

Search query (4): [SP]: 1. bullet- and blast-resistant window, in particular for use in a motor vehicle, comprising a ballistic block having a peripheral face and a plurality of panes of glass, ceramic or plastic material bonded to each other over their surfaces in a layered composite, and interposed bonding interlayers of plastic material or adhesive, characterized by an edge groove having slopes at least partly inclined for engagement with a part of the vehicle body and extending on and along at least a part of the peripheral edge of the window. 2. bullet- and blast-resistant window according to claim 1, characterized in that the edge groove shows a v-shape. 3. bullet- and blast-resistant window according to claim 2, characterized in that the v-shaped edge groove has slopes with same or different inclination. 4. bullet- and blast-resistant window according to claim 1, characterized by an additional outer pane made of glass, ceramic or plastic material and bonded to an outside of the ballistic block by an interposing layer made of plastic material, the additional outer glass pane projecting over the peripheral face of the ballistic block on the peripheral edge of the bullet-resistant window. 5. bullet- and blast-resistant window according to claim 1, characterized that the ballistic block comprises a v-shaped block groove with oblique side walls and that the window comprises a layer or insert made of bullet resistant material and bonded on at least one of the oblique side walls of the block groove. 6. bullet- and blast-resistant window according to claim 5, characterized in that the oblique side walls of the ballistic block comprise an outer side wall and an inner side wall directed obliquely to an outside surface and an inside surface of the window of the vehicle, and that the bullet resistant insert covers at least a part of the inner side wall of the v-shaped block groove. 7. bullet- and blast-resistant window according to claim 6, characterized in that the bullet-resistant insert is a strip made of ballistic steel. 8. bullet- and blast-resistant window according to claim 1, characterized in that an inside surface recess is provided on an inside surface of the window which adjoins the block groove on a peripheral face of the ballistic block, and that a bullet resistant part extends from the peripheral face of the ballistic block in the inside surface recess. 9. bullet- and blast-resistant window according to claim 8, characterized in that the inside surface of the ballistic block or window and the bullet resistant part are flush. 10. bullet- and blast-resistant window according to claim 8, characterized in that the bullet resistant part covers and/or overlaps the edge groove and a block groove of the ballistic block laterally. 11. bullet- and blast-resistant window according to claim 8, characterized in that the bullet-resistant insert and the bullet resistant part are connected to each other or are integral. 12. bullet- and blast-resistant window according to claim 8, characterized in that the bullet-resistant insert and/or the bullet resistant part can be fixed on the ballistic block by means of an adhesive or polyurethane (pu) or polyvinylbutyral (pvb). 13. bullet- and blast-resistant apparatus to be used in particular in an automotive vehicle, comprising a bullet- and blast-resistant window according to claim 1, and comprising a bullet-resistant armoring device provided to be engaged in an edge groove having side walls at least partly inclined, and being part of the vehicle body. 14. bullet- and blast-resistant apparatus according to claim 13, characterized in that the armoring device covers an edge surface of the bullet- and blast-resistant window. 15. bullet- and blast-resistant apparatus according to claim 13, characterized in that the bullet-resistant armoring device fits positively into the edge groove of the window.

Results: 7

Search history

Search CPC=(B60J1/008) (Results 186)

1:

Search SFT=(edge and groove and rectangular) (Results 240887)

2:

Search 1 and 2 (Results 4)

3:

