

PatBase - Search results 28 April 2017

Search query (1): PN=(US2009044897 OR US2012009388 OR US20050210921 OR US2009044897 OR US2012009388 OR US4638031 OR US20020176988 OR US20050181219 OR US20080302462 OR US20090068350 OR US20070231553 OR US20050153126 OR US20080268260)
Results: 9

16-023837-2

Exam. Estefanía P.

Search history

Search PN=(US2009044897 OR US2012009388 OR US20050210921 OR US2009044897 OR US2012009388 OR US4638031 OR US20020176988 OR
1: US20050181219 OR US20080302462 OR US20090068350 OR US20070231553 OR US20050153126 OR US20080268260) (Results 9)

Title: SUPERIOR HIGH SOLIDS COATINGS

Abstract: Source: US4532294A According to one aspect of the present invention, an improved method for preparing acrylic copolymer resins is provided in which the polymerization solvent comprises an alkanolic acid alkyl ester having a total of from about 7 to 12 carbon atoms per molecule. The monomers comprise hydroxy-substituted alkyl (meth)acrylates, and non-hydroxy substituted alkyl (meth)acrylates, and the process provides an improved method for forming low molecular weight acrylic resins useful as components in high solids acrylic coatings suitable for electrostatic spraying. The polymerization solvent can remain in the resin to become the solvent employed in the higher solids coating containing the thus-formed acrylic resins and provides surprisingly improved electrical resistivity and solvency and decreased surface tensions over prior art polymerization solvents. In accordance with another aspect of the present invention, an improved method for preparing high solids acrylic resin coatings is provided wherein an acrylic copolymer resin is dissolved in a coating solvent comprising at least one alkyl alkanolic acid ester having a total of from 7 to 12 carbon atoms per molecule.

Classifications:

International (IPC 8-9): C08F2/04 C08F2/06 C08F20/00 C08F20/26 C08F220/10 C08F220/12 C08F220/28 C08L33/04 C08L33/14 C09D133/04 C09D133/06 C09D133/14 (Advanced/Invention); C08L61/20 (Advanced/Non-invention); C08F2/04 C08F20/00 C08F220/00 C08L33/00 C09D133/04 C09D133/06 C09D133/14 (Core/Invention); C08L61/00 (Core/Non-invention)

International (IPC 1-7): C08F2/06 C08F20/28 C08F220/10 C08F220/12 C08F220/28 C08K5/10 C08L33/14 C09D133/14 C09D3/80

CPC: Y10S524/902 C09D133/066 C08F220/28 C08L61/20

European: C08F220/28 C09D133/06B4 M08L61/20

US: 524/773 524/853 524/902 526/216

Family:

Publication number	Publication date	Application number	Application date
DE3477008 D1	19890413	DE19843477008	19841121
DK587184 A	19850608	DK19840005871	19841207
DK587184 A0	19841207	DK19840005871	19841207
EP0148581 A1	19850717	EP19840308052	19841121
EP0148581 B1	19890308	EP19840308052	19841121
JP1825192 C3	19940228	JP19840259051	19841207
JP5031569 B4	19930512	JP19840259051	19841207
JP60141707 A2	19850726	JP19840259051	19841207
NO165759 B	19901227	NO19840004842	19841204
NO165759 C	19910410	NO19840004842	19841204
NO844842 A	19850610	NO19840004842	19841204
US4532294 A	19850730	US19830558953	19831207
US4638031 A	19870120	US19850701680	19850214
US4739006 A	19880419	US19870003739	19870116

Priority:

US19830558953 19831207 US19850701680 19850214 US19870003739 19870116

Probable Assignee: EXXON RESEARCH ENGINEERING CO

Assignee(s): (std): EXXON RESEARCH ENGINEERING CO

Assignee(s): EXXON RESEARCH AND ENGINEERING COMPANY ; ESSO RES AND ENG CO ; EXXON RESEARCH AND ENGINEERING CO ; EXXON RESEARCH AND ENGINEERING CO A CORP OF DE ; EXXON RESEARCH AND ENGINEERING COMP

Inventor(s): (std): BOUBOULIS CONSTANTINE J ; BOUBOULIS CONSTANTINE JOSEPH ; JOSEPH BOUBOULIS CONSTANTINE ; KONSUTANCHIN JIEI BUUBURISU

Inventor(s): KONSUTANCHIN JEI BUUBURISU

Designated states: BE DE FR GB IT NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE3477008 D1	19900426	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3477008 D1	19981210	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DK587184 A	19850608	LSPB	+	published / reissued	
DK587184 A	19980602	LSWD	-AHS	APPLICATION SHELVED FOR OTHER REASONS THAN NON-PAYMENT	
EP0148581 A1	19850717	LSPB	+	published / reissued	
EP0148581 A1	19850717	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19841217
EP0148581 A1	19861001	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19860806
EP0148581 A1	19870513	LSES	+R17C	DATE OF DESPATCH OF FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19870327
EP0148581 A1	19900321	LSGT	+26N	NO OPPOSITION FILED	
EP0148581 A1	19960912	LSFE	+PGFP	POSTGRANT: ANNUAL	REF COUNTRY CODE : FR

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EP0148581 A1	19960926	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : GB PAYMENT DATE : 19960926 YEAR OF FEE PAYMENT : 13
EP0148581 A1	19960927	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : NL PAYMENT DATE : 19960927 YEAR OF FEE PAYMENT : 13
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EP0148581 A1	19960930	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : BE PAYMENT DATE : 19960930 YEAR OF FEE PAYMENT : 13
EP0148581 A1	19961005	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	REF COUNTRY CODE : DE PAYMENT DATE : 19961005 YEAR OF FEE PAYMENT : 13
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EP0148581 A1	19971130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : BE DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19971130
EP0148581 A1	19980531	LSLE	-BERE	BE: LAPSED	OWNER NAME : EXXON RESEARCH AND ENGINEERING CY EFFECTIVE DATE : 19971130
EP0148581 A1	19980601	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : NL DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980601
EP0148581 A1	19980708	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 19971121
EP0148581 A1	19980801	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	REF COUNTRY CODE : DE DESCRIPTION : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES EFFECTIVE DATE : 19980801
EP0148581 A1	19980803	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF DOCUMENT NUMBER : 84308052.4 FORMAT OF REF DOCUMENT (F/P) : F
EP0148581 A1	19980803	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 19980601
EP0148581 A1	19981002	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0148581 B1	19890308	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1825192 C3	19940228	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5031569 B4	19930512	LSPB	+	published / reissued	
JP60141707 A2	19850726	LSPB	+	published / reissued	
NO165759 B	19901227	LSPB	+	published / reissued	

NO165759 C	19910410	LSGT	+	granted / extensions (spc, cpc, pte)	
NO844842 A	19850610	LSPB	+	published / reissued	
US4532294 A	19850730	LSGT	+	granted / extensions (spc, cpc, pte)	
US4532294 A	19850415	LSAS	AS	ASSIGNMENT	OWNER NAME : EXXON RESEARCH AND ENGINEERING COMPANY A DE CORP DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:BOUBOULIS, CONSTANTINE J.; REEL/FRAME:004388/0232 EFFECTIVE DATE : 19831207
US4532294 A	19890103	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4532294 A	19921221	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4532294 A	19961219	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4638031 A	19870120	LSGT	+	granted / extensions (spc, cpc, pte)	
US4638031 A	19860522	LSAS	AS	ASSIGNMENT	OWNER NAME : EXXON RESEARCH AND ENGINEERING COMPANY, A CORP. OF DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:BOUBOULIS, CONSTANTINE J.; REEL/FRAME:004553/0026 EFFECTIVE DATE : 19850212
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US4638031 A	19990117	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4638031 A	19990330	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19990120
US4739006 A	19880419	LSGT	+	granted / extensions (spc, cpc, pte)	
US4739006 A	19911002	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4739006 A	19951004	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4739006 A	20000416	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4739006 A	20000627	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20000419

