JP20160562849T	20150309
KR20160135280 A	20161125	KR20167028631	20150309
MX2016013450 A1	20170118	MX20160013450	20150309
TH167483 A	20170907	TH20161006196	20150309
US2017113520 AA	20170427	US20150301856	20150309
WO15158464 A1	20151022	WO2015EP54810	20150309

Priority:

EP20140164731 20140415 WO2015EP54810 20150309

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): KETTNER DOROTHEA ; KREMERS STEPHAN ; UEBELACKER STEFAN ; SIENERTH SANDRA

Inventor(s): (std): DOROTHEA KETTNER ; KETTNER DOROTHEA ; KREMERS STEPHAN ; SANDRA SIENERTH ; SIENERTH SANDRA ; STEFAN UEBELACKER ; STEPHAN KREMERS ; UEBELACKER STEFAN

Agent(s): GOUDREAU GAGE DUBUC ; GEBAUER DIETER EDMUND ; DR TOETI HERATY NROOSSENO ; MORITA HIROSHI ; LENDVAI TOMAS

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 GLASS HAVING REDUCED THICKNESS FOR A HEAD-UP DISPLAY (HUD)

Title: INTERLAYER FOR LAMINATED GLASS AND LAMINATED GLASS

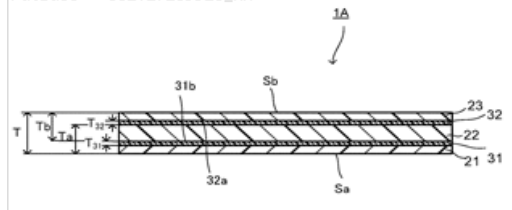
Abstract: There are provided an interlayer for laminated glass having a multilayer structure, capable of sufficiently suppressing generation of air bubbles and increase of area of air bubbles when the interlayer is made into a laminated glass. The interlayer for laminated glass includes alternately laminated at least one skin layer and two or more core layers, the skin layer having a storage modulus of 1.0×10^6 Pa or more measured by a dynamic viscoelasticity test under conditions of a frequency of 1 Hz, a swing angle gamma of 0.01 percent and a temperature of 20 degrees centigrade, and the core layers having a storage modulus of less than 1.0×10^6 Pa, wherein a value of a product of a value obtained by averaging thicknesses (mm) of the respective core layers and a thickness (mm) of the whole interlayer for laminated glass is 0.15 or more.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/30
B32B37/06 B32B37/12 B32B7/02 B32B7/12 B32B9/00 B6011/00
C03C27/12 (Advanced/Invention)

CPC: B32B17/06 B32B2309/105 B32B2250/03 B32B2250/40
B32B2309/02 B32B17/1055 B32B17/10761 B32B17/1077
B32B17/10779 B32B17/10788 B32B27/30 B32B17/10036
B32B17/10568 B32B7/12 B32B9/005 B32B17/10807 B32B37/06
B32B37/12 B32B2307/102

PatBase - US2017239918_AH



Family:

Publication number	Publication date	Application number	Application date
CN107116865 A	20170901	CN201710099460	20170223
EP3210775 A1	20170830	EP20170000282	20170222
JP2017149604 A2	20170831	JP20160032959	20160224
US2017239918 AA	20170824	US20170442300	20170224

Priority:

JP20160032959 20160224

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): ATSUSHI NAKAMURA ; NAKAMURA ATSUSHI

Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB

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

Title: METHODS OF MAKING POLYMER INTERLAYERS COMPRISING POLY(CYCLOHEXANEDIMETHYLENE TEREPHTHALATE-CO-ETHYLENE TEREPHTHALATE) COPOLYESTER

Abstract: The present invention is in the field of polymer interlayers used in multiple layer glass panels having one or more glass layers, and specifically the present invention is in the field of polymer interlayers comprising a layer of poly(cyclohexanedimethylene terephthalate-co-ethylene terephthalate) copolyester (PETG).

Classifications:

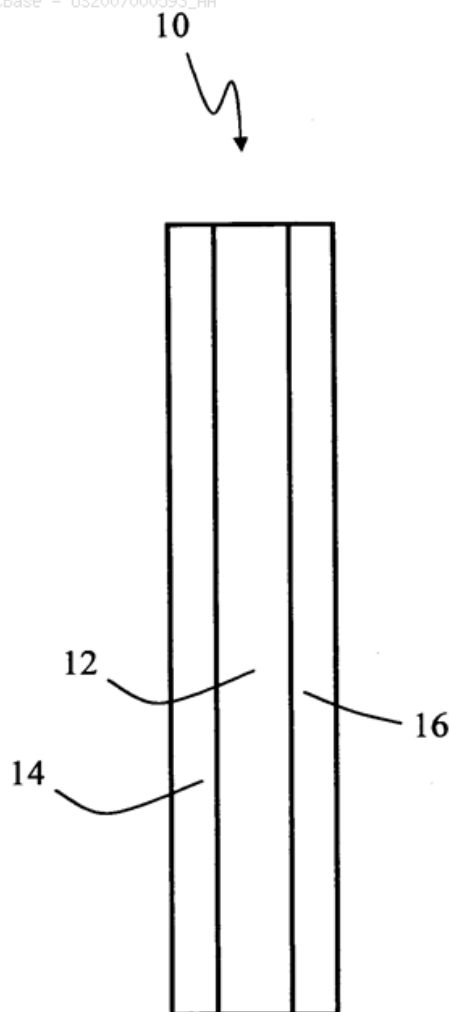
International (IPC 8-9): B29C47/06 B32B17/00 B32B17/10 B32B27/08 B32B27/30 B32B27/36 B32B27/40 C03C27/00 C03C27/12 C08G63/183 C08J5/18 C08L67/02 G02C7/00 (Advanced/Invention); B32B17/10 B32B27/08 B32B27/36 C08G63/199 C08J5/18 C08L67/02 (Advanced/Non-invention); B29C47/06 B32B17/00 B32B17/06 B32B27/08 B32B27/30 B32B27/36 B32B27/40 C03C27/00 C03C27/12 C08J5/18 C08L67/00 G02C7/00 (Core/Invention); C08J5/18 C08L67/00 (Core/Non-invention); B32B (Subclass/Invention)

CPC: B32B17/10761 Y10T428/31551 Y10T428/31616 Y10T428/31786 Y10T428/31797 Y10T428/31645 Y10T428/31649 B29C47/06 B29C47/0021 B32B17/10779 B32B2250/03 B32B2307/536 B32B2307/558 B32B2307/702 B32B2605/006 B32B27/08 B32B27/306 B32B27/32 B32B2323/04 B32B2331/04 B32B2375/00 B32B2551/00 B32B17/10 B32B17/10018 B32B17/10036 B32B17/1077 B32B17/10788 B32B27/30 B32B27/36 B32B27/40 B32B2367/00 C08G63/199

European: B29C47/06 B32B17/10 B32B17/10C2 B32B17/10C4 B32B17/10G30 B32B17/10G32 B32B17/10G36 B32B27/08 B32B27/30 B32B27/36 B32B27/40 L32B250/03 L32B307/536 L32B307/558 L32B307/702 L32B367/00 L32B605/00D M08G63/199

US: 156/99 156/99P 264/176.1 264/176.100S 428/220 428/220P 428/423.1 428/423.100S 428/430 428/430S 428/441 428/442 428/480 428/480S 428/483 428/483S

PatBase - US2007000593_AA



Family:

Publication number	Publication date	Application number	Application date
AU2006265787 AA	20070111	AU20060265787	20060629
BRPI0614042 A2	20110309	BR2006PI14042	20060629
CA2613550 AA	20071227	CA20062613550	20060629
CN101208196 A	20080625	CN200680023261	20060629
EP1910076 A1	20080416	EP20060786087	20060629
EP1910076 B1	20161005	EP20060786087	20060629
IL188451 A0	20080413	IL20060188451	20060629
JP2009500278 T2	20090108	JP20080519653T	20060629
KR20080027280 A	20080326	KR20077030452	20060629
MX2008000100 A1	20080319	MX20080000100	20060629
NO20080214 A	20080114	NO20080000214	20080114
NZ565050 A	20100326	NZ20060565050	20060629
RU2008100215 A	20090810	RU20080100215	20060629
TW200711834 A	20070401	TW20060123579	20060629
UA90725 C2	20100525	UA20080000472	20060629
US2007000593 AA	20070104	US20050170445	20050630
US2007003746 AA	20070104	US20050170643	20050630
US7686906 BB	20100330	US20050170445	20050630
WO07005711 A1	20070111	WO2006US25771	20060629

Priority:

US20050170445 20050630 US20050170643 20050630 WO2006US25771 20060629

Probable Assignee: SOLUTIA INC

Assignee(s): (std): CHEN WENJIE ; SOLUTIA INC ; SZYDLOWSKI WITOLD

Assignee(s): KARAGIANNIS ARISTOTELIS ; FLEXSYS AMERICA LP ; CITIBANK NA ; CPFILMS INC ; DEUTSCHE BANK TRUST CO ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT A ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS

Inventor(s): (std): ARISTOTELIS KARAGIANNIS ; CHEN WEN JIE ; CHEN WENJIE ; KARAGIANNIS ARISTOTELIS ; SZYDLOWSKI WITOLD ; WENJIE CHEN ; WITOLD SZYDLOWSKI

Agent(s): BALDWINS INTELLECTUAL PROPERTY; NELLIGAN O BRIEN PAYNE LLP; BECKMANN CLAUS; OSAKI KATSUMASA; TSUBOKURA MICHIAKI; KANAYAMA MASATAKA; KAWAGUCHI YOSHIO; ONO MAKOTO; BRENC LAW, ANDREW BRENC; BRENC LAW ANDREW BRENC; HAMILTON BROOK SMITH AND REYNOLDS PC

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

Title: SOLAR CONTROL LAMINATE

Abstract: Provided are solar control laminates comprising a solar control film and a polymeric sheet. The solar control film comprises a polymeric film coated with a coating comprising inorganic infrared absorbing nanoparticles. Preferably, inorganic infrared absorbing nanoparticles comprise nanoparticles of antimony tin oxide (ATO), indium tin oxide (ITO), lanthanum hexaboride (LaB₆) or mixtures thereof. Optionally, the solar control laminate also comprises a rigid sheet, such as a glass sheet.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/00 B32B27/08 B32B27/16 B32B27/18 B32B27/28 B32B27/30 B32B27/32 B32B27/34 B32B27/36 B32B27/40 B32B5/16 B32B7/02 C08K3/22 (Advanced/Invention); B32B17/06 B32B27/18 B32B27/30 B32B27/32 B32B27/34 B32B27/36 B32B27/40 B32B5/16 C08K3/00 (Core/Invention)
CPC: B32B17/10743 B32B17/10 B32B17/10018 B32B17/10036 B32B17/10761 B32B17/10788 B32B27/08 B32B27/16 B32B27/18 B32B27/304 B32B27/306 B32B27/32 B32B27/36 B32B27/40 B32B2250/24 B32B2255/10 B32B2255/20 B32B2255/26 B32B2264/102 B32B2307/412 B32B2307/42 B32B2307/518 B32B2307/54 B32B2367/00 B32B2419/04 B32B2551/00 B32B2605/00 B32B2605/006 B32B17/10633 Y10T428/24091 Y10T428/2495 Y10T428/24975 Y10T428/25 Y10T428/256 Y10T428/269 Y10T428/31504 Y10T428/31507 Y10T428/3154 Y10T428/31551 Y10T428/31739 Y10T428/31786 Y10T428/31855 Y10T428/31935 Y10T428/31938 Y10T428/31971
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US: 428/109 428/213 428/216 428/323 428/323P 428/328 428/328S 428/339 428/339S 428/411.1 428/412 428/412S 428/421 428/421S 428/423.1 428/423.100S 428/475.5 428/475.500S 428/480 428/480S 428/500 428/500S 428/522 428/522S 428/523 428/523S 428/532 428/532S

Family:

Publication number	Publication date	Application number	Application date
AU2006284757 AA	20070308	AU20060284757	20060831
AU2006284757 BB	20101209	AU20060284757	20060831
CN101258027 A	20080903	CN200680031871	20060831
EP1940614 A2	20080709	EP20060824865	20060831
JP2009505871 T2	20090212	JP20080529264T	20060831
JP5203945 B2	20130605	JP20080529264T	20060831
US2007048519 AA	20070301	US20060512814	20060830
US8871335 BB	20141028	US20060512814	20060830
WO07027861 A2	20070308	WO2006US33984	20060831
WO07027861 A3	20070628	WO2006US33984	20060831

Priority:

US20050713054P 20050831 US20050713056P 20050831 US20050721913P 20050929
US20050721719P 20050929 US20050721797P 20050929 US20060512814 20060830
WO2006US33984 20060831

Probable Assignee: E I DU PONT DE NEMOURS AND CO

Assignee(s): (std): ANDERSON JERREL C ; DU PONT ; SILVERMAN LEE A ; FUGIEL RICHARD A ; HAYES RICHARD A ; EIDU PONT DE NEMOURS AND CO ; KURARAY AMERICA INC

Assignee(s): E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; EI DU PONT DE NEMOURS AND CO

Inventor(s): (std): SILVERMAN LEE A ; HAYES RICHARD A ; FUGIEL RICHARD A ; ANDERSON JERREL C

Inventor(s): RICHARD A HAYES ; RICHARD A FUGIEL ; LEE A SILVERMAN ; JERREL C ANDERSON ; ANDERSON JERREL ; FUGIEL RICHARD ; HAYES RICHARD ; SILVERMAN LEE

Agent(s): HOULIHAN²; HOULIHAN² PTY LTD; HOULIHAN²; HEINEMANN MONICA; KUMAKURA YOSHIO; OGAWA NOBUO; HAKODA ATSUSHI; HIRAYAMA KOJI; ASAI KENJI; E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER; E I DU PONT DE NEMOURS AND CO LEGAL PATENT RECORDS CENTER; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR 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

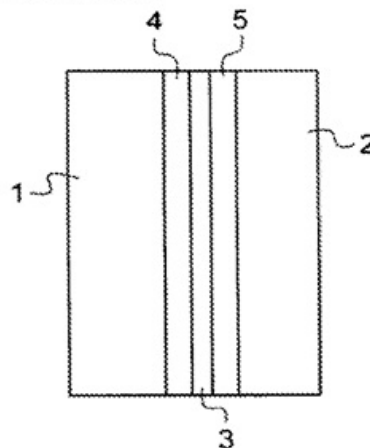
Title: VISCOELASTIC PLASTIC INTERLAYER FOR VIBRO-ACOUSTIC DAMPING AND GLAZING COMPRISING SUCH AN INTERLAYER

Abstract: A viscoelastic plastic interlayer to be incorporated between two glass sheets forms a laminated glazing with vibro-acoustic damping properties. The interlayer includes at least one layer made of viscoelastic plastic with vibro-acoustic damping properties. The interlayer is tinted in the bulk at least on a part of its surface. The interlayer is such that the resonant frequency f_2 of the second resonance mode of a laminated glazing bar with a surface area of 25 mmx300 mm composed of two glass sheets each 2.1 mm thick, between which is incorporated the interlayer, determined by measuring the mechanical impedance (MIM) at 20 degrees centigrade according to standard ISO 16940, is between 760 Hz and 1000 Hz and the loss factor η_2 of the second resonance mode of the same bar, determined by MIM under the same conditions, is greater than or equal to 0.25.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/22 B32B27/30 B60J1/00 B60J1/02 B60J1/06 B60J1/08 B60J3/00 B60R13/08 C03C27/12 G10K11/168 (Advanced/Invention); B32B17/06 B60J1/02 C03C27/12 (Advanced/Non-invention); B32B17/10 (Core/Invention)
CPC: G10K11/168 B32B2307/102 B32B2307/56 B60J1/001 B60R13/0815 B60J3/007 B32B2605/006 B32B17/10761 B32B17/10036 B32B17/10651 B32B17/1066 B32B2250/03

PatBase - US2017210097_AA



Family:

Publication number	Publication date	Application number	Application date
BR112016011361 A2	20170808	BR20161111361	20141125
CA2930238 AA	20160510	CA20142930238	20141125
CN104822526 A	20150805	CN201480002528	20141125
EA201691096 A1	20160930	EA20160091096	20141125
EP3074223 A1	20161005	EP20140821742	20141125
FR3013631 A1	20150529	FR20130061724	20131127
FR3013631 B1	20170428	FR20130061724	20131127
ID201709417 A	20170901	ID2016P0003511	20141125
IN201617015502 A	20160831	IN201617015502	20160504
JP2017504549 T2	20170209	JP20160534715T	20141125
KR20160090816 A	20160801	KR20167013665	20141125
MX2016006557 A1	20160803	MX20160006557	20141125
TH177176 A	20180621	TH20161003000	20141125
US2017210097 AA	20170727	US20140039478	20141125
US9994001 BB	20180612	US20140039478	20141125
WO15079159 A1	20150604	WO2014FR53027	20141125

Priority:

FR20130061724 20131127 WO2014FR53027 20141125

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): SAINT GOBAIN GLASS FRANCE SA ; FOURNIER DAVID ; PAYEN CORINNE

Inventor(s): (std): PAYEN CORINNE ; FOURNIER DAVID ; DAVID FOURNIER ; CORINNE PAYEN

Agent(s): GOUDREAU GAGE DUBUC ; GALDEANO SOPHIE MARIE ; SAINT GOBAIN RECHERCHE ; IR MIGNI MYRIASANDRA SH MIP MSEL ; AOKI ATSUSHI ; KOGA TETSUJI ; ISHIDA TAKASHI ; OBLON MCCLELLAND MAIER AND NEUSTADT L LP

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

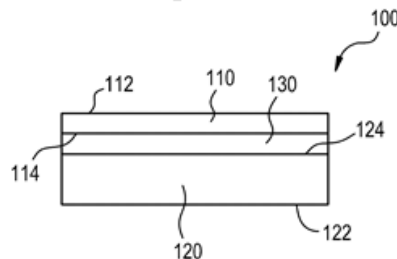
Title: GLASS LAMINATE STRUCTURES FOR HEAD-UP DISPLAY SYSTEM

Abstract: A glass laminate structure comprising a non-strengthened external glass sheet, a strengthened internal glass sheet, and at least one polymer interlayer intermediate the external and internal glass sheets. The internal glass sheet can have a thickness ranging from about 0.3 mm to about 1.5 mm, the external glass sheet can have a thickness ranging from about 1.5 mm to about 3.0 mm, and the polymer interlayer can have a first edge with a first thickness and a second edge opposite the first edge with a second thickness greater than the first thickness. Other embodiments include external and internal strengthened glass sheets as well as an external strengthened glass sheet and an internal non-strengthened glass sheet.

Classifications:

International (IPC 8-9): B32B17/00 B32B17/06 B32B17/10 B32B27/30 B32B3/26 B60J1/00 C03C21/00 C03C27/12 G02B27/01 G02B27/02 (Advanced/Invention); C03C27/12 (Advanced/Non-invention)
CPC: B32B17/064 B32B17/10568 Y10T428/24612 B32B17/10761 C03C21/002 B32B2457/20 B32B17/10137 B32B17/10036 B32B17/10119 G02B27/0101 G02B2027/0121 G02B2027/0194 B32B27/306 B32B3/263 B32B2605/00 B32B17/10743 B32B17/1077 B32B17/10788 B32B2605/08 B32B9/045 B32B27/06 B32B27/30 B32B27/365 B32B27/40 B32B2270/00 B32B2307/558 B32B2307/584 B32B2307/732 B32B2605/006 G02B2027/0196
US: 428/172 428/215

PatBase - US2015251377_AA



Family:

Publication number	Publication date	Application number	Application date
CN106255592 A	20161221	CN201580021799	20150306
EP3113949 A1	20170111	EP20150710079	20150306
JP2017512175 T2	20170518	JP20160555983T	20150306
KR20160130462 A	20161111	KR20167027638	20150306
TW201542356 A	20151116	TW20150107238	20150306
US2015251377 AA	20150910	US20150638224	20150304
US2016257095 AA	20160908	US20160156620	20160517
WO15134836 A1	20150911	WO2015US19101	20150306

Priority:

US20140949359P 20140307 US20150638224 20150304 WO2015US19101 20150306
 US20160156620 20160517

Probable Assignee: CORNING INC

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

Inventor(s): (std): CLEARY THOMAS MICHAEL ; GOFORTH DOUGLAS EDMON ; PRIESTLEY RICHARD SEAN ; WANG CHUAN CHE ; WANG CHUAN CHE ; ZAKHARIAN ARAMAIS ; ZAKHARIAN ARAMAIS ROBERT

Agent(s): SCHEUERMANN ERIK ; 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: WINDSHIELD

Abstract: A windshield according to the present invention is a windshield to which an information acquisition device that emits and/or receives light to acquire information from an outside of a vehicle can be attached, and that includes a glass sheet, and a mask layer that is formed on the glass sheet and blocks a visual field from the outside of the vehicle, and at least one opening is formed in the mask layer. The glass sheet and the mask layer have different heat shrinkage percentages and are molded together by being heated. The information acquisition device is configured to be capable of using the information while reducing an influence of distortion that occurs in a predetermined range from an inner peripheral edge of the opening toward a center of the opening due to the molding.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B60J1/00 B60J1/02 B60J3/00 B60R11/02 B60R11/04 C03C17/34 C03C27/12 G02B5/00 G06K9/00 (Advanced/Invention)

CPC: B60J3/007 G02B5/003 G06K9/00791 B60J1/02 B60R11/04 B60R2011/0026 B32B17/10036 B32B17/10348 B32B17/10761 B32B2250/03

US: 348/148

PatBase - US2017015180_AA



Family:

Publication number	Publication date	Application number	Application date
CN106103158 A	20161109	CN201580014195	20150316
EP3118036 A1	20170118	EP20150761431	20150316
EP3118036 A4	20171122	EP20150761431	20150316
JP2015137518 A1	20170406	JP20160507867T	20150316
US2017015180 AA	20170119	US20150125864	20150316
WO15137518 A1	20150917	WO2015JP57778	20150316

Priority:

JP20140052795 20140314 JP20140052796 20140314 WO2015JP57778 20150316

Probable Assignee: NIPPON SHEET GLASS CO LTD

Assignee(s): (std): NIPPON SHEET GLASS CO LTD

Assignee(s): NIPPON SHEET GLASS CO

Inventor(s): (std): KANKI SATOSHI ; OGAWA HISASHI ; OSHIMA HIDEAKI ; SAKAMOTO TAKUMITSU

Agent(s): WEBSTER JEREMY MARK; TACHIBANA KENJI; TANAKA JUNYA; YAMADA IICHIRO ET AL

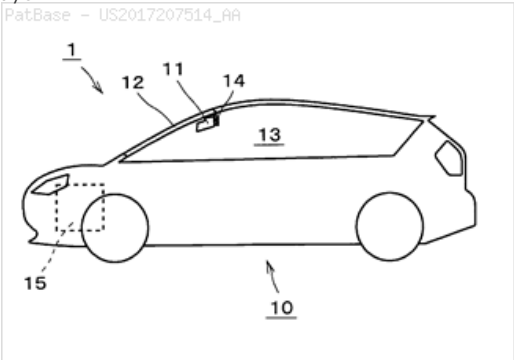
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW 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: VEHICLE

Abstract: A vehicle includes laminated glass located between a vehicle interior and an outside, and an on-vehicle radar device fixed to an inner surface of the laminated glass, a rear-view mirror, or a ceiling. The laminated glass includes an innermost glass layer, an outermost glass layer, and an intermediate resin layer. The on-vehicle radar device includes an antenna part that includes a transmitting antenna for transmitting a transmission wave. Reflection of the transmission wave on the laminated glass will be suppressed by selecting optimum values for the incident angle of the transmission wave on the innermost glass layer and the refractive index and thickness of each layer.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/06 B60J1/00 B60R11/02 B60R11/04 G01S13/93 G01S7/02 G01S7/03 H01Q1/12 H01Q1/22 H01Q1/32 H01Q21/24 (Advanced/Invention)
CPC: G01S13/931 B60J1/001 B32B2605/006 B60J1/02 B60J3/06 H01Q1/1271 H01Q1/3266 B60R11/02 B32B17/064 B32B27/06 B32B2605/08 B60R2011/0026 B60R2011/0063 B60R2011/0066 B60R2011/008 B60R2011/0294 G01S2013/9371 G01S13/867 G01S2013/9392 B60R11/04 B32B7/045 B32B17/00 B32B27/08 B32B27/285 B32B27/30 B32B27/302 B32B27/365 B32B2250/03 B32B2250/04 B32B2250/05 B32B2250/40 B32B2307/204 B32B2307/41 B32B2307/412 B32B2307/416 B32B2307/418 B32B2307/42 B32B2307/546 B32B2307/702 B32B2307/732 B32B17/10036



Family:

Publication number	Publication date	Application number	Application date
CN107042799 A	20170815	CN201710033614	20170118
JP2017129419 A2	20170727	JP20160008158	20160119
US2017207514 AA	20170720	US20170408667	20170118

Priority:

JP20160008158 20160119

Probable Assignee:

NIDEC ELESYS CORP

Assignee(s): (std):

NIDEC ELESYS CORP

Inventor(s): (std):

KAMO HIROYUKI

Agent(s):

MATSUSAKA MASAHIRO

Title: CELLULOSE ESTER MULTILAYER INTERLAYERS

Abstract: An interlayer structure having a cellulose ester layer for use in structural laminates is described herein. The cellulose ester layer provides rigidity and support to multilayer interlayers comprising an array of different layers. Due to the diverse properties of the cellulose ester layers, the present interlayers can be useful in producing structural laminates having high stiffness and which possess good optical clarity for a variety of applications, including outdoor structural applications.

Classifications:**International (IPC 8-9):** B32B17/08 B32B17/10 B32B23/08

B32B23/16 B32B23/20 B32B27/08 B32B27/30 B32B27/40

B32B27/42 B32B7/02 (Advanced/Invention)

CPC: B32B23/08 B32B7/02 B32B17/10788 B32B17/08 B32B23/20
B32B27/306 B32B23/16 B32B17/1077 B32B17/10761 B32B27/08
B32B27/42 B32B27/40 B32B2307/542 B32B2307/412 B32B2307/558
B32B2419/00 B32B2457/12 B32B2605/08 B32B2605/18 B32B3/02
B32B7/12 B32B17/00 B32B27/308 B32B2250/03 B32B2250/05
B32B2250/40 B32B2255/10 B32B2255/26 B32B2307/30
B32B2307/546 B32B2571/00

PatBase - US2017259537_AA

**Family:**

Publication number	Publication date	Application number	Application date
US2017259537 AA	20170914	US20170453486	20170308

Priority:

US20160306770P 20160311 US20170453486 20170308

Probable Assignee: SOLUTIA INC**Assignee(s):** (std): SOLUTIA INC**Inventor(s):** (std): DONELSON MICHAEL EUGENE ; KARAGIANNIS ARISTOTELIS ; TRAN KHANH DUC ; WADE BRUCE EDWARD

Title: CELLULOSE ESTER MULTILAYER INTERLAYERS

Abstract: An interlayer structure having a cellulose ester layer for use in structural laminates is described herein. The cellulose ester layer provides rigidity and support to multilayer interlayers comprising an array of different layers. Due to the diverse properties of the cellulose ester layers, the present interlayers can be useful in producing structural laminates having high stiffness and which possess good optical clarity for a variety of applications, including outdoor structural applications.

Classifications:

International (IPC 8-9): B32B17/08 B32B17/10 B32B23/08

B32B23/20 B32B27/08 B32B27/22 B32B27/30 B32B27/40

B32B27/42 B32B7/02 (Advanced/Invention)

CPC: B32B23/08 B32B7/02 B32B17/08 B32B17/10788

B32B17/10761 B32B17/1077 B32B23/20 B32B27/08 B32B27/306

B32B27/22 B32B27/40 B32B27/42 B32B2307/412 B32B2307/542

B32B2307/558 B32B2419/00 B32B2457/12 B32B2605/08

B32B2605/18 B32B3/02 B32B7/12 B32B17/00 B32B23/16

B32B27/308 B32B2250/03 B32B2250/05 B32B2250/40 B32B2255/10

B32B2255/26 B32B2270/00 B32B2307/30 B32B2571/00

PatBase - US2017259538_AA



Family:

Publication number	Publication date	Application number	Application date
US2017259538 AA	20170914	US20170453506	20170308

Priority:

US20160306774P 20160311 US20170453506 20170308

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

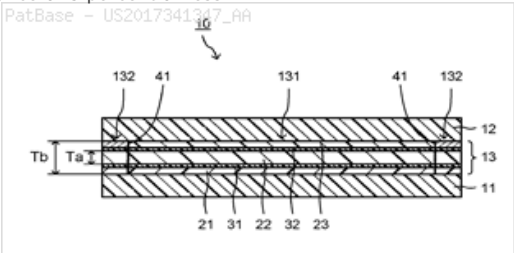
Inventor(s): (std): DONELSON MICHAEL EUGENE ; KARAGIANNIS ARISTOTELIS ; TRAN KHANH DUC ; WADE BRUCE EDWARD

Title: LAMINATED GLASS

Abstract: There is provided laminated glass superior in sound insulating property and visibility. The laminated glass includes: a pair of glass plates; and an intermediate film sandwiched between the pair of glass plates. The intermediate film has a transmitting region and a shielding region. The transmitting region has a skin layer having a glass transition point of 15 degrees centigrade or higher and a core layer having a glass transition point of lower than 15 degrees centigrade alternately laminated. The number of the core layers is two or more in the transmitting region. The shielding region is provided at peripheries of the pair of glass plates and has a visible light transmittance of 3 percent or less.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/06 B32B27/08
B32B33/00 B32B7/02 B60J1/00 C03C27/12
E06B3/67 (Advanced/Invention)
CPC: B32B17/10339 E06B3/6707 B32B2307/4026 B32B2419/00
B32B2605/08 B32B2307/412 B32B17/10348 B32B17/10357
B32B17/10651 B32B17/10761 B32B17/10036 B32B17/1066
B32B17/1055 B32B27/08 B32B33/00 B32B2255/205 B32B2307/102
B32B2605/006 B32B17/1077



Family:

Publication number	Publication date	Application number	Application date
CN107433753 A	20171205	CN201710372601	20170524
EP3248775 A1	20171129	EP20170000889	20170523
JP2017214274 A2	20171207	JP20170094774	20170511
US2017341347 AA	20171130	US20170604164	20170524

Priority:

JP20160103998 20160525 JP20170094774 20170511

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): NAKAMURA ATSUSHI

Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB

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

Title: DECORATIVE SHEETS HAVING ENHANCED ADHESION AND LAMINATES PREPARED THEREFROM

Abstract: The present invention is a decorated polymer sheet, said polymer having a modulus of from about 1000 psi (7 KPa) to about 20,000 psi (138 MPa), as determined according to ASTM D 638-03, wherein at least one of said surfaces of said sheet has disposed thereon an image and an adhesive composition, and at least a portion of said adhesive composition is in contact with said image.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/32 B44F1/06 C03C27/12 C09D11/02 C09D7/12 (Advanced/Invention); B44F1/06 C09D11/02 (Advanced/Non-invention); B32B17/06 B32B27/32 C03C27/12 C09D7/12 (Core/Invention); B44F1/00 C09D11/02 (Core/Non-invention)

CPC: B32B27/22 B32B27/28 B32B27/30 B32B27/32 B32B2307/75 B32B27/08 B32B7/12 B32B17/10018 B32B17/10036 B32B17/10339 B32B17/10688 B32B17/10761 B32B17/10788 B32B27/06 B32B27/306 B32B27/308 B32B27/32 B32B27/36 B32B37/065 B32B37/08 B32B37/1018 B32B37/12 B32B38/0008 B32B38/06 B32B38/145 B32B2038/166 B32B2307/4023 B32B2309/02 B32B2309/04 B32B2309/105 B32B2309/12 B32B2309/14 B32B2367/00 B32B2419/00 B32B2605/006 B44F1/066 C09D11/101 C09J2205/114 C09J2423/006 C09J2423/046 C09J2427/006 C09J2431/006 C09J2433/006 C09J2459/006 C09J2475/006 C09J2483/00 Y10T428/24802 B32B17/10275 C09J7/22 C09J7/38

European: B32B17/10C2 B32B17/10C4 B32B17/10E12 B32B17/10E26 B32B17/10G12 B32B17/10G28 B32B17/10G36 B32B27/08 B32B27/36 B44F1/06D C09D11/101 C09J7/02K4 C09J7/02K9B L32B367/00 M09J205/114 M09J423/00S M09J423/04S M09J427/00S M09J431/00S M09J433/00S M09J459/00S M09J475/00S M09J483/00

US: 428/195.1 428/195.100P 428/220 428/220S

Family:

Publication number	Publication date	Application number	Application date
AU2006332747 AA	20070712	AU20060332747	20061228
AU2006332747 BB	20110407	AU20060332747	20061228
EP1976690 A2	20081008	EP20060846084	20061228
US2007172636 AA	20070726	US20060645974	20061227
WO07079160 A2	20070712	WO2006US49457	20061228
WO07079160 A3	20071004	WO2006US49457	20061228

Priority:

US20050755163P 20051230 US20060645974 20061227 WO2006US49457 20061228

Probable Assignee: E I DU PONT DE NEMOURS AND CO

Assignee(s): (std): DU PONT ; HAYES RICHARD A ; SMITH REBECCA L

Assignee(s): E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; E I DU PONT DE NEMOURS AND CO

Inventor(s): (std): SMITH REBECCA L ; HAYES RICHARD A

Inventor(s): RICHARD A HAYES ; REBECCA L SMITH ; HAYES RICHARD ; SMITH REBECCA

Agent(s): HOULIHAN²; HOULIHAN² PTY LTD; HOULIHAN²; E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER; E I DU PONT DE NEMOURS AND CO LEGAL PATENT RECORDS CENTER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR 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: DEVICE FOR VIEWING AN IMAGE ON A LAMINATED SUBSTRATE

Abstract: A glazing panel for a display device, includes an external first transparent pane and an internal second transparent pane, each pane including an external face and an internal face, the glass panes being joined together by an interlayer made of a thermoformable material or by a multilayer sheet incorporating such an interlayer; a protective layer made of an opaque material making contact with the internal face of the external first pane; a masking layer made of an opaque material making contact with the internal face of the internal second pane, the masking layer including apertures forming pictograms; and a uniform layer of a material doped with luminescent species chosen because they absorb light radiation produced by the source generating radiation in the UV or IR range, and re-emit light radiation in the visible range, the uniform layer being placed in the glazing panel, between the masking layer and the protective layer.