Search [SP]: 1. bullet- and blast-resistant window, in particular for use in a motor vehicle, comprising a ballistic block having a peripheral face and a plurality of panes of glass, ceramic or plastic material bonded to each other over their surfaces in a layered composite, and interposed bonding interlayers of plastic material or adhesive, characterized by an edge groove having slopes at least partly inclined for engagement with a part of the vehicle body and extending on and along at least a part of the peripheral edge of the window. 2. bullet- and blast-resistant window according to claim 1, characterized in that the edge groove shows a v-shape. 3. bullet- and blast-resistant window according to claim 2, characterized in that the v-shaped edge groove has slopes with same or different inclination. 4. bullet- and blast-resistant window according to claim 1, characterized by an additional outer pane made of glass, ceramic or plastic material and bonded to an outside of the ballistic block by an interposing layer made of plastic material, the additional outer glass pane projecting over the peripheral face of the ballistic block on the peripheral edge of the bullet-resistant window. 5. bullet- and blast-resistant window according to claim 1, characterized that the ballistic block comprises a v-shaped block groove with oblique side walls and that the window comprises a layer or insert made of bullet resistant material and bonded on at least one of the oblique side walls of the block groove. 6. bullet- and blast-resistant window according to claim 5, characterized in that the oblique side walls of the ballistic block comprise an outer side wall and an inner side wall directed obliquely to an outside surface and an inside surface of the window of the vehicle, and that the bullet resistant insert covers at least a part of the inner side wall of the v-shaped block groove. 7. bullet- and blast-resistant window according to claim 6, characterized in that the bullet-resistant insert is a strip made of ballistic steel. 8. bullet- and blast-resistant window according to claim 1, characterized in that an inside surface recess is provided on an inside surface of the window which adjoins the block groove on a peripheral face of the ballistic block, and that a bullet resistant part extends from the peripheral face of the ballistic block in the inside surface recess. 9. bullet- and blast-resistant window according to claim 8, characterized in that the inside surface of the ballistic block or window and the bullet resistant part are flush. 10. bullet- and blast-resistant window according to claim 8, characterized in that the bullet resistant part covers and/or overlaps the edge groove and a block groove of the ballistic block laterally. 11. bullet- and blast-resistant window according to claim 8, characterized in that the bullet-resistant insert and the bullet resistant part are connected to each other or are integral. 12. bullet- and blast-resistant window according to claim 8, characterized in that the bullet-resistant insert and/or the bullet resistant part can be fixed on the ballistic block by means of an adhesive or polyurethane (pu) or polyvinylbutyral (pvb). 13. bullet- and blast-resistant apparatus to be used in particular in an automotive vehicle, comprising a bullet- and blast-resistant window according to claim 1, and comprising a bullet-resistant armoring device provided to be engaged in an edge groove having side walls at least partly inclined, and being part of the vehicle body. 14. bullet- and blast-resistant apparatus according to claim 13, characterized in that the armoring device covers an edge surface of the bullet- and blast-resistant window. 15. bullet- and blast-resistant apparatus according to claim 13, characterized in that the bullet-resistant armoring device fits positively into the edge groove of the window. (Results 7)

Title: Armoured vehicle

Abstract: The armoured vehicle has hollow zones (9) in the bodywork each containing at least one flexible profile (10) matching the dimensions of the hollow space (9). The profile (10) is of a material which is a barrier against gunshots, using polyethylene or a woven aramide fabric with a low resin content.

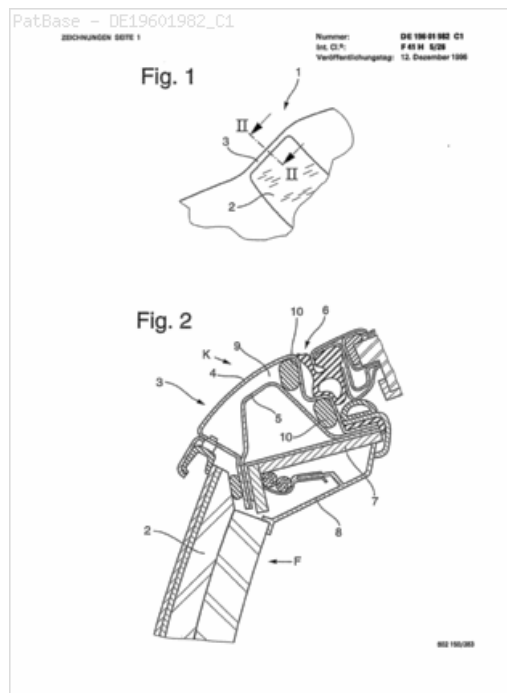
Classifications:

International (IPC 8-9): B62D25/04 F41H7/04 (Advanced/Invention)

International (IPC 1-7): B62D25/04 F41H5/26

CPC: B62D25/04 F41H5/263

European: B62D25/04 F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE19601982 C1	19961212	DE19961001982	19960120

Priority:

DE19961001982 19960120

Probable Assignee: DAIMLER BENZ AG

Assignee(s): (std): DAIMLER BENZ AG

Assignee(s): MERCEDES BENZ AKTIENGESELLSCHAFT ; MERCEDES BENZ AKTIENGESELLSCHAFT 70327 STUTTGART D ; MERCEDES BENZ AKTIENGESELLSCHAFT 70327 STUTTGART DE

