

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 13-187115- -16	FECHA: 2015-12-24 12:09:15
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 378 FASE NACIONAL INCLUIDO CAPITULO I
TRA: 11 PCT-PATENTE DE INVENCION CAPITULOS I Y II	FOLIOS: 6
ACT: 519 TRASLADOINFORME	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
LUIS FELIPE CASTILLO GIBSON

Asunto: Radicación: 13-187115- -16
 Trámite: 11
 Evento: 378
 Actuación: 519
 Oficio: 15706
 Folios: 6

Patente de Invención	X			Patente de Modelo de Utilidad	
Vía Nacional					
Vía PCT (Fase Nacional)	X	Capítulo I	X	Capítulo II	
No. Solicitud Internacional	PCT/DE2012/000004				
Fecha de Presentación Internacional	04/01/2012				

Como resultado del examen de fondo realizado, con fundamento en el Artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se comunica:

1. Documentos estudiados

Descripción	Rad. No. 13-187115-00000-0000	06 de agosto de 2013
Reivindicaciones:	Rad. No. 13-187115-00012-0000	12 de junio de 2015
Dibujos:	Rad. No. 13-187115-00000-0000	06 de agosto de 2013
Prioridad(es):	DE 20 2011 001 371.5	12 de enero de 2011

2. Análisis de la Prioridad

Se acepta la reivindicación de prioridad porque ésta solicitud fue presentada dentro del plazo establecido (Art. 9 D 486) y su contenido técnico corresponde con el de la prioridad reivindicada.

3. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del Capítulo Primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por el solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. Por lo tanto, se estudiaran las reivindicaciones 1 a 23.

Título de la solicitud: “Panel de vidrio a prueba de balas y dispositivo resistente a las balas correspondiente”.(Rad. No. 13-187115-00000-0000).

El problema planteado en esta solicitud consiste en la necesidad un panel de vidrio a prueba de balas que tenga las requeridas propiedades de resistencia a las balas especialmente en el área del borde periférico.

Para resolver este problema técnico, la solicitud en estudio proporciona un panel balístico resistente a las balas que consiste de una pluralidad paneles de vidrio, adheridos entre sí a través de sus superficies en un compuesto estratificado.

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): B60J 1/02, 1/06; F41H 7/00.

4. De la solicitud de patente

Reivindicaciones (Art 30 D 486)

Las reivindicaciones 1 y 9 no son claras porque:

Se refieren a elementos *a prueba de balas*, que es un resultado a alcanzar y no definen al panel de vidrio reclamado, puesto que la reivindicación incluiría no sólo la solución propuesta por el solicitante, sino todas las alternativas presentes o futuras que lleguen a ese resultado. Se sugiere reemplazarlo por las características esenciales, estructurales o funcionales, que contribuyen a la obtención de ese efecto.

Por lo anterior, las características mencionadas al no ser claras no se pueden comparar con lo perteneciente al estado de la técnica.

5. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de presentación de prioridad: 12 de enero de 2011, y se encontraron los siguientes documentos que anticipan el objeto de esta solicitud:

Ítem	Documento	Título	Fecha de Publicación*
D2	US6280826B1	“Bulletproof glass window for a motor vehicle”	28 de agosto de 2001

El documento D2¹ divulga una ventana de vidrio, cerámica o material plástico a prueba de balas, en particular para su uso como una ventana lateral abatible de un vehículo, conformado por una pluralidad de paneles de vidrio, dispuestos en capas y laminados. (Resumen).

6. Examen de Patentabilidad (Art 14 D486)

Novedad (Art 16 D486)

La reivindicación 1 consiste en: “*Un panel de vidrio a prueba de balas (22; 22.1), en particular para usar en un vehículo motorizado, que comprende un bloque balístico...*” (Pág. 9 del radicado No. 13-187115-00012-0000)

<http://www.google.com/patents/US6280826>

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D2
La banda (13; 13.1, 13.2) tiene un corte transversal esencialmente rectangular que cubre el bloque balístico (10; 10.1) del panel de vidrio (22; 22.1) por su borde periférico al ras.	El vidrio interior (5) contiene al elemento en forma de banda de sección transversal esencialmente rectangular (7). Dicho elemento (7) cubre el bloque balístico (3, 4, 5) del panel de vidrio por su borde periférico al ras. (Fig.1).
Un panel de vidrio (1) de cerámica u panel de plástico adherido al bloque balístico (10; 10.1) por el lado del impacto y que sobresale desde el bloque balístico y la banda (13; 13.1, 13.2) en la periferia externa del panel de vidrio a prueba de balas (22; 22.1) para formar una protuberancia (12) del panel de vidrio a prueba de balas para montar el panel de vidrio a prueba de balas sobre o en un marco (14) o rebaje de la carrocería de un vehículo automotor.	Una capa de poliuretano (2) adherida al de bloque a pruebas de balas (1, 3, 4 ,5) por el lado del impacto según indica la flecha, sobresale desde el bloque a prueba de balas y la banda (7) en la periferia externa del panel de vidrio para formar una protuberancia (8) del panel de vidrio estando montado sobre o en un marco (14) o rebaje de la carrocería de un vehículo automotor. (Col.3, líneas 53 a 67; Col.4, líneas 1 a 5; Fig.1).

De acuerdo con la tabla anterior, las características esenciales del panel de vidrio reclamado en la reivindicación 1 habían sido divulgadas previamente en el documento D2, por lo tanto, la materia reivindicada no es nueva.

Asimismo, el documento D2 divulga las características de las reivindicaciones dependientes así:

- Reivindicación 3: Porque el bloque balístico (1, 2, 3, 4, 5) tiene una configuración escalonada en su cara terminal (9, 7) de afuera hacia adentro. (Fig.1)
- Reivindicación 4: Por un panel de vidrio (1), panel de cerámica u panel de plástico externo adherido al bloque balístico (2, 3, 4, 5) por el lado del impacto y que sobresale (8) desde el bloque balístico por la periferia externa o circunferencia del panel de vidrio. (Fig.1)
- Reivindicación 5: Porque la protuberancia (8) del panel de vidrio tiene una configuración escalonada. (Fig.1)
- Reivindicación 6: Porque el bloque balístico (5) tiene una configuración escalonada sobre la periferia externa del panel de vidrio a prueba de balas (1), lo cual da lugar a por lo menos dos o más superficies terminales planas (9, 7) en la cara terminal del bloque balístico (1, 2, 3, 4, 5) que se extienden en paralelo y descentradas entre sí. (Fig.1).
- Reivindicación 7: Porque la banda (7) tiene un único espesor y se encuentra adherida al panel (5) del bloque a prueba de balas. . (Fig.1).
- Reivindicación 8: Porque la banda (7) del reforzamiento del borde están adheridas al bloque balístico. (Fig.1).