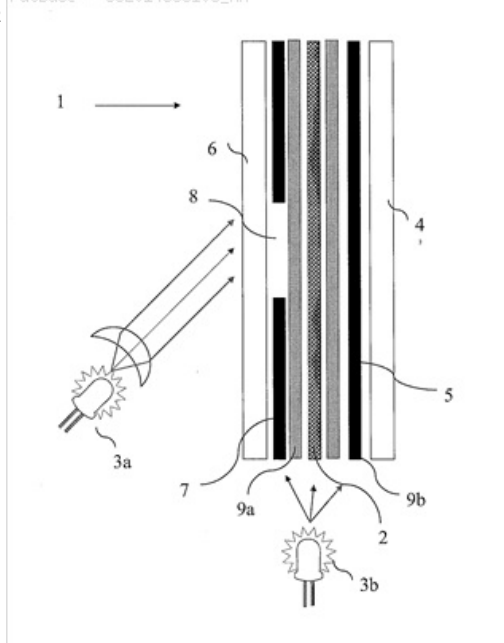
Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B60J1/02 C03C27/12 F21V8/00 G02B1/11 G02B1/111 G02B27/01 G02B5/20 G02B6/00 G09F9/00 (Advanced/Invention); F21V8/00 G02B5/20 G02B6/00 (Advanced/Non-invention); B32B17/10 (Core/Invention)

CPC: G02B5/208 G02B27/0101 G02B1/111 B60J1/02 B32B17/10036 B32B17/10348 B32B17/10669 B32B17/10761 B32B17/1077 B32B17/10788 G02B6/0003 G02B6/006 G02B6/0095 B32B17/10541 G02B2027/0118 G02B2027/0194 G02B27/01

US: 1/1 359/359

PatBase - US2014355106_AA



Family:

Publication number	Publication date	Application number	Application date
BR112014013200 A2	20170613	BR20141113200	20121220
BR112014013200 A8	20170620	BR20141113200	20121220
BR112014013200 A8	20170613	BR20141113200	20121220
CA2856841 AA	20140523	CA20122856841	20121220
CA2856841 C	20180220	CA20122856841	20121220
CN103998236 A	20140820	CN201280063811	20121220
CN103998236 B	20160907	CN201280063811	20121220
DE602012013252 D1	20160128	DE201260013252T	20121220
EA025357 B1	20161230	EA20140091239	20121220
EA201491239 A1	20140930	EA20140091239	20121220
EP2794265 A1	20141029	EP20120816744	20121220
EP2794265 B1	20151216	EP20120816744	20121220
ES2559657 T3	20160215	ES20120816744T	20121220
FR2985042 A1	20130628	FR20110062312	20111222
FR2985042 B1	20140117	FR20110062312	20111222
IN05447CN2014 A	20160304	IN2014CN05447	20140715
JP2015513684 T2	20150514	JP20140548156T	20121220
KR20140107271 A	20140904	KR20147016631	20121220
MX2014007574 A1	20140827	MX20140007574	20121220
PT2794265 T	20151231	PT20120816744T	20121220
TH146570 A	20160304	TH20141003455	20121220
TR201601175 T4	20160222	TR20160001175T	20121220
TW201338972 A	20131001	TW20120147480	20121214
TWI580565 B	20170501	TW20120147480	20121214
US2014355106 AA	20141204	US20120367720	20121220
US9477022 BB	20161025	US20120367720	20121220
WO13093351 A1	20130627	WO2012FR53009	20121220

Priority:

FR20110062312 20111222 EP20120816744 20121220 WO2012FR53009 20121220

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): SEKISUI CHEMICAL CO LTD ; SAINT GOBAIN GLASS FRANCE18 AVENUE D'ALSACEF-92400COURBEVOIEFR ; LALUET JEAN YVES ; LECAMP GUILLAUME

Inventor(s): (std): LECAMP GUILLAUME ; LALUET JEAN YVES ; JEAN YVES LALUET ; GUILLAUME LECAMP

Inventor(s): LALUET JEAN YVESFR ; LECAMP GUILLAUMEFR

Agent(s): GOUDREAU GAGE DUBUC ; G RONALD BELL AND ASSOCIATES; BOCKHORN AND KOLLEGEN PATENT U RECHTSANWAELTE; DOUYSET LAURENCE; DE ELZABURU ALBERTO; SAINT GOBAIN RECHERCHE; CABINET CHAILLOT; AOKI ATSUSHI; SHIMADA TETSURO; MIYAZAKI AND METSUGI; ELISAVET

YAKOVIDIS CINLEMEZ; PILLSBURY WINTHROP SHAW PITTMAN LLP; SAINT-GOBAIN RECHERCHE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
CU CY CZ DE 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

Title: PRIMER COMPOSITIONS FOR OPTICAL FILMS

Abstract: Articles and laminates include a substrate with a first polyester surface and a second polyester surface, a crosslinked polyurethane-based primer coated on at least the first polyester surface, and an optically clear heat activated adhesive adjacent to the crosslinked polyurethane-based primer. The articles and laminates are prepared by applying a polyurethane-based dispersion and a crosslinker on at least one polyester surface, drying the applied coating, heating while stretching the substrate and the coating to form a crosslinked primer layer on the stretched polyester surface, and applying an optically clear heat activated adhesive onto the crosslinked primer layer.

Classifications:

International (IPC 8-9): B05D5/00 B32B17/06 B32B17/10 B32B27/00 B32B27/06 B32B27/36 B32B33/00 B32B7/12

C09D175/04 C09D175/06 C09D5/00 C09D7/12 C09J123/02 C09J123/04 C09J129/14 C09J7/00 C09J7/02

G02B1/10 (Advanced/Invention)

CPC: C09J2201/606 C09J2201/61 G02B1/04 B32B17/10036 B32B17/10761 C09J7/0285 B32B17/064 B32B17/10779 B32B17/10688 B32B33/00 B32B2250/02 B32B2250/03 B32B2250/40 B32B2255/10 B32B2255/26 B32B2315/08 B32B2367/00 B32B2405/00 B32B2419/00 C09J2475/006 C09J2475/003 Y10T428/31565 Y10T428/2826 B32B7/12 C09J7/50 C09J2467/006 C08G18/0823 C08G18/10 C08G18/12 C08G18/348 C08G18/4808 C08G18/4825 C08G18/6692 C08G18/758 C09D175/08

US: 427/208 427/208.2 428/349 428/423.7

Family:

Publication number	Publication date	Application number	Application date
AU2013215434 AA	20130808	AU20130215434	20130128
AU2013215434 AA	20140821	AU20130215434	20130128
AU2013215434 BB	20150702	AU20130215434	20130128
BR112014019208 A2	20170620	BR20141119208	20130128
BR112014019208 A8	20170711	BR20141119208	20130128
CA2863403 AA	20140730	CA20132863403	20130128
CA2863403 AA	20130808	CA20132863403	20130128
CN104254441 A	20141231	CN201380018144	20130128
CN104254441 B	20160824	CN201380018144	20130128
EP2809512 A1	20141210	EP20130743195	20130128
EP2809512 A4	20151021	EP20130743195	20130128
IN05891CN2014 A	20160701	IN2014CN05891	20140801
JP2015513477 T2	20150514	JP20140555602T	20130128
JP6208690 B2	20171004	JP20140555602T	20130128
KR20140130150 A	20141107	KR20147024281	20130128
RU2014131767 A	20160327	RU20140131767	20130128
SG11201404548Q A1	20140828	SG20141104548	20130128
US2015044456 AA	20150212	US20130375146	20130128
WO13116130 A1	20130808	WO2013US23367	20130128

Priority:

US20120594405P 20120203 US20130375146 20130128 WO2013US23367 20130128

Probable Assignee: 3M CO

Assignee(s): (std): CHIEN BERT T ; HAAK CHRISTOPHER A ; KING GREGORY F ; GERLACH CHRISTOPHER P ; THERY RONALD K ; WILLETT PEGGY S ; 3M CO ; 3M INNOVATIVE PROPERTIES CO

Assignee(s): 3M INNOVATIVE PROPERTIES CO3M CENTERPOST OFFICE BOX 33427SAINT PAULMN55133-3427US

Inventor(s): (std): CHIEN BERT T ; GERLACH CHRISTOPHER P ; HAAK CHRISTOPHER A ; KING GREGORY F ; THERY RONALD K ; WILLETT PEGGY S

Inventor(s): WILLETT PEGGY SUS ; THERY RONALD KUS ; KING GREGORY FUS ; PEGGY S WILLETT ; RONALD K THERY ; RY RONALD K ; HAAK CHRISTOPHER AUS ; GERLACH CHRISTOPHER PUS ; GREGORY F KING ; CHIEN BERT TUS ; CHRISTOPHER A HAAK ; CHRISTOPHER P GERLACH ; BERT T CHIEN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR; VOSSIUS AND PARTNER; AOKI ATSUSHI; KOGA TETSUJI; ISHIDA TAKASHI; OLOFSON JEFFREY M ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC 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

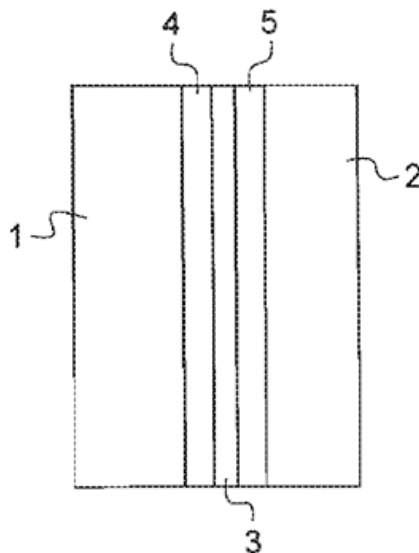
Title: VISCOELASTIC PLASTIC INTERLAYER FOR VIBRO-ACOUSTIC DAMPING AND GLAZING COMPRISING SUCH AN INTERLAYER

Abstract: A viscoelastic plastic interlayer to be incorporated between two glass sheets forms a laminated glazing with vibro-acoustic damping properties. The interlayer includes at least one layer made of viscoelastic plastic with vibro-acoustic damping properties and particles having an infrared radiation-screening function. The interlayer is such that the resonant frequency f_2 of the second resonance mode of a laminated glazing bar with a surface area of 25 mmx300 mm composed of two glass sheets each 2.1 mm thick, between which is incorporated the interlayer, determined by measuring the mechanical impedance (MIM) at 20 degrees centigrade according to standard ISO 16940, is between 760 Hz and 1000 Hz and the loss factor η_2 of the second resonance mode of the same bar, determined by MIM under the same conditions, is greater than or equal to 0.25.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/18
B32B27/30 B60J1/00 B60J1/02 C03C27/12 C08K3/00 C08K5/00
G10K11/168 G10K11/172 (Advanced/Invention);
C03C27/12 (Advanced/Non-invention);
B32B17/10 (Core/Invention)
CPC: B32B2307/102 B32B2307/56 B32B2250/03 C08K5/0016
B60J1/02 G10K11/172 B32B2307/42 B32B2605/006 B32B17/10761
B32B17/10036 B32B17/10633 G10K11/168 C08K3/01

PatBase - US2017165945_AA



Family:

Publication number	Publication date	Application number	Application date
BR112016011360 A2	20170808	BR20161111360	20141125
CA2930240 AA	20160510	CA20142930240	20141125
CN104812577 A	20150729	CN201480002529	20141125
CN104812577 B	20161214	CN201480002529	20141125
EA201691097 A1	20160930	EA20160091097	20141125
EP3074224 A1	20161005	EP20140821744	20141125
FR3013632 A1	20150529	FR20130061726	20131127
FR3013632 B1	20170428	FR20130061726	20131127
ID201709192 A	20170825	ID2016P0003512	20141125
IN201617016251 A	20160831	IN201617016251	20160510
JP2017505273 T2	20170216	JP20160534642T	20141125
KR20160090815 A	20160801	KR20167013664	20141125
MX2016006559 A1	20160803	MX20160006559	20141125
TH168126 A	20170921	TH20161003002	20141125
US2017165945 AA	20170615	US20140039482	20141125
WO15079160 A1	20150604	WO2014FR53029	20141125

Priority:

FR20130061726 20131127 WO2014FR53029 20141125

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): SAINT GOBAIN GLASS FRANCE SA ; FOURNIER DAVID ; PAYEN CORINNE

Inventor(s): (std): CORINNE PAYEN ; DAVID FOURNIER ; FOURNIER ADELIN ; FOURNIER DAVID ; PAYEN CORINNE

Inventor(s): ADELIN FOURNIER

Agent(s): GOUDREAU GAGE DUBUC ; GALDEANO SOPHIE MARIE ; SAINT GOBAIN RECHERCHE ; IR MIGNI MYRIASANDRA SH MIP MSEL ; AOKI ATSUSHI ; KOGA TETSUJI ; ISHIDA TAKASHI ; MULLER RENE

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: HEAT INSULATING WINDOW FILM, HEAT INSULATING WINDOW GLASS, BUILDING MATERIAL, WINDOW, BUILDING, AND VEHICLE

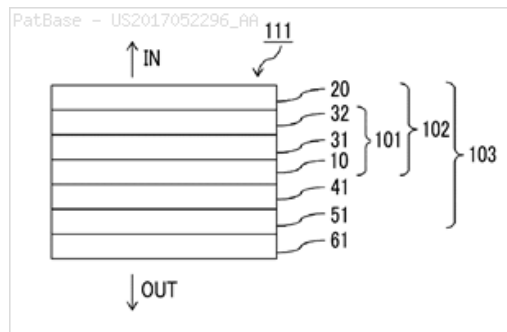
Abstract: There is provided a heat insulating window film disposed on the inside of a window, including at least: a support; and a fibrous conductive particles-containing layer disposed on the support, in which the fibrous conductive particles-containing layer is disposed on a surface of the support on a side opposite to the surface of the window side, and the heat insulating window film contains a near infrared shielding material. The heat insulating window film; a heat insulating window glass; an building material; a window; a building; and a vehicle which are manufactured at low cost, easily manufactured to have a large area, and have excellent visible light transmittance, shielding properties for near infrared light, heat insulating properties, and light resistance are provided.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/18 B32B27/36 B32B5/02 B32B7/02 B32B7/12 C03C17/00 C03C17/32 C03C17/34 C03C17/38 C09D5/24 C09D5/32 C09D7/12 E06B3/70 E06B5/10 G02B5/20 G02B5/22 G02B5/26 (Advanced/Invention)

CPC: G02B5/208 B32B17/10779 B32B7/12 B32B27/36 E06B5/10 C09D5/24 C09D5/32 C03C17/007 C03C17/322 B32B2255/10 B32B2255/26 B32B2307/412 B32B2419/00 B32B2605/08 C03C2217/29 B32B27/18 G02B5/26 C09D7/70 B32B15/18 B32B15/20 B32B27/16 B32B27/281 B32B27/286 B32B27/304 B32B27/34 B32B27/365 B32B2250/02 B32B2255/06 B32B2255/20 B32B2255/28 B32B2307/202 B32B2307/304 B32B2307/40 B32B2307/41 B32B2307/416 B32B2307/50 B32B2307/546 B32B2307/554 B32B2307/71 B32B2307/712 B32B2307/732 B32B2410/00 B32B2605/006 E06B3/6715

US: 359/359



Family:

Publication number	Publication date	Application number	Application date
CN106458731 A	20170222	CN201580023189	20150507
JP2015170695 A1	20170420	JP20160517909T	20150507
JP6309088 B1	20180411	JP20160517909T	20150507
US2017052296 AA	20170223	US20160344826	20161107
WO15170695 A1	20151112	WO2015JP63166	20150507

Priority:

JP20140096847 20140508 JP20150089017 20150424 WO2015JP63166 20150507

Probable Assignee: FUJIFILM HOLDINGS CORP

Assignee(s): (std): FUJI PHOTO FILM CO LTD ; FUJIFILM CORP ; FUJIFILM HOLDINGS CORP

Inventor(s): (std): KIYOTO NAOHARU ; OKAZAKI KENTARO

Agent(s): SIKS AND CO

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: LAMINATING THIN GLASS STRUCTURES

Abstract: A method for finishing an edge of a glass laminate structure comprising the steps of assembling a glass laminate structure having a first glass sheet, a second glass sheet and an interlayer material intermediate the first and second glass sheets and placing a compressive material on a first edge of the assembled structure. A vacuum can be applied to a second edge of the assembled structure and the assembled structure heated to a predetermined temperature at or above a softening temperature of the interlayer material. The vacuum and temperature can be maintained for a predetermined period of time whereby the compressive material provides an in situ finish for the first edge of the glass laminate structure.

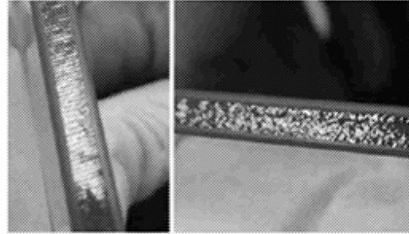
Classifications:

International (IPC 8-9): B32B17/10 B32B3/02 B32B3/04 B32B37/06 B32B37/10 B32B37/12 B32B37/18 B32B38/00 B32B7/12 C03C27/12 (Advanced/Invention)

CPC: B32B17/10119 B32B3/02 B32B7/12 B32B17/10825 B32B17/10871 B32B17/10761 B32B17/10788 B32B17/1077 B32B17/10036 B32B37/06 B32B37/18 B32B37/1009 B32B37/12 B32B38/0012 B32B2250/02 B32B2255/26 B32B2315/08 B32B2605/006 B32B17/10293 B32B17/10972

US: 264/511

PatBase - US2017113440_AH

**Family:**

Publication number	Publication date	Application number	Application date
EP3154784 A2	20170419	EP20150794996	20150609
JP2017523108 T2	20170817	JP20160572273T	20150609
US2017113440 AA	20170427	US20150316993	20150609
WO15191527 A2	20151217	WO2015US34825	20150609
WO15191527 A3	20160204	WO2015US34825	20150609

Priority:

US20140011305P 20140612 US20150316993 20150609 WO2015US34825 20150609

Probable Assignee: CORNING INC

Assignee(s): (std): CORNING INC

Inventor(s): (std): CHEREKDJIAN SARKO ; RICKERL PAUL GEORGE

Agent(s): EPPING HERMANN FISCHER; PATEL PAYAL A

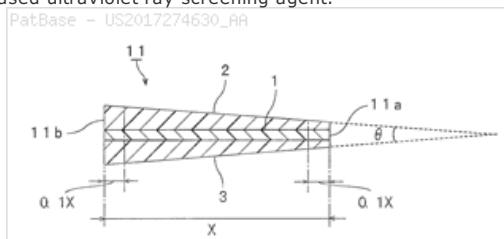
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW 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: INTERMEDIATE FILM FOR LAMINATED GLASS, AND LAMINATED GLASS

Abstract: There is provided an interlayer film for laminated glass with which a low yellow index value, low excitation purity and high heat shielding properties can be achieved in spite of the thickness varying with places. The interlayer film for laminated glass according to the present invention has a thickness of one end thinner than a thickness of the other end at the opposite side of the one end and includes a thermoplastic resin, an ultraviolet ray screening agent and tungsten oxide particles, and the ultraviolet ray screening agent is a benzotriazole-based ultraviolet ray screening agent.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/00 B32B27/08
B32B27/18 B32B27/20 B32B27/22 B32B27/30 B32B7/02 B60J1/00
B60J1/02 C01G41/02 C03C27/12 C08K3/08 C08K3/22 C08K5/00
C08K5/3475 C08L29/14 (Advanced/Invention)
International (IPC 1-7): B32B27/18 B32B27/20 B32B27/30 B60J1/00
B60J1/02 C03C27/12 C08K3/22 C08K5/3475 C08L29/14
CPC: B60J1/02 C08L29/14 B32B27/08 B32B17/10036 B32B17/10761
B32B27/20 B32B27/22 B32B27/306 B32B2264/102 B32B2307/304
B32B2307/71 B32B2605/006 C08K5/3475 B32B17/10651 C08K3/08
B32B17/10678 B32B17/10633 C08K5/0041 B32B2307/306
C01G41/02 C08K2003/2258 B32B27/18 B32B27/30 B60J1/00
C08K3/22 B32B17/10605 B32B17/10568



Family:

Publication number	Publication date	Application number	Application date
BR112017005969 A2	20171219	BR20171105969	20150928
BR112017005970 A2	20171219	BR20171105970	20150928
CN106604904 A	20170426	CN201580045737	20150928
CN107074648 A	20170818	CN201580050267	20150928
EP3202730 A1	20170809	EP20150846128	20150928
EP3202730 A4	20180502	EP20150846128	20150928
EP3202733 A1	20170809	EP20150846965	20150928
EP3202733 A4	20180425	EP20150846965	20150928
IN201737006168 A	20170519	IN201737006168	20170221
IN201737006169 A	20170519	IN201737006169	20170221
JP2016052421 A1	20170427	JP20150550886T	20150928
JP2016052422 A1	20170427	JP20150550876T	20150928
JP2016169153 A2	20160923	JP20160107436	20160530
JP2016188171 A2	20161104	JP20160107434	20160530
JP5953439 B1	20160720	JP20150550876T	20150928
JP5953440 B1	20160720	JP20150550886T	20150928
KR20170063504 A	20170608	KR20177000684	20150928
KR20170063515 A	20170608	KR20177003769	20150928
MX2017003688 A1	20170630	MX20170003688	20150928
MX2017003690 A1	20170630	MX20170003690	20150928
US2017274630 AA	20170928	US20150509129	20150928
US2017274631 AA	20170928	US20150509057	20150928
WO16052421 A1	20160407	WO2015JP77347	20150928
WO16052422 A1	20160407	WO2015JP77348	20150928

Priority:

JP20140198475 20140929 JP20140202610 20140930 JP20150550876T 20150928
JP20150550886T 20150928 WO2015JP77348 20150928 WO2015JP77347 20150928
JP20160107436 20160530 JP20160107434 20160530

Probable Assignee: SEKISUI CHEMICAL CO LTD

Assignee(s): (std): SEKISUI CHEMICAL CO LTD

Assignee(s): SEKISUI CHEM CO LTD ; SEKISUI CHEMICAL CO

Inventor(s): (std): OOTA YUSUKE ; OOTA YUSUKE ; TSUNODA RYUTA ; YUUSUKE OOTA ; RYUTA TSUNODA

Agent(s): TER MEER STEINMEISTER AND PARTNER; MIYAZAKI AND METSUGI

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: MULTILAYER FILMS OF PLASTICIZER-CONTAINING POLYVINYL ACETAL WITH PHOTOCHROMIC PROPERTIES

Abstract: Photochromic interlayer films for laminated glass are composed of at least two individual films based on plasticizer-containing polyvinyl acetal, individual films of the interlayer film containing at least one photochromic compound, wherein the individual films having photochromic compounds have glass transition temperatures which differ from each other by at least 5 K.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/18 B32B27/22 B32B27/30 B32B27/42 B32B7/02 B32B7/12 C08L29/14 (Advanced/Invention)

CPC: B32B7/12 B32B27/42 B32B27/08 B32B17/10605 B32B2307/40 B32B2605/00 B32B2419/00 B32B17/10036 B32B27/18 B32B27/22 B32B2307/102 B32B2605/006 B32B7/02 B32B17/10486 B32B17/10761 B32B27/306 B32B17/10587 B32B17/10651 B32B2250/03 B32B2367/00 B32B2605/08 B32B17/10018

US: 428/212

Family:

Publication number	Publication date	Application number	Application date
CN105504620 A	20160420	CN201510643298	20151008
EP3006202 A1	20160413	EP20140188179	20141008
EP3006203 A1	20160413	EP20150188281	20151005
JP2016074214 A2	20160512	JP20150199225	20151007
US2016101595 AA	20160414	US20150854105	20150915

Priority:

EP20140188179 20141008 EP20150188281 20151005 JP20150199225 20151007

Probable Assignee: KURARAY CO LTD

Assignee(s): (std): KURARAY CO LTD ; KURARAY EUROPE GMBH

Inventor(s): (std): MUGURUMA SHINICHI ; ROKUSHA SHINICHI

Agent(s): KISTERS MICHAEL MARCUS

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

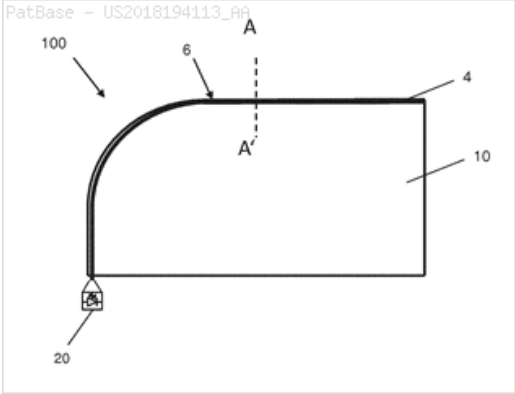
Title: COMPOSITE PANE WITH ILLUMINATION

Abstract: Composite pane, in particular a laminated side pane for a side window of a vehicle. The composite pane includes an outer pane and an inner pane that are bonded to one another via a thermoplastic intermediate layer. The intermediate layer has, at least in some sections, a cutback relative to a pane edge, and at least one light-diffusing optical fiber. The optical fiber is at least partially arranged in the region of the cutback, between the outer pane and the inner pane.

Classifications:

International (IPC 8-9): B32B1/04 B32B17/02 B32B17/10 B32B3/02 B32B38/00 B32B5/02 B32B7/12 B60J1/00 B60Q1/00 B60Q1/26 C03C27/12 C09J133/08 C09J133/12 F21V33/00 F21V8/00 G02B6/00 H05B3/86 (Advanced/Invention)

CPC: B32B17/10761 G02B6/00 B60Q1/00 B32B1/04 B32B3/08 B32B17/067 B32B17/10844 B32B37/12 B32B38/0004 B32B2262/101 B32B2307/40 B32B2605/08 B60J1/001 C09J133/08 C09J133/12 B32B2605/006 G02B6/001 B60Q1/268 B60Q1/2696 H05B3/86 B32B3/02 B32B7/12 B32B5/02 B32B2250/03 B32B2260/021 B32B2307/42 G02B6/0006 B32B17/10036 B32B17/10541



Family:

Publication number	Publication date	Application number	Application date
CA2992398 AA	20180112	CA20162992398	20160815
CN106660870 A	20170510	CN201680001680	20160815
EP3334598 A1	20180620	EP20160753895	20160815
ID201807819 A	20180727	ID2018P0001026	20160815
KR20180031006 A	20180327	KR20187004016	20160815
US2018194113 AA	20180712	US20160741244	20160815
WO17029254 A1	20170223	WO2016EP69323	20160815

Priority:

EP20150181016 20150814 WO2016EP69323 20160815

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): KLEIN MARCEL ; BAYER HERBERT ; DORNER DIRK

Inventor(s): (std): BAYER HERBERT ; DERNER DIRK ; KLEIN MARCEL ; DOERNER DIRK ; DORNER DIRK

Agent(s): GOUDREAU GAGE DUBUC ; LENDVAI TOMAS ; IR MIGNI MYRIASANDRA NOERHADI SH MIP MSEL ; GEBAUER DIETER

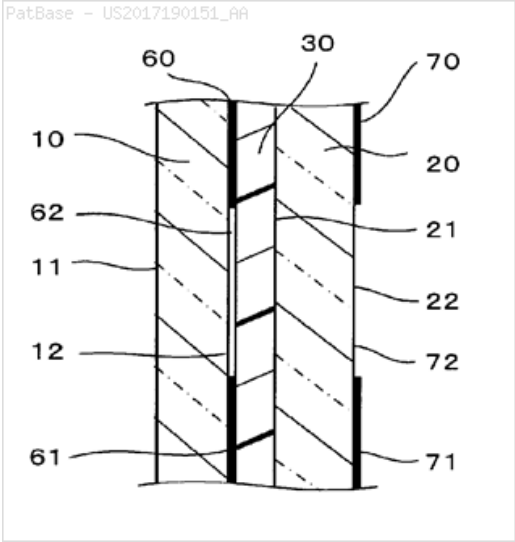
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW 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: 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
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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: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): HAMANO SUNAO ; HAMANO TADASHI ; YAJIMA TOSHIMI

Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; EIKOH PATENT FIRM PC

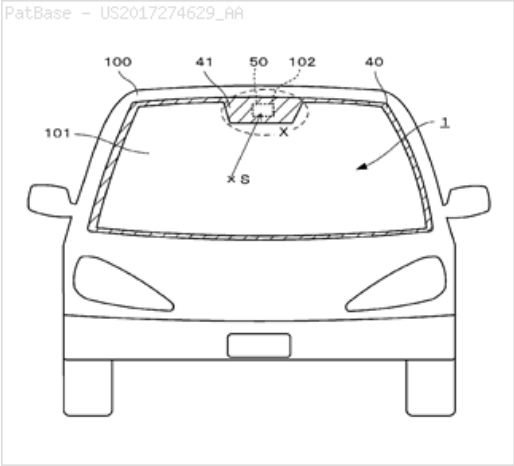
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO
PL PT RO RS SE SI SK SM TR

Title: LAMINATED GLASS

Abstract: A laminated glass includes a glass plate including a first plane compressive region having a prescribed width inside an outer peripheral edge of the glass plate in a plan view, a first plane tensile region adjacent to an inner peripheral side of the first plane compressive region and having a prescribed width, a neutral region occupying an inner peripheral side of the first plane tensile region, and a second plane compressive region located on an inner peripheral side of the first plane compressive region in a plan view.

Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 B60J1/02 B60J1/18 C03C27/12 C03C3/076 C03C3/078 C03C3/083 C03C3/085 C03C3/087 C03C3/091 C03C3/093 (Advanced/Invention)
CPC: B32B17/10082 B32B17/10036 B32B17/10761 B32B17/10788 B32B2307/412 B32B2605/08 B60J1/02 B32B17/10091 B32B17/10348 B32B17/10889 B60R11/04 B60R2011/0026 B60J1/00 B32B17/1055 C03C3/076 C03C3/078 C03C3/083 C03C3/085 C03C3/087 C03C3/091 C03C3/093



Family:

Publication number	Publication date	Application number	Application date
CN107234945 A	20171010	CN201710188137	20170327
EP3228455 A1	20171011	EP20170000497	20170324
JP2017178641 A2	20171005	JP20160064500	20160328
US2017274629 AA	20170928	US20170468261	20170324

Priority:

JP20160064500 20160328

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): ATSUSHI NAKANO ; HIROSHI HORI ; HORI HIROMI ; HORI HIROSHI ; KAZUSHIGE YODA ; NAKANO ATSUSHI ; TOSHIMI YAJIMA ; YAJIMA TOSHIMI ; YODA KAZUNARI ; YODA KAZUSHIGE

Agent(s): MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; EIKOH PATENT FIRM PC

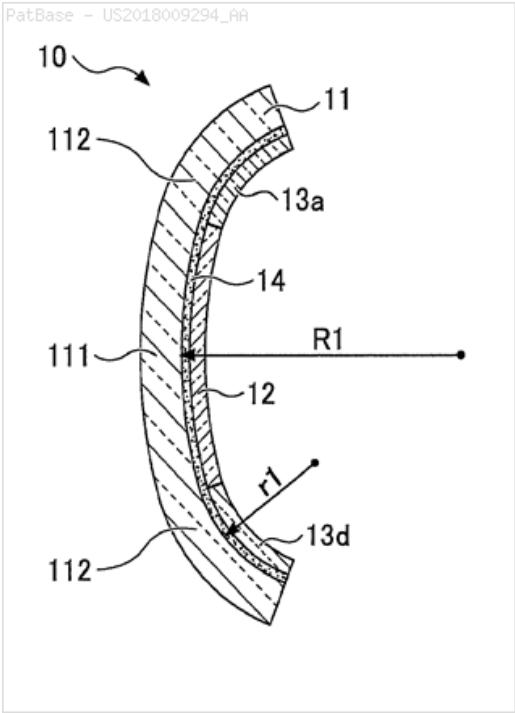
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Title: LAMINATED GLASS AND VEHICLE WINDOW

Abstract: A laminated glass includes a first glass plate; a second glass plate with a plate thickness which is less than a plate thickness of the first glass plate; and an intermediate film. The first glass plate and the second glass plate are laminated via the intermediate film. An external dimension of the second glass plate is less than an external dimension of the first glass plate. At least a part of an outer peripheral edge of the second glass plate is located on an inner periphery side with respect to an outer peripheral edge of the first glass plate.

Classifications:

International (IPC 8-9): B32B17/00 B32B17/06 B32B17/10 B32B3/02 B32B3/18 B60J1/00 B60J1/02 B60K35/00 C03C27/12 (Advanced/Invention); B60J1/02 G02B27/01 (Advanced/Non-invention)
CPC: B60J1/00 B60K35/00 B32B17/06 B60K2350/921 B32B2309/105 B60J1/02 B32B2605/006 B60K2350/94 G02B27/0101 B32B3/02 B32B3/18 B32B17/10036 B32B17/10091 B32B17/10137 B32B17/10348 B32B17/10633 B32B17/10651 B32B17/10761 B32B17/10293 B32B1/04 B32B3/14



Family:

Publication number	Publication date	Application number	Application date
CN107584833 A	20180116	CN201710532734	20170703
EP3266610 A1	20180110	EP20170179490	20170704
JP2018002567 A2	20180111	JP20160134373	20160706
US2018009294 AA	20180111	US20170640779	20170703

Priority:

JP20160134373 20160706

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): MORI SATORU ; MORI SATOSHI ; NARITA MAKOTO ; WATANABE ITSURO ; WATANABE LTSURO ; YAJIMA TOSHIMI ; YAMAKAWA HIROSHI

Agent(s): MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; ITOH TADASHIGE; ITOH TADAHIKO

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

Title: AUTOMOTIVE GLAZING STRUCTURE

Abstract: An automobile windshield that incorporates, as part of its laminated structure, a protective laceration inhibiting cover or shield, bonded to its inboard glass surface and combining a penetration resisting multi-layer body with an exposed surface that is resistant to weathering and wear. Claims, 4 Drawing Figures

Classifications:

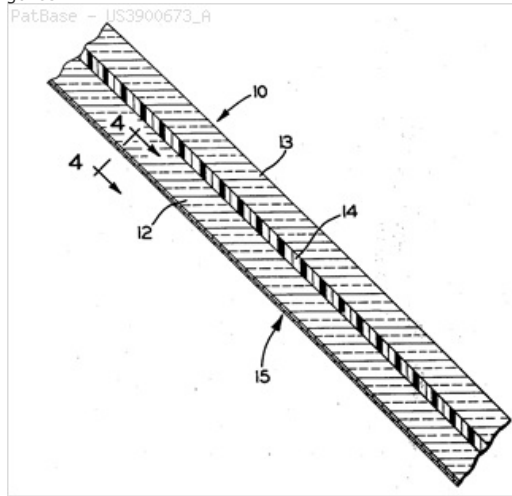
International (IPC 8-9): B32B17/10 B32B27/08 B32B7/02 B32B7/12 B60J1/00 B60J1/02 C03C17/34 C03C27/12 (Advanced/Invention); B60J1/00 C03C27/12 (Advanced/Non-invention); B32B17/06 B32B27/08 B32B7/02 B32B7/12 B60J1/00 B60J1/02 C03C17/34 C03C27/12 (Core/Invention)

International (IPC 1-7): B32B13/04 B32B17/00 B32B17/04 B32B17/06 B32B17/10 B32B27/40 B32B31/12 B32B7/02 B32B7/12 B32B9/04 B60F1/02 B60J1/00 B60J1/02 B60J1/06 B60R21/00 B60R21/02 C03C17/32 C03C27/10 C03C27/12

CPC: B32B17/10091 B32B17/10036 B32B27/08 Y10T428/269 Y10T428/31 B32B17/10688 Y10T428/2495 Y10T428/24967 Y10T428/3154 Y10T428/31504 Y10T428/31518 Y10T428/3163 Y10T428/31645 Y10T428/31649 Y10T428/31663 Y10T428/31667 Y10T428/31786 Y10T428/31797 Y10T428/31942 B32B17/10302 B32B2307/412 B32B2605/006 B32B7/12 B32B27/36 B32B2307/554 B32B2307/712 B32B2605/08 B32B17/10064 B32B17/1033 B32B17/10743 B32B17/10761 B32B2367/00 B60J1/02 C03C17/3405

European: B32B17/10C22 B32B17/10C4 B32B17/10C6 B32B17/10E16B B32B17/10E22 B32B17/10G12 B32B17/10G24 B32B17/10G28 B32B27/08 B60J1/02 C03C17/34B L32B367/00

US: 156/106 156/108 156/329 156/330 156/99 428/213 428/215 428/220 428/339 428/409 428/411.1 428/415 428/421 428/428 428/437 428/441 428/442 428/446 428/447 428/448 428/451 428/480 428/483 428/524

**Family:**

Publication number	Publication date	Application number	Application date
AR199309 A1	19740823	AR19730249803	19730828
AU197359010 A1	19750213	AU19730059010	19730808
AU470152 B2	19760304	AU19730059010	19730808
BE803902 A	19731217	BE19730134832	19730822
BR7306248 A0	19740725	BR19730006248	19730814
CA988965 A1	19760511	CA19730177997	19730802
DE2343559 A1	19740314	DE19732343559	19730824
DE2343559 C2	19840322	DE19732343559	19730824
FR2197742 A1	19740329	FR19730030954	19730827
FR2197742 B1	19770513	FR19730030954	19730827
GB1433532 A	19760428	GB19730037463	19730807
IT990269 A	19750620	IT19730052042	19730816
JP50046717 A2	19750425	JP19730093227	19730820
JP54010964 B4	19790511	JP19730093227	19730820
LU68296 A	19731024		19730824
NL7311619 A	19740304	NL19730011619	19730823
SE389098 B	19761025	SE19730011595	19730827
SE389098 C	19770203	SE19730011595	19730827
US3900673 A	19750819	US19740505830	19740913
US4059469 A	19771122	US19760646464	19760105
ZA7305314 A	19740731	ZA19730005314	19730803

Priority:

US19720284137 19720828 US19740438659 19740201 US19740505830 19740913
 US19760646464 19760105

Probable Assignee: LOF GLASS INC

Assignee(s): (std): LIBBEY OWENS FORD CO

Assignee(s): LIBBEY OWENS FORD CO TOLEDO OHIO US ; LIBBEY OWENS FORD COMPANY ; LIBBEY OWENS FORD CY ; LIBBEY OWENS FORD CY 811 MADISON AVENUE TOLEDO OHIO E U A ; LIBBEY OWENS FORD CY 811 MADISON AVENUE TOLEDO OHIO EUA ; LIBBEY OWENS FORD CY US ; LOF GLASS INC ; MATTIMOE PAUL T ; MOTTER THEODORE J ; HERLICZEK SIEGFRIED H ; HOFMANN JOHN J

Inventor(s): (std): MOTTER T J ; MOTTER THEODORE J ; MOTTER THEODORE JAMES ; HERLICZEK S H ; HERLICZEK SIEGFRIED H ; HERLICZEK SIEGFRIED HARRI ; HOFMANN J J ; HOFMANN JOHN J ; HOFMANN JOHN JOSEPH ; MATTIMOE P T ; MATTIMOE PAUL T ; MATTIMOE PAUL TIMOTHY ; MOTTER T ; MATTIMOE P ; HOFMANN J J HERLICZEK S H ; HOFMANN J ; HERLICZEK S

Inventor(s): MATTIMOE PAUL TIMOTHY TOLEDO OHIO US ; J J HOFMANN ; JAMES MOTTER THEODORE ; J J HOFMANN ; JOSEPH HOFMANN JOHN ; HERLICZEK SIEGFRIED HARRI TOLEDO OHIO US ; MOTTER THEODORE JAMES GENOA OHIO US ; P T MATTIMOE ; PAUL TIMOTHY MATTIMOE THEODORE JAMES MOTTER JOHN JOSEPH HOFMANN SIEGFRIED HARRI HEILIG ZEE ; PT MATTIMOE ; S H HERLICZEK ; SH HERLICZEK ; T J MOTTER ; TIMOTHY MATTIMOE PAUL ; TJ MOTTER ; THEODORE JAMES MOTTER ; SIEGFRIED HARRI HERLICZEK ; PAUL TIMOTHY MATTIMOE ; JOHN JOSEPH HOFMANN ; HARRI HERLICZEK SIEGFRIED

Title: DIGITAL COLOR-DESIGN COMPOSITE FOR USE IN LAMINATED GLASS

Abstract: This invention is directed to a plastic composite comprising color images printed onto a polyethylene terephthalate (PET) substrate using digital printing technology. The PET layer is then bonded to a second PET layer using a thermally activated adhesive, preferably ethylene vinyl acetate copolymer (EVA). The bonded PET layers are then disposed between two layers of plasticized PVB, forming the plastic composite. The plastic composite can then be placed between two sheets of glass forming the final laminated glass product.

Classifications:

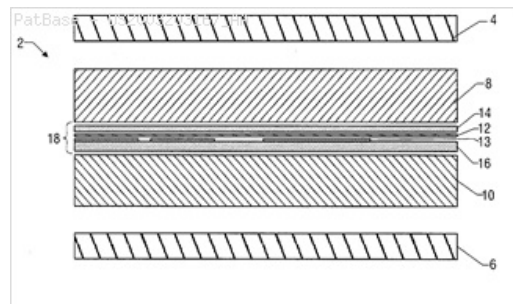
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C09J129/14 C09J131/04 C09J201/00 C09J5/02 (Advanced/Invention);
B32B17/00 B32B17/06 B32B18/00 B32B27/36 B32B9/00 B41M7/00
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C09J201/00 C09J5/02 (Core/Invention)

International (ipc 1-7): B32B17/00 B32B17/06 B32B17/10
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C09J201/00 C09J5/02

CPC: B32B17/10577 B32B17/10018 B32B17/10284 B32B17/10339
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Y10T428/2495 Y10T428/264 Y10T428/28 Y10T428/2813
Y10T428/2848 Y10T428/2874 B32B17/10 B32B17/10036

European: B32B17/10 B32B17/10C2 B32B17/10C4 B32B17/10E12 B32B17/10E12B4 B32B17/10E12B6 B32B17/10E26 B32B17/10G28 B32B17/10G2D B32B17/10G30 B32B17/10G36 B32B17/10L16F B32B17/10L22 B32B27/36

US: 428/13 428/195.1 428/195.100P 428/210 428/210P 428/213 428/220 428/29 428/335 428/335AC 428/343 428/346 428/354 428/355.0AC 428/355.0AK 428/355AC 428/355AK 428/426 428/426P 428/428 428/43 428/430 428/430S 428/435 428/435S 428/436 428/437 428/441 428/474.4 428/480 428/542.2



Family:

Publication number	Publication date	Application number	Application date
AT406259 E	20080915	AT20030726514T	20030428
AU2003228745 AA	20031117	AU20030228745	20030428
AU2003228745 BB	20080403	AU20030228745	20030428
BRPI0309749 A	20050215	BR2003PI09749	20030428
CA2483411 AA	20041025	CA20032483411	20030428
CN100398314 C	20080702	CN20038015584	20030428
CN1665680 A	20050907	CN20038015584	20030428
DE60323219 D1	20081009	DE20036023219	20030428
EP1499494 A1	20050126	EP20030726514	20030428
EP1499494 B1	20080827	EP20030726514	20030428
ES2307935 T3	20081201	ES20030726514T	20030428
JP2005523866 T2	20050811	JP20040501155T	20030428
JP4410096 B2	20100203	JP20040501155T	20030428
KR20050020785 A	20050304	KR20047017500	20030428
MXPA04010886 A1	20050125	MX2004PA10886	20030428
NO20044823 A	20050128	NO20040004823	20041105
NO20044823 A0	20041105	NO20040004823	20041105
PL373321 A1	20050822	PL20030373321	20030428
RU2004134734 A	20050510	RU20040134734	20030428
RU2297330 C2	20070420	RU20040134734	20030428
TH64403 A	20040930	TH20031001629	20030429
US2003203167 AA	20031030	US20030443541	20030522
US2003203214 AA	20031030	US20020135417	20020430
US2006078716 AA	20060413	US20050193885	20050729
US6824868 BB	20041130	US20020135417	20020430
US7727634 BB	20100601	US20050193885	20050729
WO03092999 A1	20031113	WO2003US13236	20030428
ZA200408716 A	20050830	ZA20040008716	20041027

Priority:

US20020135417	20020430	WO2003US13236	20030428	US20030443541	20030522
KR20047017500	20041029	US20050193885	20050729		

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC ; YACOVONE VINCENT J ; SOLJUTIA INK

Assignee(s): SOLUTIA SYSTEMS INC ; ABLECO FINANCE LLC ; ABLECO FINANCE LLC AS COLLATERAL AGENT ; ABLECO FINANCE LLC COLLATERAL AGENT AS ; BELL WILLIAM PAUL ; CITIBANK NA ; CPFILMS INC ; MONCHEM INC ; MONCHEM INT ; FLEXSYS AMERICA LP ; DEUTSCHE BANK TRUST CO ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT A ; MONCHEM INT INC ; MORAN JAMES R ; DEUTSCHE BANK TRUST CO AMERICAS COLLATERAL AGENT AS ; SOL LOU TIA INN KO PO RAY LTD

Inventor(s): (std): BELL WILLIAM P ; BELL WILLIAM PAUL ; JAKOVONE VINSENT DZH ; BELL UILL JAM POL ; JAMES R MORAN ; MORAN DZHEJMS R ; MORAN JAMES R ; PAUL BELL WILLIAM ; VINCENT J YACOVONE ; WILLIAM PAUL BELL ; YACOVONE VINCENT J ; YACOVONE VINCET J ; YACOVONE VINCENT ; MORAN JAMES ; BELL WILLIAM

Inventor(s): BELL UILL'JAM POL

Agent(s): BALDWIN'S INTELLECTUAL PROPERTY; NELLIGAN O BRIEN PAYNE LLP; ALBRECHT THOMAS ET AL; HITOSHIO AKIO; TSUBOKURA MICHIAKI; ONO MAKOTO; OSAKI KATSUMASA; KAWAGUCHI YOSHIO; HOWREY LLP; DOWELL AND DOWELL PC; ROBERT J.; JOHN P

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LD LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI 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 UZ VN YU ZA ZM ZW

Title: GLASS LAMINATES FOR REDUCTION OF SOUND TRANSMISSION

Abstract: The present invention is a glass laminate having sound attenuation properties that make it suitable for use as acoustic glazing in architectural applications and/or in vehicles.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/06 B32B27/08 B32B27/28 B32B27/30 B32B27/32 B32B27/36 B32B27/40 B60J1/00 B60J7/04 C03C27/12 C08J5/12 C08J7/04 C08L39/02 E06B5/20 G10K11/16 G10K11/162 G10K11/168 (Advanced/Invention); B32B17/10 B32B27/08 C08J5/12 G10K11/168 (Advanced/Non-invention);

B32B17/06 B32B27/06 B32B27/08 B32B27/28 B32B27/30 B32B27/32 B32B27/36 B32B27/40 B60J1/00 B60J7/04 C03C27/12 C08J5/12 C08J7/00 C08L39/00 E06B5/00 G10K11/00 (Core/Invention)

International (IPC 1-7): B32B17/10 B32B27/08 B32B27/30 B32B27/36 C08J5/12 C08J7/04 C08L39/02 G10K11/168

CPC: Y10T428/2852 B32B27/30 B29C55/023 B32B17/10036 B32B17/1055 B32B17/10743 B32B17/10761 B32B27/22 B32B27/36 B32B2250/03 B32B2250/24 B32B2255/10 B32B2255/24 B32B2307/102 B32B2419/00 B32B2605/006 B32B2605/08 Y10T428/31507 Y10T428/31551 Y10T428/31565 Y10T428/31616 Y10T428/31645 Y10T428/31649 Y10T428/31736 Y10T428/31786 Y10T428/31797 Y10T428/31855 Y10T428/31935 Y10T428/31938 B32B17/10 B32B27/08 G10K11/168

European: B29C55/02B B32B17/10 B32B17/10C4 B32B17/10G B32B17/10G24 B32B17/10G28 B32B27/08 B32B27/22 B32B27/30 B32B27/36 G10K11/168 L32B250/03 L32B250/24 L32B255/10 L32B255/24 L32B307/102 L32B419/00 L32B605/00D L32B605/08

US: 428/335R 428/355.00R 428/355R 428/412 428/412P 428/423.1 428/423.100S 428/423.7 428/423.700P 428/426 428/426S 428/430 428/441 428/441S 428/442 428/475.2 428/475.200S 428/480 428/480S 428/483 428/483S 428/500 428/500S 428/522 428/522S 428/523 428/523S

PatBase - KR20070063513_A

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Family:

Publication number	Publication date	Application number	Application date
CN101031419 A	20070905	CN200580031456	20050920
EP1802460 A1	20070704	EP20050798175	20050920
JP2008513342 T2	20080501	JP20070532647T	20050920
KR20070063513 A	20070619	KR20077006235	20070319
US2006063007 AA	20060323	US20050230812	20050919
US2007298264 AA	20071227	US20070881213	20070726
US7297407 BB	20071120	US20050230812	20050919
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WO06034346 A1	20060330	WO2005US33834	20050920

Priority:

US20040611596P 20040920 US20050230812 20050919 WO2005US33834 20050920
US20070881213 20070726

Probable Assignee: E I DU PONT DE NEMOURS AND CO

Assignee(s): (std): ANDERSON JERREL C ; DU PONT ; E I DU PONT DE NEOUR AND COMPA ; EIDU PONT DE NEMOURS AND CO

Assignee(s): E I DU PONT DE NEOUR AND COMPANY ; EI DUPONT DE NEMOURS AND CO ; E I DUPONT DE NEMOURS AND COMPANY ; EI DU PONT DE NEOUR AND CO ; EI DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY

Inventor(s): (std): ANDERSON JERREL C

Inventor(s): ANDERSON JERREL

Agent(s): KUMAKURA YOSHIO; OGAWA NOBUO; HAKODA ATSUSHI; HIRAYAMA KOJI; ASAI KENJI; E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER; E I DU PONT DE NEMOURS AND CO LEGAL PATENT RECORDS CENTER; KEVIN; TONG; MARK

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

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

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

Classifications:

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

B32B15/04 B32B17/00 B32B17/06 B32B17/10 B32B33/00
B32B38/00 B32B7/02 B32B9/00 B60J1/00 B60J1/02 B60J1/20
C03C17/09 C03C17/22 C03C17/23 C03C17/245 C03C17/34
C03C17/36 C03C25/52 C03C27/06 C09D5/00 C23C14/00
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C23C28/04 E04D13/03 E06B3/66 E06B3/663 E06B3/67 E06B3/677
E06B7/00 E06B7/12 F21S4/00 F21V33/00 F21V5/04 F25D21/04
F25D23/02 G02B1/11 G02B3/00 H05B3/00 H05B3/02 H05B3/14
H05B3/16 H05B3/84 H05B33/22 (Advanced/Invention);
B82Y30/00 E04D13/03 F21Y115/10 F21Y115/15
F25D23/02 (Advanced/Non-invention);
C03C17/34 (Core/Invention)

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

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C03B25/00 E03B7/12 C03C27/06 C03C2217/71 F21S43/235 F21S43/239 F21S43/245 F21S43/26 F27B5/14 F27B5/18

C03C17/3435 C03C2217/948 C03C2218/32 G02B1/115 G02B27/0006 C23C14/08

European: C03C17/34D2 C03C17/34D4B C03C17/36 C03C17/36B320 C03C17/36B332 C03C17/36B342 C03C17/36B352L

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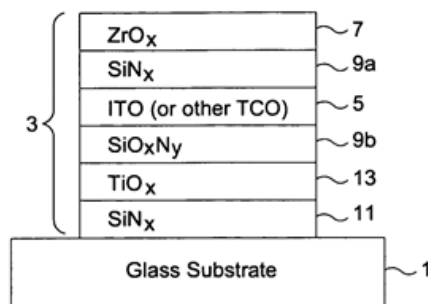
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428/432 428/434 428/446 428/446S 428/448 428/448S 428/450 428/697 428/698 428/699 428/701 428/702 428/704

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

PatBase - US2011210656_AA



Family:

Publication number	Publication date	Application number	Application date
BR112012021452 A2	20160531	BR20121121452	20101206
BR112013014077 A2	20160920	BR20131114077	20111129
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CA2819242 AA	20130528	CA20112819242	20111129
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CN104114510 A	20141022	CN201280069795	20121213
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CN106977116 A	20170725	CN201610838860	20121213
DE602010034716 D1	20160825	DE201060034716T	20101206
EP2539291 A1	20130102	EP20100795490	20101206
EP2539291 B1	20160713	EP20100795490	20101206
EP2649020 A2	20131016	EP20110797073	20111129
EP2794501 A1	20141029	EP20120809049	20121213
EP2834557 A2	20150211	EP20130717913	20130402
EP3141534 A1	20170315	EP20160177756	20101206
ES2596903 T3	20170112	ES20100795490T	20101206
IN04976DN2014 A	20150320	IN2014DN04976	20140618
IN06984DN2012 A	20140221	IN2012DN06984	20120809
JP2015504035 T2	20150205	JP20140549147T	20121213
JP2017206435 A2	20171124	JP20170122080	20170622
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KR20140116424 A	20141002	KR20147020231	20121213
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MX2014007424 A1	20150303	MX20140007424	20121213
PL2539291 T3	20170131	PL20100795490T	20101206
RU2012141044 A	20140410	RU20120141044	20101206
RU2013131005 A	20150120	RU20130131005	20111129
RU2014129498 A	20160210	RU20140129498	20121213
RU2613236 C2	20170315	RU20130131005	20111129
RU2613652 C2	20170321	RU20120141044	20101206
RU2639765 C2	20171222	RU20140129498	20121213
TH128178 A	20131015	TH20121004339	20101206
TH154805 A	20160728	TH20141003559	20121213

TR201614162 T4	20161021	TR20160014162T	20101206
US2011210656 AA	20110901	US20100662894	20100510
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Priority:

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Probable Assignee: GUARDIAN GLASS LLC

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

Assignee(s): CENTRE LUXEMBOURG DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE CRVC SA ; SRVS ; SANTR LYUKSAMBURZHUA DE RESHERSH PUR LE VERR E LYA SERAMIK SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SARL ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SA CRVC ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE RL SA ; GUARDIAN INDUSTRIES CORP ; GUARDIAN IND CORP ; MURPHY

NESTOR ; GUARDIAN IND CORP2300 HARMON ROAD AUBURN HILLS MI 48326-1714 US ; PALLOTA PIERRE ; GUARDIAN IND CORP AUBURN HILLS ; GUARDIAN EUROPE SARL ; GUARDIAN INDUSTRIES CORP CRVC ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE (CRVC) SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SAZONE INDUSTRIELLE WOLSERL-3452 DUDELANGELU ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET AL CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET AL CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SA

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

Inventor(s): LAGE HERBERT LU ; FERREIRA JOSE LU ; BLACKER RICHARD US ; MCLEAN DAVID DUS ; LEMMER JEAN MARCUS ; MURPHY NESTOR US ; NESTOR P MURPHY ; PALLOTA PIERRE FR

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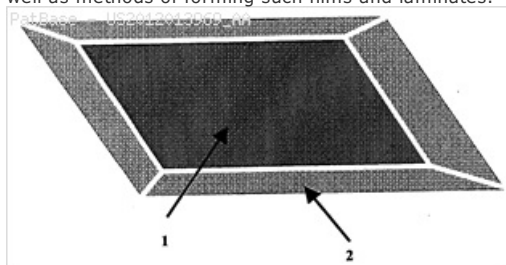
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Title: SPD FILMS AND LIGHT VALVE LAMINATES WITH IMPROVED DURABILITY

Abstract: A moisture-resistant suspended particle device film comprising a cured suspended particle device emulsion having a plurality of uncrosslinked droplets of a liquid light valve suspension distributed throughout the cured emulsion; first and second glass or plastic sheets located outwardly from and sandwiching the cured emulsion, wherein located on an inner aspect of each sheet, adjacent the cured emulsion, is a thin, transparent, electrically conductive coating, the coating serving as an electrode to permit passage of an applied electric field through the cured emulsion; and a moisture-resistant barrier located around an entire outer peripheral edge portion of the film, wherein the barrier is comprised of a barrier material that eliminates or at least reduces passage of moisture from outside the film into the cured emulsion, thus preventing development of a light-frame pattern in the film that would otherwise be caused by the moisture. The disclosure also discloses forming a laminate comprising the above-described film, as well as methods of forming such films and laminates.

Classifications:

International (IPC 8-9): B29C65/48 B32B27/08 B32B27/20 B32B27/30 B32B27/36 B32B27/40 B32B3/02 B32B7/02 B32B7/12 G02B26/00 G02F1/167 G02F1/17 G02F1/19 G09G3/34 G2F1/17 H01R4/04 (Advanced/Invention)
CPC: G02F1/172 B32B17/10036 B32B17/10302 B32B17/10532 B32B17/10761 B32B17/1077 B32B17/10788 G02B1/105 G02B1/10 B32B3/02 B32B7/12 B32B27/08 B32B27/20 B32B27/306 B32B27/36 B32B27/40 B32B2255/10 B32B2255/20 B32B2307/40 B32B2307/41 B32B2307/412 B32B2307/7246 B32B2551/00 G02B1/14 G02B1/18
European: B32B17/10C4 B32B17/10E16B B32B17/10E40D68 B32B17/10G28 B32B17/10G30 B32B17/10G36 S02B1/10B
US: 156/313 156/313S 345/107 359/296 359/296P 359/507 359/513

**Family:**

Publication number	Publication date	Application number	Application date
AU2011279272 AA	20120119	AU20110279272	20110713
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CA2800137 AA	20121120	CA20112800137	20110713
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CN103003746 A	20130327	CN201180034705	20110713
CN103003746 B	20160518	CN201180034705	20110713
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EP2593833 A4	20170524	EP20110807427	20110713
IN00345DN2013 A	20141010	IN2013DN00345	20130111
JP2013532844 T2	20130819	JP20130519784T	20110713
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KR20130090407 A	20130813	KR20137003321	20110713
US2012013969 AA	20120119	US20110182087	20110713
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WO12009399 A1	20120119	WO2011US43797	20110713

Priority:

US20100363934P 20100713 JP20130519784T 20110713 US20110182087 20110713
 WO2011US43797 20110713 JP20160116967 20160613

Probable Assignee: RESEARCH FRONTIERS INC

Assignee(s): (std): CHEN XIAO PING ; RES FRONTIERS INC ; RESEARCH FRONTIERS INC ; SAXE ROBERT L ; SLOVAK STEVEN M ; WANG DONGYAN

Inventor(s): (std): WANG DONGYAN ; SLOVAK STEVEN M ; SAXE ROBERT L ; CHEN XIAO PING

Agent(s): GRIFFITH HACK; MCCARTHY TETRAULT LLP; WALCHER ARMIN; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; NISHIJIMA TAKAKI; OSTROLENK FABER LLP; FARLEY MARK A ET AL

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: BIAXIALLY STRETCHED LAMINATED POLYESTER FILM, INFRARED LIGHT SHIELDING STRUCTURE FOR LAMINATED GLASS COMPOSED OF THE SAME, AND LAMINATED GLASS COMPOSED OF THE SAME

Abstract: Provided are a biaxially stretched laminated polyester film and a laminated glass composed of the same. Specifically, the invention is achieved by a biaxially stretched laminated polyester film including 51 layers or more in total, in which a first layer and a second layer are alternately laminated, wherein a polyester (A) constituting the first layer is polyethylene-2,6-naphthalenedicarboxylate; a polyester (B) constituting the second layer is a polyester containing at least one of an ethylene terephthalate component and an ethylene naphthalene dicarboxylate component; an average reflectance within a wavelength range of 400 to 750 nm is not more than 25 percent; an average reflectance within a wavelength range of 800 to 1,200 nm is 50 percent or more; and a Young's modulus of the film at 90 degrees centigrade is 2,400 MPa or more in at least one direction of the longitudinal direction and the lateral direction of the film.

Classifications:
International (IPC 8-9): B32B15/00 B32B15/04 B32B15/08 B32B15/09 B32B17/10 B32B27/00 B32B27/06 B32B27/08 B32B27/18 B32B27/30 B32B27/32 B32B27/36 B32B7/00 B32B7/02 B32B7/10 B32B9/00 B60J1/00 C03C27/12 G02B5/28 (Advanced/Invention)
CPC: B32B7/005 B32B7/02 B32B15/08 B32B15/09 B32B27/18 B32B27/306 B32B27/32 B60J3/007 G02B5/282 B32B17/10678 B32B2250/05 B32B2250/42 B32B2307/418 B32B2307/518 B32B2307/416 B32B2307/54 B32B2367/00 B32B2551/00 B32B2605/006 B32B27/08 Y10T428/24975 Y10T428/265 Y10T428/31616 Y10T428/3163 Y10T428/31786 B32B27/36 B32B7/12 B32B2250/244 B32B2255/10 B32B2255/205 B32B2255/26 B32B2307/30 B32B2307/306 B32B2307/732 B32B17/10174 B32B17/10743 B32B17/10761 B32B17/10788
US: 359/359 359/360 428/216 428/336 428/430 428/437 428/480

Family:

Publication number	Publication date	Application number	Application date
CN104066580 A	20140924	CN201280068069	20121128
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Priority:
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Probable Assignee: TEIJIN DUPONT FILMS JAPAN LTD
Assignee(s): (std): TEIJIN DUPONT FILMS JAPAN LTD
Assignee(s): TEIJIN DUPONT FILMS JAPAN LIMITED
Inventor(s): (std): ONO MITSUMASA ; OYA TARO ; YOSHIDA TETSUO ; YOSHIMURA TOMOKA
Agent(s): HALLYBONE HUW GEORGE; TAMEYAMA TARO
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

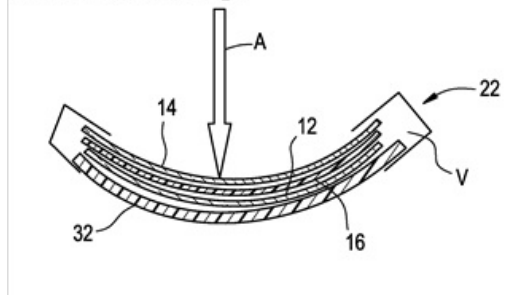
Title: PROCESS FOR LAMINATING THIN GLASS LAMINATES

Abstract: A process using a vacuum ring or vacuum bag to produce glass laminates with improved optical distortion and shape consistency using thin glass having a thickness not exceeding 1.0 by using a soak temperatures not exceeding 120 degrees centigrade or not exceeding 100 degrees centigrade and a vacuum not exceed about -0.6 bar. One or more assembled stacks of two glass sheets and a polymer interlayer being laminated may be stacked on a single reference mold and processed simultaneously in a single vacuum bag or vacuum ring. One more thin glass sheets may be placed on top the assembled stack(s) on the reference mold to protect the assembled stack from irregular forces applied by the vacuum bag or the vacuum ring.