Inventor(s): (std): JAUSS CHRISTIAN DIPL ING

Inventor(s): JAUSS CHRISTIAN DIPL ING 70839 GERLINGEN DE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE19601982 C1	19961212	LSGT	+	granted / extensions (spc, cpc, pte)	
DE19601982 C1	19961212	LSPB	+8100	PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION	
DE19601982 C1	19961212	LSGT	+D1	GRANT (NO UNEXAMINED APPLICATION PUBLISHED) PATENT LAW 81	
DE19601982 C1	19970605	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE19601982 C1	19971002	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : DAIMLER-BENZ AKTIENGESELLSCHAFT, 70567 STUTTGART,
DE19601982 C1	19990527	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : DAIMLERCHRYSLER AG, 70567 STUTTGART, DE
DE19601982 C1	20051117	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE19601982 C1	20160120	PEXP		Calculated Patent Term Expiry	

Title: DOOR FRAME WITH LAMINATED ARMoured GLASS FOR A SPECIALLY PROTECTED ARMoured VEHICLE

Abstract: Vehicle armoured to provide special protection has a door frame (1) mounting a multi-layer armoured glass panel (5) which has a groove (10] at the edge between the inner (12) and outer (6) layers, into which an arm (9) of a profile member (8} covering the door gap to prevent a bullet etc. passing through projects in the direction of the plane of the door panel. The profile member may include a support (11) for the inner layer (12) of the glass panel.

Classifications:

International (IPC 8-9): B32B17/10 B60J10/06 B60J10/79 B60J5/04 F41H5/26 (Advanced/Invention);

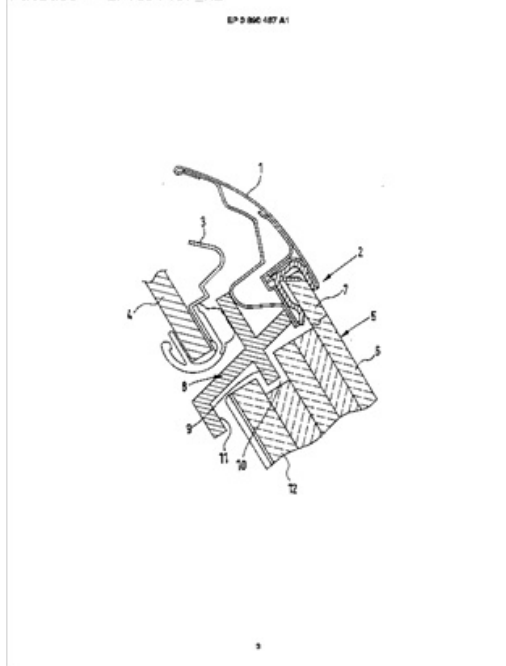
B32B17/06 B60J10/02 B60J5/04 F41H5/00 (Core/Invention)

International (IPC 1-7): B60J1/00 B60J10/06 B60J10/06 F41H5/26 F41H7/00

CPC: B60J10/79 B60J5/0402 B32B17/10293 F41H5/263

European: B32B17/10E16 B60J10/06 B60J5/04B2 F41H5/26B

PatBase - EP0890467_A1



Family:

Publication number	Publication date	Application number	Application date
DE19729897 C1	19981022	DE19971029897	19970712
EP0890467 A1	19990113	EP19980112337	19980703
EP0890467 B1	20021002	EP19980112337	19980703
ES2185087 T3	20030416	ES19980112337T	19980703

Priority:

DE19971029897 19970712

Probable Assignee: DAIMLERCHRYSLER AG

Assignee(s): (std): DAIMLER BENZ AG ; DAIMLER CHRYSLER AG

Assignee(s): DAIMLERCHRYSLER AG ; DAIMLER BENZ AKTIENGESELLSCHAFT ; DAIMLER BENZ AKTIENGESELLSCHAFT 70567 STUTTGART DE ; DAIMLER BENZ 70567 STUTTGART DE AG

Inventor(s): (std): BESCHLE KLAUS ; BESCHLE KLAUS DIPL ING ; JAUSS CHRISTIAN ; JAUSS CHRISTIAN DIPL ING ; KRUECK PETER ; KRUECK PETER ; KRUECK PETER DIPL ING ; LUDWIG SASCHA ; LUDWIG SASCHA DIPL ING ; UHLENBERG JUERGEN ; UHLENBERG JUERGEN DIPL ING ; UHLENBERG JURGEN

Designated states: ES FR GB IT

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE19729897 C1	19981022	LSGT	+	granted / extensions (spc, cpc, pte)	
DE19729897 C1	19981022	LSPB	+8100	PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION	
DE19729897 C1	19981022	LSGT	+D1	GRANT (NO UNEXAMINED APPLICATION PUBLISHED) PATENT LAW 81	
DE19729897 C1	19990408	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : DAIMLERCHRYSLER AG, 70567 STUTTGART, DE
DE19729897 C1	19990422	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE19729897 C1	20070503	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : DAIMLERCHRYSLER AG, 70327 STUTTGART, DE