La reivindicación 9 consiste en: “*Un aparato, el cual se puede usar de forma a prueba de balas y en particular en un vehículo automotor, que comprende un panel de vidrio a prueba de balas...*” (Pág. 9 del radicado No. 13-187115-00012-0000)

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D2
Un bloque balístico (10; 10.1).	Un bloque balístico (1, 2, 3, 4 ,5). (Col.3, líneas 44 a 52).
Que comprende una pluralidad de paneles de vidrio (1, 3, 5, 7, 9; 7.1, 9.1), cerámica o material plástico adheridas entre sí por sus superficies en un compuesto de capas,	Que comprende una pluralidad de paneles de vidrio (1, 3, 5) cerámica o material plástico adheridas entre sí por sus superficies en un compuesto de capas. (Col.3, líneas 44 a 52).
Intercalas adheridas interpuestas (2, 4, 6, 8.1) de material plástico,	Intercaladas adheridas e interpuestas con material plástico (2, 4). (Col. 3 líneas 64 a 65, Fig.1)
una banda (13; 13.1, 13.2) que tiene un corte transversal esencialmente rectangular y que cubre el bloque balístico (10; 10.1) de panel de vidrio (22; 22.1) por su borde periférico	una banda (7) que tiene un corte transversal esencialmente rectangular y que cubre el bloque balístico de panel de vidrio (5) por su borde periférico. (Col. 3, líneas 32 a 37, Fig.1).
que comprende un dispositivo de blindaje (19; 19.1, 19.2)	que comprende un dispositivo de blindaje (14). (Col. 3, líneas 18 a 21, Fig.1).
donde el dispositivo de blindaje (19.1) tiene una configuración escalonada correspondiente a la configuración escalonada del bloque balístico (10.1) de tal manera que contacta y se superpone a la configuración escalonada del bloque balístico (10.1) del panel de vidrio (22.1),	donde el dispositivo de blindaje (14) tiene una configuración escalonada correspondiente a la configuración escalonada del bloque balístico (1, 2, 3, 4, 5) de tal manera que contacta y se superpone a la configuración escalonada del bloque balístico del panel de vidrio. (Fig.1).
dispuesto en el interior del vehículo motorizado adyacente al panel de vidrio (22, 22.1)	dispuesto en el interior del vehículo motorizado adyacente al panel de vidrio (1). (Fig.1).
que se superpone al panel de vidrio (22, 22.1) en un área de la periferia externa del panel de vidrio (22, 22.1).	que se superpone al panel de vidrio (1) en un área de la periferia externa del panel de vidrio a prueba de balas (1). (Fig.1).

De acuerdo con la tabla anterior, las características esenciales del aparato a prueba de balas utilizado en un vehículo automotor y reclamado en la reivindicación 9, habían sido divulgadas previamente en el documento D2, por lo tanto, la materia reivindicada no es nueva.

Asimismo, el documento D2 divulga las características de las reivindicaciones dependientes así:

- Reivindicación 11: El bloque balístico (1, 2, 3, 4 ,5) con paneles de vidrio (1, 3, 5) tiene una configuración escalonada en su cara terminal, de afuera hacia adentro. (Fig.1).

- Reivindicación 12: El bloque balístico (1, 2, 3, 4, 5) con paneles de vidrio (1, 3, 5) tiene un panel de vidrio (1), panel de cerámica o plástico, externo adherido al bloque balístico (3) por el lado del impacto y que sobresale (8) desde el bloque balístico por la periferia externa del panel de vidrio. (Col.3, líneas 53 a 67; Col.4, líneas 1 a 5; Fig.1).
- Reivindicación 13: El bloque balístico (1, 2, 3, 4, 5) con paneles de vidrio (1, 3, 5) tiene un panel de vidrio (1), panel de cerámica o plástico, externo adherido al bloque balístico (3) por el lado del impacto y que sobresale desde el bloque balístico por la periferia externa del panel de vidrio, formando una protuberancia (8) del panel de vidrio, y montado el panel de vidrio sobre o en un marco (14). (Col.3, líneas 53 a 67; Col.4, líneas 1 a 5; Fig.1).
- Reivindicación 14. Porque la protuberancia del panel de vidrio una configuración escalonada. (Fig.1).
- Reivindicación 15. el bloque balístico (1, 2, 3, 4, 5) conformado por paneles de vidrio (1, 3, 5) tiene una configuración escalonada sobre la periferia externa del panel, lo cual da lugar a por lo menos dos superficies terminales planas (9, 7) en la cara terminal del bloque balístico, que se extienden en paralelo y descentradas entre sí, y que, en correspondencia con las superficies terminales, se proporcionándose la banda (7) que cubren la superficie terminales del bloque balístico al ras. (Fig.1).
- Reivindicación 16 y 17. La banda (7) del reforzamiento del borde están adheridas al bloque balístico (1, 2, 3, 4, 5) (Fig.1).
- Reivindicación 18. Una protuberancia (8) en el lado del borde del panel de vidrio a prueba de balas. (Fig.1).
- Reivindicación 19. El dispositivo de blindaje (14) soporta el panel de vidrio. (Fig.1).
- Reivindicación 20. El bloque balístico (1, 2, 3, 4, 5) del panel de vidrio tiene una configuración escalonada en su cara terminal. (Fig.1).
- Reivindicación 21. El bloque balístico (1, 2, 3, 4, 5) está montado en un marco (14) o rebaje de la carrocería de un vehículo. (Fig.1).
- Reivindicación 22. El panel de vidrio tiene una protuberancia (8) en su periferia externa, la cual está adosada o adherida a un perfil escalonado de la carrocería de un vehículo. (Fig.1).
- Reivindicación 23. El bloque balístico (1, 2, 3, 4, 5) y la protuberancia (8) tienen una configuración escalonada en su cara terminal. (Fig.1).