Classifications:

International (IPC 8-9): B32B17/10 B32B37/06 B32B37/10
B32B37/18 C03B23/035 C03C27/10 C03C27/12 (Advanced/Invention)
CPC: B32B17/10137 B32B17/10743 B32B17/10761 B32B17/1077
B32B17/10788 B32B17/10853 B32B17/1088 B32B17/10889
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B32B2250/40 B32B2307/10 B32B17/10036 Y10T156/1044
US: 156/222 156/285

PatBase - US2015122406_AA



Family:

Publication number	Publication date	Application number	Application date
EP2858822 A1	20150415	EP20130729888	20130606
JP2015521575 T2	20150730	JP20150516206T	20130606
JP2016175835 A2	20161006	JP20160082743	20160418
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US2015122406 AA	20150507	US20130405668	20130606
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Priority:

US20120657272P 20120608 JP20150516206T 20130606 WO2013US44493 20130606
US20130405668 20130606 JP20160082743 20160418

Probable Assignee: CORNING INC

Assignee(s): (std): CORNING INC ; FISHER WILLIAM KEITH ; MOORE MICHAEL JOHN ; MOYER STEVEN LUTHER ; SHENG HUAN HUNG ; SMITH LARRY GENE

Inventor(s): (std): FISHER WILLIAM KEITH ; LARRY GENE SMITH ; MOYER STEVEN LUTHER ; SHENG HUAN HUNG ; MOORE MICHAEL JOHN ; MICHAEL JOHN MOORE ; SMITH LARRY GENE ; WILLIAM KEITH FISHER ; STEVEN LUTHER MOYER

Agent(s): OLDROYD RICHARD DUNCAN; HARDEE RYAN T

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

Title: METHODS FOR PRODUCING ION EXCHANGED GLASS AND RESULTING APPARATUS

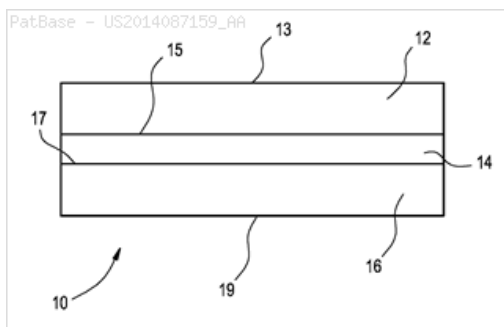
Abstract: A laminate structure having a first glass layer, a second glass layer, and at least one polymer interlayer intermediate the first and second glass layers. The first glass layer is comprised of a thin, chemically strengthened glass having a surface compressive stress of between about 250 MPa and about 350 MPa and a depth of layer (DOL) of compressive stress greater than about 60 micro m. The second glass layer can also be comprised of a thin, chemically strengthened glass having a surface compressive stress of between about 250 MPa and about 350 MPa and a depth of layer (DOL) of compressive stress greater than about 60 micro m.

Classifications:

International (IPC 8-9): B32B17/00 B32B17/10 B32B3/26 B32B7/02 C03C15/00 C03C21/00 C03C23/00 C03C27/10 C03C27/12 C03C3/085 C03C3/095 (Advanced/Invention)

CPC: B32B17/10743 B32B17/1077 B32B17/10788 B32B7/02 B32B2307/50 C03C3/085 C03C3/095 C03C27/10 Y10T428/2495 Y10T428/24967 Y10T428/24983 Y10T428/269 Y10T428/315 B32B17/10119 B32B17/10036 B32B17/10761 C03C15/00 B32B3/263 B32B2250/03 B32B2250/40 B32B2605/006 B32B2419/00 C03C21/002 B32B17/10137

US: 1/1 428/213 428/215 428/217 428/339 428/410 65/30.14



Family:

Publication number	Publication date	Application number	Application date
CN104812572 A	20150729	CN201380050054	20130923
CN105492205 A	20160413	CN201480046872	20140623
EP2900471 A1	20150805	EP20130771726	20130923
EP3013580 A1	20160504	EP20140740069	20140623
IN11660DN2015 A	20160513	IN2015DN11660	20151222
JP2015534536 T2	20151203	JP20150533246T	20130923
JP2016528139 T2	20160915	JP20160521881T	20140623
JP6080279 B2	20170215	JP20150533246T	20130923
KR20150060782 A	20150603	KR20157009904	20130923
KR20160024947 A	20160307	KR20167001806	20140623
US2014087159 AA	20140327	US20130926461	20130625
US2014087193 AA	20140327	US20120626958	20120926
US2016280591 AA	20160929	US20160178901	20160610
US9387651 BB	20160712	US20130926461	20130625
WO14052229 A1	20140403	WO2013US61164	20130923
WO14209861 A1	20141231	WO2014US43619	20140623

Priority:

US20120626958 20120926 US20130926461 20130625 WO2013US61164 20130923
 WO2014US43619 20140623 US20160178901 20160610

Probable Assignee: CORNING INC

Assignee(s): (std): CITES JEFFREY SCOTT ; CLEARY THOMAS MICHAEL ; CORNING INC ; COUILLARD JAMES GREGORY ; MOORE MICHAEL JOHN ; CORNING CO LTD

Inventor(s): (std): CITES JEFFREY SCOTT ; CLEARY THOMAS MICHAEL ; COUILLARD JAMES GREGORY ; HUTEN TIMOTHY SCOTT ; JAIN ANURAG ; MARCELLUS BRENNIA ; MOORE MICHAEL JOHN ; MARCELLUS BRENNIA ELIZABETH

Agent(s): KINGSBURY OLIVER WILLIAM; SCHEUERMANN ERIK; PAYAL A; HARDEE RYAN T

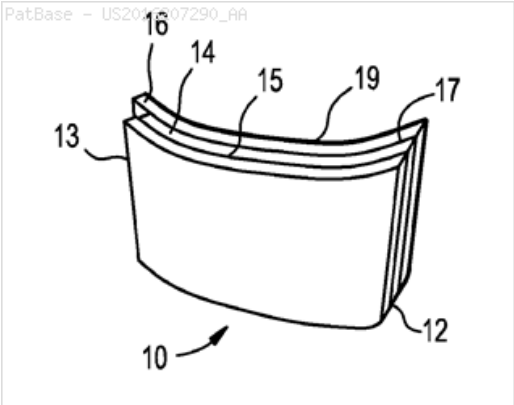
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Title: THIN GLASS LAMINATE STRUCTURES

Abstract: A laminate structure having a first glass layer, a second glass layer, and at least one polymer interlayer intermediate the first and second glass layers. In some embodiments, the first glass layer can be comprised of a strengthened glass having first and second surfaces, the second surface being adjacent the interlayer and chemically polished and the second glass layer can be comprised of a strengthened glass having third and fourth surfaces, the fourth surface being opposite the interlayer and chemically polished and the third surface being adjacent the interlayer and having a substantially transparent coating formed thereon. In another embodiment, the first glass layer is curved and the second glass layer is substantially planar and cold formed onto the first glass layer to provide a difference in surface compressive stresses on the surfaces of the second glass layer.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B37/10 B32B37/18 B60J1/00 C03C15/00 C03C21/00 C03C27/12 (Advanced/Invention)
CPC: B32B17/10174 B32B17/10761 B32B17/10119 B32B17/10743 B32B17/1077 B32B17/10788 B32B17/10366 B32B37/182 B32B2398/00 B32B2315/08 B32B2307/412 B32B2307/558 B32B17/10036 B32B17/10091 B32B17/10137 B32B17/10146 B32B2605/006
US: 428/215



Family:

Publication number	Publication date	Application number	Application date
CN105705330 A	20160622	CN201480059991	20140828
EP3038827 A2	20160706	EP20140762187	20140828
JP2016530204 T2	20160929	JP20160537845T	20140828
KR20160046889 A	20160429	KR20167007845	20140828
US2016207290 AA	20160721	US20140915437	20140828
WO15031594 A2	20150305	WO2014US53122	20140828
WO15031594 A3	20150723	WO2014US53122	20140828

Priority:

US20130871602P 20130829 US20140915437 20140828 WO2014US53122 20140828

Probable Assignee: CORNING INC

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

Inventor(s): (std): CLEARY THOMAS MICHAEL ; EARLY KINTU ODINGA X ; FRISKE MARK STEPHEN ; HART SHANDON DEE ; HU GUANGLI ; MARCELLUS BRENNIA ELIZABETH ; ZHANG CHUNHE

Agent(s): GREENE SIMON KENNETH; HARDEE RYAN T

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: NON-YELLOWING GLASS LAMINATE STRUCTURE

Abstract: A glass laminate structure comprising an internal glass sheet, an external glass sheet, and at least one polymer interlayer intermediate the external and internal glass sheets where the polymer interlayer includes a phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl) additive, a 2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol additive, a 2-(2H-Benzotriazol-2-yl)-6-(1-methyl-1-phenylethyl)-4-(1,1,3,3-tetramethylbutyl)phenol additive, or an hydroxyphenyl substituted benzotriazole additive without a chlorine substituent. In some embodiments, the external and/or internal glass sheets can be formed from non-chemically strengthened glass, and in other embodiments, the external and/or internal glass sheets can be formed from chemically strengthened glass. Use of such an additive can reduce or eliminate discoloration of the polymer interlayer when using high ultraviolet transmission glass sheets.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/18 C03C27/12

C08K5/07 C08K5/13 C08K5/134 C08K5/1575 C08K5/315

C08K5/3475 C08K5/3477 C08K5/357

C08L101/00 (Advanced/Invention)

CPC: B32B17/10678 B32B17/10036 B32B17/10091 B32B17/10137

B32B17/10761 B32B2605/08 C08K5/3475 C08K5/3477 C08K5/07

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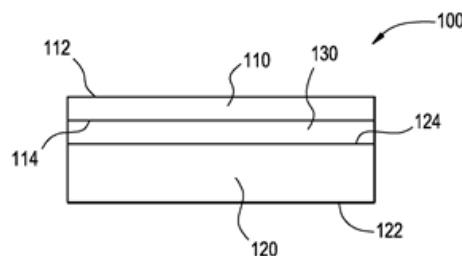
B32B17/10788 B32B2307/71 B32B2605/006 Y10T428/24967

Y10T428/266 Y10T428/269 Y10T428/3163

US: 428/215 428/337 428/339 428/437 524/100 524/108 524/238

524/291 524/359 524/87 524/91

PatBase - US2015158275_AA

**Family:**

Publication number	Publication date	Application number	Application date
CN105980148 A	20160928	CN201480075176	20141204
EP3079904 A1	20161019	EP20140824193	20141204
JP2017501953 T2	20170119	JP20160536985T	20141204
KR20160095143 A	20160810	KR20167018366	20141204
US2015158275 AA	20150611	US20140559345	20141203
US2015158276 AA	20150611	US20140566683	20141210
WO15088866 A1	20150618	WO2014US68476	20141204

Priority:

US20130914144P 20131210

US20140559345 20141203

WO2014US68476 20141204

US20140566683 20141210

Probable Assignee: CORNING INC

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

Inventor(s): (std): D ERRICO JOHN JOSEPH ; FISHER WILLIAM KEITH ; FRISKE MARK STEPHEN ; THOMPSON BENJAMIN BRISTOL

Agent(s): SCHEUERMANN ERIK; 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: LAMINATED SAFETY GLASS

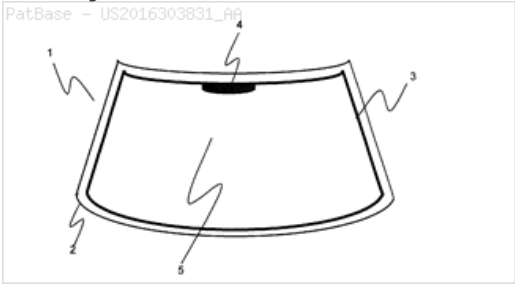
Abstract: A method for producing laminated safety glass includes the steps of applying imagewise a thermally reducible composition including a organic metal salt on a glass surface or a thermoplastic polymeric surface, and heating at least the imagewise applied thermally reducible composition to form a metal from the organic metal salt.

Classifications:

International (IPC 8-9): B32B17/10 B32B37/06 B60J1/00 B60J1/02 B60J3/00 C03C27/12 (Advanced/Invention)

CPC: B60J3/007 B32B37/06 B32B2605/006 B32B2605/08 B32B17/10266 B32B17/10036

US: 428/426



Family:

Publication number	Publication date	Application number	Application date
BR112016013137 A2	20170808	BR20161113137	20141209
CN107073901 A	20170818	CN201480068329	20141209
EP2883694 A1	20150617	EP20130196873	20131212
IN201617019251 A	20160831	IN201617019251	20160603
JP2017500271 T2	20170105	JP20160549640T	20141209
JP6313861 B2	20180418	JP20160549640T	20141209
US2016303831 AA	20161020	US20140100671	20141209
WO15086564 A1	20150618	WO2014EP76982	20141209

Priority:

EP20130196873 20131212 WO2014EP76982 20141209

Probable Assignee: AGFA GEVAERT NV

Assignee(s): (std) AGFA GEVAERT NV ; AGFA GRAPHICS NV

Assignee(s): AGFA NV ; AGFA GRAPHICS N V

Inventor(s): (std) CLOOTS TOM ; FRANSEN GUIDO ; LOCCUFIER JOHAN

Inventor(s): TOM CLOOTS ; GUIDO FRANSEN ; JOHAN LOCCUFIER

Agent(s): STRIJCKERS HANS LOUIS P; STRIJCKERS HANS

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: INTERMEDIATE FILM FOR LAMINATED GLASS, AND LAMINATED GLASS

Abstract: The present invention aims to provide an interlayer film for laminated glass capable of displaying images with a high luminous intensity when irradiated with a light beam, and a laminated glass including the interlayer film for laminated glass. The present invention relates to an interlayer film for laminated glass, including a light-emitting layer that contains a thermoplastic resin and a lanthanoid complex with a polydentate ligand containing a halogen atom, the light-emitting layer containing not more than 50 ppm in total of potassium, sodium, and magnesium.

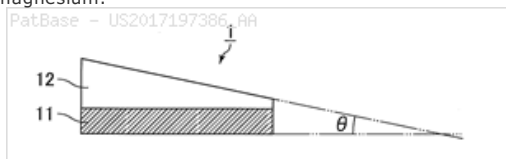
Classifications:

International (IPC 8-9): B32B B32B17/10 B32B27/18 B32B27/20 B32B7/12 B60J B60J1/00 B60J1/02 C03C C03C27/12 C08K C08K5/07 C08K5/56 C08L C08L101/00 C09K11/02

C09K11/06 (Advanced/Invention);
C03C27/12 (Core/Invention)

International (IPC 1-7): B32B27/18 B60J1/00 C03C27/12 C08K5/07 C08L101/00

CPC: B32B17/10568 B32B17/10541 B32B17/10761 B60J1/02 C09K11/025 C09K11/06 C08K5/56 B32B2264/00 B32B2605/08 C09K2211/188 C09K2211/1044 C09K2211/1007 B32B17/10036 B32B17/10669 B32B17/10688 B32B27/18 B32B2307/422



Family:

Publication number	Publication date	Application number	Application date
AU2015297377 AA	20160204	AU20150297377	20150803
BR112017001868 A2	20171128	BR20171101868	20150803
CA2951233 AA	20161205	CA20152951233	20150803
CN106458746 A	20170222	CN201580031928	20150803
EP3176136 A1	20170607	EP20150827272	20150803
EP3176136 A4	20180307	EP20150827272	20150803
IN201637041821 A	20170505	IN201637041821	20161207
JP2016017825 A1	20170427	JP20150542090T	20150803
JP2016216356 A2	20161222	JP20160137585	20160712
JP5973082 B1	20160823	JP20150542090T	20150803
KR20170038755 A	20170407	KR20167026034	20150803
MX2017000889 A1	20170501	MX20170000889	20150803
TH177342 A	20180628	TH20171000455	20150803
US2017197386 AA	20170713	US20150316293	20150803
WO16017825 A1	20160204	WO2015JP72004	20150803
ZA201608605 A	20180530	ZA20160008605	20150803

Priority:

JP20140158222 20140801 JP20140158224 20140801 WO2015JP72004 20150803
JP20150542090T 20150803 JP20160137585 20160712

Probable Assignee: SEKISUI CHEMICAL CO LTD

Assignee(s): (std): SEKISUI CHEMICAL CO LTD

Assignee(s): SEKISUI CHEMICAL CO ; IZU YASUYUKI ; NAKAJIMA DAISUKE ; OOTA YUUSUKE ; SEKISUI CHEM CO LTD

Inventor(s): (std): DAISUKE NAKAJIMA ; IZU YASUYUKI ; NAKAJIMA DAISUKE ; OOTA YUUSUKE ; YASUYUKI IZU ; YUUSUKE OOTA ; OOTA YUSUKE

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; RICHES MCKENZIE AND HERBERT LLP; HART DAVIS JASON; YASUTOMI AND ASSOCIATES

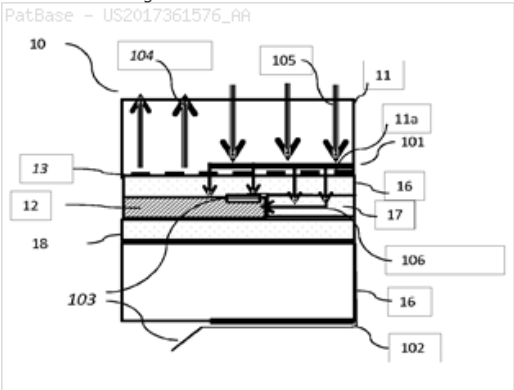
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Title: LAMINATED GLASS

Abstract: A laminated glass includes a first glass sheet, an electrically powered functional film, a reflective element to reflect infrared radiation, disposed between the first glass sheet and the functional film, at least one first thermoplastic interlayer disposed between the reflecting element and the functional film, and a second glass sheet. The laminated glass includes at least one interlayer including a zone that is opaque to radiation in the visible wavelength.

Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 C03C27/12 G02B5/00 G02B5/08 G02F1/01 G02F1/13 G02F1/17 (Advanced/Invention)
CPC: B32B17/10174 B32B17/10752 B32B17/1077 B32B2307/102 B32B2605/006 B32B17/10183 B32B17/10036 B32B17/10348 B32B17/10504 B32B17/10532 B32B17/1066 B32B17/10761 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
CN107107566 A	20170829	CN201580068809	20151216
EA201791269 A1	20171031	EA20170091269	20151216
EP3034297 A1	20160622	EP20140199140	20141219
EP3233478 A1	20171025	EP20150813370	20151216
JP2018508439 T2	20180329	JP20170532901T	20151216
US2017361576 AA	20171221	US20150537242	20151216
WO16097047 A1	20160623	WO2015EP80086	20151216

Priority:

EP20140199140 20141219 WO2015EP80086 20151216

Probable Assignee: AGC GLASS EUROPE

Assignee(s): (std): AGC GLASS EUROPE

Inventor(s): (std): LEGRAND DENIS ; MASAKI YUJI

Agent(s): CHABOU SAMIA

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

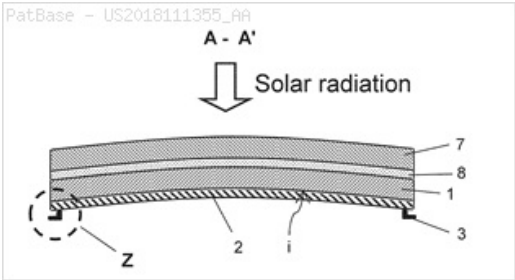
Title: PANE WITH THERMAL-RADIATION-REFLECTING COATING AND FASTENING OR SEALING ELEMENT ATTACHED THERETO

Abstract: A pane for separating an interior from an external environment, at least including a substrate, and a thermal-radiation-reflecting coating on the interior-side surface of the substrate is disclosed. The coating has at least one functional layer containing a transparent conductive oxide and a topmost layer containing silicon dioxide, and a polymeric fastening or sealing element on the thermal-radiation-reflecting coating.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/42 B32B3/06 B60J1/10 B60J10/30 B60J10/70 B60J10/90 C03C17/34 C03C17/42 (Advanced/Invention); B60J1/10 (Advanced/Non-invention)

CPC: C03C17/3417 B32B17/10165 B32B17/1055 B32B17/10807 B32B27/42 B32B2255/20 B32B2255/28 B32B2307/416 B32B2605/006 B60J1/10 C03C17/42 B60J10/90 B32B2307/412 B32B2307/202 B32B2605/08 B32B2309/105 C03C2217/241 C03C2217/213 C03C2217/948 C03C2217/281 C03C2218/156 B32B17/10201 B32B17/10036 B32B17/10293 B32B17/10761 B32B17/1077 B32B17/10788 B60J10/70 C03C17/3435



Family:

Publication number	Publication date	Application number	Application date
BR112017024628 A2	20180731	BR20171124628	20160510
CA2981124 AA	20170927	CA20162981124	20160510
CN106457778 A	20170222	CN201680000863	20160510
CN106457778 B	20180330	CN201680000863	20160510
EA201792378 A1	20180330	EA20170092378	20160510
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ID201805799 A	20180531	ID2017P0008050	20160510
IN201737032393 A	20171013	IN201737032393	20170913
KR20170136606 A	20171211	KR20177032620	20160510
MX2017014575 A1	20180315	MX20170014575	20160510
US2018111355 AA	20180426	US20160562889	20160510
WO16184732 A1	20161124	WO2016EP60475	20160510

Priority:

EP20150167777 20150515 WO2016EP60475 20160510

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): HAGEN JAN ; MANZ FLORIAN

Inventor(s): (std): FLORIAN MANZ ; HAGEN JAN ; JAN HAGEN ; MANZ FLORIAN

Agent(s): GOUDREAU GAGE DUBUC ; FEIST FLORIAN ARNO; IRMIGNI MYRIASANDRA NOERHADI MIP MSEL; GEBAUER DIETER

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: GLASS LAMINATE WITH PANE HAVING GLASS-GLASS LAMINATE STRUCTURE

Abstract: A glass laminate includes a first pane having a glass-glass laminate structure, a second pane, and an interlayer disposed between the first pane and the second pane and including a polymeric material.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B37/08
B32B37/12 B32B7/02 C03B15/10 C03B17/06 C03C21/00
C03C27/12 (Advanced/Invention)

CPC: B32B17/10266 B32B17/10743 B32B2309/105 B32B37/08
B32B2605/006 B32B17/10137 B32B17/10036 B32B17/10091
B32B17/10247 B32B17/10761 B32B17/1077 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
CN107848267 A	20180327	CN201680044311	20160601
EP3302968 A1	20180411	EP20160729437	20160601
KR20180015713 A	20180213	KR20187000059	20160601
TW201704009 A	20170201	TW20160117238	20160601
US2018154615 AA	20180607	US20160578128	20160601
WO16196546 A1	20161208	WO2016US35151	20160601

Priority:

US20150169834P 20150602 US20150256842P 20151118 WO2016US35151 20160601
US20160578128 20160601

Probable Assignee: CORNING INC

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

Inventor(s): (std): DOHN PAUL BENNETT ; GOLYATIN VIADISLAV YURYEVICH ; GOLYATIN VLADISLAV YURYEVICH ;
VADDI BUTCHI REDDY ; VENKATARAMAN NATESAN

Agent(s): SCHEUERMANN ERIK; HOOD MICHAEL 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: LAMINATED PLATE AND INTERMEDIATE FILM

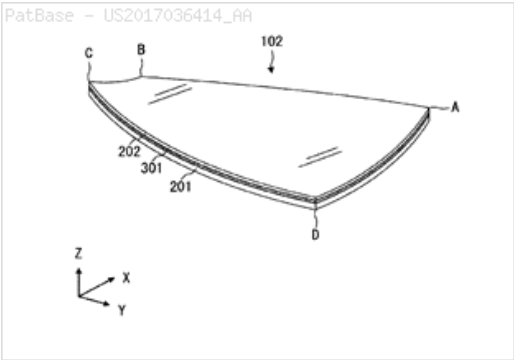
Abstract: The present invention relates to a laminated plate (laminated glass plate 102 for a vehicle) including a first plate (first glass plate 201) being curved in a first curved shape, a second plate (second glass plate 202) having a second shape that is different from the first curved shape, and an intermediate film 301 bonding the first plate and the second plate, in which the laminated plate has, in a planar view thereof, a peripheral region 313 and an in-plane region 314, and the peripheral region 313 has a flat region 313a and an undulating region 313b.

Classifications:

International (IPC 8-9): B32B1/04 B32B17/06 B32B17/10 B32B3/02 B60J1/00 C03C27/12 (Advanced/Invention)

CPC: B32B3/02 B32B17/06 B60J1/008 B32B2605/00 B60J1/17 B32B17/10293 B32B17/10036 B32B17/10633 B32B17/10651 B32B17/10761 B32B17/10788 B32B17/10889 B32B17/10908 B32B2264/102 B32B2264/104 B32B2264/105 B32B2307/102 B32B2307/542 B32B2605/006 B32B2605/08 B32B3/085 B32B3/28 B32B7/12 B32B33/00 B60J1/00

US: 428/172



Family:

Publication number	Publication date	Application number	Application date
CN106431019 A	20170222	CN201610639077	20160805
DE102016009524 A1	20170209	DE201610009524	20160804
JP2017035880 A2	20170216	JP20160137764	20160712
US2017036414 AA	20170209	US20160228605	20160804

Priority:

JP20150157684 20150807 JP20160137764 20160712

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): NAKANO ATSUSHI ; NOTSU KEIJI ; NOZU KEIJI ; SADAKANE SHUNSUKE

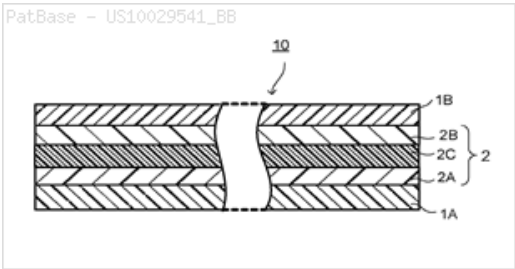
Agent(s): EIKOH PATENT FIRM PC

Title: LAMINATED GLASS

Abstract: There is provided a laminated glass that has both of a rigidity and a sound insulating property while attaining the weight reduction. The laminated glass comprises a pair of glass plates each having a plate thickness of 0.3 mm to 1.8 mm; and an interlayer film provided between the glass plates and having a storage elastic modulus G' equal to or greater than 2.0×10^6 Pa at a frequency of 1 Hz and temperature of 20 degrees centigrade, wherein the laminated glass has a loss factor equal to or greater than 0.2 at one or more resonance points at the frequency of 3 to 6 KHz and the temperature of 20 degrees centigrade

Classifications:

International (IPC 8-9): B32B17/10 B32B27/06 B32B27/18
B32B33/00 B32B7/02 B60J1/00 C03C27/12 G10K11/168
G10K11/172 (Advanced/Invention)
CPC: B60J1/001 B32B17/10752 G10K11/172 G10K11/168
B32B2307/102 B32B2307/546 B32B2605/006 B32B17/10761
C03C27/10 B32B17/10633 B32B17/10678 B32B27/08 B32B27/18
B32B33/00 B32B17/10036 B32B17/1077 B32B17/10788
B32B2250/03
US: 181/286



Family:

Publication number	Publication date	Application number	Application date
CN106554158 A	20170405	CN201610863721	20160929
EP3150374 A1	20170405	EP20160002082	20160927
JP2017065966 A2	20170406	JP20150193018	20150930
US10029541 BB	20180724	US20160274549	20160923
US2017087964 AA	20170330	US20160274549	20160923

Priority:

JP20150193018 20150930

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): NAKAMURA ATSUSHI ; ATSUSHI NAKAMURA

Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB; OBLON MCCLELLAND MAIER AND NEUSTADT LLP

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

Title: CELLULOSE ESTER MULTILAYER INTERLAYERS

Abstract: An interlayer structure having a cellulose ester layer for use in structural laminates is described herein. The cellulose ester layer provides rigidity and support to multilayer interlayers comprising an array of different layers. Due to the diverse properties of the cellulose ester layers, the present interlayers can be useful in producing structural laminates having high stiffness and which possess good optical clarity for a variety of applications, including outdoor structural applications.

Classifications:

International (IPC 8-9): B32B17/10 B32B23/08 B32B23/16

B32B23/20 B32B27/08 B32B27/36 B32B27/40

B32B27/42 (Advanced/Invention)

CPC: B32B23/08 B32B17/10761 B32B17/1077 B32B23/20
B32B27/08 B32B27/42 B32B27/40 B32B23/16 B32B17/10605
B32B27/36 B32B2270/00 B32B2307/418 B32B2307/412

B32B2307/542 B32B2307/102 B32B2419/00 B32B2605/08

B32B2605/18 B32B2457/12 B32B3/02 B32B7/02 B32B7/12

B32B17/00 B32B27/22 B32B27/306 B32B27/308 B32B2250/03

B32B2250/05 B32B2250/40 B32B2255/10 B32B2255/26 B32B2307/30 B32B2307/558 B32B2571/00



Family:

Publication number	Publication date	Application number	Application date
US2017259540 AA	20170914	US20170453748	20170308

Priority:

US20160306756P 20160311 US20170453748 20170308

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

Inventor(s): (std): DONELSON MICHAEL EUGENE ; KARAGIANNIS ARISTOTELIS ; TRAN KHANH DUC ; WADE BRUCE EDWARD

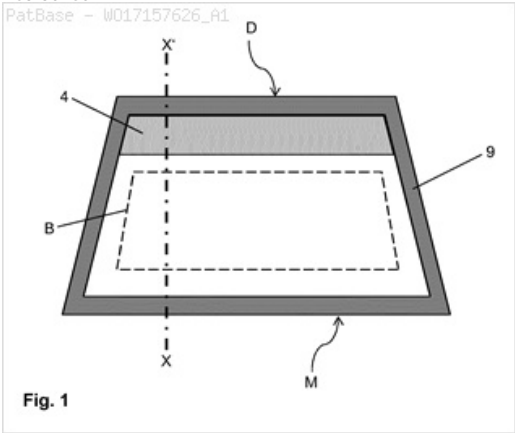
Title: WINDSCREEN WITH ELECTRICALLY REGULATABLE SUN VISOR

Abstract: The invention relates to a windscreen with an electrically regulatable sun visor (4), at least comprising an outer screen (1) and an inner screen (2) which are interconnected by means of an intermediate layer (3), wherein above a central field of vision (B), a functional element (5) with electrically regulatable optical properties is inserted into the intermediate layer (3), which is connected to the outer screen (1) by means of a region (6a) of a first thermoplastic layer (6) and to the inner screen (2) by means of a region of a second thermoplastic layer (7), the region (6a) of the first thermoplastic layer (6) and/or the region of the second thermoplastic layer (7) being toned or coloured.