DE19729897 C1	20070516	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE19729897 C1	20170712	PEXP		Calculated Patent Term Expiry	
EP0890467 A1	19990113	LSPB	+	published / reissued	
EP0890467 A1	19990310	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19990108
EP0890467 A1	19990407	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : DAIMLERCHRYSLER AG
EP0890467 A1	19990922	LSFE	+AKX	PAYMENT OF DESIGNATION FEES	TEXT : ES FR GB IT
EP0890467 A1	20010606	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20010423
EP0890467 B1	20021002	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0890467 B1	20021002	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP0890467 B1	20030416	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2185087 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0890467 B1	20030711	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20030711 YEAR OF FEE PAYMENT : 6
EP0890467 B1	20030718	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20030718 YEAR OF FEE PAYMENT : 6
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EP0890467 B1	20050331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050331
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EP0890467 B1	20070328	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20060703	
EP0890467 B1	20180703	PEXP		Calculated Patent Term Expiry		
ES2185087 T3	20030416	LSGT	+	granted / extensions (spc, cpc, pte)		
ES2185087 T3	20180703	PEXP		Calculated Patent Term Expiry		

Title: MULTILAYER GLASS PANE FOR SAFE MOTOR VEHICLES

Abstract: The invention relates to a multilayer glass pane for safe motor vehicles. The inventive glass pane is composed of several individual panes. At least the outer pane (1a) at least partially protrudes over the remaining panes (1z, 1I) in a step-by-step manner and with the outer edge thereof. A first limb (4.1) of a safety element (4) is fixed to at least one edge of the pane. According to the invention, the safety element (4) is provided with at least two additional limbs (4.2, 4.3) which are arranged in an essentially rectangular manner in relation to the first limb (4.1). The second limb (4.2) overlaps the area up to a body component (2) that is adjacent to the multilayer pane, or a bullet-proof interior lining (3) and the third limb (4.3) overlaps the multilayer glass pane (1). At least the second limb (4.2) and the first limb (4.1) are configured as separate components.

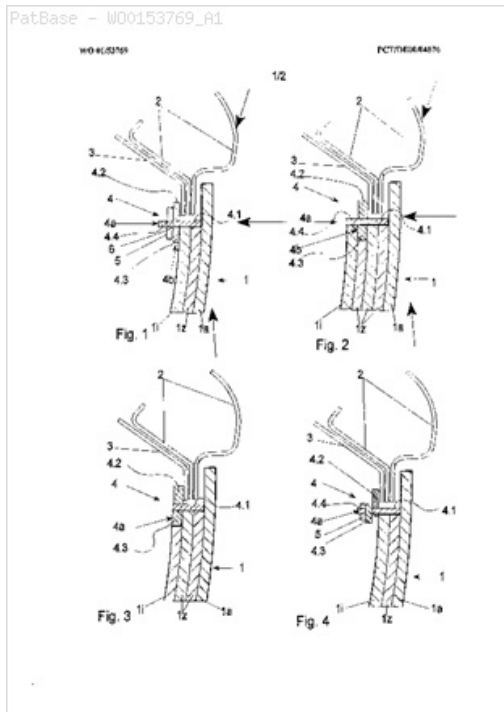
Classifications:

International (IPC 8-9): B32B17/10 F41H5/04 (Advanced/Invention); B32B17/06 (Core/Invention)

International (IPC 1-7): B60J1/00 C03C27/12 F41H5/04 F41H5/26

CPC: B32B17/10045 B32B17/10293 F41H5/0407 F41H5/263

European: B32B17/10C4B B32B17/10E16 F41H5/04B F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
AT246336 E	20030815	AT20000990590T	20001223
AU2001230020 AA	20010731	AU20010230020	20001223
DE10002671 A1	20010809	DE20001002671	20000124
DE10002671 B4	20040513	DE20001002671	20000124
DE50003149 D1	20030904	DE20005003149	20001223
EP1250560 A1	20021023	EP20000990590	20001223
EP1250560 B1	20030730	EP20000990590	20001223
WO0153769 A1	20010726	WO2000DE04676	20001223

Priority:

DE20001002671 20000124 DE20005003149 20001223 WO2000DE004676 20001223
WO2000DE04676 20001223

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Assignee(s): SACHSENRING FAHRZEUGTECHNIK GMBH ; SACHSENRING ENTWICKLUNGSGESELLSCHAFT MBH