Title: LIGHT-TRANSMITTING AND/OR COATED ARTICLE WITH REMOVABLE PROTECTIVE COATING AND METHODS OF MAKING THE SAME

Abstract: Source: US2002176988A A method and coating are provided for temporarily protecting a substrate or article during shipping, handling or storage by applying a removable protective coating over at least a portion of the substrate. The substrate may be flat or curved and may have zero, one or more functional coatings. A plurality of substrates with the protective coating of the invention may be arranged in a shipping container so that the protective coating reduces the possibility of damage to the substrate or optional functional coating. In one embodiment, the protective coating is the evaporation or reaction product of an aqueous coating composition containing a polyvinyl alcohol polymer which may be subsequently removed by aqueous washing, thermal decomposition or combustion. In another embodiment, the protective coating is formed by sputtering a substantially carbon coating onto the substrate. The carbon coating is subsequently removed by combustion. The protective coating may have identification materials, such as colorants or fragrance materials, such that different types of substrates and/or functional coatings can be distinguished from each other. Additionally, the temporary protective coating can improve the heating of a functionally coated glass substrate.

Classifications:

International (IPC 8-9): B05D1/00 B05D1/36 B05D3/02 B05D5/00 B05D5/06 B05D7/00 B32B7/06 B32B9/00 B65G49/06 C03C17/00 C03C17/32 C03C17/34 C03C17/36 C03C17/38 C03C17/42 C09D1/00 C09D129/04 C09D5/00 C09D5/20 C09D7/12 G06F3/041 G06F3/0484 G06F3/0485 G06F3/0488 G08B3/00 G08B5/00 G08B6/00 (Advanced/Invention);

B05D5/00 B05D7/00 B32B7/06 B32B9/00 C09D5/20 G06F3/01 (Advanced/Non-invention);

B05D1/00 B05D5/00 B05D7/00 B32B7/06 B32B9/00 B65G49/05

C03C17/00 C03C17/28 C03C17/36 C03C17/42 C09D1/00 C09D129/00 C09D5/00 C09D5/20 C09D7/12 (Core/Invention)

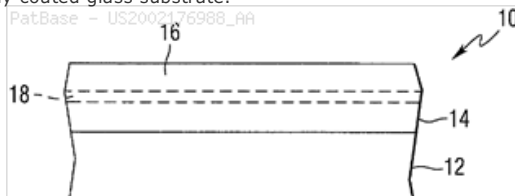
International (IPC 1-7): B05D1/00 B05D5/00 B05D7/00 B32B17/06 B32B17/10 B32B18/00 B32B7/06 B32B9/00 B65G49/06 C03C17/32 C03C17/38 C03C17/42 C09D5/00 C23C14/34

CPC: B65B33/04 C03C2217/475 C03C2217/485 Y10T428/265 Y10T428/30 Y10T428/273 C03C17/3441 B65G49/069 C03C17/22 C03C17/32 C03C17/38 C03C17/42 C09D5/008 C23C14/0605 Y10T428/31507 Y10T428/31649 Y10T428/31681 Y10T428/31692 Y10T428/31699 Y10T428/31703 Y10T428/31786 Y10T428/31931 Y10T428/31935 C03C2217/282 C03C2218/154 C03C2218/328 C03C2218/355 G06F3/0488 G06F3/0412 G06F3/04842 G06F3/04847 G06F3/04855 G06F3/04883 G06F3/04812

European: B65G49/06H2 C03C17/22 C03C17/32 C03C17/34D4D C03C17/38 C03C17/42 C09D5/00F C23C14/06B

G06F3/0484A G06F3/0485B G06F3/0488 G06F3/0488G M03C217/282 M03C217/475 M03C218/154 M03C218/328 M03C218/355

US: 1/1 204/192.1 204/192.100S 340/384.1 340/384.100S 340/407.2 340/407.200S 340/815.4 340/815.400S 345/173 345/173P 427/154 427/155 427/156 427/207.1 427/208.8 427/226 427/227 427/372.2 427/407.1 427/407.2 427/419.7 428/336 428/336P 428/341 428/408 428/408P 428/412 428/412S 428/426 428/426S 428/432 428/432S 428/433 428/433S 428/442 428/458 428/461 428/463 428/464 428/48 428/480 428/480S 428/521 428/521S 428/522 428/522S 428/688 428/688S 428/697 428/698 428/698S 428/701 428/702 715/702 715/702S



Family:

Publication number	Publication date	Application number	Application date
AR024640 AA	20021016	AR2000P103383	20000630
AU200057618 A5	20010122	AU20000057618	20000623
CA2377714 AA	20011219	CA20002377714	20000623
CA2377714 C	20080212	CA20002377714	20000623
CN101084279 A	20071205	CN200580043882	20051220
DE602005046026 D1	20150625	DE200560046026T	20051215
EP1200528 A2	20020502	EP20000943099	20000623
IN04703DN2007 A	20070817	IN2007DN04703	20070619
JP2003504227 T2	20030204	JP20010508275T	20000623
JP2011105003 A2	20110602	JP20110000044	20110104
KR20020031153 A	20020426	KR20027000039	20020102
MXPA01013196 A1	20020604	MX2001PA13196	20000623
RU2007127690 A	20090127	RU20070127690	20051220
RU2429262 C2	20110920	RU20070127690	20051220
US2002176988 AA	20021128	US20020080824	20020222
US2005153126 AA	20050714	US20040017155	20041220
US2010060605 AA	20100311	US20090619208	20091116
US2012274591 AA	20121101	US20120539687	20120702
US6682773 BB	20040127	US20020080824	20020222
US6849328 BA	20050201	US20000567934	20000510
US7361404 BB	20080422	US20040017155	20041220
US8212790 BB	20120703	US20090619208	20091116
US9116612 BB	20150825	US20120539687	20120702
WO0102496 A2	20010111	WO2000US17326	20000623
WO0102496 A3	20010712	WO2000US17326	20000623
WO06069068 A2	20060629	WO2005US46170	20051220
WO06069068 A3	20060831	WO2005US46170	20051220

Priority:

EP20050112245	20051215	JP20010508275	20000623	JP20010508275T	20000623
US19990142090P	19990702	US20000567934	20000510	WO2000US17326	20000623
US20020080824	20020222	US20040017155	20041220	US20090619208	20091116
US20040017155	20041221	US20040017115	20041221	US20120539687	20120702
WO2005US46170	20051220				

Probable Assignee: MICROSOFT TECHNOLOGY LICENSING LLC

Assignee(s): (std): JARRETT ROBERT JAMES ; PPG IND OHIO INC ; MICROSOFT CORP ; PPG INDUSTRIES OGAJO INK ; RIMAS RIBIKAUSKAS EMILY K ; RIMAS RIBIKAUSKAS EMILY ; MICROSOFT TECHNOLOGY LICENSING LLC