Classifications:

International (IPC 8-9): B32B17/10 B60J3/04 (Advanced/Invention)

CPC: B60J3/04 B32B17/10036 B32B17/10339 B32B17/10348
B32B17/10504 B32B17/10761 B32B17/1077 B32B17/10788
B32B17/10871 B32B17/10302 B32B17/1088 B32B2307/412
B32B2605/006



Family:

Publication number	Publication date	Application number	Application date
CA3009447 AA	20180621	CA20173009447	20170222
CN107614302 A	20180119	CN201780000610	20170222
KR20180059531 A	20180604	KR20187012073	20170222
WO17157626 A1	20170921	WO2017EP54001	20170222

Priority:

EP20160160838 20160317 WO2017EP54001 20170222

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): LABROT MICHAEL ; LINNHOFER DIETER

Inventor(s): (std): LABROT MICHAEL ; LINNHOFER DIETER ; LINNHOFER DIETER

Agent(s): GOUDREAU GAGE DUBUC ; FEIST FLORIAN ARNO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC 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: LAMINATED GLASS COMPRISING A FUNCTIONAL FILM

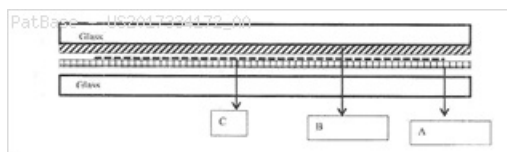
Abstract: Laminated glass consists of two glass sheets interlayered with at least one film A containing a polyvinyl acetal PA and optionally at least one plasticiser WA, at least one film B containing a polyvinyl acetal PB and at least one plasticiser WB and polymer film C, wherein film A comprises less than 16 percent by weight of plasticiser WA, film B comprises at least 16 percent by weight of plasticiser WB, film C comprises polyamide, polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polyvinyl alcohol (PVA), polylactic acid (PLA), cellulose acetate or ionomers, and wherein film C is located between film A and film B.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/06 B32B27/08 B32B27/18 B32B27/22 B32B27/30 B32B3/24 B32B3/26 B32B33/00 C03C27/12 (Advanced/Invention)

CPC: B32B17/06 B32B17/064 B32B3/266 B32B2250/03 B32B17/10036 B32B17/1022 B32B17/10568 B32B17/10633 B32B17/10761 B32B27/08 B32B27/22 B32B27/306 B32B2307/304 B32B2307/402 B32B17/1066 B32B17/10688 B32B17/1055

B32B17/10614 B32B27/06 B32B27/18 B32B33/00 B32B2255/10 B32B2255/205 B32B2264/102 B32B2264/104 B32B2270/00 B32B2419/00 B32B2605/08 B32B17/10605



Family:

Publication number	Publication date	Application number	Application date
CN107443837 A	20171208	CN201710357045	20170519
EP3246157 A1	20171122	EP20170169838	20170507
JP2018008867 A2	20180118	JP20170099028	20170518
KR20170131238 A	20171129	KR20170060456	20170516
TW201819181 A	20180601	TW20170112722	20170417
US2017334172 AA	20171123	US20170491261	20170419

Priority:

EP20160170488 20160519 KR20170060456 20170516 JP20170099028 20170518

Probable Assignee: KURARAY CO LTD

Assignee(s): (std): KURARAY CO LTD ; KURARAY EUROPE GMBH

Inventor(s): (std): KELLER UWE

Agent(s): KISTERS MICHAEL MARCUS; MORITA HIROSHI

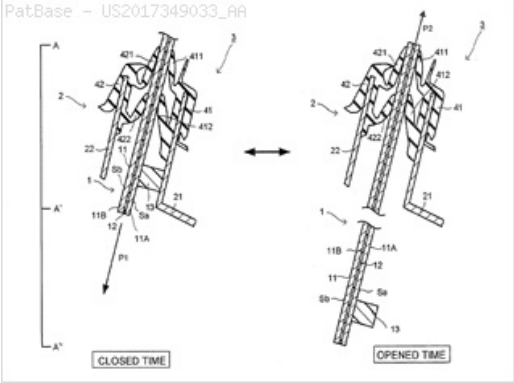
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Title: LAMINATED GLASS AND AUTOMOBILE DOOR

Abstract: A laminated glass provided in an automobile door panel including two panel boards facing each other and seal members provided on facing surfaces of the panel boards at regions along a beltline, the laminated glass being openable and closable by being provided between the two panel boards so as to slide between the seal members, the laminated glass includes: a laminated glass main body including at least two glass plates and an interlayer film sandwiched between the glass plates and having a storage modulus G of 1.5×10^6 Pa or more; and a viscoelastic member provided on a surface of the laminated glass main body, the viscoelastic member abutting on the seal member or the panel board and sealing a gap between the seal member or the panel board and the laminated glass main body, at a closed time of the laminated glass.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B60J1/00 B60J1/17 C03C27/12 (Advanced/Invention)
CPC: B60J1/17 B32B17/066 B32B17/06 B32B2605/08 B32B17/10174 B32B17/10293 B32B17/10761 B32B17/1077 B32B17/10788 B32B2605/006 B32B17/10036 B32B2307/102 Y10T428/26



Family:

Publication number	Publication date	Application number	Application date
CN107459269 A	20171212	CN201710408548	20170602
EP3251838 A1	20171206	EP20170000951	20170602
JP2017218331 A2	20171214	JP20160111690	20160603
US2017349033 AA	20171207	US20170612559	20170602

Priority:

JP20160111690 20160603

Probable Assignee: ASAHI GLASS CO LTD

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

Assignee(s): N A

Inventor(s): (std): ATSUSHI NAKAMURA ; DAISUKE YAMADA ; NAKAMURA ATSUSHI ; YAMADA DAISUKE

Agent(s): MUELLER BORE AND PARTNER PATENTANWALTE PARTG MBB

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

Title: INTERLAYERS COMPRISING OPTICAL FILMS HAVING ENHANCED OPTICAL PROPERTIES

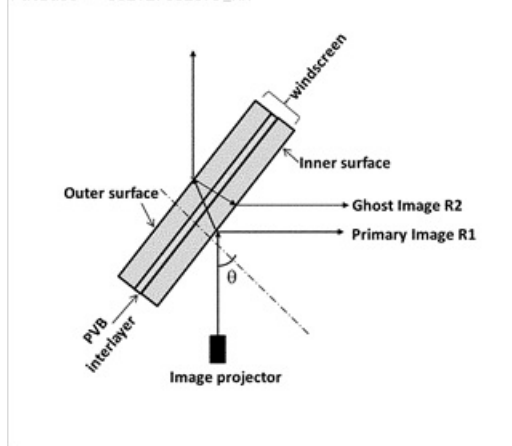
Abstract: An interlayer comprising a first polymer layer, a polarization rotary optical film and optionally a second polymer layer, and multiple layer panels formed from such interlayers. The panels may exhibit desirable optical properties, including, for example, less image "ghosting," when used as part of a heads-up-display (HUD) display panel for use in automotive and aircraft applications.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/30 B60J1/02 B60J1/20 B60J3/00 G02B1/14 G02B27/00 G02B27/01 G02B5/30 (Advanced/Invention)

CPC: B32B17/10761 B32B2307/412 B32B2605/006 B60J3/007 G02B27/0101 G02B27/0018 G02B5/3033 B60J1/20 G02B2027/012 B60J1/02 G02B2027/0118 B32B17/10458 B32B17/10036 B32B17/10605 B32B27/08 B32B27/30 G02B1/14 G02B5/3016 G02B2027/0194 G02B5/3083

PatBase - US2017361579_AA

**Family:**

Publication number	Publication date	Application number	Application date
US2017361579 AA	20171221	US20170623852	20170615
US2017361687 AA	20171221	US20170623872	20170615
US2017363863 AA	20171221	US20170623895	20170615
WO17223023 A1	20171228	WO2017US38228	20170620

Priority:

US20160352225P 20160620	US20170508407P 20170519	US20170510028P 20170523
US20170623852 20170615	US20170623872 20170615	US20170623895 20170615

Probable Assignee: SOLUTIA INC**Assignee(s):** (std): SOLUTIA INC**Assignee(s):** SOUTHWALL EUROPE GMBH

Inventor(s): (std): CARICO KIMBERLEY CARMENIA ; CHEN WENJIE ; HURLBUT JEFFREY B ; MACKENZIE PETER BORDEN ; NORMAN DAVID WILLIAM ; PICKETT SCOTT EVAN ; SPANGLER LORA LEE ; THIELSCH ROLAND CLAUS ; WANG BIN

Agent(s): BUGBEE MICHELLE

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: IMAGE CARRYING LAMINATED MATERIAL

Abstract: A method and apparatus for producing image carrying laminated material (10). An image (18) is printed on a polyvinylbutyral interlayer (16) using a solvent based ink, paint or dye system. The interlayer (16) is used to join two sheets of material (12, 14) to form the laminate.

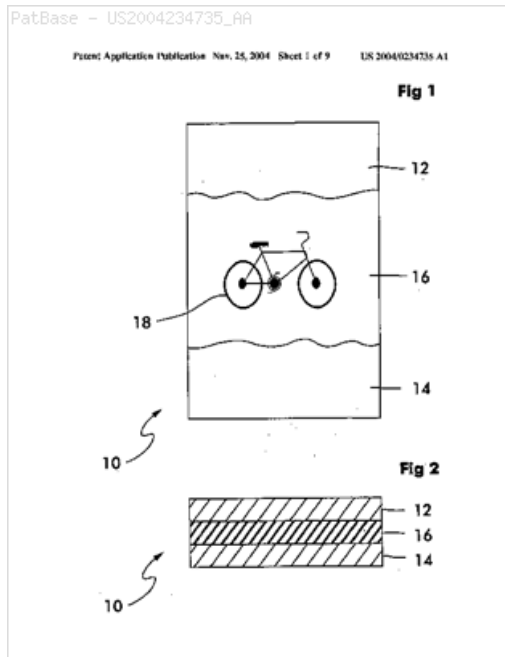
Classifications:

International (IPC 8-9): B29C71/02 B32B17/06 B32B17/10 B32B37/00 B41M1/30 B41M5/00 B41M5/52 B41M7/00 B44C3/02 B44C5/04 B44F1/06 C03C17/00 C03C17/34 C03C27/12 C03C8/24 (Advanced/Invention); B41M5/52 (Advanced/Non-invention); B29C71/02 B32B17/06 B32B37/00 B41M1/26 B41M5/00 B41M5/50 B44C3/00 B44C5/00 B44F1/00 C03C17/00 C03C17/34 C03C27/12 C03C8/00 (Core/Invention); B41M5/50 (Core/Non-invention)

International (IPC 1-7): B29C71/02 B32B17/10 B32B3/00 B32B31/00 B41M5/00 B44C3/02 B44F1/06 C03C27/12 C03C8/24
CPC: B32B17/10899 B32B17/10935 B32B17/10036 B32B17/10247 B32B17/10275 B32B17/10761 B32B17/1077 B41M5/0047 B41M5/0064 B41M5/52 B41M5/5254 B41M5/5281 B41M7/0027 B44C3/02 B44C5/0407 B44C5/0446 B44F1/066 C03C17/002 C03C17/34 C03C2217/485 Y10T428/24876

European: B32B17/10C4 B32B17/10E12 B32B17/10G28 B32B17/10G30 B41M5/00S2 B41M5/00S8 B41M5/52 B41M7/00C B44C3/02 B44C5/04C B44C5/04L B44F1/06D C03C17/00B2 C03C17/34 L41M5/52K L41M5/52L4 M03C217/485

US: 1/1 156/100 156/100S 156/106 156/106S 156/277 156/277S 428/204 428/204P



Family:

Publication number	Publication date	Application number	Application date
AU056700 A0	20001026	AU2000PR00567	20001004
AU2000000567 A0	20001026	AU2000PR00567	20001004
AU2000002194 A0	20010125	AU2000PR02194	20001220
AU2000009830 A0	20000928	AU2000PQ09830	20000901
AU2001285590 AA	20020313	AU20010285590	20010903
AU2001285590 BB	20091015	AU20010285590	20010903
AU200185590 A1	20020313	AU20010085590	20010903
AU200185590 A5	20020313	AU20010085590D	20010903
AU219400 A0	20010125	AU2000PR02194	20001220
AU983000 A0	20000928	AU2000PQ09830	20000901
CA2420870 AA	20030228	CA20012420870	20010903
CA2420870 C	20100622	CA20012420870	20010903
CN103552321 A	20140205	CN201310388396	20010903
CN103552321 B	20170704	CN201310388396	20010903
CN1473114 A	20040204	CN20018018285	20010903
DE20122692 U1	20070301	DE20012022692U	20010903
DE60124287 D1	20061214	DE20016024287	20010903
DE60124287 T2	20070405	DE20016024287T	20010903
DE60124287 T3	20150319	DE20016024287T	20010903
EP1322482 A1	20030702	EP20010964744	20010903
EP1322482 A4	20040623	EP20010964744	20010903
EP1322482 B1	20061102	EP20010964744	20010903
EP1322482 B2	20141119	EP20010964744	20010903
EP1741552 A1	20070110	EP20060021998	20010903
HK1062820 A3	20041126	HK20040105672	20040802
JP2004506559 T2	20040304	JP20020523297T	20010903
JP5138142 B2	20130206	JP20020523297T	20010903
NZ524898 A	20050324	NZ20010524898	20010903
US2004234735 AA	20041125	US20010363279	20010903
US9403346 BB	20160802	US20010363279	20010903
WO0218154 A1	20020307	WO2001AU01106	20010903

Priority:

AU2000PQ09830 20000901	AU2000PR00567 20001004	AU2000PR02194 20001220
AU20010285590 20010903	AU20010085590 20010903	CN20018018285 20010903
EP20010964744 20010903	WO2001AU01106 20010903	

Probable Assignee: KURARAY CO LTD

Assignee(s): (std): DIGIGLASS PTY ; DIGIGLASS PTY LTD ; REYNOLDS MILTON CHARLES ; MC CLUSKEY GERARD MICHAEL ; MCCLUSKEY GERARD MICHAEL ; DON MATHIESON AND STAFF GLASS PT ; DON MATHIESON AND STAFF GLASS PTY LTD ; ANDERSON ANTHONY JOHN LUKE ; CEILART PTY LTD

Assignee(s): COOLING BROS GLASS CO PTY LTD ; KURARAY AMERICA INC ; KURARAY CO LTD

Inventor(s): (std): ANDERSON A J L ; ANDERSON ANTHONY JOHN LUKE ; ANDERSON JOHN ; ANTHONY JOHN LUKE ANDERSON ; CLUSKEY G M MC ; MCCLUSKEY GERARD MICHAEL ; MILTON CHARLES REYNOLDS ; REYNOLDS CHARLES ; REYNOLDS M C ; REYNOLDS MILTON CHARLES ; REYNOLDS MILTON ; MC

CLUSKEY GERARD ; GERARD MICHAEL MC CLUSKEY ; ANDERSON ANTHONY ; MC CLUSKEY GERARD
MICHAEL ; MC CLUSKEY MICHAEL

Inventor(s): MC REYNOLDS ; A J L ANDERSON ; AJL ANDERSON ; G M MC CLUSKEY ; GERARD MICHAEL
MCCLUSKEY ; GM MC CLUSKEY ; M C REYNOLDS

Agent(s): DAVIES COLLISON CAVE PTY LTD; DAVIES COLLISON CAVE; TORYS LLP; MORF JAN STEFAN; OBLON
MCLELLAND MAIER AND NEUSTADT LLP

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

Title: LAMINATED SAFETY WINDSHIELDS

Abstract: Safety glass windshields consisting essentially of polyurethane sheets laminated between moisture impervious sheets, such as glass, tend to separate. This separation has been discovered to be related to absorption of moisture in the polyurethane sheets along the exposed portion over an increasingly wider margin extending inward from the exposed surface during the time that the laminated glass-polyurethane window has its peripheral portion exposed until such time that its marginal portion is protected from exposure to atmospheric moisture when the windshield is installed with its marginal portion in a moisture impervious frame when assembled within an automobile or other vehicle. Bilayer windshields consisting essentially of a single glass sheet laminated to a polyurethane sheet also tend to delaminate on exposure to moisture. The present invention provides an adhesion promoting composition, such as a coupling agent, to a selected portion of the interface between glass and polyurethane to prevent separation of the windshield components. Care is taken to limit the proportion of the area of the interface treated with the adhesion promoting composition to control the overall adhesion of polyurethane to glass to a range in which the laminated windshield has an acceptable resistance to penetration, an acceptable lacerative injury rating and an acceptable Severity Index rating.

Classifications:

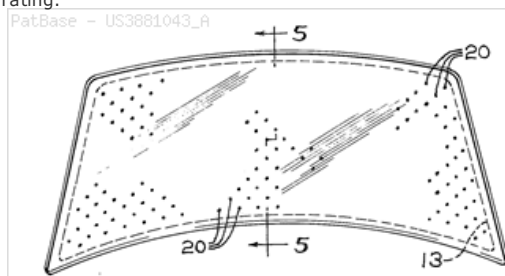
International (IPC 8-9): B32B17/06 B32B17/10 B32B27/00 B32B27/40 B60J1/00 B60J1/02 C03C17/32 C03C27/12 C08G18/10 C08G18/42 C08G18/66 C08G18/75 C09J157/06 C09J175/06 (Advanced/Invention); C03C27/12 (Advanced/Non-invention); B32B17/06 B32B27/00 B32B27/40 B60J1/00 B60J1/02 C03C17/28 C03C27/12 C08G18/00 C09J157/00 C09J175/06 (Core/Invention); C03B C07C (Subclass/Invention)

International (IPC 1-7): B01J1/00 B32B17/00 B32B17/06 B32B17/10 B32B27/00 B32B27/40 B32B7/00 B60J1/00 B60J1/02 C03B C03C17/12 C03C17/32 C03C27/00 C03C27/10 C03C27/12 C07C C08G18/42 C08G18/75 C08G22/00 C08G22/06 C08G22/10 C08G22/24 C08G22/28 C09D3/72 C09J3/16

CPC: B32B2605/08 Y10T428/24793 Y10T428/31601 B32B17/10 B32B17/10036 B32B17/10302 B32B2375/00 B32B27/36 B32B2307/412 B32B2605/006 B32B17/10018 B32B17/10688 B32B17/10697 B32B17/1077 B32B17/10853 B32B17/10981 B32B27/00 B60J1/02 C08G18/10 C08G18/42 C08G18/6633 C08G18/75 C09J157/06 C09J175/06

European: B32B17/10C2 B32B17/10E16B B32B17/10G12 B32B17/10G14 B32B17/10G30 B32B17/10L10B2B2 B32B17/10L22 B32B27/00 B60J1/02 C08G18/10 C08G18/42 C08G18/66M C08G18/75 C09J157/06 C09J175/06 L32B375/00 L32B605/08

US: 156/99 260/75NT 296/84.1 428/194 428/38 428/424 428/425.6 428/81 52/171.2 528/288 528/83 528/85

**Family:**

Publication number	Publication date	Application number	Application date
AR197780 A1	19740510	AR19720242651	19720619
AU197243570 A1	19740103	AU19720043570	19720619
AU197246507 A1	19740321	AU19720046507	19720911
AU463667 B2	19750731	AU19720043570	19720619
BE785125 A	19721220	BE19720785125	19720620
BE785126 A	19721220	BE19720785126	19720620
BR7203978 A0	19730531	BR19720003978	19720620
BR7206576 A0	19730925	BR19720006576	19720922
CA955621 A1	19741001	CA19720143590	19720531
CA974441 A1	19750916	CA19720143591	19720531
DE2229794 A1	19730111	DE19722229794	19720619
DE2229794 C2	19861204	DE19722229794	19720619
DE2229794 C3	19861204	DE19722229794	19720619
DE2247644 A1	19730405	DE19722247644	19720928
FR2143063 A1	19730202	FR19720022002	19720619
FR2143063 B1	19800201	FR19720022002	19720619
GB1399124 A	19750625	GB19720028976	19720621
IT966927 A	19740220	IT19720068984	19720620
JP48041423 A2	19730618	JP19720061409	19720621
JP55051744 B4	19801226	JP19720061408	19720621
NL7208466 A	19721227	NL19720008466	19720621
NL7208466 A1	19721227	NL19720008466	19720621
NL7209476 A	19730403	NL19720009476	19720707
NL7209476 A1	19730403	NL19720009476	19720707
NO133364 B	19760112	NO19720002197	19720620
NO133364 C	19760421	NO19720002197	19720620
US3881043 A	19750429	US19730395485	19730910
US3931113 A	19760106	US19720311043	19721130
US4041208 A	19770809	US19740472019	19740521
ZA7204156 A	19740227	ZA19720004156	19720616
ZA7204157 A	19740130	ZA19720004157	19720616

Priority:

US19710154944 19710621 US19710185627 19711001 US19720242347 19720410
 US19720246016 19720420 US19720311043 19721130 US19730395485 19730910
 US19740472019 19740521

Probable Assignee: PPG IND INC

Assignee(s): (std): PPG IND INC ; PPG INDUSTRIES INC ONE GATEWAY CENTER PITTSBURG P ; PPG INDUSTRIES INC PITTSBURGH PA US ; PPG INDUSTRIES INC

Assignee(s): PPG INDUSTRIES INC 15222 PITTSBURGH PA US ; PPG INDUSTRIES INC ONE GATEWAY CENTER PITTSBURG PE ; PPG INDUSTRIES INC PITTSBURGH PA V ST A ; PPG INDUSTRIES INC ONE GATEWAY CENTER PITTSBURG PENNSYLVANIE E U A ; RIESER RAYMOND G ; SEEGER NELSON V ; PPG IND INC PITTSBURGH PA V ST A ; CHABAL JOSEPH ; KAMAN ANDREW J

Inventor(s): (std): J CHABAL ; JOSEPH CHABAL ; KAMAN A ; AJ KAMAN ; ANDREW JOSEPH KAMAN ; KAMAN ANDREW JOSEPH NORTON OHIO US ; NELSON VERNARD SEEGER ; SEEGER NELSON VERNARD CUYAHOGA FALLS OHIO US ; SEEGER NV ; SEEGER NELSON VERNARD ; SEEGER N V ; RIESER RAYMOND GEORGE ; RIESER RAYMOND G ; RIESER R G ; RAYMOND GEORGE RIESER ; RG RIESER ; RIESER R ; SEEGER N ;

Inventor(s):

KAMAN ANDREW JOSEPH ; KAMAN A J ; CHABEL JOSEPH ; CHABAL JOSEPH ; CHABAL J ; SEEGER
NELSON V ; KAMAN ANDREW J

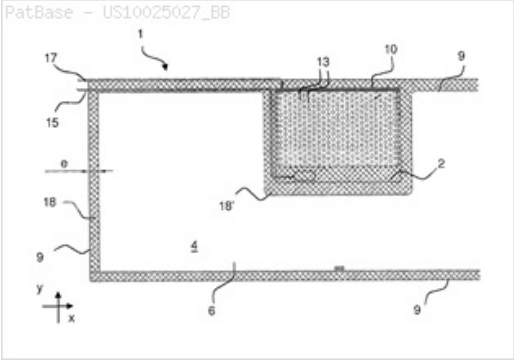
R G RIESER ; A J KAMAN ; SEEGER NELSON VERNARD CUYAHOGA FALLS ; N V SEEGER ; NELSON
VERNARD SEEGER AND ANDREW JOSEPH KAMAN ; GEORGE RIESER RAYMOND ; KAMAN ANDREW
JOSEPH NORTON

Title: GLAZING UNIT COMPRISING A TRANSPARENT DISPLAY

Abstract: A glazing unit includes a transparent display located in only one portion of the glazing unit, at least one light-guiding substrate located nearer the exterior than the display, at least one light source located on the periphery of the substrate, for example facing an edge face of the light-guiding substrate, and a light extraction device for extracting the light emitted by the light source. The light source may be formed from a plurality of light emitting diodes.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B60J1/00 B60J1/08 B60J1/18 B60Q3/02 B60R11/02 B61D25/00 E06B3/66 E06B3/663 F21K99/00 F21S2/00 F21V23/00 F21V23/02 F21V23/04 F21V33/00 F21V8/00 G02B27/01 G02B6/00 G02F1/13 G02F1/133 G02F1/13357 G03B21/62 G09F13/18 G09F21/04 (Advanced/Invention); B60Q3/208 E06B3/663 (Advanced/Non-invention)
CPC: G02B6/0095 B32B17/10256 B32B17/10541 G02B6/0068 G02B6/0093 F21V23/0464 F21V23/02 G02B6/0065 G02B6/0073 G02B27/0101 B32B2605/006 B32B17/10036 G02B6/0043 B32B17/10018 B32B17/10247 B32B17/10266 B32B17/10761 B32B17/10788 B60Q3/208 E06B3/6617 E06B3/66376 G09F13/18 G09F21/04
US: 362/612 362/613



Family:

Publication number	Publication date	Application number	Application date
CA2904955 AA	20150909	CA20142904955	20140314
CN105026149 A	20151104	CN201480015705	20140314
EP2969551 A1	20160120	EP20140716880	20140314
FR3003196 A1	20140919	FR20130052313	20130315
FR3003196 B1	20180119	FR20130052313	20130315
IN07867DN2015 A	20160429	IN2015DN07867	20150902
JP2016518615 T2	20160623	JP20150562289T	20140314
KR20150131159 A	20151124	KR20157028410	20140314
RU2015143890 A	20170421	RU20150143890	20140314
RU2015143890 A3	20180306	RU20150143890	20140314
US10025027 BB	20180717	US20140776215	20140314
US2016041331 AA	20160211	US20140776215	20140314
WO14140502 A1	20140918	WO2014FR50599	20140314

Priority:

FR20130052313 20130315 RU20150143890 20140314 WO2014FR50599 20140314

Probable Assignee: SAINT GOBAIN GLASS FRANCE

Assignee(s): (std): SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN SA
Assignee(s): SAINT GOBAIN GLASS FRANCE SA ; D AUDIFFRET STEPHANE ; ODULINSKI ANDRZEJ
Inventor(s): (std): D AUDIFFRET STEPHANE ; ODULINSKI ANDRZEJ

Inventor(s): STEPHANE D AUDIFFRET ; DAUDIFFRET STEPHANE ; ANDRZEJ ODULINSKI

Agent(s): GOUDREAU GAGE DUBUC ; JAMET VINCENT ; SAINT GOBAIN RECHERCHE ; AOKI ATSUSHI ; KOGA TETSUJI ; ISHIDA TAKASHI ; PILLSBURY WINTHROP SHAW PITTMAN LLP

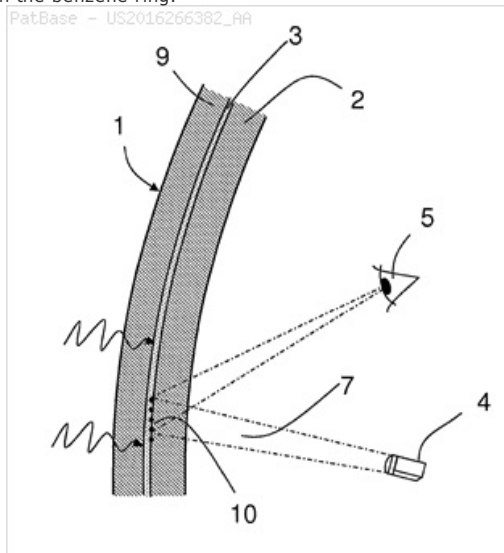
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW 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: GLASS PANEL FOR DISPLAY SYSTEM

Abstract: A glazing for information display includes an assembly of two transparent inorganic or plastic sheets, connected together by a thermoplastic or adhesive interlayer or by multilayer sheets incorporating the interlayer, wherein a luminophore material is incorporated to enable the display. One of the luminophores includes a benzene ring substituted at least by: a first ester -COOR group, wherein R is a linear or branched carbon-based group including a main carbon-based chain of at least six consecutive carbon atoms, the R group including, if the chain is linear, more than 10 carbon atoms and, if the chain is branched, at least 7 carbon atoms, optionally a second -COOR' group, wherein R' is another hydrocarbon-based group or hydrogen, the second group optionally being in para position on the benzene ring with respect to the first ester group, two hydroxyl -OH groups that are optionally in para position on the benzene ring.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/18 B32B27/30 B32B27/36 B60J1/00 B60J1/02 B64C1/14 C03C27/12 C07C69/00 C09K11/06 E04C2/54 E06B3/66 F21V9/16 G02B27/01 G03B21/62 (Advanced/Invention); B32B17/10 G02B27/01 (Core/Invention)
CPC: B32B2605/006 B32B17/10761 B32B27/308 B32B27/365 C09K11/06 G02B27/0101 B32B17/10541 B32B17/1055 B32B2250/02 B32B2255/26 B32B2255/24 B32B2307/412 B32B2590/00 B32B2605/08 B32B2605/18 F21W2131/405 B32B17/10036 B32B17/10669 B32B2307/422 B32B2305/07 F21Y2101/00 F21V9/30
US: 362/84

**Family:**

Publication number	Publication date	Application number	Application date
BR112016007027 A2	20170801	BR20161107027	20141015
CA2926006 AA	20160331	CA20142926006	20141015
CN105636780 A	20160601	CN201480058166	20141015
EA029903 B1	20180531	EA20160090828	20141015
EA201690828 A1	20160831	EA20160090828	20141015
EP3060394 A1	20160831	EP20140796819	20141015
FR3012069 A1	20150424	FR20130060288	20131022
FR3012069 B1	20151023	FR20130060288	20131022
ID201709546 A	20170901	ID2016P0002652	20141015
IN201627011011 A	20160715	IN201627011011	20160330
JP2017502322 T2	20170119	JP20160525529T	20141015
KR20160074579 A	20160628	KR20167013051	20141015
MX2016005144 A1	20160718	MX20160005144	20141015
TH175642 A	20180503	TH20161002178	20141015
US2016266382 AA	20160915	US20140031118	20141015
WO15059385 A1	20150430	WO2014FR52625	20141015

Priority:

FR20130060288 20131022 WO2014FR52625 20141015

Probable Assignee: SAINT GOBAIN GLASS FRANCE

Assignee(s): (std): SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN SA ; SAINT GOBAIN GLASS FRANCE S A ; SEKISUI CHEMICAL CO LTD

Assignee(s): SEKISUI CHEMICAL CO ; SAINT GOBAIN GLASS FRANCE SA ; CLABAU FREDERIC ; DUCLOS MARIE CHRISTINE ; LABROT MICHAEL ; LEMAIRE MARC ; METAY ESTELLE

Inventor(s): (std): MICHAEL LABROT ; MARIE CHRISTINE DUCLOS ; MARC LEMAIRE ; FREDERIC CLABAU ; ESTELLE METAY ; METAY ESTELLE ; LEMAIRE MARC ; LABROT MICHAEL ; DUCLOS MARIE CHRISTINE ; CLABAU FREDERIC

Inventor(s): CLABAU FREDRIC

Agent(s): GOUDREAU GAGE DUBUC ; G RONALD BELL AND ASSOCIATES; LUCAS FRANCOIS; SAINT GOBAIN RECHERCHE; CABINET CHAILLOT; BUDI RAHMAT SH; AOKI ATSUSHI; KOGA TETSUJI; ISHIDA TAKASHI; MIYAZAKI AND METSUGI

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

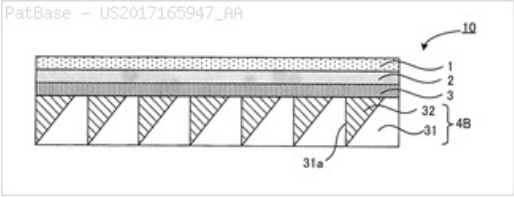
Title: WINDOW FILM

Abstract: A window film including at least a first adhesive layer containing a weathering agent, a barrier layer, a second adhesive layer, and a light control layer in this order.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/00 B32B27/08 B32B27/18 B32B27/30 B32B27/36 B32B27/38 B32B27/40 B32B3/30 B32B7/02 B32B7/12 C09J11/06 C09J201/00 C09J7/02 E06B3/30 E06B9/24 G02B5/00 G02B5/02 G02B5/04 G02B5/20 (Advanced/Invention)

CPC: C08K5/005 B32B27/18 B32B2307/712 B32B2605/006 B32B27/08 B32B3/30 B32B7/12 B32B17/10779 B32B27/40 B32B27/308 B32B27/38 E06B9/24 E06B3/30 G02B5/045 C09J2433/00 C09J2205/102 C09J2433/006 C09J2201/162 B32B2255/10 B32B2255/26 B32B2264/12 B32B2307/416 B32B2307/412 B32B2419/00 B32B2605/08 E06B2009/2417 E06B2009/2405 G02B2207/123 B32B27/36 C09J2467/006 G02B5/208 C09J2201/606 C09J2201/622 C09J2400/22 C09J2475/006 C09J2205/106 C09J7/22 C09J7/29 C09J7/38 G02B5/02 G02B27/285



Family:

Publication number	Publication date	Application number	Application date
JP2015127137 A2	20150709	JP20140199829	20140930
JP2016000531 A2	20160107	JP20150159392	20150812
JP5794369 B2	20151014	JP20140199829	20140930
US2017165947 AA	20170615	US20140039337	20141110
WO15079897 A1	20150604	WO2014JP79739	20141110

Priority:

JP20130244235 20131126 JP20140199829 20140930 WO2014JP79739 20141110
JP20150159392 20150812

Probable Assignee: DAINIPPON PRINTING CO LTD

Assignee(s): (std): DAINIPPON PRINTING CO LTD

Assignee(s): DAI NIPPON PRINTING CO ; DAI NIPPON PRINTING CO LTD

Inventor(s): (std): IDEGAMI MASATO ; MURAKAMI KEIICHI ; NAMATAME SHINGO ; TAKARABE ANRI ; TATEZAWA MASAHIRO ; TATSUZAWA MASAHIRO

Agent(s): YAMASHITA AKIHIKO 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 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

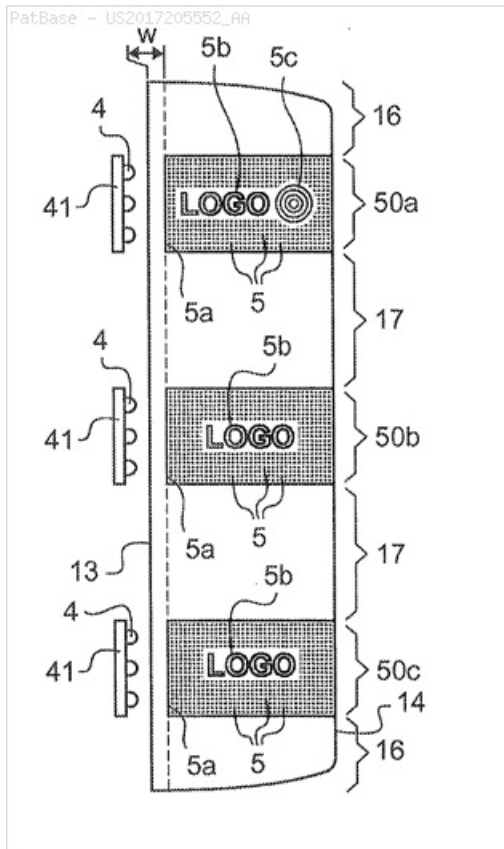
Title: LUMINOUS GLAZING ASSEMBLY

Abstract: A luminous glazing assembly includes a first glazing pane with a first light source coupled to the first pane to emit at instant t_0 at φ_1 and to emit at t_1 at φ_2 , φ_2 distinct from φ_1 ; a first light-extracting system and first masking arrangement to mask the extracted light from the internal-face side; making optical contact with the first glazing pane, a second glazing pane with a second light source that is optically coupled to the second pane, to emit at t_0 at a φ_3 distinct from φ_1 ; a second light-extracting system and second masking arrangement to mask the light from the bonding-face side; between the first masking arrangement and the second extracting system, a first optical isolator; and between the first masking arrangement and the second extracting system, a second optical isolator, merged with the first optical isolator or separate and closer to the second extracting system.