Inventor(s): (std): ROSE MICHAEL

Inventor(s): MICHAEL ROSE

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 CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT246336 E	20030815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT246336 E	20050315	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT246336 E	20201223	PEXP		Calculated Patent Term Expiry	
AU2001230020 AA	20010731	LSPB	+	published / reissued	

DE10002671 A1	20010809	LSPB	+	published / reissued	
DE10002671 A1	20010809	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE10002671 A1	20030515	LSAS	8127	NEW PERSON/NAME/ADDRESS OF THE APPLICANT	PARTYTYPE : OWNER OWNER : SACHSENRING FAHRZEUGTECHNIK GMBH, 08058 ZWICKAU, D
DE10002671 B4	20040513	LSGT	+	granted / extensions (spc, cpc, pte)	
DE10002671 B4	20041111	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE10002671 B4	20200124	PEXP		Calculated Patent Term Expiry	
DE50003149 D1	20050113	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : SACHSENRING ZWICKAU AG, 08058 ZWICKAU, DE
DE50003149 D1	20060202	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : VOLKSWAGEN AG, 38440 WOLFSBURG, DE
DE50003149 D1	20060518	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
EP1250560 A1	20021023	LSPB	+	published / reissued	
EP1250560 A1	20021023	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020724
EP1250560 A1	20170428	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161231 YEAR OF FEE PAYMENT : 17
EP1250560 B1	20030730	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1250560 B1	20030730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20030730
EP1250560 B1	20030730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20030730
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EP1250560 B1	20030731	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1250560 B1	20030903	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : GERMAN
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EP1250560 B1	20031201	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
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EP1250560 B1	20201223	PEXP		Calculated Patent Term Expiry	
WO0153769 A1	20010726	LSPB	+	published / reissued	
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WO0153769 A1	20030730	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000990590 COUNTRY OF REF DOCUMENT : EP
WO0153769 A1	20040929	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP

Title: DOOR FRAME WITH ARMORED GLASS PANE FOR ARMORED PROTECTION VEHICLE HAS STRIP ELEMENT RUNNING AT ANGLE AND NARROWING FROM REGION FILLED WITH PANE

Abstract: The door frame (1) has a strip element (8) reinforcing the frame and an armored glass pane (5) fixed in place by this strip. The strip element is enclosed between the inside and outside of the door frame. It becomes narrower and angled in the outward direction from the region filled with the pane, which has a complementary angling of its own edge to match the strip element.

Classifications:

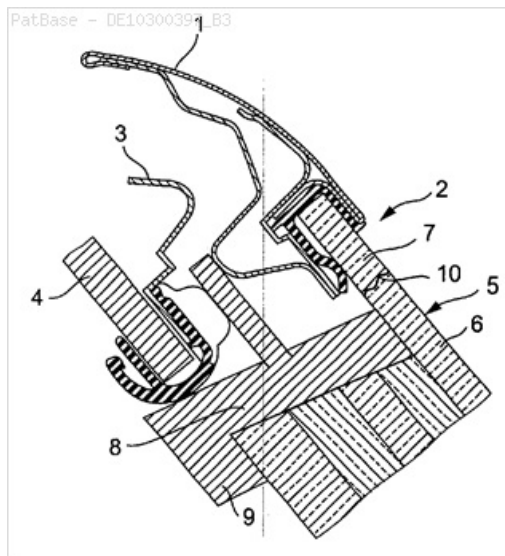
International (ipc 8-9): B32B17/10 B60J10/08 B60J5/00 F41H5/26 F41H7/04 (Advanced/Invention);

B32B17/06 B60J10/00 B60J5/00 F41H5/00 F41H7/00 (Core/Invention)

International (ipc 1-7): B60J1/00 B60J5/00 F41H5/26

CPC: B32B17/10045 B32B17/10293 B60J5/00 B60J10/80 F41H5/26 F41H5/263

European: B32B17/10C4B B32B17/10E16 B60J10/08 B60J5/00 F41H5/26 F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE10300397 B3	20040603	DE20031000397	20030109

Priority:

DE20031000397 20030109

Probable Assignee: DAIMLER CHRYSLER AG

Assignee(s): (std): DAIMLER CHRYSLER AG

Assignee(s): DAIMLERCHRYSLER AG

Inventor(s): (std): BESCHLE KLAUS ; KRUECK PETER ; SCHUMACHER JOSEF

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE10300397 B3	20040603	LSGT	+	granted / extensions (spc, cpc, pte)	
DE10300397 B3	20040603	LSPB	+8100	PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION	
DE10300397 B3	20041202	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE10300397 B3	20061116	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE10300397 B3	20230109	PEXP		Calculated Patent Term Expiry	