7. Conclusión

Los requisitos de Patentabilidad de la presente solicitud están afectados así:

Ítem	Documento	Reivindicaciones afectadas	Requisito que afecta
D2	US 2008/264669	1 - 23	Novedad/Nivel Inventivo

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta (60) días contados a partir del día siguiente de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Se invita al solicitante se sirva indicar, si así lo considera, su renuncia al término faltante de sesenta (60) días para dar respuesta a este requerimiento y presentarla por escrito.

Finalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones, no pagará la tasa de modificación voluntaria pero sí la correspondiente al pago por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2015-12-29

Elaboró: Jesus Alejandro Velasquez Salgado
Revisó: Leonardo Rojas Vega

jesusvelasquez

Search history

Search 1: PN=(WO2013119507) (Results 1)

Search 2: [SP]: 1. a method of fracturing a subterranean formation comprising introducing a proppant stage into the subterranean formation, wherein the proppant stage comprises a fine textured foam containing: (i) a viscosified aqueous fluid having ultra lightweight (ulw) proppant suspended in the viscosified aqueous fluid and (ii) a gaseous fluid, wherein the gaseous fluid constitutes at least about 85 volume percent of the combination of gaseous fluid and aqueous fluid in the fine textured foam wherein the diameter of at least 70 percent gas volume of the bubbles of the fine textured foam is less than or equal to 0.18 mm and further wherein the proppant stage is introduced into the subterranean formation at a pressure sufficient to create or enlarge a fracture. 2. the method of claim 1, wherein the diameter of the bubbles of the fine textured foam is between from about 0.01 to about 0.10 mm. 3. the method of claim 1, wherein the diameter of at least 80 percent gas volume of the bubbles of the fine textured foam is less than or equal to 0.18 mm. 4. the method of claim 3, wherein the diameter of the bubbles of the fine textured foam is between from about 0.01 to about 0.10 mm. 5. the method of claim 3, wherein the diameter of at least 90 percent gas volume of the bubbles of the fine textured foam is less than or equal to 0.18 mm. 6. the method of claim 5, wherein the diameter of the bubbles of the fine textured foam is between from about 0.01 to about 0.10 mm. 7. the method of claim 1, wherein the amount of proppant suspended in the viscosified aqueous fluid is that sufficient to create a partial monolayer of proppant in the fracture. 8. the method of claim 1, wherein the apparent specific gravity of the ulw proppant is less than or equal to 2.25. 9. the method of claim 8, wherein the apparent specific gravity of the ulw proppant is less than or equal to 1.75. 10. the method of claim 9, wherein the apparent specific gravity of the ulw proppant is less than or equal to 1.25. 11. the method of claim 1, wherein the viscosified aqueous fluid contains a viscoelastic surfactant. 12. the method of claim 1, wherein the gaseous fluid is nitrogen, carbon dioxide or a combination thereof. 13. a method of fracturing a subterranean formation comprising: (a) pumping into the formation a proppant stage comprising a fine textured foam, the fine textured foam prepared by: (i) suspending an ultra lightweight (ulw) proppant in a viscosified aqueous fluid and then (ii) combining the viscosified aqueous fluid with a gaseous fluid wherein the gaseous fluid constitutes at least about 85 volume percent of the combination of gaseous fluid and aqueous fluid in the fine textured foam and (b) creating or enlarging a fracture in the subterranean formation. 14. the method of claim 13, wherein the viscosified aqueous fluid comprises between from about 6 to about 55 weight percent of ultra lightweight (ulw) proppant having an apparent specific gravity less than or equal to 2.25, 15. the method of claim 13, further comprising, prior to pumping the proppant stage into the subterranean formation, pumping a pad fluid comprising a gaseous fluid into the formation at a pressure sufficient to initiate a fracture. 16. the method of claim 15, wherein the pad fluid further contains a proppant. 17. the method of claim 16, wherein the pad fluid comprises a gaseous fluid and an aqueous fluid. 18. the method of claim 13, wherein the amount of proppant suspended in the viscosified aqueous fluid is that sufficient to create a partial monolayer of proppant in the fracture. 19. the method of claim 13, wherein the diameter of at least 70 percent gas volume of the bubbles of the fine textured foam is less than or equal to 0.18 mm. 20. the method of claim 19, wherein the diameter of at least 90 percent gas volume of the bubbles of the fine textured foam is less than or equal to 0.18 mm. 21. the method of claim 13, wherein the diameter of between about 70 to about 90 percent gas volume of the bubbles is from about 0.01 to about 0.10 mm. 22. the method of claim 13, wherein the viscosified aqueous fluid is added to the gaseous fluid in step (a) (ii). 23. the method of claim 13, wherein the gaseous fluid is added to the viscosified aqueous fluid in step (a) (ii). 24. a method of fracturing a subterranean formation comprising introducing a proppant stage into the fracture, wherein the proppant stage is a fine textured foam comprising a gaseous fluid and an ultra lightweight (ulw) proppant having an apparent specific gravity (asg) less than or equal to 2.25 suspended in a viscosified aqueous system and further wherein the gaseous fluid of the proppant stage is greater than 90 volume percent of the fluid in the proppant stage. 25. the method of claim 24, wherein the diameter of between about 50 to about 90 percent gas volume of the bubbles is from about 0.01 to about 0.10 mm. 26. the method of claim 24, wherein the gaseous fluid comprises at least 95 volume percent of the fluid in the proppant stage. (Results 537)

Search 3: TAC=(Vacuum and relief and device and for and fluid) (Results 1074)

Search 4: TAC=(Vacuum and relief and device and for and fluid) and EC=(F04B 49/00) (Results 0)

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Search 7: TAC=(ENDODONTIC and DENTAL and IMPLANT) (Results 47)

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Search 17: TAC=(alternating and flow and resistance and increases and decreases) and EC=(a61c) (Results 1)

Search 18: TAC=(alternating and flow and resistance and increases and decreases) and EC=(e21b) (Results 17)

Search 19: TAC=(LOW and FRICTION and FABRIC) and EC=(d03d) (Results 70)

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Search 21: TAC=(LOW and FRICTION and FABRIC) and EC=(d03d) (Results 70)

Search 22: TAC=(LOW and FRICTION and FABRIC) and EC=(d03d15) (Results 21)

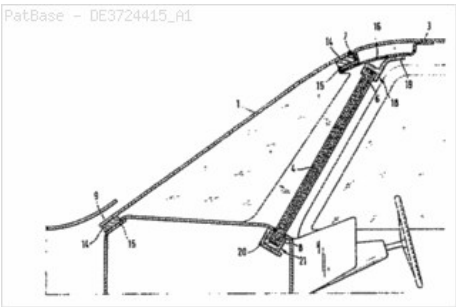
Search 23: TAC=(Bulletproof and glass and window and motor and vehicle) (Results 44)

Search 24: TAC=(Bulletproof and glass and window and motor and vehicle) and EC=(b32B) (Results 17)

Title: Bullet-proof window for a motor vehicle

Abstract: Source: DE3724415A1 A bullet-proof front or rear window for a motor vehicle is distinguished by the fact that it consists of a windscreen (1) and/or rear window (2) which is matched to the shape of the body of the motor vehicle, forms the outer skin of the motor vehicle, is of usual design and has in each case a separate pane (4) and/or (12) of armoured glass. The armoured glass panes (4; 12) are arranged inside the body of the vehicle at a distance from the windscreen or rear window at a steeper installation angle than the said windows and, in contrast to the windscreen and rear window, are planar or only slightly curved.