Classifications:

International (IPC 8-9): B32B17/10 B32B7/02 B32B7/12 E06B7/28 F21S2/00 F21V33/00 F21V8/00 G02B6/00 G02B6/02 G07B15/00 G07C9/00 G09F13/18 (Advanced/Invention); F21V33/00 G02B6/02 (Advanced/Non-invention); G07B15/00 G07C9/00 (Core/Invention); F21V33/00 (Core/Non-invention)

CPC: B32B17/10339 B32B17/10761 B32B2315/08 G02B6/006 B32B7/12 B32B17/10779 G02B6/0095 G02B6/0068 G02B6/0035 G02B6/0043 G02B6/0076 G07C9/00007 B32B2307/412 B32B2307/416 B32B2307/41 B32B2307/418 B32B2519/00 B32B2590/00 B32B17/10036 B32B17/10541 B32B17/10788 G07C9/00944 G07B15/00 G07C9/00

**Family:**

Publication number	Publication date	Application number	Application date
BR112016019046 A2	20170815	BR20161119046	20150209
CA2938339 AA	20160728	CA20152938339	20150209
CN106457775 A	20170222	CN201580019057	20150209
DE602015009843 D1	20180509	DE201560009843T	20150209
DK3105052 T3	20180723	DK20150706898T	20150209
EA201691609 A1	20171031	EA20160091609	20150209
EP3105052 A1	20161221	EP20150706898	20150209
EP3105052 B1	20180411	EP20150706898	20150209
ES2677596 T3	20180803	ES20150706898T	20150209
FR3017468 A1	20150814	FR20140051016	20140210
FR3017468 B1	20160219	FR20140051016	20140210
IN201617028667 A	20170428	IN201617028667	20160823
JP2017514181 T2	20170601	JP20160568141T	20150209
KR20160120751 A	20161018	KR20167024751	20150209
MX2016010319 A1	20161111	MX20160010319	20150209
US2017205552 AA	20170720	US20150117844	20150209
US9841551 BB	20171212	US20150117844	20150209
WO15118280 A1	20150813	WO2015FR50306	20150209

Priority:

FR20140051016 20140210 MY20140001989 20140703 EP20150706898 20150209
WO2015FR50306 20150209

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): CHAHBOUNE KAMEL ; GIERENS ANNE ; ZHANG JINGWEI ; WOLFF RICHARD

Inventor(s): (std): CHAHBOUNE KAMEL ; GIERENS ANNE ; WOLFF RICHARD ; ZHANG JINGWEI ; RICHARD WOLFF ; KAMEL CHAHBOUNE ; JINGWEI ZHANG ; ANNE GIERENS

Agent(s): GOUDREAU GAGE DUBUC ; SAINT GOBAIN RECHERCHE; ELZABURU SLP ELZABURU SLP; AOKI ATSUSHI; KOGA TETSUJI; ISHIDA TAKASHI; PILLSBURY WINTHROP SHAW PITTMAN LLP

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: VEHICLE-WINDSHIELD-GLASS INTERMEDIATE FILM, ROLLED BODY, AND VEHICLE WINDSHIELD GLASS

Abstract: The present invention aims to provide an interlayer film for an automotive windshield which, while having recesses in the shape of engraved lines, enables the production of automotive windshields with high yield by a vacuum deaeration method; a roll of the interlayer film for an automotive windshield; and an automotive windshield including the interlayer film for an automotive windshield. The present invention relates to an interlayer film for an automotive windshield. The interlayer film includes, on at least one surface thereof, a large number of recesses and a large number of projections. The recesses have a groove shape with a continuous bottom. The recesses are adjacently arranged regularly side by side in parallel with one another. The recesses in a groove shape with a continuous bottom are inclined 35 degrees or more relative to the machine direction of the film in production of the interlayer film for an automotive windshield.

Classifications:

International (IPC 8-9): B32B17/10 B32B3/26 B32B3/28 B32B3/30 B32B7/02 B60J B60J1/00 B60J1/02 C03C C03C27/12 (Advanced/Invention); B60J1/00 (Core/Invention)

CPC: B32B3/30 B32B3/263 B32B17/1055 B32B17/10036 B32B2250/03 B32B2307/102 B32B2605/08 B60J1/02 B32B3/28 B32B7/045 B32B7/12 B32B27/08 B32B27/285 B32B27/302 B32B27/304 B32B27/306 B32B27/308 B32B27/32 B32B27/322 B32B27/34 B32B27/36 B32B27/365 B32B2307/406 B32B2307/412 B32B2307/538 B32B2307/546 B32B2307/581 B32B2307/732 B32B2605/006 B32B7/02

US: 296/84.1

PatBase - US2016318278 AA



Family:

Publication number	Publication date	Application number	Application date
AU2015244725 AA	20151015	AU20150244725	20150409
BR112016018810 A2	20170815	BR20161118810	20150409
CA2934844 AA	20160622	CA20152934844	20150409
CN105764868 A	20160713	CN201580002736	20150409
EP3130569 A1	20170215	EP20150776478	20150409
EP3130569 A4	20171220	EP20150776478	20150409
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JP2015156365 A1	20170413	JP20150522311T	20150409
KR20160143635 A	20161214	KR20167016210	20150409
MX2016011722 A1	20161214	MX20160011722	20150409
RU2016143546 A	20180510	RU20160143546	20150409
US2016318278 AA	20161103	US20150108413	20150409
US9969145 BB	20180515	US20150108413	20150409
WO15156365 A1	20151015	WO2015JP61143	20150409
ZA201604608 A	20180131	ZA20160004608	20150409

Priority:

JP20140080241 20140409 WO2015JP61143 20150409

Probable Assignee: SEKISUI CHEMICAL CO LTD

Assignee(s): (std): SEKISUI CHEMICAL CO LTD

Assignee(s): INUI HIROAKI ; KITANO HIROFUMI ; NAKAYAMA KAZUHIKO ; SEKISUI CHEMICAL CO

Inventor(s): (std): HIROAKI INUI ; HIROFUMI KITANO ; INUI HIROAKI ; KAZUHIKO NAKAYAMA ; KITANO HIROFUMI ; NAKAYAMA KAZUHIKO ; INAYAMA NAOTOSHI

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; RICHES MCKENZIE AND HERBERT LLP; HART DAVIS JASON; WENDEROTH LIND AND PONACK LLP; YASUTOMI AND ASSOCIATES

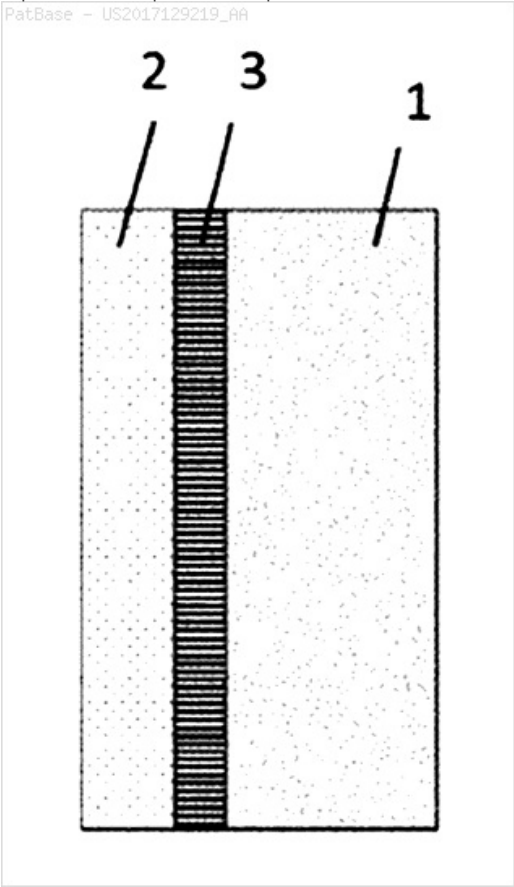
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Title: COMPOSITE PANE COMPOSED OF A POLYMERIC PANE AND A GLASS PANE

Abstract: A vehicular composite pane including a polymeric pane with a thickness of 1.5 mm to 10 mm and a glass pane with a thickness of 0.3 mm to 1 mm areally bonded to the polymeric pane. The polymeric pane contains at least polycarbonate (PC) and/or polymethyl methacrylate (PMMA). The glass pane is a non-prestressed pane.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/36
B32B27/40 B32B7/12 B60J1/00 C03C27/12 (Advanced/Invention)
CPC: B60J1/00 B32B7/12 B32B2605/006 B32B17/1077
B32B17/10018 B32B17/10036 B32B17/10761 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
CN106457792 A	20170222	CN201580031371	20150505
EP3154783 A1	20170419	EP20150722496	20150505
MX2016016282 A1	20170331	MX20160016282	20150505
US2017129219 AA	20170511	US20150317825	20150505
WO15188982 A1	20151217	WO2015EP59797	20150505

Priority:

EP20140172077 20140612 WO2015EP59797 20150505

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Inventor(s): (std): DOROTHEA KETTNER ; KETTNER DOROTHEA ; KREMERS STEPHAN ; SANDRA SIENERTH ; SIENERTH SANDRA ; STEFAN UEBELACKER ; STEPHAN KREMERS ; UEBELACKER STEFAN

Agent(s): GEBAUER DIETER EDMUND; LENDVAI TOMAS

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: DAMAGE RESISTANT GLASS ARTICLE

Abstract: A strengthened glass sheet product along with a process and an apparatus for strengthening a glass sheet are provided. 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.

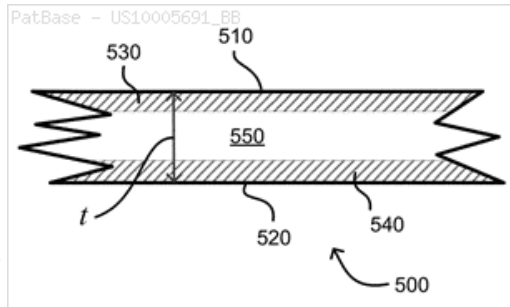
Classifications:

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

International (IPC 1-7): C03B27/04 C03B27/048 C03B27/052 C03B29/12 C03B29/16 C03B35/24 C03C3/11

CPC: C03B27/0413 C03B27/048 C03B27/044 C03B27/04 C03C21/002 C03B27/052 C03B29/12 C03B29/16 C03B35/24 C03C3/11 C03B27/012 C03B27/0404 C03B27/016 C03B27/0526 Y10T428/315 C03C23/007 E06B3/6715 G06F3/041 C03B27/0445 C03B27/0447 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

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:**

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AU2015296243 AA	20160204	AU20150296243	20150730
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CA2994236 AA	20180130	CA20162994236	20160728
CA2994284 AA	20180130	CA20162994284	20160801
CN106795036 A	20170531	CN201580053189	20150730
CN108025939 A	20180511	CN201680053655	20160728
EP3174835 A1	20170607	EP20150757030	20150730
EP3328803 A1	20180606	EP20160754030	20160728
EP3328807 A1	20180606	EP20160751079	20160728
EP3329348 A1	20180606	EP20160751081	20160728
IN201717004717 A	20170505	IN201717004717	20170209
IN201817003418 A	20180511	IN201817003418	20180130
IN201817004962 A	20180511	IN201817004962	20180209
JP2017523114 T2	20170817	JP20170505499T	20150730
KR20170036091 A	20170331	KR20177005630	20150730
KR20180033294 A	20180402	KR20187005874	20160801
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KR20180036746 A	20180409	KR20187005865	20160728
MX2017001386 A1	20170821	MX20170001386	20150730
TW201623168 A	20160701	TW20150124988	20150731
TW201623169 A	20160701	TW20150124991	20150731
US10005691 BB	20180626	US20150814363	20150730
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US2016031752 AA	20160204	US20150814181	20150730
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WO16019167 A1	20160204	WO2015US42955	20150730
WO16019171 A1	20160204	WO2015US42965	20150730
WO17019837 A1	20170202	WO2016US44401	20160728
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Priority:

US20140031856P	20140731	US20140074838P	20141104	US20150147289P	20150414
US20150814181	20150730	US20150814232	20150730	US20150814274	20150730
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US20150236296P	20151002	US20150236296P	20151002	US20160286192P	20160122
US20160281971P	20160122	US20160288851P	20160129	US20160288669P	20160129
US20160288755P	20160129	US20160082872	20160328	WO2016US44401	20160728

Probable Assignee: CORNING INC

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

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

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

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: LAMINATED GLASS

Abstract: The present invention provides a laminated glass to be used in a windshield of an automobile, and the laminated glass includes: an outer glass sheet; an inner glass sheet arranged opposite to the outer glass sheet, the inner glass sheet having a smaller thickness than that of the outer glass sheet; and an interlayer sandwiched between the outer glass sheet and the inner glass sheet. The interlayer includes at least a core layer and a pair of outer layers between which the core layer is sandwiched, the outer layers having a higher rigidity than that of the core layer. An attachment angle to the vertical with respect to the automobile is 45 degrees or more. The core layer has a Young's modulus of 1 to 25 MPa at a frequency of 100 Hz and a temperature of 20 degrees centigrade

Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 B60J1/02 C03C27/12 G10K11/168 (Advanced/Invention)
CPC: B60J1/02 B32B17/10036 B32B17/1055 B60Y2306/09 B32B2605/00 B32B2307/102 B32B2250/05 B60J1/00 B32B2250/03 B32B2605/08 G10K11/168 B32B17/10761



Family:

Publication number	Publication date	Application number	Application date
CN106573837 A	20170419	CN201580043745	20150813
EP3181534 A1	20170621	EP20150832562	20150813
EP3181534 A4	20180321	EP20150832562	20150813
JP2016041634 A2	20160331	JP20140165599	20140815
US2017274738 AA	20170928	US20150503959	20150813
WO16024625 A1	20160218	WO2015JP72914	20150813

Priority:

JP20140165599 20140815 WO2015JP72914 20150813

Probable Assignee: NIPPON SHEET GLASS CO LTD

Assignee(s): (std): NIPPON SHEET GLASS CO LTD

Inventor(s): (std): ASAI TAKAHIRO ; KAMIYOSHI SATORU ; KANKI SATOSHI

Agent(s): WEBSTER JEREMY MARK; TACHIBANA KENJI; TANAKA JUNYA; YAMADA IICHIRO ET AL

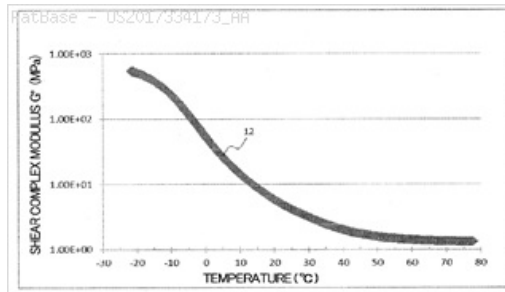
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX 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

Title: INTERLAYER FILM FOR LAMINATED GLASS AND LAMINATED GLASS

Abstract: The present invention provides an interlayer film for laminated glass which has excellent sound insulating properties even when the thickness is reduced, and also hardly causes optical unevenness. An interlayer film for laminated glass includes at least one layer A containing a thermoplastic elastomer, wherein the shear storage modulus of the layer A at 70 degrees centigrade as measured by performing a dynamic viscoelasticity test at a frequency of 1,000 Hz in accordance with ASTM D4065-06 is 1 MPa or more, and a layer having a higher shear storage modulus than the layer A is provided on at least one surface of the layer A, and at least one surface of the interlayer film for laminated glass is in a state of having been shaped.

Classifications:

International (IPC 8-9): B32B17/10 B32B25/00 B32B25/08 B32B25/14 B32B27/00 B32B27/06 B32B27/08 B32B27/18 B32B27/22 B32B27/30 B32B27/32 B32B3/30 B32B7/02 B60J1/00 B60J1/02 C03C27/12 C08F297/02 C08F297/04 C08F8/04 C08J5/18 C08K3/22 C08K3/24 C08K3/38 C08K5/07 C08K5/101 C08K5/11 C08K5/20 C08K5/3417 C08K5/3475 C08K5/3492 C08K9/02 C08L101/00 C08L21/00 C08L29/14 C08L53/00 C08L53/02 C09J11/06 C09J129/14 C09J201/00 C09J7/00 E06B3/66 E06B3/67 E06B5/20 (Advanced/Invention); B32B25/04 (Advanced/Non-invention)
CPC: E06B3/66 B32B17/10036 B32B17/10633 B32B17/10761 B32B27/18 B32B2307/304 B32B27/22 B32B2605/006 B32B27/08 B32B27/306 B32B7/02 B32B2307/102 E06B3/6707 B32B25/042 E06B3/6715 B32B2307/30 B32B2309/105 B32B17/10577 B32B17/10587 B32B17/10724 B32B17/10743 B32B17/1077 B32B17/10788 B32B17/1055 B32B25/08



Family:

Publication number	Publication date	Application number	Application date
CN107108348 A	20170829	CN201580061097	20151110
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WO16076338 A1	20160519	WO2015JP81666	20151110
WO16076339 A1	20160519	WO2015JP81667	20151110
WO16076340 A1	20160519	WO2015JP81668	20151110

Priority:

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Probable Assignee: KURARAY CO LTD

Assignee(s): (std): KURARAY CO

Assignee(s): KURARAY CO LTD

Inventor(s): (std): ASADA MITSUNORI ; ISOKAMI KOICHIRO ; ISOUE KOICHIRO ; KAMATA YOHEI ; KOBAYASHI TAKUYA ; KUSUDOU TAKESHI ; KUSUFUJI TAKESHI ; OSHITA SHINYA ; YUI TAIGA

Agent(s): MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; LIGHTHOUSE INT PATENT FIRM

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: POLY(VINYL ACETAL) RESIN COMPOSITIONS, LAYERS, AND INTERLAYERS HAVING ENHANCED OPTICAL PROPERTIES

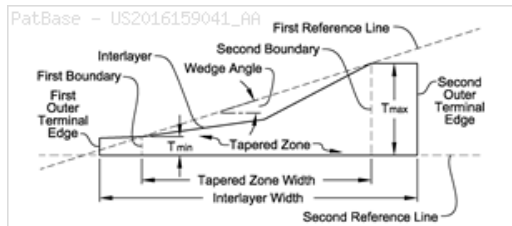
Abstract: A tapered interlayer comprising at least one resin layer and a having tapered zone with a wedge angle of at least 0.13 mrad. The first resin layer comprises a first poly(vinyl acetal) resin and at least one RI balancing agent. The refractive index of the first resin layer is at least 1.480.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/30 B60J1/00 B60J1/02 B60S1/52 C03C27/12 C08J5/18 C08K5/103 C08K5/11 C08L29/14 (Advanced/Invention); B32B27/08 B32B27/22 B32B27/30 B32B27/36 B32B3/26 (Advanced/Non-invention)

CPC: C08J5/18 B32B17/10036 B32B17/10633 B32B17/10605 B32B17/10761 B60J1/02 C08J2329/14 C08K5/103 B32B17/10568 C08K5/11 B32B2605/006 B32B27/08 B32B27/30 B32B3/26 B32B27/22 B32B27/306 B32B27/36 B32B270/00 B32B2307/412 B32B2307/418 B32B2307/558 B32B2307/732 B32B2419/00 B32B2551/00 B32B2607/02

US: 428/156 428/161 428/162 428/172



Family:

Publication number	Publication date	Application number	Application date
CN107000386 A	20170801	CN201580066963	20151204
EP3230369 A1	20171018	EP20150866882	20151204
US2016159041 AA	20160609	US20140563011	20141208
US2016168353 AA	20160616	US20160051183	20160223
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WO17146901 A1	20170831	WO2017US16898	20170208

Priority:

US20140563011 20141208 WO2015US63975 20151204 US20160051183 20160223

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

Inventor(s): (std): HURLBUT JEFFREY B ; LU JUN ; SPANGLER LORA LEE

Agent(s): RICKER MATHIAS; STEVEN A; OWEN STEVEN A; BUGBEE MICHELLE

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

Title: ELECTROMAGNETIC ENERGY-ABSORBING OPTICAL PRODUCT AND METHOD FOR MAKING

Abstract: An electromagnetic energy-absorbing optical product useful particularly for automotive and architectural window films is disclosed. The electromagnetic energy-absorbing optical product includes a polymeric substrate and a composite coating with the composite coating including first and second layers each containing a binding group component which together form a complimentary binding group pair.

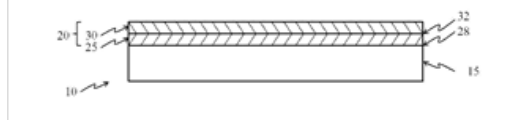
Classifications:

International (IPC 8-9): B05D1/02 B05D1/36 B05D7/02 B05D7/24 B32B17/10 B32B27/18 B32B27/20 B32B27/30 B32B27/36 B32B7/02 B32B7/10 B32B9/00 B60J1/20 B60J3/00 C03C27/12 C08J5/18 C08K9/04 C09D139/02 C09D5/32 E06B9/24 G02B G02B1/04 G02B1/10 G02B5/08 G02B5/20 G02B5/22 (Advanced/Invention); B60J3/00 G02B1/04 (Advanced/Non-invention); G02B (Subclass/Invention)

CPC: E06B9/24 B60J3/007 B60J1/2094 G02B5/206 B05D1/02 E06B2009/2417 G02B1/04 C09D5/32 C08K9/04 C09D139/02 B05D1/36 G02B1/10 G02B5/208 G02B5/223 B32B17/10761 C08J5/18 B32B17/10036 B32B17/10247 B32B17/1077 B32B2307/4023 B32B2307/42 B32B2605/00

US: 1/1 359/359 359/890 427/162 428/336 428/483

PatBase - US2016170104_Aff



Family:

Publication number	Publication date	Application number	Application date
CN107003452 A	20170801	CN201580068356	20151201
CN108291990 A	20180717	CN201680069971	20160422
CN108291991 A	20180717	CN201680069989	20160422
EP3234662 A1	20171025	EP20150816960	20151201
IL251986 A0	20170629	IL20150251986	20151201
IN201717015464 A	20180223	IN201717015464	20170502
JP2018506732 T2	20180308	JP20170531857T	20151201
KR20170095287 A	20170822	KR20177018862	20151201
TW201632918 A	20160916	TW20150137947	20151117
TW201738081 A	20171101	TW20160112717	20160422
TW201738082 A	20171101	TW20160112719	20160422
US2016170104 AA	20160616	US20140569955	20141215
US2016231480 AA	20160811	US20160134875	20160421
US2016231481 AA	20160811	US20160134864	20160421
US2017010389 AA	20170112	US20160274348	20160923
US9453949 BB	20160927	US20140569955	20141215
US9817166 BB	20171114	US20160134864	20160421
US9891347 BB	20180213	US20160274348	20160923
US9891357 BB	20180213	US20160134875	20160421
WO16099853 A1	20160623	WO2015US63082	20151201
WO17095468 A1	20170608	WO2016US28756	20160422
WO17095469 A1	20170608	WO2016US28757	20160422
WO18057286 A1	20180329	WO2017US50170	20170906

Priority:

US20140569955 20141215	WO2015US63082 20151201	US20160134864 20160421
US20160134875 20160421	WO2016US28756 20160422	WO2016US28757 20160422
US20160274348 20160923		

Probable Assignee: EASTMAN CHEMICAL CO

Assignee(s): (std): EASTMAN CHEM CO

Assignee(s): EASTMAN CHEMICAL CO

Inventor(s): (std): BOMAN LEE CAMPBELL ; GERASIMOV TIMOFEY ; HAWKINS MICHAEL ; ISBELL JEREMY L ; KROGMAN KEVIN C ; MINASE GENICHI ; NAND BRIJA ; PATEL KAYUR ASHWIN ; PORT ANTHONY BRIAN ; SCHULTZ RALPH PETER ; SHUTLZ RALPH PETER

Agent(s): RICKER MATHIAS; AOKI ATSUSHI; ISHIDA TAKASHI; KOGA TETSUJI; JOHN P; MICHAEL K; FORYT JOHN P; CARRIER MICHAEL K

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 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: MANUFACTURING OF DECORATIVE PANELS BY INKJET

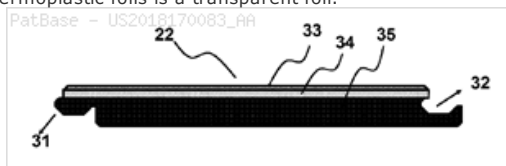
Abstract: A method for manufacturing polymeric decorative panels includes, in order, the steps of a) inkjet printing an image on a first thermoplastic foil using an aqueous pigmented inkjet ink; b) applying a second thermoplastic foil on the inkjet printed image; c) heat pressing the first and second thermoplastic foils into a decorative laminate; and d) cutting the laminate into a decorative panel; wherein the aqueous pigmented inkjet ink contains polymeric resin particles and a self-dispersing colour pigment; and at least one of the first and second thermoplastic foils is a transparent foil.

Classifications:

International (IPC 8-9): A45C7/00 B32B17/02 B32B27/08 B32B27/12 B32B27/20 B32B27/30 B32B3/06 B32B37/18 B32B38/00 B32B7/04 B41J2/01 B41M5/00 B41M7/00 B44C5/04 C09D11/102 C09D11/107 C09D11/322 E04F15/02 E04F15/10 (Advanced/Invention); B32B27/00 E04F15/00 (Advanced/Non-invention)

CPC: E04F15/102 B32B5/022 B32B7/04 B32B27/12 B32B2255/28 B32B2264/0214 B32B2264/102 B32B2307/58 B32B2307/732

B32B2307/75 B32B2607/00 B44F9/02 B32B27/20 B32B37/182 B32B38/0004 B32B38/145 B32B3/06 C09D11/322 C09D11/102 C09D11/107 B41M7/0081 E04F15/02038 E04F15/105 E04F15/107 B41J2/01 B44F9/04 E04F2201/0153 E04F2201/043 B41M5/0047 B32B27/08 B32B27/304 B32B2255/10 B32B2255/26 B32B2262/101 B32B2264/0292 B32B2307/21 B32B2307/4023 B32B2307/41 B32B2307/412 B32B2307/554 B32B2451/00 B41M5/0064 B41M7/0027 B44C5/04

**Family:**

Publication number	Publication date	Application number	Application date
CN107635768 A	20180126	CN201680029742	20160511
EP3095613 A1	20161123	EP20150168913	20150522
IN201717041448 A	20180126	IN201717041448	20171120
US2018170083 AA	20180621	US20160575982	20160511
WO16188745 A1	20161201	WO2016EP60511	20160511

Priority:

EP20150168913 20150522 WO2016EP60511 20160511

Probable Assignee: AGFA GEVAERT NV

Assignee(s): (std): AGFA GRAPHICS NV ; AGFA NV ; UNILIN BVBA

Assignee(s): AGFA GEVAERT NV

Inventor(s): (std): DE MONDT ROEL

Agent(s): STRIJCKERS HANS LOUIS P; STRIJCKERS HANS

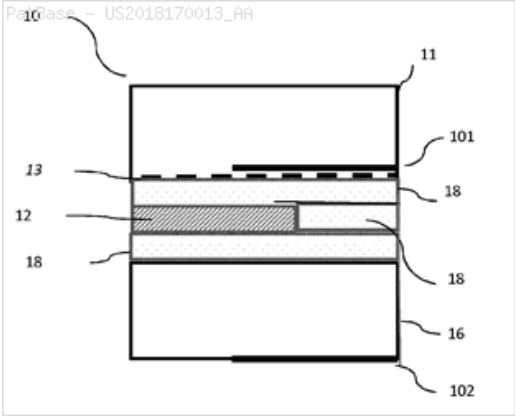
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW 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: LAMINATED GLAZING

Abstract: A laminated glazing includes (i) a first outer sheet of glass; (ii) an electrically powered functional film; (iii) an infrared reflecting means arranged between the first sheet of glass and the functional film; (iv) at least one first thermoplastic insert arranged between the infrared radiation reflecting means and the functional film; and (v) a second outer sheet of glass. The laminated glazing includes at least the first outer sheet with infrared reflection RIRV so that RIRV greater than or equal to 1.087ssTLV, where TLV is the light transmission of the sheet of glass, and the infrared reflecting means is characterized by light transmission TLC so that TLC greater than or equal to 1.3ssTIRC, where TIRC is the infrared transmission of the infrared radiation reflecting means.