Title: METHOD FOR FITTING ARMORED GLASS PANEL INTO ARMORED VEHICLE INVOLVES FITTING SUPPORT FLANGE TO THE EDGE OF THE ARMOR TO HOLD THE GLASS PANEL WITH ADJUSTMENT

Abstract: A method for fitting an armored glass panel 93 into the frame (5) of an armored vehicle has the edge of the armor panel (23) lipped (27) and with a number of bores through which fasteners (29) are set into a support flange (35) on which the profiled edge of the glass panel is supported. Some of the bores hold threaded adjusters which set the spacing of the glass panel in the support mounting. The armor panel prevents penetration by projectiles through the otherwise vulnerable edges of the glass panel.

Classifications:

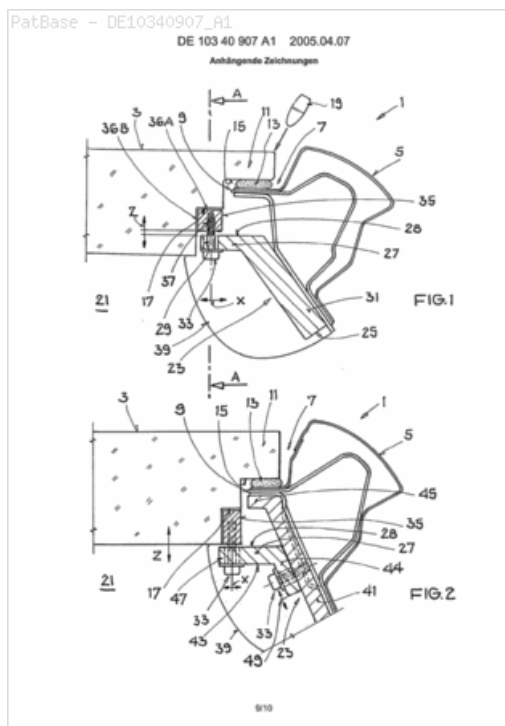
International (IPC 8-9): F41H5/013 F41H5/26
F41H7/04 (Advanced/Invention);

F41H5/00 F41H7/00 (Core/Invention)

International (IPC 1-7): F41H5/013 F41H5/26

CPC: F41H5/013 F41H5/26 F41H5/263

European: F41H5/013 F41H5/26 F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE10340907 A1	20050407	DE20031040907	20030905

Priority:

DE20031040907 20030905

Probable Assignee: DAIMLER CHRYSLER AG

Assignee(s): (std): DAIMLER CHRYSLER AG

Assignee(s): DAIMLERCHRYSLER AG

Inventor(s): (std): BESCHLE KLAUS ; KRUECK PETER ; SCHICK KLAUS ; UHLENBERG JUERGEN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE10340907 A1	20050407	LSPB	+	published / reissued	
DE10340907 A1	20050407	LSSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE10340907 A1	20060216	LSWD	-8130	WITHDRAWAL	

Title: BULLET-RESISTANT TRANSPARENT LAMINATE COMPOSITE AND PROTECTION ARRANGEMENT HAVING A BULLET-RESISTANT TRANSPARENT LAMINATE COMPOSITE

Abstract: A bullet-resistant transparent laminate composite (10) has at least two plates (12) arranged one behind the other and at a spacing relative to each other in the direction of threat and comprising a transparent first material with a modulus of elasticity of at least about 1,500 N/mm², and a respective intermediate layer (14) of a transparent second material with a lower modulus of elasticity than that of the first material between two adjacent plates (12). The layer thicknesses of the plates (12) and the intermediate layer or layers (14) are so selected that the overall layer structure of the layer composite (10) of plates and intermediate layer or layers has a modulus of elasticity which is at least about 10 percent lower in comparison with a block made exclusively from the first material and of the same overall thickness.