Assignee(s): MICROSOFT TECHNOLOGY LICENSING LLC REDMOND ; VITRO SAB DE CV ; PPG INDUSTRIES OHIO INC ; FINLEY JAMES J ; GOODREAU ERIN ; SCRIVEN ROGER L ; THIEL JAMES P ; PPG IND ; LAWTON ERNEST L ; MARIETTI GARY J ; MARTIN GEORGE M ; MEDWICK PAUL A

Inventor(s): (std): FINLEY JAMES J ; FINLEY JAMES M ; FINLI DZHEJMS DZH ; GOODREAU ERIN ; LAWTON ERNEST L ;

MARIETTI GARY J ; MARTIN GEORGE M ; MEDWICK PAUL A ; RIMAS RIBIKAUSKAS EMILY ; RIMAS RIBIKAUSKAS EMILY K ; JARRETT ROBERT JAMES ; SCRIVEN ROGER L ; THIEL JAMES P ; TIL DZHEJMS P

Inventor(s): TIL' DZHEJMS P. ; THIEL JAMES ; JARRETT ROBERT JAMES REDMOND ; RIMAS RIBIKAUSKAS EMILY REDMOND ; ROGER L SCRIVEN ; PAUL A MEDWICK ; JAMES J FINLEY ; JAMES P THIEL ; ERIN GOODREAU ; ERNEST L LAWTON ; FINLEY JAMES ; GARY J MARIETTI ; GEORGE M MARTIN

Agent(s): COLLISON AND CO; BORDEN LADNER GERVAIS LLP; GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; ASAMURA HAJIME; ASAMURA KIYOSHI; PPG INDUSTRIES INC, INTELLECTUAL PROPERTY DEPT; PPG IND INC INTELLECTUAL PROPERTY DEPT; SHOOK HARDY AND BACON LLP MICROSOFT CORPORATION; SHOOK HARDY AND BACON LLP MICROSOFT CORP; JACQUES B; SIMINERIO ANDREW C; ANDREW C; SHOOK HARDY AND BACON LLP; HENRY; KATE; MICKY

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 KN KP KR KZ 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 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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR024640 AA	20021016	LSPB	+	published / reissued	
AR024640 AA	20060925	LSGT	+FG	GRANT, REGISTRATION	
AU200057618 A5	20010122	LSPB	+	published / reissued	
AU200057618 A5	20040708	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
CA2377714 AA	20011219	LSPB	+	published / reissued	
CA2377714 AA	20011219	LSNP	+AFNE	NATIONAL PHASE ENTRY	
CA2377714 AA	20011219	LSES	+EEER	EXAMINATION REQUEST	
CA2377714 C	20080212	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101084279 A	20071205	LSPB	+	published / reissued	
CN101084279 A	20071205	LSPB	+C06	PUBLICATION	
CN101084279 A	20100825	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP1200528 A2	20020502	LSPB	+	published / reissued	
EP1200528 A2	20020502	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020123
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : MEDWICK, PAUL, A.
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : MARIETTI, GARY, J.
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : THIEL, JAMES, P.
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : SCRIVEN, ROGER, L.
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : FINLEY, JAMES, J.
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : MARTIN, GEORGE, M.
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : GOODREAU, ERIN
EP1200528 A2	20020710	LSRE	RIN1	INVENTOR (CORRECTION)	INVENTOR NAME : LAWTON, ERNEST, L.

EP1200528 A2	20031217	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20031030
EP1200528 A2	20050518	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20041117
IN04703DN2007 A	20070817	LSPB	+	published / reissued	
JP2003504227 T2	20030204	LSPB	+	published / reissued	
JP2003504227 T2	20060719	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20060718
JP2003504227 T2	20090107	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090106
JP2003504227 T2	20090707	LSRE	A521	WRITTEN AMENDMENT	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090706
JP2003504227 T2	20100906	LSRV	-A02	DECISION OF REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100903
JP2003504227 T2	20100906	LSRV	-A02	DECISION OF REFUSAL	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100903
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KR20020031153 A	20020426	LSPB	+	published / reissued	
MXPA01013196 A1	20020604	LSPB	+	published / reissued	
MXPA01013196 A1	20070110	LSGT	+FG	GRANT OR REGISTRATION	
RU2007127690 A	20090127	LSPB	+	published / reissued	
RU2429262 C2	20110920	LSGT	+	granted / extensions (spc, cpc, pte)	
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US2002176988 AA	20021128	LSPB	+	published / reissued	
US2005153126 AA	20050714	LSPB	+	published / reissued	
US2010060605 AA	20100311	LSPB	+	published / reissued	
US2012274591 AA	20121101	LSPB	+	published / reissued	
US2012274591 AA	20120702	LSAS	AS	ASSIGNMENT	OWNER NAME : MICROSOFT CORPORATION, WASHINGTON DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RIMAS-RIBIKAUSKAS, EMILY; JARRETT, ROBERT JAMES; REEL/FRAME:028479/0051 EFFECTIVE DATE : 20041220
US2012274591 AA	20141209	LSAS	AS	ASSIGNMENT	OWNER NAME : MICROSOFT TECHNOLOGY LICENSING, LLC, WASHINGTON DESCRIPTION : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNOR:MICROSOFT CORPORATION; REEL/FRAME:034544/0541 EFFECTIVE DATE : 20141014
US6682773 BB	20040127	LSGT	+	granted / extensions (spc, cpc, pte)	
US6682773 BB	20070727	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6682773 BB	20110727	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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US6682773 BB	20161025	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VITRO, S.A.B. DE C.V., MEXICO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PPG INDUSTRIES OHIO, INC.; REEL/FRAME:040473/0455 EFFECTIVE DATE : 20161001
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US6849328 BA	20000728	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PPG INDUSTRIES OHIO, INC., OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MEDWICK, PAUL A.; GOODREAU, ERIN; FINLEY, JAMES J.; AND OTHERS; REEL/FRAME:011021/0027; SIGNING DATES FROM 20000630 TO 20000718
US6849328 BA	20080801	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6849328 BA	20120801	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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US7361404 BB	20111024	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US8212790 BB	20151216	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9116612 BB	20150825	LSGT	+	granted / extensions (spc, cpc, pte)	
WO0102496 A2	20010111	LSPB	+	published / reissued	
WO0102496 A3	20011206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 57618/00 COUNTRY OF REF DOCUMENT : AU
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WO0102496 A3	20020426	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027000039 COUNTRY OF REF DOCUMENT : KR
WO0102496 A3	20020502	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000943099 COUNTRY OF REF DOCUMENT : EP
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WO06069068 A3	20070620	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200580043882.9 COUNTRY OF REF DOCUMENT : CN
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WO06069068 A3	20070720	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007127690 COUNTRY OF REF DOCUMENT : RU

Title: METHOD OF MANUFACTURING A COATED GLAZING PANEL AND GLAZING PANEL

Abstract: Source: US2005181219A A protective coating is used in heat treating a coated glazing panel.