Classifications:
International (IPC 8-9): F41H5/26 (Advanced/Invention)
International (IPC 1-7): B60J1/00 F41H5/26
CPC: B32B17/10045 F41H5/263
European: B32B17/10C4B F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE3724415 A1	19890202	DE19873724415	19870723

Priority:

DE19873724415 19870723

Probable Assignee: VER GLASWERKE GMBH
Assignee(s): (std): GLASWERKE GMBH VER ; VER GLASWERKE GMBH
Assignee(s): VEGLA VEREINIGTE GLASWERKE GMBH
Inventor(s): (std): SIEMONSEN HANS PETER DR

Title: Bulletproof motor vehicle window - is made from laminated glass with outer layer projecting beyond edge of inner layers

Abstract: Source: DE4006709A1 The bullet-proof window is for a motor vehicle. It is constructed from laminated glass. An outer composite layer, consisting of laminations (3,16,3) projects beyond the edge of the remaining layers (4) of the glass pane (1). These layers (4) are mounted on a frame (8) which forms part of the vehicle structure (7) whilst the outer composite layer projects over the edge of the frame (8). Instead of projecting beyond the inner layers, the edge of the outer layer may be set back with respect to the inner layers (8). USE - Bullet-proof windows for motor vehicles.

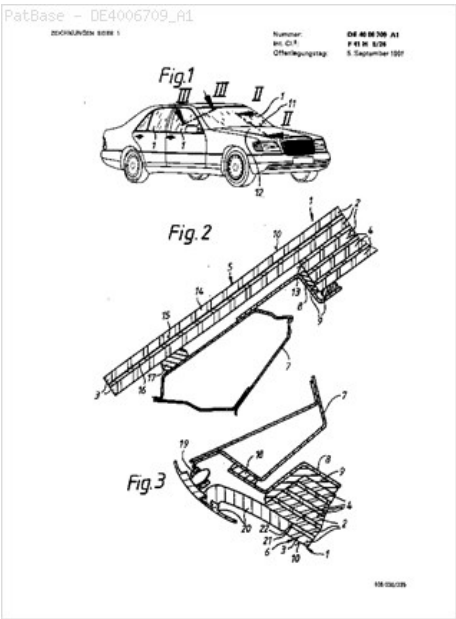
Classifications:

International (IPC 8-9): B32B17/10 B60J10/06 C03C27/12 F41H5/26 (Advanced/Invention)

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

CPC: B32B17/10045 B32B17/10293 B60J10/06 F41H5/0407 F41H5/263

European: B32B17/10C4B B32B17/10E16 B60J10/06 F41H5/04B F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE4006709 A1	19910905	DE19904006709	19900303
DE4006709 C2	19930805	DE19904006709	19900303

Priority:

DE19904006709 19900303

Probable Assignee: DAIMLER BENZ AG

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

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Inventor(s): (std): KRUECK PETER ; STIEGELER OSKAR ; ZWEIGART GERHARD

Inventor(s): ZWEIGART GERHARD 7042 AIDLINGEN DE ; STIEGELER OSKAR 7030 BOEBLINGEN DE ; KRUECK PETER 7030 BOEBLINGEN DE

Title: Bulletproof sliding window for motor vehicle - is guided by step formed by overlapping of laminations

Abstract: Source: DE4006711A1 The sliding window is made of bullet-proof glass and is fitted to a motor vehicle. The bullet-proof glass is formed from laminated glass consisting of several layers and has a step (10,11) formed on the edge of its outer surface (7). This step forms a guide surface with the edges of the inner guide rail (6) which is fitted in the outer guide rail (5) which is mounted in the frame (4) which forms part of the coachwork of the vehicle. A second guide surface is formed by a flange (15) which extends from the inner rail (6) and abuts against the inner surface (14) of the pane (1). USE - Bullet-proof glass for motor vehicles.

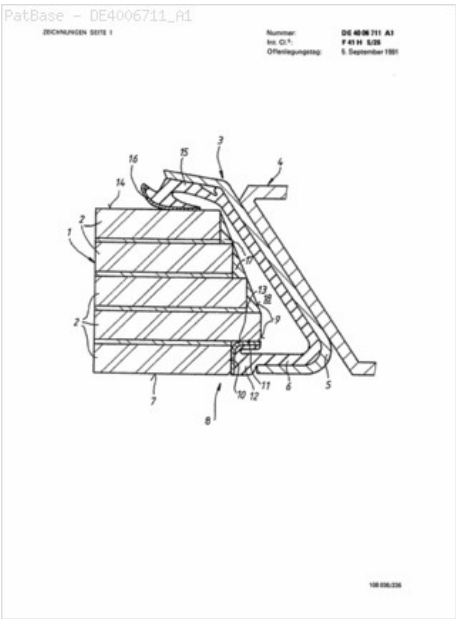
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International (IPC 8-9): B32B17/10 B60J10/00 B60J10/06
F41H5/26 (Advanced/Invention);
B32B17/06 (Core/Invention)

International (IPC 1-7): B60J1/17 F41H5/26

CPC: B32B17/10045 B32B17/10293 B60J10/0008 B60J10/06 F41H5/0407 F41H5/263

European: B32B17/10C4B B32B17/10E16 B60J10/00C3 B60J10/06 F41H5/04B
F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE4006711 A1	19910905	DE19904006711	19900303

Priority:

DE19904006711 19900303

Probable Assignee: DAIMLER BENZ AG

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

Assignee(s): MERCEDES BENZ AKTIENGESELLSCHAFT 7000 STUTTGART DE

Inventor(s): (std): KRUECK PETER ; STIEGELER OSKAR ; ZWEIGART GERHARD

Inventor(s): ZWEIGART GERHARD 7042 AIDLINGEN DE ; STIEGELER OSKAR 7030 BOEBLINGEN DE

Title: Bulletproof window for motor vehicle - is supported by sealing strip which rests on two edges of window frame

Abstract: Source: DE4006708A1 Bullet proof glass is fitted in the coachwork of a motor vehicle with the aid of a frame (2), of U-shaped cross-section, which fits over the edges of the composite pane (1). The pane (1) and its frame (2) are together pressed into the opening in the coachwork or into the opening in the door and the frame (2) presses against a sealing strip (4). This sealing strip is supported on two edges (5) which lie on a plane (22) which is parallel to the surface (21) of the frame (2) when the frame is in place in the coachwork or door and so provides stable support for the glass. USE - Bullet proof glass for motor vehicles.

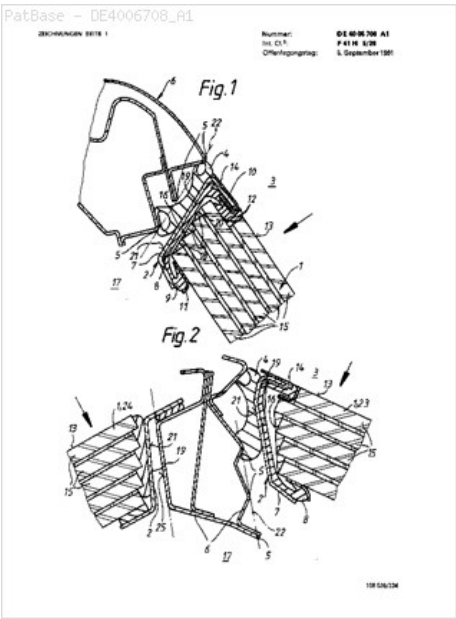
Classifications:

International (IPC 8-9): B60J10/06 F41H5/26 (Advanced/Invention)

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

CPC: B32B17/10045 B32B17/10293 B60J10/06 F41H5/0407 F41H5/263

European: B32B17/10C4B B32B17/10E16 B60J10/06 F41H5/04B F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE4006708 A1	19910905	DE19904006708	19900303
DE4006708 C2	19931111	DE19904006708	19900303

Priority:

DE19904006708 19900303

Probable Assignee: DAIMLER BENZ AG

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

Assignee(s): MERCEDES BENZ AKTIENGESELLSCHAFT 7000 STUTTGART DE ; MERCEDES BENZ AKTIENGESELLSCHAFT 70327 STUTTGART D ; MERCEDES BENZ AKTIENGESELLSCHAFT 70327 STUTTGART DE

Inventor(s): (std): KRUECK PETER ; STIEGELER OSKAR ; ZWEIGART GERHARD

Inventor(s): ZWEIGART GERHARD 7042 AIDLINGEN DE ; STIEGELER OSKAR 7030 BOEBLINGEN DE ; KRUECK PETER 7030 BOEBLINGEN DE

Title: **Motor vehicle** with armoured **glass**.

Abstract: A **motor vehicle** with armoured **window** is described in which the armoured **window** (1) has the following features: - a pane (3, 3 percent) of armoured **glass** which is set back with respect to an outer circumferential face of the **motor vehicle** in the direction of its interior and is connected to the **motor vehicle**, - a compensation plane (2, 2 percent) which is not armoured or is armoured to a lesser degree, is positioned on the outside of the **vehicle** in front of the plane of armoured **glass** and is let in an essentially flush manner into the outer shell (8, 20) of the **motor vehicle** or its door and has a contour which is predetermined by the shape of the **vehicle** and - spacing elements (5) for compensating production tolerances of the pane (3, 3 percent) of armoured **glass** and for mounting the compensation pane (2, 2 percent) on the pane of armoured **glass** bearing it.

Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 B60J10/06 C03C27/12

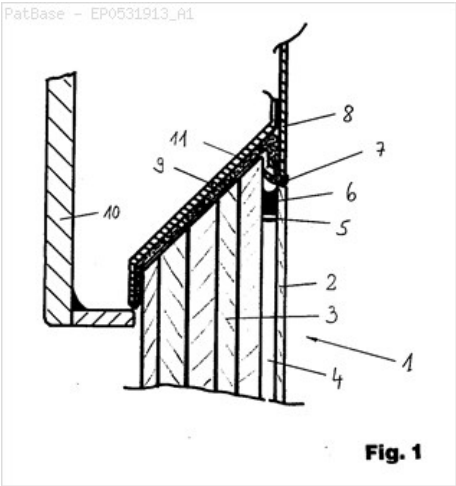
F41H5/04 (Advanced/Invention);

B60J1/00 (Core/Invention)

International (IPC 1-7): B60J1/00 C03C27/12 F41H5/26 F41H7/00 F41H7/02

CPC: B32B17/10055 B60J10/06 F41H5/0407 F41H5/263

European: B32B17/10C4B4 B60J10/06 F41H5/04B F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE59207609 D1	19970116	DE19925007609	19920905
DE9111130 U1	19920116	DE19910011130U	19910907
DE9205520 U1	19920806	DE19920005520U	19920423
EP0531913 A1	19930317	EP19920115229	19920905
EP0531913 B1	19961204	EP19920115229	19920905

Priority:

DE19919111130U 19910907 DE19910011130U 19910907 DE19925007609 19920905
DE19920005520U 19920423

Probable Assignee: TRASCO EXPORT GMBH

Assignee(s): (std): TRASCO EXPORT GMBH

Assignee(s): TRASCO EXPORT GMBH 2820 BREMEN DE ; TRASCO EXPORT GMBH 28719 BREMEN DE

Inventor(s): (std): MEYER HUGO ; NABER SVEN

Inventor(s): NABER SVEN W 2833 KIRCHSEELTE DE ; MEYER HUGO W 2803 WEYHE AHAUSEN DE

Designated states: BE CH DE DK ES FR GB GR IT LI NL PT SE

Title: **Bulletproof window** for **vehicle** - has steel reinforcement plate to prevent bullets penetrating **window** frame

Abstract: Source: DE4142416A1 The **vehicle** has a **window** pane made of reinforced **glass** and held in a frame. The **window** pane (2) has a steel plate (5) reinforcing element on the end side surface (2) which prevents the penetration of a shot into the **vehicle** interior fired in the direction of the arrows (a,b,c). The steel plate is several millimetres thick and has a tensile strength of about 60kp/mm2. USE/ADVANTAGE - Protective measure which ensures that a bullet cannot penetrate the frame of a **bulletproof window** in a **vehicle**.