Classifications:

International (IPC 8-9): B32B17/10 B60J3/00 C03C3/087 E06B3/67 E06B9/24 G02F1/1335 G02F1/157 G02F1/17 (Advanced/Invention)
CPC: E06B2009/2464 B32B17/10201 C03C3/087 G02F1/133553 G02F1/157 G02F1/172 B60J3/007 E06B9/24 E06B3/6722 B32B2255/20 B32B2255/205 B32B2307/412 B32B2307/416 B32B2419/06 B32B2605/006 G02F2203/11 B32B17/10513 B32B17/10036 B32B17/10119 B32B17/10229 B32B17/10504 B32B17/10532 B32B17/10761 B32B17/10788 B32B17/10 B32B2367/00



Family:

Publication number	Publication date	Application number	Application date
CN107787275 A	20180309	CN201680035444	20160606
EA201890008 A1	20180531	EA20180090008	20160606
EP3106304 A1	20161221	EP20150172969	20150619
EP3310574 A1	20180425	EP20160729827	20160606
US2018170013 AA	20180621	US20160737463	20160606
WO16202617 A1	20161222	WO2016EP62743	20160606

Priority:

EP20150172969 20150619 WO2016EP62743 20160606

Probable Assignee: AGC GLASS EUROPE

Assignee(s): (std): AGC GLASS EUROPE

Inventor(s): (std): BOLAND FRAN OIS ; BOLAND FRANCOIS ; DOGIMONT AUDREY ; DOMERCQ BENOIT ; DOMERQ BENOIT ; HUBERT RENAUD ; LAMBRICHT THOMAS ; SARTENAER YANNICK ; TIMMERMANS TANGUY

Agent(s): CHABOU SAMIA

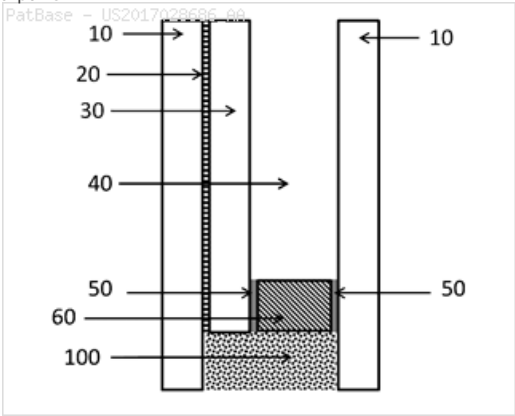
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW 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: DURABLE AND LIGHTWEIGHT GLAZING UNITS

Abstract: An environmentally durable window glass unit is provided with improved edge sealing to protect the interlayer of one or more laminates that make up the unit. The insulated glass unit includes a first pane comprising an outboard glass sheet, an inboard sheet and an interlayer therebetween. The inboard sheet is smaller in length and/or width than the outboard sheet. The glass unit also includes a second pane spaced away from and sealed to the first pane. A gas space is located between the inboard sheet of the first pane and the second pane. A spacer is positioned between the first pane and the second pane. The spacer is adhered to the inboard sheet of the first pane and to the second pane with a primary seal. A second seal adheres the outboard sheet of the first pane to the second pane.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/08 B32B27/36 B32B27/40 B32B7/14 E06B3/66 E06B3/663 G02F1/1334 G02F1/1339 G02F1/1343 (Advanced/Invention)
CPC: B32B17/1055 E06B3/66309 B32B17/06 B32B7/14 B32B17/10733 B32B17/1077 B32B27/08 B32B27/36 B32B27/40 G02F1/1334 G02F1/13439 G02F1/1339 E06B2009/2417 B32B2255/10 B32B2255/205 B32B2255/24 B32B2255/26 B32B2274/00 B32B2307/202 B32B2307/412 B32B2307/416 B32B2419/00 E06B9/24 E06B3/6617 B32B7/045 B32B7/12 B32B9/045 B32B27/06 B32B27/308 B32B27/325 B32B2250/44 B32B2255/20 B32B2307/304 B32B2307/71 B32B2581/00 B32B17/10229 B32B17/10477 B32B17/10495 B32B17/10743 B32B17/10761 B32B17/10788 B32B17/10798
US: 428/34



Family:

Publication number	Publication date	Application number	Application date
US2017028686 AA	20170202	US20160223628	20160729

Priority:

US20150198380P 20150729 US20160223628 20160729

Probable Assignee: PLEOTINT LLC

Assignee(s): (std): BROEKHUIS MICHAEL D ; BYKER HARLAN J ; PLEOTINT LLC ; WILSON EDWARD L

Inventor(s): (std): BROEKHUIS MICHAEL D ; BYKER HARLAN J ; WILSON EDWARD L

Title: INTERLAYER FOR LAMINATED GLASS AND LAMINATED GLASS

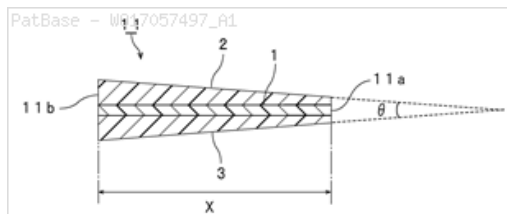
Abstract: Provided is an interlayer for laminated glass, whereby a laminated glass unlikely to have creases in the interlayer and having suppressed external defects can be obtained. This interlayer for laminated glass has: an MD direction and a TD direction; and one end and another end on the opposite side to the one end and having a greater thickness than the one end. The one end and the other end are positioned on both sides of the interlayer, in the TD direction. When the distance between the one end and the other end is X, the absolute value for the difference between a maximum heat shrinkage and a minimum heat shrinkage is no more than 5 percent, between: a first heat shrinkage at 150 degrees centigrade at a first position at 0.05 X from the one end towards the other end, in the MD direction; a second heat shrinkage at 150 degrees centigrade at a second position at 0.5 X from the one end towards the other end, in the MD direction; and a third heat shrinkage at 150 degrees centigrade at a third position at 0.95 X from the one end towards the other end, in the MD direction.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/00 B32B27/08 B32B27/22 B32B27/30 B60J1/00 B60J1/02

C03C27/12 (Advanced/Invention)

CPC: B32B17/10 B60J1/00 B60J1/02 B32B17/10568 B32B17/10036 B32B17/10761 B32B27/08 B32B27/22 B32B2307/736 B32B2309/105 B32B2605/006



Family:

Publication number	Publication date	Application number	Application date
AU2016329565 AA	20170406	AU20160329565	20160928
CN108137404 A	20180608	CN201680056929	20160928
IN201837005477 A	20180316	IN201837005477	20180213
JP2017057497 A1	20171102	JP20160560936T	20160928
KR20180061188 A	20180607	KR20187008600	20160928
TW201726408 A	20170801	TW20160131567	20160930
WO17057497 A1	20170406	WO2016JP78688	20160928

Priority:

JP20150195408 20150930 WO2016JP78688 20160928

Probable Assignee: SEKISUI CHEMICAL CO LTD

Assignee(s): (std): SEKISUI CHEMICAL CO LTD

Assignee(s): SEKISUI CHEMICAL CO

Inventor(s): (std): NISHINO HIROMITSU ; OOTA YUUSUKE ; TSUNODA RYUTA

Agent(s): GRIFFITH HACK; MIYAZAKI AND METSUGI

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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

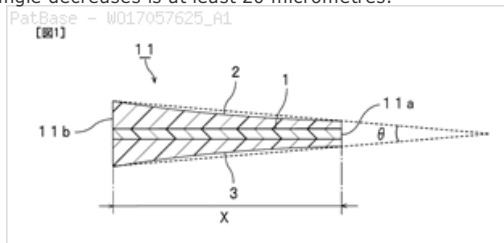
Title: INTERLAYER FOR LAMINATED GLASS, AND LAMINATED GLASS

Abstract: An interlayer for laminated glass is provided which, when used to obtain a laminated glass, is capable of inhibiting the persistence of air bubbles between laminated glass members and the interlayer. An interlayer for laminated glass according to the present invention includes a thermoplastic resin, and has either: a section in a region where the thickness increases, said section wherein the amount of increase in the thickness increases from one end to another end; a section in the region where the thickness increases, said section wherein the amount of increase in the thickness decreases from the one end to the other end; a section in a region having a wedge-shaped cross section in the thickness direction, said section wherein the wedge angle increases from the one end to the other end; or a section in the region having a wedge-shaped cross section in the thickness direction, said section wherein the wedge angle decreases from the one end to the other end. The ten-point average roughness R_z of the surface at a position in the centre of either the section in which the amount of increase in the thickness increases, the section in which the amount of increase in the thickness decreases, the section in which the wedge angle increases, or the section in which the wedge angle decreases is at least 20 micrometres.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/22 B32B27/30
B32B3/30 B32B38/06 B60J1/00 B60J1/02 B60K35/00 C03C27/12
C08J5/18 G02B27/01 (Advanced/Invention)

CPC: B60J1/02 B32B17/10568 B32B17/10036 B32B17/10577
B32B17/10761 B32B38/06 B32B2307/538 B32B2309/105
B32B2315/08 B32B2605/006



Family:

Publication number	Publication date	Application number	Application date
AU2016332385 AA	20170406	AU20160332385	20160929
CN108025969 A	20180511	CN201680056471	20160929
IN201837005476 A	20180316	IN201837005476	20180213
JP2017057625 A1	20171005	JP20160561401T	20160929
JP2018039725 A2	20180315	JP20170195135	20171005
JP6229076 B1	20171108	JP20160561401T	20160929
KR20180061190 A	20180607	KR20187008602	20160929
TW201730129 A	20170901	TW20160131526	20160930
WO17057625 A1	20170406	WO2016JP78907	20160929

Priority:

JP20150195405 20150930 JP20160561401T 20160929 WO2016JP78907 20160929

Probable Assignee: SEKISUI CHEMICAL CO LTD

Assignee(s): (std): SEKISUI CHEMICAL CO LTD

Assignee(s): SEKISUI CHEM CO LTD ; SEKISUI CHEMICAL CO

Inventor(s): (std): HIROTA ETSURO ; HIROTA ETSUROU ; KUMAKURA KOJI ; NISHINO HIROMITSU

Agent(s): GRIFFITH HACK; MIYAZAKI AND METSUGI

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU
ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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
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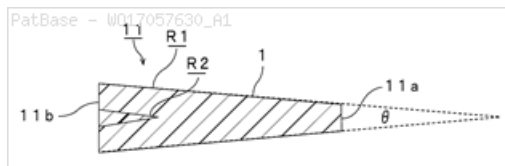
Title: INTERLAYER FILM FOR LAMINATED GLASS AND LAMINATED GLASS

Abstract: Provided is an interlayer film for a laminated glass capable of making visibility uniform in the entirety of the laminated glass. An interlayer film for a laminated glass according to the present invention comprises a thermoplastic resin and a heat insulating compound and has one end and a separate end having a thickness thicker than the one end on the opposite side from the one end, wherein the absolute value of the difference between the thickness of the thickest part and the thickness of the thinnest part is 0.1 mm or more, wherein, in the laminated glass having the interlayer film sandwiched between two heat ray absorbing plate glasses of 2.1 mm in thickness, the absolute value of the difference between the visible light transmittance in the thickest part of the interlayer film and the visible light transmittance in the thinnest part of the interlayer film is 4 percent or less.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/00 B32B27/18
B32B27/30 B32B3/26 B32B5/14 B32B7/02 B60J1/00 B60J1/02
C03C27/12 C08K3/22 (Advanced/Invention);
B60J1/00 B60J1/02 (Advanced/Non-invention)

CPC: B32B3/26 B32B17/10 B32B27/18 B60J1/00 B60J1/02
B32B17/10568 B32B17/10036 B32B17/10633 B32B17/10761
C08K3/22 B32B2264/102 B32B2307/304 B32B2309/105
B32B2315/08 B32B2605/006



Family:

Publication number	Publication date	Application number	Application date
AU2016332390 AA	20170406	AU20160332390	20160929
CN108025968 A	20180511	CN201680056469	20160929
IN201837005475 A	20180316	IN201837005475	20180213
JP2017057630 A1	20180719	JP20160561410T	20160929
KR20180061192 A	20180607	KR20187008604	20160929
TW201726384 A	20170801	TW20160131564	20160930
WO17057630 A1	20170406	WO2016JP78916	20160929

Priority:

JP20150195407 20150930 WO2016JP78916 20160929

Probable Assignee: SEKISUI CHEMICAL CO LTD

Assignee(s): (std): SEKISUI CHEMICAL CO LTD

Assignee(s): SEKISUI CHEMICAL CO

Inventor(s): (std): II DAIZOU ; MATSUDOU MASAKI ; OOTA YUUSUKE ; TSUNODA RYUTA

Agent(s): GRIFFITH HACK ; MIYAZAKI AND METSUGI

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR
CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU
ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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: HIGH RIGIDITY INTERLAYERS AND LIGHT WEIGHT LAMINATED MULTIPLE LAYER PANELS

Abstract: This disclosure is related to the field of polymer interlayers for multiple layer panels and multiple layer panels having at least one polymer interlayer sheet. Specifically, this disclosure is related to the field of high rigidity interlayers and light weight laminated multiple layer panels incorporating high rigidity interlayers.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/06

B32B27/22 B32B27/30 B32B27/42 B32B3/26 B32B7/02

B60J1/02 (Advanced/Invention)

CPC: B32B17/10761 B32B27/42 B32B27/22 B32B17/10605

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B32B17/00 B32B27/08 B32B27/18 B32B27/20 B32B2250/40

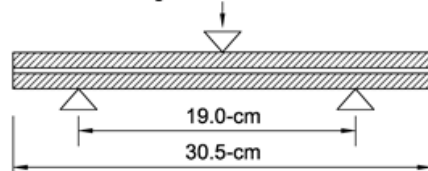
B32B2307/542 B32B2307/546 B32B2307/558 B32B2307/718

B32B2307/732

US: 428/172 428/215

PatBase - US2017100918_AA

Force applied at the center of the beam
Bending rate = 1.27 mm/min.



Family:

Publication number	Publication date	Application number	Application date
TW201726391 A	20170801	TW20160132316	20161006
US2017100918 AA	20170413	US20150879720	20151009
US2017100919 AA	20170413	US20150879596	20151009
WO17062239 A1	20170413	WO2016US54055	20160928

Priority:

US20150879373 20151009

US20150879596 20151009

US20150879720 20151009

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

Inventor(s): (std): LU JUN

Agent(s): OWEN STEVEN A

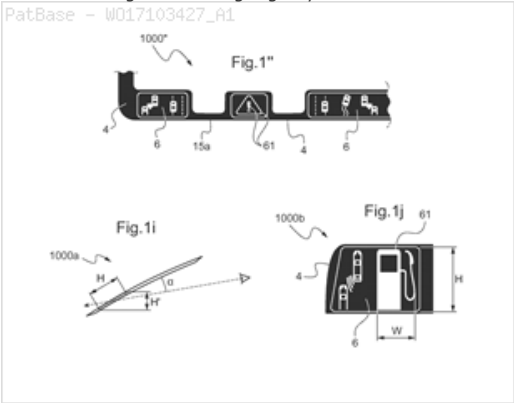
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Title: LAMINATED WINDSHIELD FOR A VEHICLE, COMPRISING AN INTERNAL LUMINOUS SIGNAGE SYSTEM

Abstract: The invention relates to a laminated windshield for a vehicle, provided with internal luminous information (1000) and comprising a first glazing (1), an intermediate lamination sheet, and a second glazing (1') having a surface F4 that supports a first curved organic light emitting diode (OLED) device (2) for illuminating the first signage system.

Classifications:

International (IPC 8-9): B32B17/10 B60J1/02 B60Q11/00
C03C27/12 F21V33/00 G02B27/02 (Advanced/Invention)
CPC: B32B17/10541 B32B17/10018 B32B17/10036 B32B17/10174
B32B17/10348 B32B17/10761 B32B17/1077 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
CN107107572 A	20170829	CN201680003431	20161213
FR3045505 A1	20170623	FR20150062515	20151216
FR3045505 B1	20171222	FR20150062515	20151216
WO17103427 A1	20170622	WO2016FR53367	20161213

Priority:

FR20150062515 20151216 WO2016FR53367 20161213

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): SAINT GOBAIN GLASS FRANCE SA

Inventor(s): (std): LALUET JEAN YVES

Inventor(s): JEAN YVES LALUET

Agent(s): SAINT GOBAIN RECHERCHE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC 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: THERMOFORMED POLYCARBONATE/GLASS LAMINATES AND APPLICATIONS THEREOF

Abstract: A laminate and an article of manufacture include a first layer including a polymeric material and a second layer including a glass sheet thermoformed to the first layer. The laminate may include at least one third layer including a polymeric material, the at least one third layer thermoformed to the second layer. The polymeric material in the first layer or the at least one third layer may include a polycarbonate. The laminate and/or article of manufacture may further include at least one functional layer. The at least one functional layer may include an image forming layer, a conductive layer or a touch sensing layer. An electronic device, a sound or moisture barrier, or a medical tray may incorporate the laminate/article of manufacture. Methods for forming the laminate and article of manufacture are also described.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/20 B32B27/28

B32B27/30 B32B27/32 B32B27/34 B32B27/36

B32B7/12 (Advanced/Invention)

CPC: B32B7/12 B32B27/20 B32B27/281 B32B27/285 B32B27/302

B32B27/308 B32B27/32 B32B27/34 B32B27/36 B32B27/365

B32B2255/10 B32B2255/26 B32B2262/0269 B32B2262/0276

B32B2262/06 B32B2262/062 B32B2262/08 B32B2262/101

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B32B2307/102 B32B2307/202 B32B2307/212 B32B2307/40

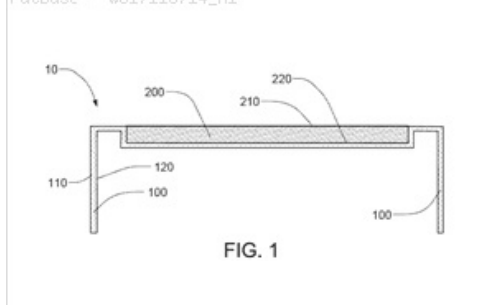
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B32B2535/00 B32B17/064 B32B17/10018 B32B17/1077

B32B17/10788 B32B2369/00 B32B2457/202

PatBase - WO17116714_A1



Family:

Publication number	Publication date	Application number	Application date
WO17116714 A1	20170706	WO2016US66654	20161214

Priority:

US20150272765P 20151230

Probable Assignee: SABIC GLOBAL TECHNOLOGIES BV

Assignee(s): (std): AMBA RAKSHIT ; SABIC GLOBAL TECHNOLOGIES BV

Inventor(s): (std): AMBA RAKSHIT

Agent(s): QUICKER KATRINA M ET AL

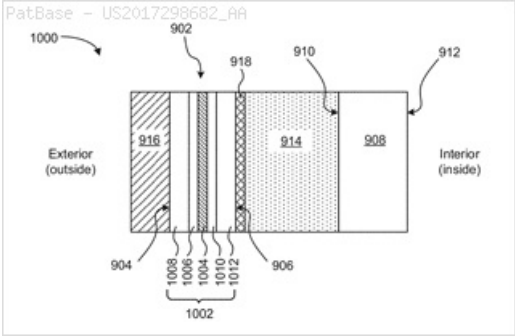
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Title: INTEGRATION OF ELECTROCHROMIC FILMS ON A SUBSTRATE

Abstract: The present disclosure relates generally to methods for the integration of electrochromic films onto a substrate, such as a glass window, and the systems/structures formed via such methods.

Classifications:

International (IPC 8-9): A01M29/06 B32B17/10 B32B7/12
C01B25/30 C01D15/10 C03C17/23 C08K3/18 C08K5/315 C09K9/02
E06B3/67 E06B9/24 G02F1/01 G02F1/15
G02F1/153 (Advanced/Invention);
C03C17/36 (Advanced/Non-invention)
CPC: G02F1/153 G02F1/1523 B32B17/10513 B32B7/12
B32B17/10779 E06B2009/2464 G02F1/15 C08K5/315 C08K3/18
C09K2211/1458 G02F2001/1519 C09K2211/145 H01B1/122
C03C17/34 C03C17/3655 C03C2217/94 C03C2217/948 G02F1/1525
C03C17/23 B32B17/10036 B32B17/10055 B32B17/10174
B32B17/10761 B32B17/1077 B32B17/10788 C01B25/30 E06B3/6722
E06B9/24 C03C17/3668 A01M29/08 C03C17/366



Family:

Publication number	Publication date	Application number	Application date
US2017298682 AA	20171019	US20170399852	20170106
US2017299932 AA	20171019	US20170487325	20170413
WO17218682 A1	20171221	WO2017US37510	20170614

Priority:

US20160323407P 20160415 US20160349841P 20160614 US20170399852 20170106
US20170487325 20170413

Probable Assignee: FURCIFER INC

Assignee(s): (std): FURCIFER INC

Inventor(s): (std): WANG CHAO ; WANG JIAN ; ZHOU YAN

Agent(s): CHEN WEIGUO

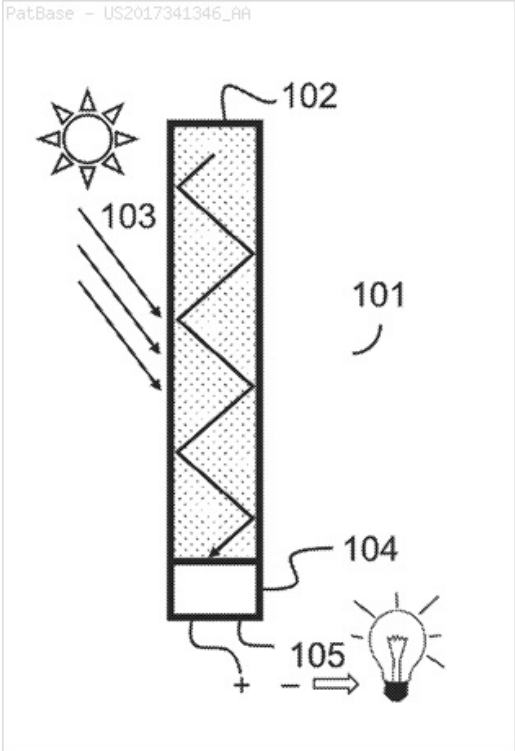
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ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG
MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC
SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: LAMINATED GLASS LUMINESCENT CONCENTRATOR

Abstract: A laminated glass luminescent concentrator is provided which includes a solid medium having a plurality of fluorophores disposed therein. In some embodiments, the fluorophore is a low-toxicity quantum dot. In some embodiments, the fluorophore has significantly reduced self-absorption, which allows for unperturbed waveguiding of the photoluminescence over a long distance. Also disclosed are apparatuses for generating electricity from the laminated glass luminescent concentrator, and its combination with buildings and vehicles.

Classifications:

International (IPC 8-9): B32B17/08 B32B17/10 E06B3/66 E06B3/663 E06B3/673 H01L31/055 (Advanced/Invention)
CPC: B32B17/10449 B32B17/10036 B32B17/10614 B32B17/10743 B32B17/10761 H01L31/055 B32B17/10871 B32B17/10908 B32B17/10935 B32B17/08 B32B17/10788 B32B2305/72 B32B2305/30 B32B2264/12 B32B2255/26 B32B2307/422 B32B2311/12 B32B2311/20 B32B2315/08 B32B2317/18 B32B2329/06 B32B2331/04 B32B2333/12 B32B2419/00 B32B2457/12 B32B2605/08



Family:

Publication number	Publication date	Application number	Application date
US2017341346 AA	20171130	US20170604656	20170525
WO17205641 A1	20171130	WO2017US34507	20170525

Priority:

US20160341238P 20160525 US20170604656 20170525

Probable Assignee: UBIQD LLC

Assignee(s): (std): UBIQD LLC

Inventor(s): (std): BERGREN MATTHEW ; BERGREN MATTHEW R ; JACKSON AARON ; MCDANIEL HUNTER

Agent(s): FORTKORT JOHN

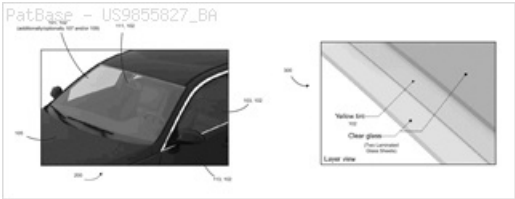
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Title: MOTOR VEHICLE WINDOW VISIBILITY SYSTEM AND METHOD

Abstract: An improved motor vehicle window visibility system that increases visibility and provides low-glare for a windshield and windows of a motor vehicle, improves temperature control, improves visual contrast and reduces glare in bright sunlight, rain, sleet, snow, fog, and night conditions. The system includes a thin polymeric film, yellow-tinted, that sandwiches and seals between layers of clear laminated glass of the motor vehicle.

Classifications:

International (ipc 8-9): B32B17/10 B60J1/00 B60J3/00 B60J3/04 B60J3/06 G02B27/00 G02F1/00 G02F1/01 (Advanced/Invention)
CPC: B60J3/007 B32B17/10036 B32B17/10357 B32B17/10486 B60J1/002 B60J3/04 B60J3/06 G02B27/00 G02F1/0126 B32B17/10302 B32B2250/02 B32B2255/26 B32B2307/408 B32B2307/4023 B32B2307/412 B32B2307/42 B32B2605/08 G02B5/208 G02B5/223



Family:

Publication number	Publication date	Application number	Application date
US9855827 BA	20180102	US20160155050	20160515

Priority:

US20150197505P 20150727 US20160155050 20160515

Probable Assignee:

ZAMBITO JOSEPH

Assignee(s): (std):

ZAMBITO JOSEPH

Inventor(s): (std):

ZAMBITO JOSEPH

Agent(s):

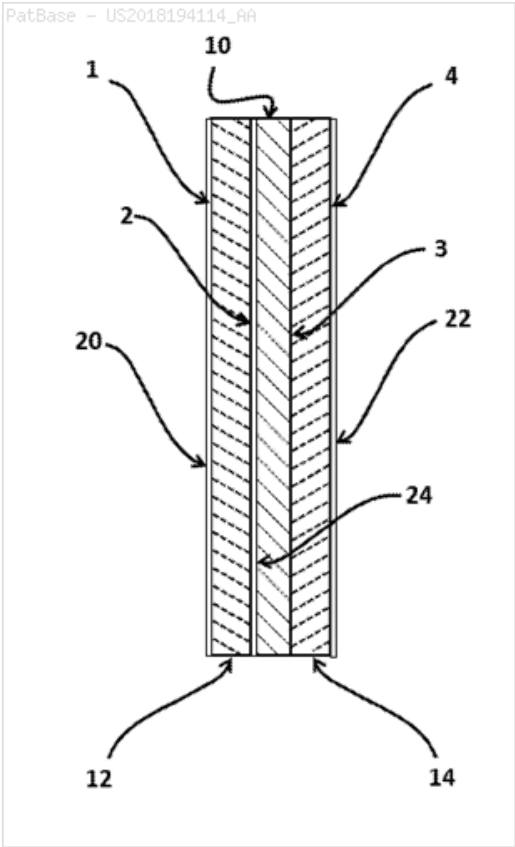
RACHEL; RG PATENT CONSULTING LLC

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 B64C1/1476 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

Priority:

US20160440453P 20161230 US20170859427 20171230

Probable Assignee: AGP AMERICA S A

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

Assignee(s): 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

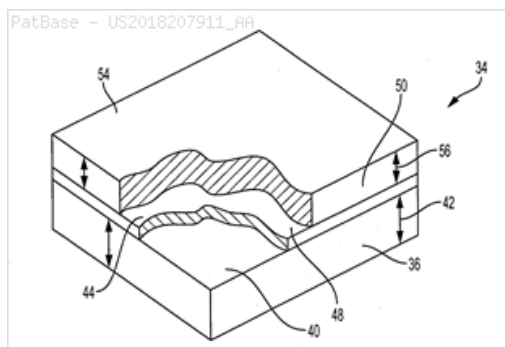
Title: ASYMMETRIC GLAZING LAMINATES WITH HIGH IMPACT RESISTANCE

Abstract: An asymmetric glazing laminate (34) that includes an outer transparency (36) and an inner transparency (50) that are maintained together by an interlayer (44). Outer transparency (36) has a nominal thickness (42) of 2.1 mm and inner transparency (50) has a nominal thickness of 1.2 mm. The asymmetric glazing has greater stone impact resistance and lower per unit weight than symmetric glazing laminate (10) in which the outer and inner transparencies (12 and 26) each have nominal thickness of 2.1.

Classifications:

International (IPC 8-9): B32B17/10 B32B37/10 B32B37/18
B32B7/02 B60J1/02 C03C17/36 (Advanced/Invention)

CPC: C03C17/3681 B32B17/10761 B32B17/10559 B32B17/10752
B32B17/10779 B32B2605/006 B32B37/10 B32B17/10036
B32B17/10917 B32B37/182



Family:

Publication number	Publication date	Application number	Application date
US2018207911 AA	20180726	US20180876518	20180122
US2018207923 AA	20180726	US20180876775	20180122
WO18136860 A1	20180726	WO2018US14651	20180122
WO18136869 A1	20180726	WO2018US14677	20180122

Priority:

US20170448657P 20170120 US20180876518 20180122 US20180876775 20180122

Probable Assignee: PITTSBURGH GLASS WORKS LLC

Assignee(s): (std): LAMPMAN DEWITT ; PITTSBURGH GLASS WORKS LLC ; ULIZIO MICHAEL

Inventor(s): (std): LAMPMAN DEWITT ; ULIZIO MICHAEL

Agent(s): TOLHURST FREDERICK L ET AL; TOLHURST FREDERICK 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 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: LIGHT-WEIGHT, HIGH STIFFNESS GLASS LAMINATE STRUCTURE

Abstract: A laminate structure having a first chemically strengthened glass layer, a second chemically strengthened glass layer, and a polymer interlayer structure intermediate the first and second glass layers. The polymer interlayer structure can include a first polymeric layer adjacent to the first glass layer, a second polymeric layer adjacent to the second glass layer, and a polymeric rigid core intermediate the first and second polymeric layers.

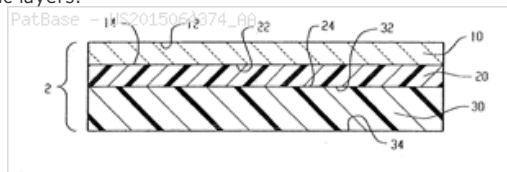
Classifications:

International (IPC 8-9): B32B17/10 B32B27/06 B32B27/18 B32B27/28 B32B27/36 B32B33/00 B32B37/18 C03C27/012 C03C21/00 C03C27/12 C08G77/448 C08G77/455 E06B3/66 (Advanced/Invention)

CPC: B32B17/10091 B32B37/18 B32B2383/00 B32B2369/00 B32B2367/00 B32B17/10119 B32B17/10761 B32B17/10798 B32B17/10036 B32B17/10137 B32B17/10752 B32B17/10779 B32B17/10788 Y10T428/31507 Y10T428/31663 Y10T156/10

Y10T428/24868 Y10T428/24926 Y10T428/2495 Y10T428/24967 B32B27/283 B32B27/365 B32B17/10018 B32B17/10678 B32B17/1077 E06B3/66

US: 156/60 428/203 428/210 428/213 428/215 428/34 428/412 428/446 428/447



Family:

Publication number	Publication date	Application number	Application date
CN105682921 A	20160615	CN201480059358	20140828
EP3038826 A2	20160706	EP20140762186	20140828
IN201617009730 A	20160729	IN201617009730	20160321
JP2016538227 T2	20161208	JP20160537843T	20140828
KR20160047566 A	20160502	KR20167008221	20140828
TW201509650 A	20150316	TW20140129988	20140829
US2015064374 AA	20150305	US20140471830	20140828
WO15031590 A2	20150305	WO2014US53115	20140828
WO15031590 A3	20150716	WO2014US53115	20140828

Priority:

US20130871928P 20130830 US20140471830 20140828 WO2014US53115 20140828

Probable Assignee: CORNING INC

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

Inventor(s): (std): JAIN ANURAG ; LAURIN MICHAEL M ; MAAS CHRISTIANUS JOHANNES JACOBUS ; MCDONALD MICHAEL AARON ; MOORE MICHAEL JOHN ; WOOD CHARLIE W ; MAAS CHRISTIANUS JOHANNES JAC

Agent(s): SCHEUERMANN ERIK; HARDEE RYAN T 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: POLYMERIC INTERLAYERS HAVING ENHANCED SURFACE ROUGHNESS

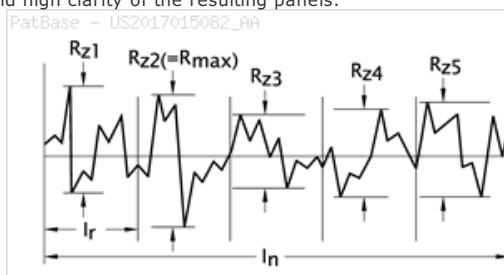
Abstract: Embossed polymer sheets and interlayers having at least one tapered zone are provided. The roughness of the embossed portion of the sheets and interlayers may be substantially uniform. Methods and systems for producing such interlayers are also described herein and may utilize at least one pair of rollers oriented substantially parallel to one another. When used in multiple layer panels, such as safety glass laminates, the embossed tapered interlayers described herein exhibit excellent optical performance, as indicated by the low haze and high clarity of the resulting panels.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/08 B32B27/22
B32B27/30 B32B27/42 B32B3/26 B32B3/30 B32B38/06
C08J5/18 (Advanced/Invention)

CPC: B32B3/30 B32B27/42 B32B27/22 B32B27/08 B32B9/045
B32B27/18 B32B27/306 B32B27/36 B32B27/365 B32B2250/24
B32B2255/10 B32B2255/26 B32B2307/308 B32B2307/412
B32B2307/518 B32B2307/536 B32B2307/538 B32B2307/732
B32B2419/00 B32B2457/12 B32B2571/00 B32B2605/006
B32B2607/00 B32B17/10568 B32B17/10587 B32B17/10761
C08J5/18 B32B17/1055 B32B3/263 B32B38/06

US: 428/141



Family:

Publication number	Publication date	Application number	Application date
CN107922641 A	20180417	CN201680041876	20160712
EP3322747 A1	20180523	EP20160825022	20160712
KR20180021216 A	20180228	KR20187004546	20160712
MX2017016709 A1	20180309	MX20170016709	20160712
US2017015082 AA	20170119	US20150830902	20150820
WO17011435 A1	20170119	WO2016US41850	20160712

Priority:

US20150193393P 20150716 US20150830902 20150820 WO2016US41850 20160712

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

Inventor(s): (std): ARISTOTELIS KARAGIANNIS ; CREYTENS HANS ; GARY MATIS ; HANS CREYTENS ; KARAGIANNIS ARISTOTELIS ; MATIS GARY

Agent(s): RICKER MATHIAS; OWEN STEVEN 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: LAMINATE STRUCTURES WITH ENHANCED DAMPING PROPERTIES

Abstract: Described herein are laminate structures with enhanced sound-damping properties and mechanical properties. The laminates are composed of an interlayer structure disposed between a first glass substrate and a second glass substrate, wherein the interlayer is composed of a polymer layer designed such that sound attenuation or damping by the laminate is optimized. The laminates described herein may be used in vehicles or architectural panels. In one or more embodiments, the laminate may be disposed in an opening of a vehicle body. Where the vehicle body is an automobile, the laminate could be used as a windshield, a side window, sunroof or rear windshield. The body of some embodiments may include railcar body, or an airplane body. In other embodiments, the laminate may be used in architectural panels, which may include a window, an interior wall panel, a modular furniture panel, a backsplash, a cabinet panel, or an appliance panel.