Classifications:

International (IPC 8-9): C03C17/38 C03C17/42 (Advanced/Invention)

International (IPC 1-7): B05D3/02 B05D5/06 B32B17/06 C03C17/38 C03C17/42

CPC: C03C17/38 C03C17/42 C03C2218/355

European: C03C17/38 C03C17/42 M03C218/355

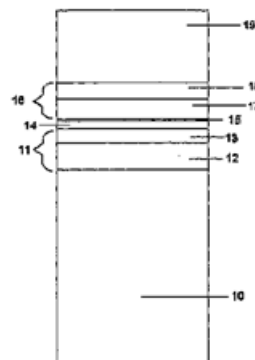
US: 427/165 427/165S 427/384 427/384S 428/426 428/426P

PatBase - US2005181219_AA

Patent Application Publication Aug. 18, 2005

US 2005/0181219 A1

Fig 1



Family:

Publication number	Publication date	Application number	Application date
AU2003252608 AA	20040202	AU20030252608	20030630
EP1380553 A1	20040114	EP20020015343	20020710
EP1521726 A1	20050413	EP20030763900	20030630
US2005181219 AA	20050818	US20030520413	20030630
WO04007387 A1	20040122	WO2003EP50278	20030630

Priority:

EP20020015343 20020710 EP20030763900 20030630 WO2003EP50278 20030630

Probable Assignee: GLAVERBEL

Assignee(s): (std): DEPAUW JEAN MICHEL ; GLAVERBEL ; LAMBERT EMMANUEL

Inventor(s): (std): DEPAUW JEAN MICHEL ; LAMBERT EMMANUEL

Inventor(s): EMMANUEL LAMBERT ; JEAN MICHEL DEPAUW

Agent(s): DLA PIPER RUDNICK GRAY CARY US, SUPERVISOR PATENT PROSECUTION SERVICES; DLA PIPER RUDNICK GRAY CARY US SUPERVISOR PATENT PROSECUTION SERVICES

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2003252608 AA	20040202	LSPB	+	published / reissued	
AU2003252608 AA	20050428	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
EP1380553 A1	20040114	LSPB	+	published / reissued	
EP1380553 A1	20040204	LSWD	-18W	WITHDRAWN	EFFECTIVE DATE : 20031209
EP1521726 A1	20050413	LSPB	+	published / reissued	
EP1521726 A1	20050413	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20050210
EP1521726 A1	20070103	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20061205
EP1521726 A1	20071024	LSAS	RAP1	TRANSFER OF RIGHTS OF AN EP	OWNER NAME :

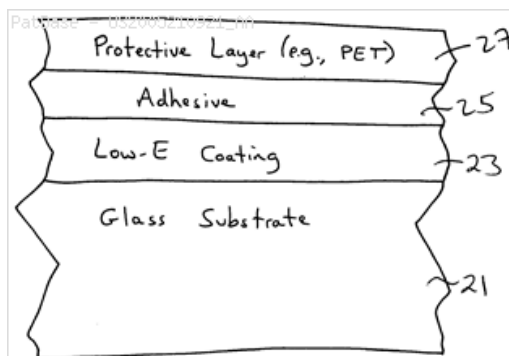
PUBLISHED APPLICATION					AGC FLAT GLASS EUROPE SA
EP1521726 A1	20080305	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20070616
US2005181219 AA	20050818	LSPB	+	published / reissued	
WO04007387 A1	20040122	LSPB	+	published / reissued	
WO04007387 A1	20050104	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003763900 COUNTRY OF REF DOCUMENT : EP
WO04007387 A1	20050106	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10520413 COUNTRY OF REF DOCUMENT : US
WO04007387 A1	20050413	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003763900 COUNTRY OF REF DOCUMENT : EP
WO04007387 A1	20060719	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO04007387 A1	20060719	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : JP
WO04007387 A1	20070616	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003763900 COUNTRY OF REF DOCUMENT : EP

Title: METHOD OF MAKING COATED GLASS ARTICLE, AND INTERMEDIATE PRODUCT USED IN SAME

Abstract: Source: US2005210921A A temporary protective coating is provided over a low-E coated glass substrate. The temporary protective coating is preferably applied in solid form (i.e., as opposed to liquid form) so that no significant curing is needed. Moreover, the temporary protective coating can be easily removed by simply peeling it off just prior to heat treatment. In certain example embodiments, the temporary protective coating is designed such that it is not water soluble so that it remains on and protects the low-E coated glass substrate during washing step(s) and thereafter during at least some post-wash handling.

Classifications:

International (IPC 8-9): B65D85/48 B65G49/06 C03C17/38
C03C17/42 C09D5/00 (Advanced/Invention);
B65D85/48 B65G49/05 C03C17/36 C03C17/42 (Core/Invention)
International (IPC 1-7): B65D85/48 B65G49/06 C03C17/38
C03C17/42 C03C27/00 C09D5/00
CPC: C03C17/38 C03C17/42 C03C2218/328 C03C2218/355
European: C03C17/38 C03C17/42 M03C218/328 M03C218/355
US: 65/104 65/104S 65/105 65/105S 65/106 65/106S 65/23 65/23P
65/61 65/61S



Family:

Publication number	Publication date	Application number	Application date
AT488478 E	20101215	AT20050725893T	20050318
CA2559173 AA	20060907	CA20052559173	20050318
CA2559173 C	20110531	CA20052559173	20050318
DE602005024785 D1	20101230	DE200560024785T	20050318
EP1735251 A1	20061227	EP20050725893	20050318
EP1735251 B1	20101117	EP20050725893	20050318
ES2356558 T3	20110411	ES20050725893T	20050318
US2005210921 AA	20050929	US20040811309	20040329
WO05100276 A1	20051027	WO2005US09088	20050318

Priority:

US20040811309 20040329 WO2005US09088 20050318

Probable Assignee: GUARDIAN IND CORP

Assignee(s): (std): GUARDIAN IND ; GUARDIAN INDUSTRIES ; RICHARDSON CORY ; THOMSEN SCOTT V

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

Inventor(s): (std): RICHARDSON CORY ; THOMSEN SCOTT ; THOMSEN SCOTT V

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

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT488478 E	20101215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT488478 E	20110515	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
CA2559173 AA	20060907	LSPB	+	published / reissued	
CA2559173 AA	20060907	LSNP	+AFNE	NATIONAL PHASE ENTRY	
CA2559173 AA	20060907	LSES	+EEER	EXAMINATION REQUEST	
CA2559173 C	20110531	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1735251 A1	20061227	LSPB	+	published / reissued	
EP1735251 A1	20061227	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20061017
EP1735251 A1	20070502	LSRE	RIN1	INVENTOR	PARTYTYPE : INVENTOR

				(CORRECTION)	INVENTOR : RICHARDSON, CORY
EP1735251 A1	20070502	LSRE	RIN1	INVENTOR (CORRECTION)	PARTYTYPE : INVENTOR INVENTOR : THOMSEN, SCOTT, V.
EP1735251 A1	20070620	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20070523
EP1735251 A1	20101117	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1735251 A1	20101130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1735251 A1	20101222	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1735251 A1	20110309	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20101117
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EP1735251 A1	20160429	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160328 YEAR OF FEE PAYMENT : 12
EP1735251 A1	20160531	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160329 YEAR OF FEE PAYMENT : 12
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EP1735251 A1	20170213	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
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ES2356558 T3	20110411	LSGT	+	granted / extensions (spc, cpc, pte)	
US2005210921 AA	20050929	LSPB	+	published / reissued	
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WO05100276 A1	20051027	LSPB	+	published / reissued	
WO05100276 A1	20060907	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2559173 COUNTRY OF REF DOCUMENT : CA
WO05100276 A1	20060930	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO05100276 A1	20060930	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE
WO05100276 A1	20061017	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005725893 COUNTRY OF REF DOCUMENT : EP
WO05100276 A1	20061227	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005725893 COUNTRY OF REF DOCUMENT : EP

Title: REMOVABLE PROTECTIVE COVER

Abstract: Source: US2007231553A A substrate bearing a removable cover is provided. The removable cover includes two or more removable films, wherein at least one film is removable by a different removing process than another film. For example, in some cases one film is an organic film removable by heat treatment and another film is an inorganic film durable to heat treatment but is soluble to a mild acid or a mild base.