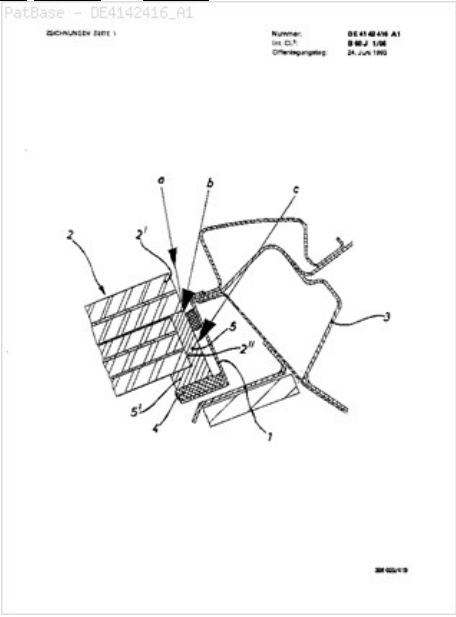
Classifications:

International (IPC 8-9): B32B17/10 B60J10/06 C03C27/12 F41H5/26 (Advanced/Invention)

International (IPC 1-7): B60J1/00 E06B5/10 F41H5/26

CPC: B32B17/10045 B32B17/10293 B60J10/06 F41H5/263

European: B32B17/10C4B B32B17/10E16 B60J10/06 F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE4142416 A1	19930624	DE19914142416	19911220
DE4142416 C2	19981008	DE19914142416	19911220

Priority:

DE19914142416 19911220

Probable Assignee: BAYERISCHE MOTOREN WERKE AG

Assignee(s): (std): BAYERISCHE MOTOREN WERKE AG

Assignee(s): BAYERISCHE MOTOREN WERKE AG 8000 MUENCHEN DE ; BAYERISCHE MOTOREN WERKE AG 80809 MUENCHEN DE

Inventor(s): (std): WUEHR MANFRED

Inventor(s): WUEHR MANFRED 8031 EICHENAU DE

Title: **BULLETPROOF GLASS** PANE OF AUTOMOBILES

Abstract: Source: US5496643A The invention provides a bombardment-inhibiting **bulletproof glass** pane or automobiles, composed of a plurality of silicate **glass** panes with intermediate layers of thermoplastics polymer disposed between them. On the interior surface of the **bulletproof glass** pane, a sheet or plate of impact-resistant plastics material is mounted by means of a thermoplastics adhesive film such that, in the installed state, this sheet faces towards the passenger compartment. On the exterior surface of the **bulletproof glass** pane is a scratch-resistant coating.

Classifications:

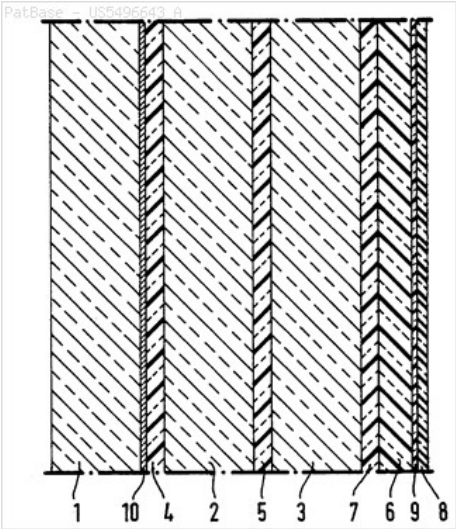
International (IPC 8-9): B32B17/10 B60J1/00 C03C27/06 C03C27/12 F41H5/04 (Advanced/Invention)

International (IPC 1-7): B32B15/00 B32B17/10 B60J1/00 C03C27/06 C03C27/12 E06B3/24 F41H5/26

CPC: Y10S428/913 B32B17/10761 B32B17/10055 B32B17/10064 B32B17/10174 F41H5/0407 Y10T428/315 Y10T428/31518 Y10T428/31525

European: B32B17/10C4B4 B32B17/10C6 B32B17/10E10 F41H5/04B

US: 428/34 428/410 428/415 428/417 428/432 428/702 428/908.8 428/913 52/786.12



Family:

Publication number	Publication date	Application number	Application date
AT211441 E	20020115	AT19940401649T	19940719
CA2128462 AA	19950123	CA19942128462	19940720
CA2128462 C	20040831	CA19942128462	19940720
DE69429559 D1	20020207	DE19946029559	19940719
DE69429559 T2	20020808	DE19946029559T	19940719
DE9310957 U1	19930923	DE19930010957U	19930722
DK0635359 T3	20020415	DK19940401649T	19940719
EP0635359 A1	19950125	EP19940401649	19940719
EP0635359 B1	20020102	EP19940401649	19940719
ES2169732 T3	20020716	ES19940401649T	19940719
JP3847798 B2	20061122	JP19940169185	19940721
JP7149548 A2	19950613	JP19940169185	19940721
PT635359 T	20020628	PT19940401649T	19940719
US5496643 A	19960305	US19940279202	19940722

Priority:

DE19939310957U 19930722 DE19930010957U 19930722 DE19946029559 19940719

Probable Assignee: SAINT GOBAIN VITRAGE

Assignee(s): (std): GLASWERKE GMBH VER ; SAINT GOBAIN ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN VITRAGE ; VER GLASWERKE GMBH

Assignee(s): SAINT GOBAIN VITRAGE LES MIROIRS ; VEGLA VER GLASWERKE GMBH 52066 AACHEN DE ; VEGLA VEREINIGTE GLASWERKE GMBH 52066 AACHEN DE ; SAINT GOBAIN GLASS FRANCE COURBEVOIE