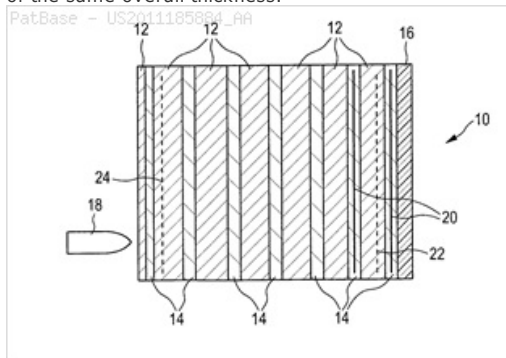
Classifications:

International (IPC 8-9): B29C65/02 B32B17/10 B32B27/08 B32B27/30 B32B7/12 B63B3/10 C03C27/12 F41H F41H5/04 F41H5/24 F41H5/26 F41H7/02 F41H7/04 (Advanced/Invention); B32B27/08 (Advanced/Non-invention); B32B27/30 B32B7/12 C03C27/12 F41H5/00 (Core/Invention); B32B27/08 (Core/Non-invention); F41H (Subclass/Invention)

CPC: B32B7/12 B32B17/10844 B32B27/08 B32B27/30 B32B2369/00 F41H5/0407 F41H5/263 B32B7/02 B32B9/005 B32B9/045 B32B27/304 B32B27/36 B32B27/365 B32B27/40 B32B2270/00 B32B2307/412 B32B2307/54 B32B2571/02 B32B2605/00 B32B2605/16 B32B2605/18 B32B17/10064 B32B17/1077

European: B32B17/10L10B2B B32B27/08 B32B27/30 B32B7/12 F41H5/04B F41H5/26B L32B369/00

US: 156/285 156/285S 89/36.02 89/36.020P 89/904 89/904S 89/905 89/905S



Family:

Publication number	Publication date	Application number	Application date
DE102008028318 A1	20091217	DE200810028318	20080613
DE602009051187 D1	20180329	DE200960051187T	20090612
EP2294352 A2	20110316	EP20090761514	20090612
EP2322894 A1	20110518	EP20110000362	20090612
EP2322894 B1	20180307	EP20110000362	20090612
IL209432 A0	20110131	IL20090209432	20090612
IL209432 A1	20160929	IL20090209432	20090612
US2011185884 AA	20110804	US20090997873	20090612
US8833233 BB	20140916	US20090997873	20090612
WO09149951 A2	20091217	WO2009EP04255	20090612
WO09149951 A3	20100408	WO2009EP04255	20090612

Priority:

DE200810028318 20080613 EP20090761514 20090612 WO2009EP04255 20090612
EP20110000362 20090612

Probable Assignee: IABG LICHTENAU

Assignee(s): (std): ESW GMBH ; HAMPEL JAN ; HINRICHSSEN DENNI ; IABG LICHTENAU ; KRD SICHERHEITSTECHNIK GMBH ; KRUEGER THOMAS ; SCHAEFER ROGER ; JENOPTIK ADVANCED SYSTEMS GMBH

Inventor(s): (std): HAMPEL JAN DR ; SCHAEFER ROGER DR ; SCHAEFER ROGER ; KRUEGER THOMAS ; HINRICHSSEN DENNI ; HAMPEL JAN

Agent(s): SOELTENFUSS DIRK CHRISTIAN; PRUEFER AND PARTNER MBB PATENTANWAELTE RECHTSANWAELTE; LUZZATTO AND LUZZATTO; GREER BURNS AND CRAIN LTD; SOELTENFUSS DIRK

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE102008028318 A1	20091217	LSPB	+	published / reissued	
DE102008028318 A1	20150421	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	
DE102008028318 A1	20150603	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	EFFECTIVE DATE : 20150421
DE102008028318 A1	20170120	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : IABG LICHTENAU, DE OLDPARTY : FORMER OWNERS: ESW GMBH, 22880 WEDEL, DE; IABG LICHTENAU, 33165 LICHTENAU, DE; KRD SICHERHEITSTECHNIK GMBH, 21502 GEESTHACHT, DE
DE102008028318 A1	20170120	LSAS	R081	CHANGE OF	PARTYTYPE : OWNER