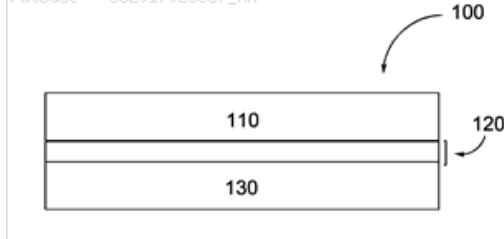
Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 B61D25/00 B64C1/14 C08F220/18 C08F220/28 C08F220/30 C08F226/06 (Advanced/Invention)

CPC: B32B17/10137 B32B17/10119 B64C1/14 B32B2605/00 B32B2307/102 B32B17/10743 B32B17/10761 B32B17/10036 B64C1/00 B64C1/066 B64C2001/0072 B64D2011/0046 C08F220/28 C08F220/30 C08F226/06 C08F2220/1875 C08F2220/282 C08F2220/285 C08F2220/301 Y02T50/46 B32B2255/26 B32B2307/732 B32B2419/00 B32B2479/00 B32B2509/00 B32B2607/00 B32B2250/03 C08F220/18 B32B17/10697 B32B17/10788 B32B2607/02 Y02T50/43

US: 428/213

PatBase - US2017028687_AA

**Family:**

Publication number	Publication date	Application number	Application date
CN108290388 A	20180717	CN201680045126	20160727
EP3328644 A2	20180606	EP20160748237	20160727
KR20180037014 A	20180410	KR20187006027	20160727
US2017028687 AA	20170202	US20160219664	20160726
WO17023644 A2	20170209	WO2016US44250	20160727
WO17023644 A3	20170504	WO2016US44250	20160727

Priority:

US20150199285P 20150731 US20160339152P 20160520 US20160349425P 20160613
 US20160349425P 20160713 US20160219664 20160726 WO2016US44250 20160727

Probable Assignee: CORNING INC

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

Inventor(s): (std): DEROSA MICHAEL EDWARD ; LYON JENNIFER LYNN ; MATTHEWS JAMES ROBERT ; SORENSEN MICHAEL LESLEY ; WEIKEL ARLIN LEE

Agent(s): EPPING HERMANN FISCHER; PATEL PAYAL A

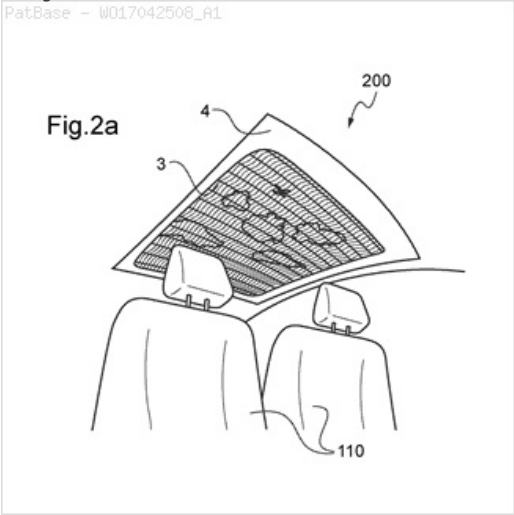
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Title: LUMINOUS GLAZING UNIT FOR A VEHICLE AND THE MANUFACTURE THEREOF

Abstract: The invention relates to luminous glazing unit (200) for a vehicle, in particular a road vehicle, having a laminated glazing unit and a first light source at the periphery of the glazing unit, a luminous woven textile comprising warp yarns, weft yarns and optical fibres, the optical fibres being capable of emitting light sideways, the optical fibres protruding from a first edge surface of the laminated glazing unit, and the light source being connected to the first free ends of the optical fibres. The woven textile has openings between the warp yarns, the weft yarns and the optical fibres, allows a fraction of the solar radiation to pass through via the openings and has a clarity C of at least 75 percent. The luminous woven textile is in optical contact with the faces F2 and F3 of the glass panes of the laminated glazing unit.

Classifications:

International (IPC 8-9): B32B15/04 B32B15/14 B32B17/06 B32B17/10 B32B33/00 B60J1/00 B60Q3/00 B60Q3/02 B60Q3/208 B62D25/06 C03C4/00 (Advanced/Invention)
CPC: B32B17/10036 B32B17/067 B32B17/10174 B32B17/10541 B32B17/10761 B32B17/10788 B32B2605/08 B60Q3/208 B62D25/06 B32B15/14 B32B15/04 B32B33/00 B32B2307/40 B32B2307/406 B32B17/10339 B32B2315/08 B32B2605/006



Family:

Publication number	Publication date	Application number	Application date
CN107074148 A	20170818	CN201680002124	20160909
EP3347199 A1	20180718	EP20160775293	20160909
FR3040992 A1	20170317	FR20150058499	20150911
FR3040992 B1	20171006	FR20150058499	20150911
IN201817006849 A	20180706	IN201817006849	20180223
KR20180053328 A	20180521	KR20187009779	20160909
WO17042508 A1	20170316	WO2016FR52271	20160909

Priority:

FR20150058499 20150911 WO2016FR52271 20160909

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Inventor(s): (std): ARTZNER EMMANUELLE ; BAUERLE PASCAL ; BROCHIER CEDRIC ; CHEVALIER DELPHINE ; LALUET JEAN YVES

Inventor(s): PASCAL BAUERLE ; DELPHINE CHEVALIER ; EMMANUELLE ARTZNER ; JEAN YVES LALUET ; CEDRIC BROCHIER

Agent(s): SAINT GOBAIN RECHERCHE

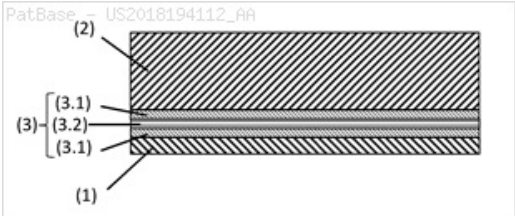
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT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

Title: LAMINATED GLASS WITH THIN INNER PANE AND SOUNDPROOFING THERMOPLASTIC INTERMEDIATE LAYER

Abstract: A vehicular laminated glass for separating a vehicle interior from an external environment is presented. The laminated glass includes inner and outer panes made of glass and having respective thicknesses of less than or equal to 0.4 mm, and greater than or equal to 1.5 mm, and an acoustically damping intermediate layer that bonds the inner pane to the outer pane. According to one aspect, the acoustically damping intermediate layer has two outer polymeric layers between which an inner polymeric layer is positioned, the outer polymeric layers having lower elasticity or plasticity than the inner polymeric layer. According to another aspect, the inner polymeric layer has a thickness of 0.05 mm to 0.40 mm, each of the outer polymeric layers have a thickness of 0.20 mm to 0.60 mm, and the total thickness of the acoustically damping intermediate layer is at least 0.70 mm.

Classifications:

International (IPC 8-9): B32B17/10 C03C27/12
C03C3/083 (Advanced/Invention)
CPC: B32B17/1077 C03C27/10 B32B17/10788 C03C2201/32
C03C2201/50 C03C2201/54 C03C3/083 B32B17/10036
B32B17/10137 B32B17/10761 B32B2250/05 B32B2307/102
B32B2329/06 B32B2605/006 B60R13/0815



Family:

Publication number	Publication date	Application number	Application date
CN107405884 A	20171128	CN201680002133	20160929
US2018194112 AA	20180712	US20160738103	20160929
WO17055470 A1	20170406	WO2016EP73291	20160929

Priority:

EP20150187851 20151001 WO2016EP73291 20160929

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Inventor(s): (std): AJDARI ARMAND ; KREBS BENJAMIN ; LINNHOFER DIETER ; LINNHOFER DIETER

Agent(s): GEBAUER DIETER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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

Abstract: The invention relates to a method for producing a composite pane (1), wherein a) a carrier film (5) having an electrically conductive coating (6) is provided, b) a first laminating film (4.1) is laid onto the electrically conductive coating (6) of the carrier film (5), c) the carrier film (5) and the first laminating film (4.1) are joined in order to form a bilayer (7), d) the bilayer (7) is arranged on an outer pane (2) in such a way that the first laminating film (4.1) lies on the outer pane (2) in a planar manner, e) a second laminating film (4.2) is arranged on the bilayer (7) in such a way that the second laminating film (4.2) lies on the carrier film (5) in a planar manner, f) an inner pane (3) is laid onto the second laminating film (4.2), g) the stack of layers comprising outer pane (2), bilayer (7) of first laminating film (4.1) and carrier film (5) having electrically conductive coating (6), second laminating film (4.2), and inner pane (3), is autoclaved in order to form a composite pane (1).

B32B17/10788 B32B2307/416 B32B2605/006

Publication number	Publication date	Application number	Application date
CA2998306 AA	20180309	CA20162998306	20161020
CN107107570 A	20170829	CN201680002349	20161020
IN201817010135 A	20180706	IN201817010135	20180320
KR20180055865 A	20180525	KR20187010903	20161020
WO17068076 A1	20170427	WO2016EP75287	20161020

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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 UB US UZ VC VN ZA ZM ZW

Title: VEHICLE ANTENNA DISC OR VEHICLE DISC ANTENNA FOR A TOLL PAYMENT SYSTEM

Abstract: The invention relates to a vehicle antenna disc (100) for operating a toll payment system, at least comprising: a disc (1); a first receiver (10) for receiving a first signal (S1) from a toll booth transmitter (31); a signal converter (5) for converting the first signal (S1) into a second signal (S2) and for converting a third signal (S3) into a fourth signal (S4); a second transmitter (21) for transmitting the second signal (S2) to a mobile radio device (6); a second receiver (20) for receiving the third signal (S3) from the mobile radio device (6); a first transmitter (11) for transmitting the fourth signal (S4) to a toll booth receiver (30), wherein the receiver (10, 20) and the transmitter (11, 21) are designed for receiving and transmitting short-range radio signals (S1-S4).

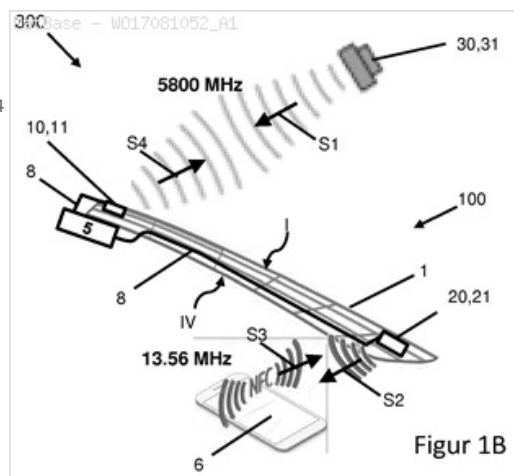
Classifications:

International (IPC 8-9): B32B17/00 B32B17/10 G06Q20/04

G07B15/06 H01Q1/12 (Advanced/Invention)

CPC: G07B15/063 B32B17/10036 B32B17/10192 B32B17/10761

B32B17/10788 B32B2605/08 H01Q1/1271 B32B17/10779 G06Q20/04



Family:

Publication number	Publication date	Application number	Application date
CA2993482 AA	20180124	CA20162993482	20161109
CN108027988 A	20180511	CN201680002619	20161109
IN201827004016 A	20180504	IN201827004016	20180202
KR20180069006 A	20180622	KR20187013129	20161109
WO17081052 A1	20170518	WO2016EP77072	20161109

Priority:

EP20150193874 20151110 WO2016EP77072 20161109

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): DROSTE STEFAN ; GARCIA STEFAN ; OFFERMANN VOLKMAR

Inventor(s): (std): DROSTE STEFAN ; GARCIA STEFAN ; OFFERMANN VOLKMAR

Agent(s): GOUDREAU GAGE DUBUC ; GEBAUER DIETER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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

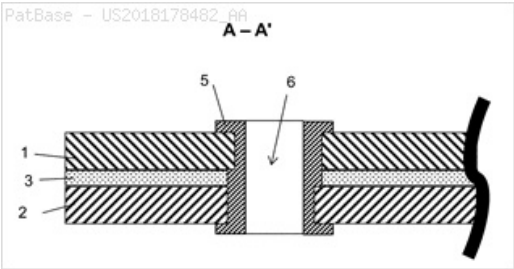
Title: COMPOSITE GLASS PANE WITH A MOUNTING HOLE

Abstract: A composite glass pane with a through mounting hole. The composite glass pane having a first pane and a second pane that are bonded to one another via a thermoplastic intermediate layer and at least one passage that extends through the entire composite glass pane, wherein the edge of the passage is provided with a polymeric element formed in one piece having a through hole running through the passage.

Classifications:

International (IPC 8-9): B29C45/14 B32B17/10 B32B3/08 B32B3/24 B32B3/26 B60J1/17 E05F11/38 E06B3/66 E06B3/673 (Advanced/Invention)

CPC: B32B17/10293 B32B3/266 B32B17/1077 B32B17/10807 B32B2605/00 B32B2605/006 B32B17/10724 B32B17/10779 B32B3/08 E06B3/66 B32B17/10761 E05Y2900/55 E06B3/673 B29C45/14344 B29C45/14434 B29K2067/006 B29K2077/00 B29K2709/08 B29L2031/3052 B32B17/10036 B60J1/17 E05F11/385 E05F2011/387



Family:

Publication number	Publication date	Application number	Application date
CA2994990 AA	20180207	CA20162994990	20160217
CN106993407 A	20170728	CN201680002207	20160217
IN201837000391 A	20180223	IN201837000391	20180104
KR20180026507 A	20180312	KR20187003337	20160217
US2018178482 AA	20180628	US20160736282	20160217
WO17084767 A1	20170526	WO2016EP53337	20160217

Priority:

US20150256658P 20151117 US20160736282 20160217 WO2016EP53337 20160217

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): UEBELACKER STEFAN ; VON AVENARIUS WOLFGANG ; KOTTE ROLF ; PARIJ GERRY R

Inventor(s): (std): KOETTE ROLF ; KOTTE ROLF ; VON AVENARIUS WOLFGANG ; UEBELACKER STEFAN ; PARIJ GERRY R

Agent(s): GOUDREAU GAGE DUBUC ; LENDVAI TOMAS

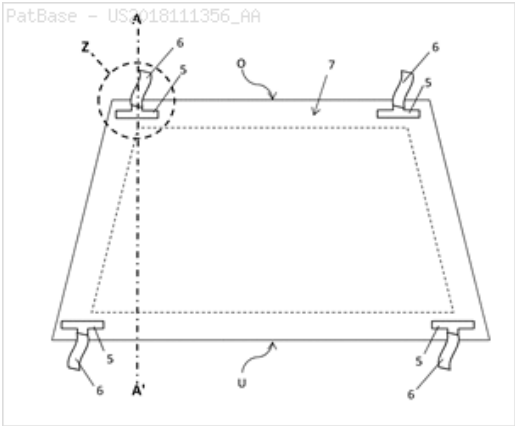
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Title: VEHICLE COMPOSITE PANE WITH AN INTEGRATED LIGHT SENSOR

Abstract: A vehicle composite pane with an integrated light sensor is presented. The vehicle composite pane includes an outer pane and an inner pane that are bonded to one another via a thermoplastic intermediate layer. A photodiode situated on a circuit board is arranged between the outer pane and the inner pane, wherein the photodiode is a surface-mounted device (SMD) component.

Classifications:

International (IPC 8-9): B32B17/10 B60Q1/00 B60S1/08 H01R13/73 (Advanced/Invention); B60S1/08 H01R13/73 (Advanced/Non-invention)
CPC: B60Q1/00 B32B2605/006 B60Q1/0023 B32B17/10293 B32B17/10036 B32B17/10761 B32B17/1077 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
CA2995016 AA	20180207	CA20162995016	20161114
CA2995353 AA	20180209	CA20162995353	20161114
CN107046805 A	20170815	CN201680003095	20161114
CN107206753 A	20170926	CN201680003109	20161114
IN201837003773 A	20180316	IN201837003773	20180201
IN201837004122 A	20180316	IN201837004122	20180203
KR20180022931 A	20180306	KR20187002882	20161114
KR20180022932 A	20180306	KR20187002883	20161114
MX2018002211 A1	20180323	MX20180002211	20161114
US2018111356 AA	20180426	US20160737675	20161114
WO17097536 A1	20170615	WO2016EP77534	20161114
WO17097537 A1	20170615	WO2016EP77536	20161114

Priority:

EP20150198195 20151207 WO2016EP77534 20161114 WO2016EP77536 20161114

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): DUERKOP DETLEV ; EFFERTZ CHRISTIAN ; SCHMALBUCH KLAUS ; WOHLFEIL DIRK ; SCHWINGES GUIDO ; ZEISS MICHAEL

Inventor(s): (std): CHRISTIAN EFFERTZ ; DETLEV DUERKOP ; DIRK WOHLFEIL ; DUERKOP DETLEV ; EFFERTZ CHRISTIAN ; GUIDO SCHWINGES ; KLAUS SCHMALBUCH ; MICHAEL ZEISS ; SCHMALBUCH KLAUS ; SCHWINGES GUIDO ; WOHLFEIL DIRK ; ZEISS MICHAEL

Agent(s): GOUDREAU GAGE DUBUC ; LENDVAI TOMAS

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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

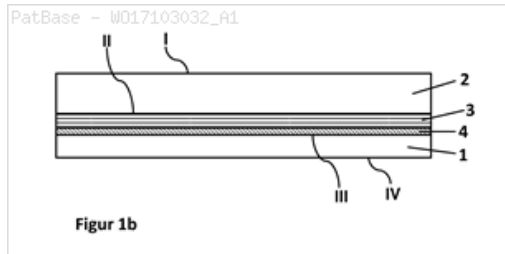
Title: HEATABLE LAMINATED GLASS COMPRISING A THIN INNER PANE AND A THIN OUTER PANE

Abstract: Disclosed is a laminated glass for a vehicle for separating the interior of a vehicle from an external environment, at least comprising: - an inner pane (1) consisting of glass and comprising an inner face (III) and an outer face (IV), - an outer pane (2) consisting of glass and comprising an inner face (II) and an outer face (I), - a thermoplastic intermediate layer (3) which connects the inner face (III) of the inner pane (1) to the inner face (II) of the outer pane (2), wherein - the thickness of the inner pane (1) is less than or equal to 1.4 mm, - the thickness of the outer pane (2) is less than or equal to 1.8 mm and - an electrically heatable coating (4) is applied to the inner face (III) of the inner pane (1) or the inner face (II) of the outer pane (2).

Classifications:

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

CPC: B32B17/10174 B32B17/10229 B32B17/10761 B32B17/1077
B32B17/10788 B32B17/10036 B32B17/10119 B32B17/10137
B32B17/10211 B32B17/1022 B32B2307/202 B32B2309/105
B32B2605/08



Family:

Publication number	Publication date	Application number	Application date
CA3005510 AA	20180516	CA20163005510	20161215
CN107107571 A	20170829	CN201680003204	20161215
KR20180082548 A	20180718	KR20187016611	20161215
WO17103032 A1	20170622	WO2016EP81323	20161215

Priority:

EP20150200334 20151216 WO2016EP81323 20161215

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Assignee(s): SCHALL GUNTHER ; SCHULZ VALENTIN

Inventor(s): (std): SCHALL GUENTHER ; SCHULZ VALENTIN ; SCHALL GUNTHER

Agent(s): GOUDREAU GAGE DUBUC ; GEBAUER DIETER

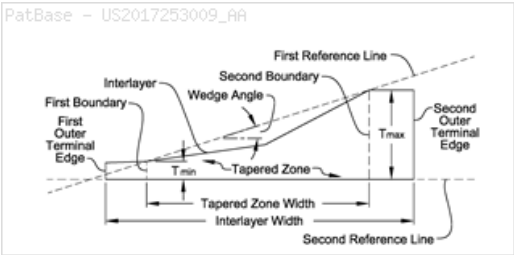
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ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG
MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC
SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: POLYMERIC INTERLAYERS AND MULTIPLE LAYER PANELS MADE THEREFROM EXHIBITING ENHANCED PROPERTIES AND PERFORMANCE

Abstract: Multiple layer panels including a pair of substrates and an interlayer disposed therebetween are provided. In some cases, the multiple layer panels may utilize substrates having different thicknesses, and such configurations may help reduce glass thickness and overall panel weight. However, panels of the present invention may still exhibit sufficient strength, rigidity, and acoustic performance and can be suitable for use in a wide range of automotive, aeronautical, and/or architectural applications.

Classifications:

International (IPC 8-9): B32B17/10 B32B27/06 B32B27/08 B32B27/30 B32B3/26 B32B7/00 B32B7/02 (Advanced/Invention); G02B27/01 (Advanced/Non-invention)
CPC: B32B17/10568 B32B7/00 B32B27/306 B32B27/08 B32B7/02 B32B17/10761 B32B3/263 B32B2250/246 B32B2250/03 B32B2307/558 B32B2307/544 B32B2307/546 B32B2307/102 B32B2605/006 B32B17/10036 B32B27/30 B32B2250/40 G02B27/01 G02B27/0149 G02B2027/0194



Family:

Publication number	Publication date	Application number	Application date
TW201800231 A	20180101	TW20170107101	20170303
US2017253009 AA	20170907	US20160061418	20160304
WO17151345 A1	20170908	WO2017US18631	20170221

Priority:

US20160061418 20160304

Probable Assignee: SOLUTIA INC

Assignee(s): (std): SOLUTIA INC

Inventor(s): (std): LU JUN

Agent(s): BUGBEE MICHELLE

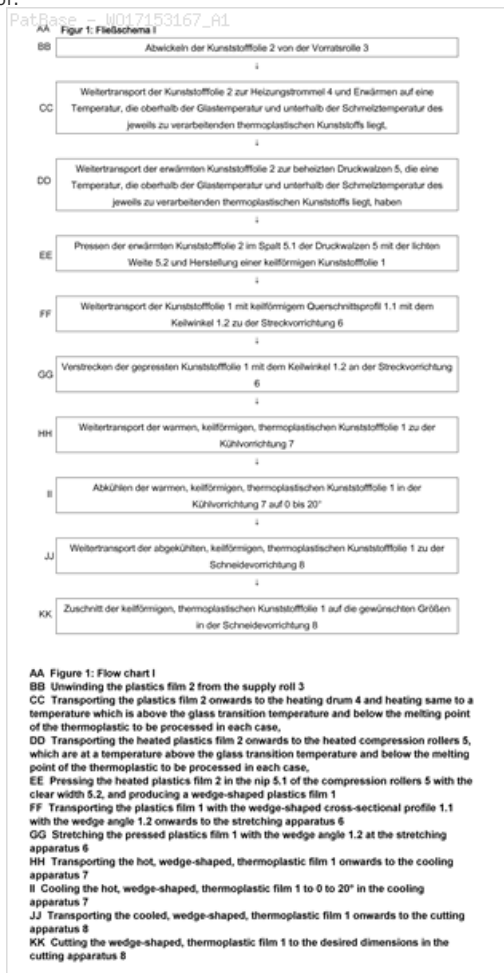
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR 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: METHOD FOR PRODUCING WEDGE-SHAPED, THERMOPLASTIC FILMS AND USE THEREOF

Abstract: The invention relates to a continuous method for producing a wedge-shaped, thermoplastic film (1), comprising the method steps of (A) unwinding a flat, thermoplastic film (2) from a supply roll (3) and transporting same onwards to a heating drum (4), (B) heating the plastics film (2) with a heating drum (4) and transporting same onwards to compression rollers (5), (C) pressing the plastics film (2) in the nip (5.1) between two heated compression rollers (5), wherein the nip (5.1) has a clear width (5.2) which corresponds to the cross-sectional profile (1.1) of the plastics film (1) to be produced, and transporting same onwards to a stretching apparatus (6), (D) stretching the plastics film (1) with a wedge-shaped cross-sectional profile (1.1) in the stretching apparatus and transporting the plastics film (1) onwards to a cooling apparatus (7), (E) cooling the plastics film (1) in the cooling apparatus (7) and transporting same onwards to a cutting apparatus (8), and (F) cutting the plastics film (1) to the desired dimensions in the cutting apparatus (8), and also relates to a method for producing a composite (9) of two panes (10) with a plastics film (1) or at least two plastics films (1a) as intermediate layer, and to a transparent composite (9) produced in such a way and the use thereof.

Classifications:

International (IPC 8-9): B29C43/22 B29C43/24 B29C43/46 B29C43/52 B29C55/06 B29K101/12 B29L31/30 B29L7/00 B32B17/10 C03B23/03 C03B40/00 G02B27/00 G02B27/01 (Advanced/Invention); B29C43/52 B29K101/12 B29L31/30 B29L7/00 C03B40/00 G02B27/01 (Advanced/Non-invention)
CPC: B29C43/24 B29C43/224 B29C43/46 B29C43/52 B29C55/06 B29C2043/467 B29K2101/12 B29L2007/00 B29L2031/3052 B32B17/10568 C03B23/0302 C03B23/0307 C03B40/00 G02B27/0018 G02B2027/0121 G02B2027/0194 G02B27/01 G02B27/0101 B32B17/10036 B32B17/10761 B32B17/1077 B32B17/10788 B32B17/1088 B29C55/18

**Family:**

Publication number	Publication date	Application number	Application date
CN107614233 A	20180119	CN201780000242	20170222
WO17153167 A1	20170914	WO2017EP54029	20170222

Priority:

EP20160159894 20160311 WO2017EP54029 20170222

Probable Assignee: SAINT GOBAIN GLASS FRANCE**Assignee(s):** (std): SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE**Inventor(s):** (std): GIER STEPHAN ; KLUCZEWSKI WOJCIECH ; LUCKE STEFAN ; LUECKE STEFAN**Agent(s):** LENDVAI TOMAS

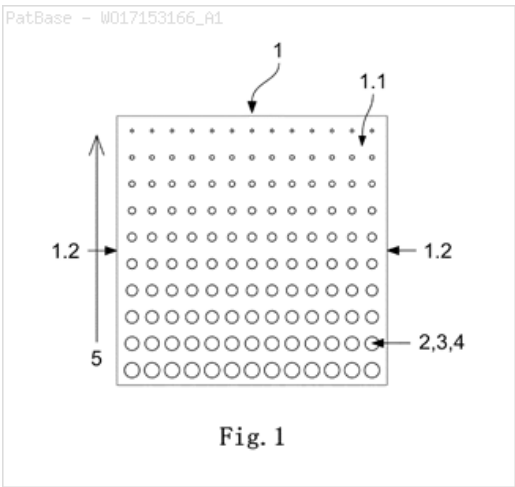
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Title: PERFORATED, THERMOPLASTIC PLASTIC FILMS AND USE THEREOF TO PRODUCE WEDGE-SHAPED FILMS

Abstract: The invention relates to perforated, thermoplastic plastic films (1) according to figure 1, having at least two parallel edges (1.2) and being of uniform thickness over the entire area (1.1) of said plastic films, wherein the perforation (2) is formed by at least one grid zone (3) of a multiplicity of holes (4), which grid zone extends over part of the entire area (1.1) or over the entire area (1.1), wherein the holes (4) are arranged in such a way that, in at least one direction, a mass gradient (5) is produced in the plastic films (1). The invention further relates to the use of said plastic films to produce wedge-shaped films (6) free of perforations.

Classifications:

International (IPC 8-9): B32B17/10 C03C27/12
C08J5/18 (Advanced/Invention)
CPC: B32B17/10036 B32B17/10568 B32B17/10761 C08J5/18
B32B17/1077 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
CN107614456 A	20180119	CN201780000241	20170222
WO17153166 A1	20170914	WO2017EP54013	20170222

Priority:

EP20160159872 20160311 WO2017EP54013 20170222

Probable Assignee: SAINT GOBAIN GLASS FRANCE

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

Inventor(s): (std): GIER STEPHAN ; KLUCZEWSKI WOJCIECH ; LUCKE STEFAN ; LUECKE STEFAN ; PLAHL SABRINA ; VORONKOFF JUSTINE

Agent(s): LENDVAI TOMAS

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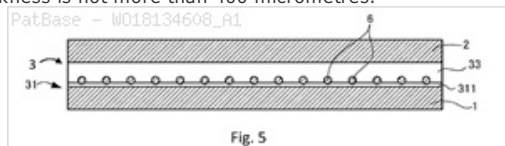
Title: LAMINATED GLASS AND METHOD OF MANUFACTURING THE SAME

Abstract: A laminated glass comprising an outer glass sheet having a first edge and a second edge opposing the first edge, an inner glass sheet arranged opposite the outer glass sheet and having substantially the same shape as the outer glass sheet, and an intermediate layer arranged between the outer glass sheet and the inner glass sheet; the intermediate layer having a heat-generating layer comprising a first busbar extending along an end portion on the first edge side, a second busbar extending along an end portion on the second edge side, and a plurality of heating wires arranged so as to connect the first busbar and the second busbar, and a sheet-like substrate (311) for supporting at least the plurality of heating wires among both busbars wherein the intermediate layer further comprises an adhesive layer (33) adjoining the heat-generating layer wherein a distance (Z1, Z2) from a centre of the heating wires in a thickness direction to a surface (S1, S2) of the outer glass sheet and a distance (Z3, Z4) from the centre of the heating wires in a thickness direction to a surface (S3, S4) of the inner glass sheet being different; and a distance (Z2) from the centre of the heating wires in the thickness direction to the inside surface (S2) of the outer glass sheet and a distance (Z3) from the centre of the heating wires in the thickness direction to the outside surface (S3) of the inner glass sheet being different wherein the thickness of the adhesive layer (33) or the thickness of the substrate (311) whichever having smaller thickness is not more than 400 micrometres.

Classifications:

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

CPC: B32B17/10385 B32B17/10036 B32B17/10348 B32B17/10761 B32B17/10779 B32B17/10788



Family:

Publication number	Publication date	Application number	Application date
GB201712058 A0	20170906	GB20170012058	20170726
WO18134608 A1	20180726	WO2018GB50157	20180119

Priority:

JP20170008689 20170120 GB20170012058 20170726

Probable Assignee: PILKINGTON GROUP LTD

Assignee(s): (std): NIPPON SHEET GLASS CO LTD ; PILKINGTON GROUP LTD

Assignee(s): NIPPON SHEET GLASS CO

Inventor(s): (std): CHAMBERLAIN MARK ANDREW ; CHIBA KAZUKI ; MELLOR LEIGH FRANCIS ; OGAWA HISASHI ; OGAWA RYOHEI ; SIDDONS GRAHAM

Agent(s): DENNO RICHARD CHRISTOPHER SOMER ET AL

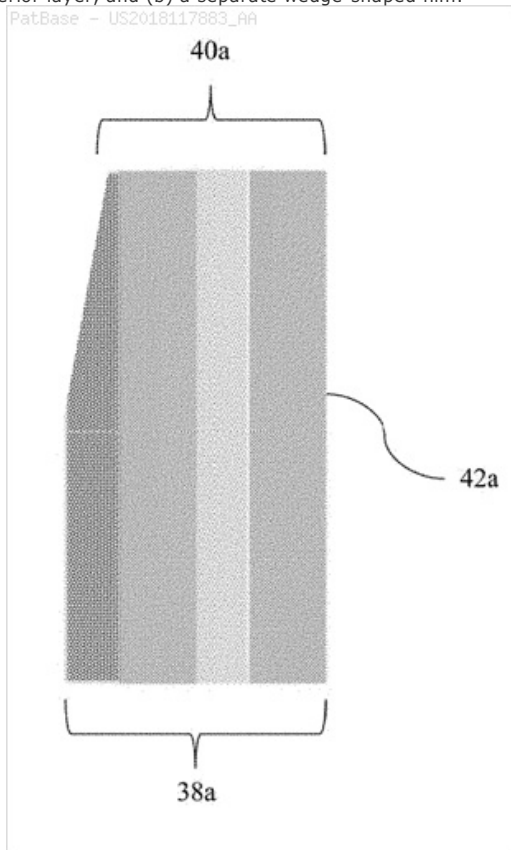
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Title: WEDGE-SHAPED MULTILAYER INTERLAYER AND GLASS LAMINATE

Abstract: Provided is a wedge-shaped multilayer interlayer and a glass laminate containing such interlayer, wherein the interlayer is based on the combination of (a) an integrated multilayer interlayer sheet having an overall substantially consistent thickness and a substantially consistent thickness of an interior layer, and (b) a separate wedge-shaped film.

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B32B27/08
 B32B27/30 B32B27/42 B32B3/02 B32B3/26 (Advanced/Invention)
CPC: B32B17/10871 B32B17/10568 B32B17/10651 B32B17/10045
 B32B17/10761 B32B27/30 B32B3/02 B32B3/263 B32B27/08
 B32B27/42 B32B2274/00 B32B2307/10 B32B2307/4026
 B32B2307/732 B32B2605/006 B32B17/10036 B32B17/10633
 B32B17/10743 B32B2250/04

**Family:**

Publication number	Publication date	Application number	Application date
US2018117883 AA	20180503	US20170796192	20171027
WO18081570 A1	20180503	WO2017US58776	20171027

Priority:

US20160414015P 20161028 US20170796192 20171027

Probable Assignee: KURARAY CO LTD

Assignee(s): (std): HANSEN STEVEN M ; KURARAY AMERICA INC ; KURARAY CO LTD ; OLSON JAMES ; PUTS RUTGER D

Inventor(s): (std): HANSEN STEVEN ; HANSEN STEVEN M ; OLSON JAMES ; PUTS RUTGER ; PUTS RUTGER D

Agent(s): MASON DEREK J 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 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