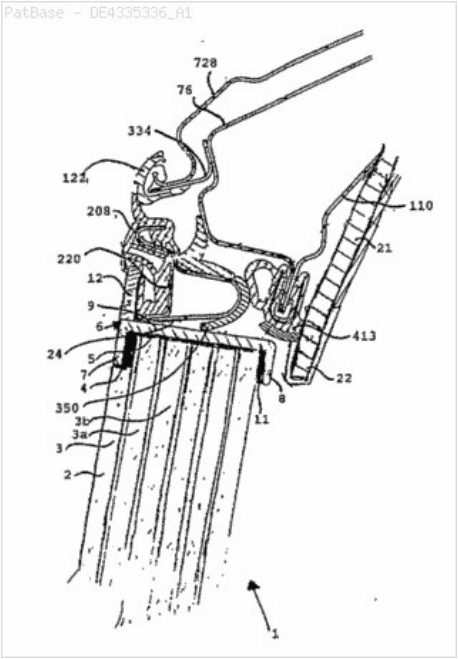
Inventor(s): (std): ALPEN ULRICH VON ; FUON ARUPAN URURITSUHI ; ULRICH VON A ; ULRICH VON ALPEN ; VON ALPEN DR ; VON ALPEN ULRICH ; VON ALPEN ULRICH DR

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU NL PT SE

Title: Bullet-proof glass window, in particular for a motor vehicle

Abstract: Source: DE4335336A1 To reduce the armour-plating in the roof of a vehicle and hence, in particular, to increase the size of the entry region through the doors, the invention provides a bullet-proof glass window, in particular for a passenger car, which has a laminated glass pane composed of a plurality of individual panes, and has a supplementary profile arranged at least in the upper region. The bullet-proof glass window is configured in a manner such that the supplementary profile is a U profile (6) which engages over and around the end sides (5) of the majority of the individual panes (3a, 3b,...) of the laminated glass pane (2), and which consists of armour steel.

Classifications:
International (IPC 8-9): B32B17/10 B60J10/06 C03C27/12 F41H5/26 (Advanced/Invention)
International (IPC 1-7): B60J1/00 C03C27/12 F41H5/26 F41H7/00
CPC: B32B17/10302 B60J10/06 F41H5/226 F41H5/263
European: B32B17/10E16B B60J10/06 F41H5/22D F41H5/26B



Family:

Publication number	Publication date	Application number	Application date
DE4335336 A1	19950420	DE19934335336	19931016

Priority:
DE19934335336 19931016

Probable Assignee: WENDLER KAROSSERIEBAU GMBH
Assignee(s): (std): WENDLER KAROSSERIEBAU GMBH
Assignee(s): WENDLER KAROSSERIEBAU GMBH 72766 REUTLINGEN DE
Inventor(s): (std): HENSEL JUERGEN
Inventor(s): HENSEL JUERGEN 72766 REUTLINGEN DE

Title: BOMBARDMENT-INHIBITING **BULLETPROOF GLASS** PANE FOR AUTOMOBILES

Abstract: Source: US5747170A A bombardment-inhibiting **bulletproof glass** pane for automobiles, composed of a plurality of silicate **glass** sheets (16, 17, 18, 19), connected together by thermoplastic intermediate layers (20, 21, 22). The pane may also comprise a silicate **glass** sheet (16) having a high absorption action in the spectral range from 780 to 1,200 nm. This silicate **glass** sheet (16) or another of the **glass** sheets (17, 18, 19) constituting the **bulletproof glass** pane may be provided, on one of its surfaces, with a partially reflecting surface coating (23), which has a high reflection in the spectral range of 780 to 1,200 nm. The **bulletproof glass** pane has, in total, a total light transmittance of less than 15 percent, and preferably of less than 10 percent in the spectral range from 780 to 1,200 nm. **Bulletproof glass** panes constructed in this manner offer a high security during night travel, because they are non-transparent to infrared sighting devices and noctovisors (night viewing devices).

Classifications:

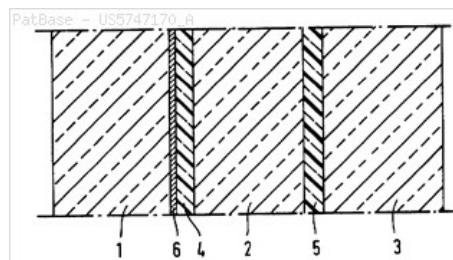
International (IPC 8-9): B32B17/10 B60J1/00 C03C27/12 F41H5/04 F41H5/26 G02B5/20 (Advanced/Invention)

International (IPC 1-7): B32B17/06 B32B17/10 B60J1/00 C03C17/36 C03C27/00 C03C27/12 F41H5/04 F41H5/26 G02B5/08 G02B5/20

CPC: B32B17/10045 B32B17/10174 B60J1/002 F41H5/0407 G02B5/208 Y10S428/911

European: B32B17/10C4B B32B17/10E10 B60J1/00C F41H5/04B G02B5/20V

US: 296/97.2 359/353 359/359 359/360 359/885 428/34 428/426 428/432 428/433 428/434 428/699 428/701 428/702 428/911 52/786.1 89/36.02



Family:

Publication number	Publication date	Application number	Application date
AT187388 E	19991215	AT19940402398T	19941025
CA2134283 AA	19950426	CA19942134283	19941025
CA2134283 C	20040928	CA19942134283	19941025
DE4336321 A1	19950427	DE19934336321	19931025
DE69422001 D1	20000113	DE19946022001	19941025
DE69422001 T2	20000525	DE19946022001T	19941025
EP0653298 A2	19950517	EP19940402398	19941025
EP0653298 A3	19950906	EP19940402398	19941025
EP0653298 B1	19991208	EP19940402398	19941025
ES2142391 T3	20000416	ES19940402398T	19941025
JP3863200 B2	20061227	JP19940260284	19941025
JP7187729 A2	19950725	JP19940260284	19941025
PL177319 B1	19991029	PL19940305584	19941024
PL305584 A1	19950502	PL19940305584	19941024
US5747170 A	19980505	US19970790306	19970128

Priority:

DE19934336321 19931025 DE19946022001 19941025 US19970790306 19970128
US19940328949 19941025 CA19942134283 19941025

Probable Assignee: SAINT GOBAIN VITRAGE

Assignee(s): (std): GLASWERKE GMBH VER ; SAINT GOBAIN GLASS FRANCE ; SAINT GOBAIN VITRAGE ; VER GLASWERKE GMBH

Assignee(s): SAUER GERD ; VON ALPEN ULRICH ; SAINT GOBAIN VITRAGE LES MIROIRS COURBEVOIE ; VEGLA VEREINIGT GLASWERKE GMBH 52066 AACHEN DE

Inventor(s): (std): SAUER GERD ; VON ALPEN ULRICH ; VON ALPEN ULRICH DR ; URURITSUHI FUON ARUPEN ; GERUTO ZAUERU ; SAUER M GERD ; ALPEN ULRICH VON DR