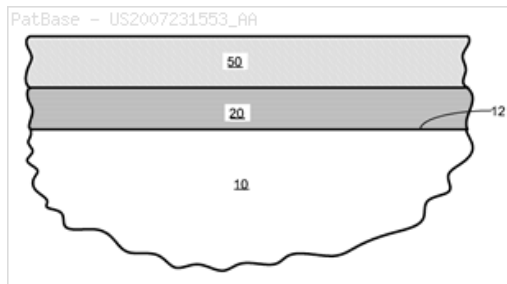
Classifications:

International (IPC 8-9): B08B17/04 B32B17/06 C03B40/00 C03C17/00 C03C17/22 C03C17/23 C03C17/28 C03C17/34 C03C17/42 C09D5/00 E06B5/00 (Advanced/Invention); B08B17/00 B32B17/06 C03B40/00 C03C17/00 C03C17/22 C03C17/23 C03C17/28 C03C17/34 C03C17/42 C09D5/00 E06B5/00 (Core/Invention)

CPC: Y10T428/24975 Y10T428/30 C03C17/009 B32B17/06 C03B40/00 C03C17/007 C03C17/008 C03C17/34 C03C17/42 C03C2217/42 C03C2217/44 C03C2217/91 C03C2218/154 C03C2218/355 C09D5/008

European: B32B17/06 C03B40/00 C03C17/00D2 C03C17/00D4 C03C17/00D4B C03C17/34 C03C17/42 C09D5/00F M03C217/420 M03C217/440 M03C217/910 M03C218/154 M03C218/355

US: 427/154 427/154S 427/337 427/337S 427/372.2 427/372.200S 428/216 428/216P 428/408 428/408S 428/426 428/426S 428/698 428/698S 428/702 428/702S



Family:

Publication number	Publication date	Application number	Application date
CA2646376 AA	20080919	CA20072646376	20070320
CN101448755 A	20090603	CN200780018036	20070320
EP2004562 A1	20081224	EP20070758852	20070320
HK1127590 A3	20091002	HK20090105381	20090616
JP2009531178 T2	20090903	JP20090503149T	20070320
KR20080106473 A	20081205	KR20087025287	20081016
US2007231553 AA	20071004	US20070688036	20070319
WO07112229 A1	20071004	WO2007US64342	20070320

Priority:

US20060786500P 20060328 US20070688036 20070319 WO2007US64342 20070320

Probable Assignee: CARDINAL CG CO

Assignee(s): (std): CARDINAL CG CO ; HARTIG KLAUS ; MILLER LEAH M

Assignee(s): CARDINAL CG COMPANY

Inventor(s): (std): HARTIG KLAUS ; MILLER LEAH M ; KLAUS HARTIG

Agent(s): BORDEN LADNER GERVAIS LLP; PERSSON ALBIN; INTELLECTUAL PROPERTY GROUP FREDRIKSON AND BYRON PA

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
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CA2646376 AA	20080919	LSNP	+AFNE	NATIONAL PHASE ENTRY	
CA2646376 AA	20130515	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20130320
CN101448755 A	20090603	LSPB	+	published / reissued	
CN101448755 A	20090603	LSPB	+C06	PUBLICATION	
CN101448755 A	20130227	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP2004562 A1	20081224	LSPB	+	published / reissued	
EP2004562 A1	20081224	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20081022
EP2004562 A1	20120201	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20120102
EP2004562 A1	20121114	LSDW	-18D	DEEMED TO BE	EFFECTIVE DATE : 20120515

WITHDRAWN					
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KR20080106473 A	20081205	LSPB	+	published / reissued	
KR20080106473 A	20120421	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
US2007231553 AA	20071004	LSPB	+	published / reissued	
US2007231553 AA	20070319	LSAS	AS	ASSIGNMENT	OWNER NAME : CARDINAL CG COMPANY, MINNESOTA DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HARTIG, KLAUS; MILLER, LEAH M.; REEL/FRAME:019031/0594; SIGNING DATES FROM 20070315 TO 20070316
WO07112229 A1	20071004	LSPB	+	published / reissued	
WO07112229 A1	20080919	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2646376 COUNTRY OF REF DOCUMENT : CA
WO07112229 A1	20080926	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009503149 COUNTRY OF REF DOCUMENT : JP
WO07112229 A1	20080930	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: COATED GLASS SUBSTRATE WITH HEAT TREATABLE ULTRAVIOLET BLOCKING CHARACTERISTICS

Abstract: Source: US2008268260A A composite oxide coating is provided on a substrate over an optional infrared (IR) blocking multi-layer coating (e.g., low-E coating), where the composite oxide coating efficiently blocks ultraviolet (UV) radiation. An organic polymer top coating may be provided over the composite oxide, where the organic polymer may be formed by exposing a photomonomer and/or photopolymer to radiation (e.g., UV radiation). The coated glass substrate may be heat and/or crack resistant and may be subjected to a high temperature heat treatment step. The coated article may be effective at blocking IR and/or UV radiation in applications such as window applications. The UV blocking coating may include ceria, titania, and silica as UV blocker(s) in certain example embodiment of this invention.

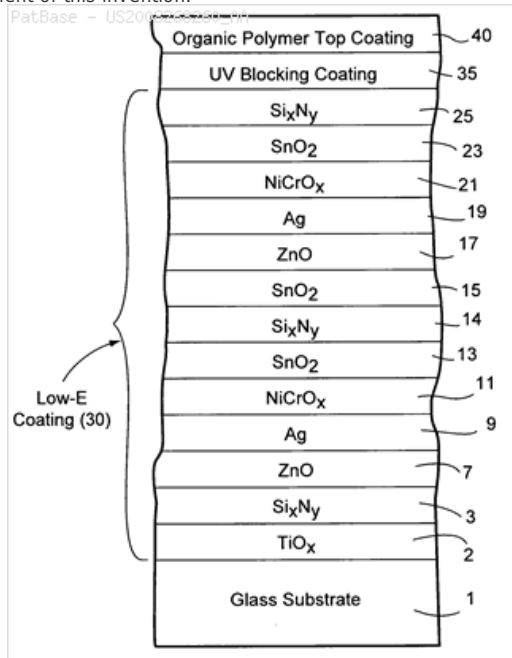
Classifications:

International (IPC 8-9): B05D1/38 B05D5/00 B32B17/06 C03C17/25 C03C17/42 (Advanced/Invention); B05D5/00 B32B17/06 C03C17/25 C03C17/42 (Core/Invention)

CPC: Y10T428/31612 C03C17/256 C03C17/42 C03C2217/212 C03C2217/213 C03C2217/228 C03C2217/23 C03C2217/74 C03C2218/113

European: C03C17/25C C03C17/42 M03C217/212 M03C217/213 M03C217/228 M03C217/230 M03C217/740 M03C218/113

US: 427/160 427/160S 427/165 427/419.2 427/419.3 427/508 428/426 428/426S 428/429 428/429P 428/432 428/432S

**Family:**

Publication number	Publication date	Application number	Application date
EP2148843 A1	20100203	EP20080726335	20080303
US2008268260 AA	20081030	US20070790813	20070427
US8409663 BB	20130402	US20070790813	20070427
WO08133773 A1	20081106	WO2008US02778	20080303

Priority:

US20070790813 20070427 WO2008US02778 20080303

Probable Assignee: GUARDIAN IND CORP

Assignee(s): (std): GUARDIAN IND ; GUARDIAN INDUSTRIES ; HOGAN JOHN P ; VARAPRASAD DESARAJU V

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

Inventor(s): (std): HOGAN JOHN P ; VARAPRASAD DESARAJU V

Agent(s): HESS PETER K G ; NIXON AND VANDERHYE PC ; NIXON AND VANDERHYE P C ; RHOA JOSEPH A

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

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Patent	Date recorded	Event group	Code	Event	Details
EP2148843 A1	20100203	LSPB	+	published / reissued	
EP2148843 A1	20100203	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20091119
EP2148843 A1	20100915	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20100420
US2008268260 AA	20081030	LSPB	+	published / reissued	
US2008268260 AA	20070706	LSAS	AS	ASSIGNMENT	OWNER NAME : GUARDIAN INDUSTRIES CORP., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:VARAPRASAD, DESARAJU V.; HOGAN, JOHN P.;

REEL/FRAME:019553/0800 EFFECTIVE DATE : 20070619					
US8409663 BB	20130402	LSGT	+	granted / extensions (spc, cpc, pte)	
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US8409663 BB	20160915	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
WO08133773 A1	20081106	LSPB	+	published / reissued	
WO08133773 A1	20091028	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: METHOD OF MAKING COATED GLASS ARTICLE, AND INTERMEDIATE PRODUCT USED IN SAME

Abstract: Source: US2008302462A In certain example embodiments of this invention, there is provided a method of making a window, the method including: forming a multi-layered low-E and/or solar control coating on a glass substrate; providing at least two flexible protective sheets in non-liquid form to the glass substrate over at least part of the low-E and/or solar control coating; applying at least one protective coating in liquid form, before and/or after the flexible protective sheets are provided, so as to reduce one or more gaps formed between the low-E and/or solar control coating and the flexible protective sheet(s) and/or between the flexible protective sheets; and performing one or more of cutting, edge seaming, and/or washing the coated article with the protective coating and protective sheets thereon and peeling the protective sheets and at least part of the protective coating off of the top surface of the low-E and/or solar control coating. Heat treatment (e.g., thermal tempering) may then be performed, and the heat treated coated article may be used in a window unit or the like.

Classifications:

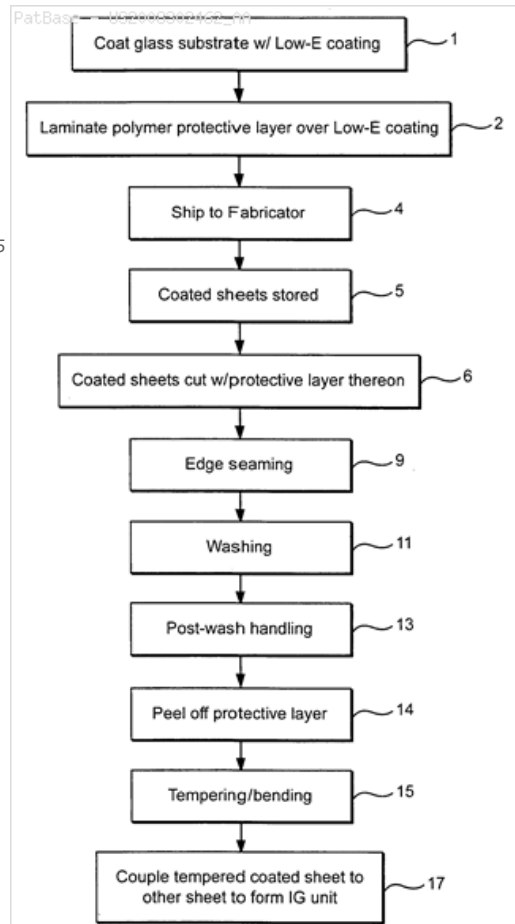
International (ipc 8-9): B32B17/00 B32B17/06 B65G49/06 C03B27/00 C03B33/02 C03C17/34 C03C17/36 C03C17/42 C03C27/00 C09D5/00 E06B3/67 E06B3/673 (Advanced/Invention); B32B17/06 C03C17/34 C03C17/42 (Advanced/Non-invention); B32B17/06 B65G49/05 C03C17/34 C03C27/00 C09D5/00 E06B3/66 (Core/Invention); B32B17/06 C03C17/34 (Core/Non-invention)

International (ipc 1-7): E06B3/67

CPC: Y10S156/918 C09D5/008 B65G49/069 C03C17/36 C03C17/3613 C03C17/3626 C03C17/3639 C03C17/3644 C03C17/3652 C03C17/366 C03C17/3681 C03C17/42 C03C2218/355 Y10T156/1168

European: B65G49/06H2 C03C17/36 C03C17/36B316 C03C17/36B332 C03C17/36B339 C03C17/36B342 C03C17/36B346 C03C17/36B352L C03C17/36B356 C03C17/42 C09D5/00F M03C218/355

US: 156/101 156/104 156/107 156/108 156/109 156/157 156/304.1 156/714 156/918 156/99 427/154 65/112



Family:

Publication number	Publication date	Application number	Application date
BRPI0812239 A2	20150616	BR2008PI12239	20080421
DE602008042380 D1	20160331	DE200860042380T	20080421
EP2150669 A1	20100210	EP20080743138	20080421
EP2150669 B1	20160217	EP20080743138	20080421
ES2571031 T3	20160523	ES20080743138T	20080421
HU029709 T2	20170328	HU20080743138T	20080421
IN07527DN2009 A	20100702	IN2009DN07527	20091119
RU2009148792 A	20110720	RU20090148792	20080421
RU2459919 C2	20120827	RU20090148792	20080421
US2008302462 AA	20081211	US20070808133	20070606
US2013019637 AA	20130124	US20120546016	20120711
US8236116 BB	20120807	US20070808133	20070606
US8506737 BB	20130813	US20120546016	20120711
WO08153622 A1	20081218	WO2008US05116	20080421

Priority:

EP20080743138 20080421 US20070808133 20070606 WO2008US05116 20080421
US20120546016 20120711

Probable Assignee: GUARDIAN INDUSTRIES CORP

Assignee(s): (std): CT LUXEMBOURGEOIS RECH VERRE ; GARDIAN INDASTRIZ KORP ; CRVC ; HENKEL LUTZ ; LAGE HERBERT ; SOL JEAN MARC ; VARAPRASAD DESARAJU V ; SCHLOREMBERG MARCEL ; VANDERPLOEG JOHN A ; GUARDIAN INDUSTRIES ; CENTRE LUXEMBOURGEOIS DE RECH POUR LE VERRE ET LA CERAMIQUE S A C R V C ; GAURDIAN IND CORP ; GUARDIAN IND ; SANTR LJUKSAMBURZHUA DE RESHERSH PUR LE VERR EH LJA SERAMIK S A S R V S ; GUARDIAN EUROPE S A R L

Assignee(s): GUARDIAN EUROPE SARL ; SANTR LJUKSAMBURZHUA DE RESHERSH PUR LE VERR EH LJA SERAMIK SRVS SA ; GUARDIAN IND CORP AUBURN HILLS ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET AL 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 ;

GAURDIAN INDUSTRIES CORP ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET AL CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE ET LA CERAMIQUE S A C R V C ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET AL CERAMIQUE CRVC SA ; CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERREET LA CERAMIQUE CRVC SA ; GUARDIAN IND CORP ; GUARDIAN INDUSTRIES CORP