				APPLICANT/PATENTEE	OWNER : JENOPTIK ADVANCED SYSTEMS GMBH, DE OLDPARTY : FORMER OWNERS: ESW GMBH, 22880 WEDEL, DE; IABG LICHTENAU, 33165 LICHTENAU, DE; KRD SICHERHEITSTECHNIK GMBH, 21502 GEESTHACHT, DE
DE102008028318 A1	20170120	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : KRD SICHERHEITSTECHNIK GMBH, DE OLDPARTY : FORMER OWNERS: ESW GMBH, 22880 WEDEL, DE; IABG LICHTENAU, 33165 LICHTENAU, DE; KRD SICHERHEITSTECHNIK GMBH, 21502 GEESTHACHT, DE
DE102008028318 A1	20170720	LSES	R016	RESPONSE TO EXAMINATION COMMUNICATION	
DE102008028318 A1	20171218	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : JENOPTIK ADVANCED SYSTEMS GMBH, DE OLDPARTY : FORMER OWNERS: IABG LICHTENAU, 33165 LICHTENAU, DE; JENOPTIK ADVANCED SYSTEMS GMBH, 22880 WEDEL, DE; KRD SICHERHEITSTECHNIK GMBH, 21502 GEESTHACHT, DE
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EP2294352 A2	20110316	LSPB	+	published / reissued	
EP2294352 A2	20110316	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20101206
EP2294352 A2	20120404	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : ESW GMBH
EP2294352 A2	20120404	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : KRD SICHERHEITSTECHNIK GMBH
EP2294352 A2	20120725	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20120625
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EP2322894 A1	20110518	LSPB	+	published / reissued	
EP2322894 A1	20111026	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110913
EP2322894 A1	20120104	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20111129
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EP2322894 A1	20171025	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20170928
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EP2322894 B1	20180315	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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IL209432 A1	20170131	LSGT	+FF	PATENT GRANTED	
IL209432 A1	20170330	LSFE	+KB	PATENT RENEWED	
US2011185884 AA	20110804	LSPB	+	published / reissued	
US8833233 BB	20140916	LSGT	+	granted / extensions (spc, cpc, pte)	
US8833233 BB	20110308	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KRD SICHERHEITSTECHNIK GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HINRICHSSEN, DENNI; REEL/FRAME:025923/0177 EFFECTIVE DATE : 20110301
US8833233 BB	20110308	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : IABG LICHTENAU, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HAMPEL, JAN; SCHAFFER, ROGER; REEL/FRAME:025923/0202 EFFECTIVE DATE : 20110303
US8833233 BB	20110308	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ESW GMBH, GERMANY

					OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:KRUGER, THOMAS; REEL/FRAME:025923/0209 EFFECTIVE DATE : 20110301
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US8833233 BB	20150922	LSRE	CC	CERTIFICATE OF CORRECTION	
US8833233 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JENOPTIK ADVANCED SYSTEMS GMBH, GERMANY OLDPARTY : MERGER AND CHANGE OF NAME; ASSIGNORS:ESW GMBH; JENOPTIK AG; JENOPTIK ADVANCED SYSTEMS GMBH; SIGNING DATES FROM 20060831 TO 20070606; REEL/FRAME:041812/0597
US8833233 BB	20180313	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8833233 BB	20310401	PEXP		Calculated Patent Term Expiry (PTA 658 days)	
WO09149951 A2	20091217	LSPB	+	published / reissued	
WO09149951 A3	20101214	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09149951 A3	20110307	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12997873 COUNTRY OF REF DOCUMENT : US

Abstract: The present invention refers to a bullet- and blast-resistant window, in particular for use in a motor vehicle, which comprises a ballistic block having a peripheral face and a plurality of panes of glass, ceramic or plastic material bonded to each other over their surfaces in a layered composite, and interposed bonding interlayers of plastic material or adhesive, wherein an edge groove having slopes at least partly inclined for engagement with a part of the vehicle body and extending on and along at least a part of the peripheral edge of the window.

International (IPC 8-9): B60J1/02 B60J1/20 B60J5/04 F41H5/04 F41H5/26 (Advanced/Invention)

Publication number	Publication date	Application number	Application date
BR112016025636 A2	20170815	BR20161125636	20150806
CO20170002283 A2	20170531	CO20170002283	20170307
DE14425108 T1	20160519	DE20140425108T	20140820
EP2988088 A1	20160224	EP20140425108	20140820
EP2988088 B1	20180502	EP20140425108	20140820
ES2571678 T1	20160526	ES20140425108T	20140820
MX2016014964 A1	20170411	MX20160014964	20150806
US2017234656 AA	20170817	US20150315276	20150806
WO16026554 A1	20160225	WO20150315276	20150806

EP20140425108 20140820 ES20140425108T 20140820 WO2014DE425108 20140820
WQ2015EP01630 20150806

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 TH TJ TM TN TR TT TZ UA UG UD US UZ VC VN ZA ZW ZC

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Patent	Date recorded	Event group	Code	Event	Details
CO20170002283 A2	20170531	LSPB	+	published / reissued	
DE14425108 T1	20160519	LSPB	+	published / reissued	
EP2988088 A1	20160224	LSPB	+	published / reissued	
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EP2988088 A1	20171227	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20171130

EP2988088 A1	20180321	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20180223
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ES2571678 T1	20160526	LSPB	+	published / reissued	
MX2016014964 A1	20170411	LSPB	+	published / reissued	
US2017234656 AA	20170817	LSPB	+	published / reissued	
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