Inventor(s): (std): HENKEL LUTZ ; SCHLOREMBERG MARCEL ; SOL JEAN MARC ; VARAPRASAD DESARAJU V ; LAGE HERBERT ; VANDERPLOEG JOHN A ; VANDERPLOG DZHON A ; VARAPRASAD DESARADZHU V ; SOL ZHAN MARK ; SHLOREMBERG MARSEL ; LAGE KHERBERT ; KHENKEL LUTTS

Inventor(s): VARAPRASAD DESARAJU ; LUTZ HENKEL ; MARCEL SCHLOREMBERG ; DESARAJU V VARAPRASAD ; VARAPRASAD DESARAJU V ANN ARBOR ; VANDERPLOEG JOHN A ZEELAND ; SOL' ZHAN-MARK ; SHLOREMBERG MARSEL' ; KHENKEL' LUTTS ; SOL JEANMARC ; VANDERPLOEG JOHN ; HERBERT LAGE ; JEAN MARC SOL ; JOHN A VANDERPLOEG

Agent(s): HESS PETER K G ; VALLEJO JUAN PEDRO ; NIXON AND VANDERHYE PC ; RHOA JOSEPH A

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BRPI0812239 A2	20150616	LSPB	+	published / reissued	
EP2150669 A1	20100210	LSPB	+	published / reissued	
EP2150669 A1	20100210	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20091123
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EP2150669 A1	20100519	LSRE	RIN1	INVENTOR (CORRECTION)	PARTYTYPE : INVENTOR INVENTOR : LAGE, HERBERT
EP2150669 A1	20100519	LSRE	RIN1	INVENTOR (CORRECTION)	PARTYTYPE : INVENTOR INVENTOR : VANDERPLOEG, JOHN, A.
EP2150669 A1	20100519	LSRE	RIN1	INVENTOR (CORRECTION)	PARTYTYPE : INVENTOR INVENTOR : VARAPRASAD, DESARAJU, V.
EP2150669 A1	20100519	LSRE	RIN1	INVENTOR (CORRECTION)	PARTYTYPE : INVENTOR INVENTOR : HENKEL, LUTZ
EP2150669 A1	20100519	LSRE	RIN1	INVENTOR (CORRECTION)	PARTYTYPE : INVENTOR INVENTOR : SCHLOREMBERG, MARCEL
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EP2150669 A1	20160229	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2150669 A1	20160309	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2150669 A1	20160315	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 775764 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160315
EP2150669 A1	20160331	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602008042380 COUNTRY OF REF DOCUMENT : DE
EP2150669 A1	20160426	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2150669 A1	20160523	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2571031 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20160523
EP2150669 A1	20160627	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2150669 A1	20160715	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 775764 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160217
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EP2150669 A1	20160729	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 9

OFFICE					
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EP2150669 A1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160217
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EP2150669 A1	20160831	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 9
EP2150669 A1	20161012	LSAS	RAP2	TRANSFER OF RIGHTS OF AN EP GRANTED PATENT	PARTYTYPE : OWNER OWNER : CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE
EP2150669 A1	20161012	LSAS	RAP2	TRANSFER OF RIGHTS OF AN EP GRANTED PATENT	PARTYTYPE : OWNER OWNER : GUARDIAN INDUSTRIES CORP.
EP2150669 A1	20161019	LSAS	RAP2	TRANSFER OF RIGHTS OF AN EP GRANTED PATENT	PARTYTYPE : OWNER OWNER : GUARDIAN EUROPE S.A.R.L.
EP2150669 A1	20161019	LSAS	RAP2	TRANSFER OF RIGHTS OF AN EP GRANTED PATENT	PARTYTYPE : OWNER OWNER : GUARDIAN INDUSTRIES CORP.
EP2150669 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160217
EP2150669 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160217

EP2150669 A1	20161118	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602008042380 COUNTRY OF REF DOCUMENT : DE
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EP2150669 A1	20170125	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
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EP2150669 A1	20170207	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : GUARDIAN INDUSTRIES CORP., AUBURN HILLS, US

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EP2150669 A1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160217
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EP2150669 A1	20170313	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
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EP2150669 B1	20160217	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2571031 T3	20160523	LSGT	+	granted / extensions (spc, cpc, pte)	
HU029709 T2	20170328	LSPB	+	published / reissued	
IN07527DN2009 A	20100702	LSPB	+	published / reissued	
RU2009148792 A	20110720	LSPB	+	published / reissued	
RU2459919 C2	20120827	LSGT	+	granted / extensions (spc, cpc, pte)	
US2008302462 AA	20081211	LSPB	+	published / reissued	
US2008302462 AA	20070904	LSAS	AS	ASSIGNMENT	OWNER NAME : CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOL, JEAN-MARC; LAGE, HERBERT; VANDERPLOEG, JOHN A.; AND OTHERS; REEL/FRAME:019814/0346; SIGNING DATES FROM 20070803 TO 20070822
US2008302462 AA	20070904	LSAS	AS	ASSIGNMENT	OWNER NAME : GUARDIAN INDUSTRIES CORP., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOL, JEAN-MARC; LAGE, HERBERT; VANDERPLOEG, JOHN A.; AND OTHERS; REEL/FRAME:019814/0346; SIGNING DATES FROM 20070803 TO 20070822
US2013019637 AA	20130124	LSPB	+	published / reissued	
US8236116 BB	20120807	LSGT	+	granted / extensions (spc, cpc, pte)	
US8236116 BB	20070904	LSAS	AS	ASSIGNMENT	OWNER NAME : CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOL, JEAN-MARC; LAGE, HERBERT; VANDERPLOEG, JOHN A.; AND OTHERS; REEL/FRAME:019814/0346;

					SIGNING DATES FROM 20070803 TO 20070822
US8236116 BB	20070904	LSAS	AS	ASSIGNMENT	OWNER NAME : GUARDIAN INDUSTRIES CORP., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOL, JEAN-MARC; LAGE, HERBERT; VANDERPLOEG, JOHN A.; AND OTHERS; REEL/FRAME:019814/0346; SIGNING DATES FROM 20070803 TO 20070822
US8236116 BB	20070904	LSAS	AS	ASSIGNMENT	OWNER NAME : CENTRE LUXEMBOURGEOIS DE RECHERCHES POUR LE VERRE DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOL, JEAN-MARC; LAGE, HERBERT; VANDERPLOEG, JOHN A.; AND OTHERS; SIGNING DATES FROM 20070803 TO 20070822; REEL/FRAME:019814/0346
US8236116 BB	20070904	LSAS	AS	ASSIGNMENT	OWNER NAME : GUARDIAN INDUSTRIES CORP., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOL, JEAN-MARC; LAGE, HERBERT; VANDERPLOEG, JOHN A.; AND OTHERS; SIGNING DATES FROM 20070803 TO 20070822; REEL/FRAME:019814/0346
US8236116 BB	20160208	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8506737 BB	20130813	LSGT	+	granted / extensions (spc, cpc, pte)	
US8506737 BB	20170202	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
WO08153622 A1	20081218	LSPB	+	published / reissued	
WO08153622 A1	20091208	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08153622 A1	20100111	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009148792 COUNTRY OF REF DOCUMENT : RU
WO08153622 A1	20150616	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0812239 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 EFFECTIVE DATE : 20091204

Title: METHOD OF MAKING A HEAT-TREATED COATED GLASS ARTICLE USING A POLYMER DISPERSION

Abstract: Source: US2009044897A A temporary protective coating is provided over a coated glass substrate. The temporary protective coating is preferably applied in an aqueous dispersion then solidified on the substrate. In some instances, the temporary protective coating may be removed by treatment with a basic solution. In certain example embodiments, the temporary protective coating is applied after heat treatment before the coated substrate is coupled to another substrate to form a window unit such as an IG window unit or a laminated vehicle windshield.

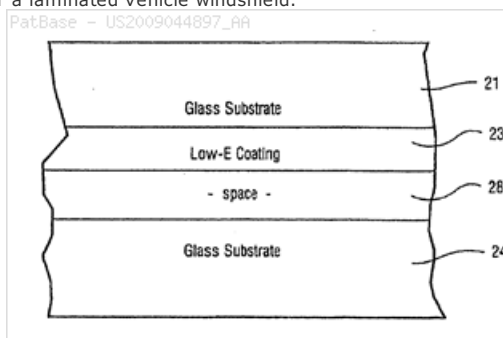
Classifications:

International (IPC 8-9): B05D3/00 B05D5/00 B32B38/00 C03C17/42 C09D5/00 C23C14/34 (Advanced/Invention); B05D3/00 B05D5/00 B32B38/00 C03C17/42 C09D5/00 C23C14/34 (Core/Invention)

CPC: C03C17/42 C03C2218/11 C03C2218/355 C09D5/008

European: C03C17/42 C09D5/00F M03C218/110 M03C218/355

US: 156/150 204/192.22 204/192.220S 427/154 427/154P 427/154S



Family:

Publication number	Publication date	Application number	Application date
EP2185481 A1	20100519	EP20080795174	20080808
EP2188225 A1	20100526	EP20080795173	20080808
US2009044897 AA	20090219	US20080222458	20080808
US2009068350 AA	20090312	US20080222459	20080808
WO09023149 A1	20090219	WO2008US09564	20080808
WO09023150 A1	20090219	WO2008US09565	20080808

Priority:

US20070935404P 20070810 US20080222458 20080808 US20080222459 20080808
WO2008US09565 20080808 WO2008US09564 20080808

Probable Assignee: GUARDIAN IND CORP

Assignee(s): (std): GUARDIAN IND ; GUARDIAN INDUSTRIES ; THOMSEN SCOTT V ; VANDERPLOEG JOHN A ; VARAPRASAD DESARAJU V

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

Inventor(s): (std): THOMSEN SCOTT V ; VANDERPLOEG JOHN A ; VARAPRASAD DESARAJU V

Agent(s): HESS PETER K G ; NIXON AND VANDERHYE PC ; RHOA JOSEPH A

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP2185481 A1	20100519	LSPB	+	published / reissued	
EP2185481 A1	20100519	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100309
EP2185481 A1	20110105	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20101201
EP2185481 A1	20150805	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20150303
EP2188225 A1	20100526	LSPB	+	published / reissued	
EP2188225 A1	20100526	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100310
EP2188225 A1	20110119	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20101217
EP2188225 A1	20150805	LSDW	-18D	DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20150303
US2009044897 AA	20090219	LSPB	+	published / reissued	

US2009044897 AA	20081023	LSAS	AS	ASSIGNMENT	OWNER NAME : GUARDIAN INDUSTRIES CORP., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:THOMSEN, SCOTT V.; VARAPRASAD, DESARAJU V.; REEL/FRAME:021748/0797 EFFECTIVE DATE : 20081008	
US2009068350 AA	20090312	LSPB	+	published / reissued		
US2009068350 AA	20081120	LSAS	AS	ASSIGNMENT	OWNER NAME : GUARDIAN INDUSTRIES CORP., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:VARAPRASAD, DESARAJU V.; VANDERPLOEG, JOHN A.; REEL/FRAME:021887/0498; SIGNING DATES FROM 20081008 TO 20081105	
WO09023149 A1	20090219	LSPB	+	published / reissued		
WO09023149 A1	20100211	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE	
WO09023150 A1	20090219	LSPB	+	published / reissued		
WO09023150 A1	20100211	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE	

Title: COATED GLASS SUBSTRATE WITH HEAT TREATABLE ULTRAVIOLET BLOCKING CHARACTERISTICS

Abstract: Source: US2012009388A Certain example embodiments of this invention relate to the development of temperable UV blocking coatings having enhanced UV blocking efficiency and aesthetic appearance on stock sheets of glass substrates using large-scale wet coating manufacturing methods. A glass substrate is provided. A base coat is curtain coated on the glass substrate from an oxide precursor material including zinc, cerium, titanium, and silicon precursor materials. The base coat is cured. A top coat is roll coated, directly or indirectly, on the base coat, with the top coat being a sacrificial cross-linked organic polymer-based layer. The substrate is heat treated with the base coat and the top coat thereon. The base coat and the top coat are substantially uniform in thickness, and the heat treating removes substantially all of the top coat while causing substantially no cracking in the base coat.

Classifications:

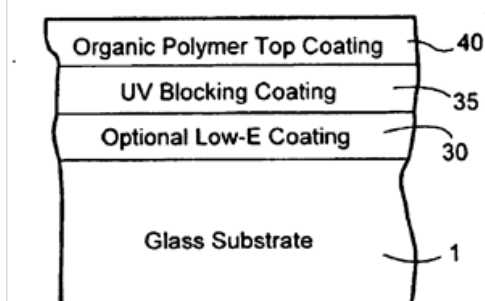
International (IPC 8-9): B05D1/28 B05D1/30 B05D1/36 B05D3/02 B05D3/08 B05D3/12 B05D7/00 B32B3/00 C03C17/00 C03C17/42 (Advanced/Invention)

CPC: C03C17/42 C03C17/002 C03C2217/74 C03C2218/355 Y10T428/24612

European: C03C17/00B2 C03C17/42 M03C217/740 M03C218/355

US: 1/1 427/226 427/226S 427/289 427/289S 427/383.5 427/383.500S 428/172 428/172P

PatBase - US2012009388_AA



Family:

Publication number	Publication date	Application number	Application date
EP2404882 A1	20120111	EP20110173212	20110708
US2012009388 AA	20120112	US20100805069	20100709
US9272949 BB	20160301	US20100805069	20100709

Priority:

US20100805069 20100709

Probable Assignee: GUARDIAN IND

Assignee(s): (std): GUARDIAN IND ; GUARDIAN INDUSTRIES ; ORLEANS DAVID B ; VARAPRASAD DESARAJU V ; WANG ZHONGMING

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

Inventor(s): (std): ORLEANS DAVID B ; VARAPRASAD DESARAJU V ; WANG ZHONGMING

Agent(s): HESS PETER K G ; NIXON AND VANDERHYE 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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP2404882 A1	20120111	LSPB	+	published / reissued	
EP2404882 A1	20120718	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20120605
EP2404882 A1	20130529	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20130429
US2012009388 AA	20120112	LSPB	+	published / reissued	
US2012009388 AA	20110124	LSAS	AS	ASSIGNMENT	OWNER NAME : GUARDIAN INDUSTRIES CORP., MICHIGAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:VARAPRASAD, DESARAJU V.; ORLEANS, DAVID B.; WANG, ZHONGMING; SIGNING DATES FROM 20100915 TO 20110121; REEL/FRAME:025717/0474
US9272949 BB	20160301	LSGT	+	granted / extensions (spc, cpc, pte)	