Inventor(s): SAUER GERD 52224 STOLBERG DE

Agent(s): GOUDREAU GAGE DUBUC

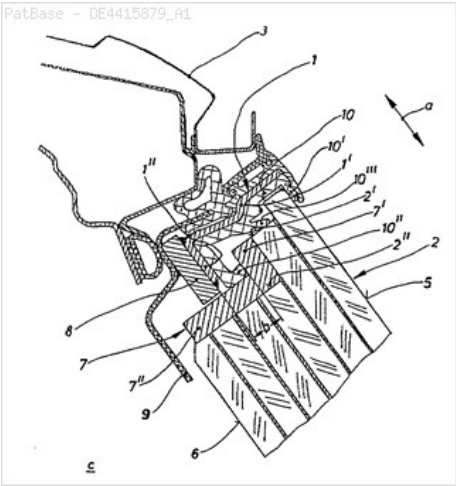
Designated states: AT BE DE ES FR GB IT LU NL SE

Title: **VEHICLE** ARMoured **GLASS** ASSEMBLY

Abstract: Source: DE4415879A1 The assembly for an armoured **glass** pane, in a **vehicle**, has a second edge step (2'') at the edge step at the steel unit (8) towards the armoured component (7).

Classifications:

International (IPC 8-9): B32B17/10 B60J1/08 B60J10/00 B60J10/06 C03C27/12 F41H5/013 (Advanced/Invention);
B32B17/06 B60J1/08 B60J10/00 B60J10/02 C03C27/12 F41H5/00 (Core/Invention)
International (IPC 1-7): B60J1/00 C03C27/12 F41H7/00
CPC: F41H5/263 B60J1/08 B32B17/10045 B32B17/10302 B60J10/0022 B60J10/0031 B60J10/06 F41H5/013
European: B32B17/10C4B B32B17/10E16B B60J1/08 B60J10/00D3 B60J10/00D5 B60J10/06 F41H5/013



Family:

Publication number	Publication date	Application number	Application date
DE4415879 A1	19951109	DE19944415879	19940505
DE4415879 C2	19960814	DE19944415879	19940505

Priority:

DE19944415879 19940505

Probable Assignee: BAYERISCHE MOTOREN WERKE AG

Assignee(s): (std): BAYERISCHE MOTOREN WERKE AG

Assignee(s): BAYERISCHE MOTOREN WERKE AG 80809 MUENCHEN DE ; BAYERISCHE MOTOREN WERKE 80809 MUENCHEN DE AG

Inventor(s): (std): BAUER WALTER ; WUEHR MANFRED

Inventor(s): WUEHR MANFRED 82223 EICHENAU DE ; BAUER WALTER 85114 BUXHEIM DE

Title: **BULLETPROOF GLASS WINDOW** FOR USE AS A WINDSCREEN IN A **MOTOR VEHICLE**

Abstract: Source: US6276100B The present invention relates to a **bulletproof glass window**, in particular for use as a windscreen of a **motor vehicle**, fitted into a frame (9), the **bulletproof glass window** comprising several laminated **glass** panes (1,2) in a compound, of which at least one **glass** pane (1) juts out above the other **glass** pane(s) (2) with a projecting section (12) within a marginal area of the **bulletproof glass window**, to form a grading or stepped portion (14) from the projecting section to the other **glass** pane(s) in the direction of the inner side of the **bulletproof glass window**; the **bulletproof glass window** with the projecting section (12) of the at least one **glass** pane (1) is fixed to the frame (9), wherein the surface in the area of the grading or stepped portion (14) is fitted with an edging (10) made of synthetic material that holds back **glass** splinters.

Classifications:

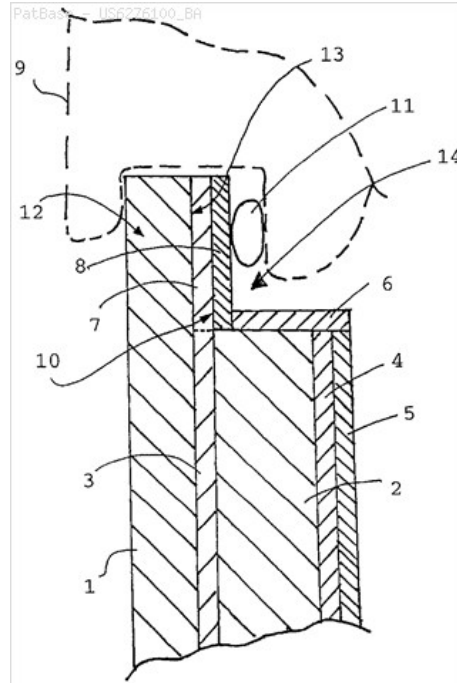
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International (IPC 1-7): B32B17/10 B60J1/00 B60J1/02 C03B19/00 C03C27/12 E06B3/964 F41H5/00 F41H5/04 F41H5/26

CPC: Y10T428/31616 F41H5/263 B32B17/10036 B32B17/10064 B32B17/10293 B32B17/10981 B60J1/02 F41H5/0407

European: B32B17/10C4 B32B17/10C6 B32B17/10E16 B32B17/10L22 B60J1/02 F41H5/04B F41H5/26B

US: 216/34 296/93 428/430 52/204.62 522/46.2



Family:

Publication number	Publication date	Application number	Application date
AT320916 E	20060415	AT19990120098T	19991021
BRPI9907602 A	20011002	BR1999PI07602	19991118
BRPI9907602 B1	20101019	BR1999PI07602	19991118
CO5021184 A1	20010327	CO19990074599	19991126
DE19947680 A1	20000608	DE19991047680	19991004
DE29818858 U1	19990218	DE19982018858U	19981127
DE59913245 D1	20060511	DE19995013245	19991021
EP1004433 A1	20000531	EP19990120098	19991021
EP1004433 B1	20060322	EP19990120098	19991021
ES2148131 T1	20001016	ES19990120098T	19991021
ES2148131 T3	20061101	ES19990120098T	19991021
PE09192000 A1	20000916	PE19990001181	19991124
PE91900 A1	20000916	PE19990001181	19991124
US6276100 BA	20010821	US19990448764	19991124

Priority:

DE19982018858U 19981127 DE19991047680 19991004 DE19995013245 19991021

Probable Assignee: ISOCLIMA SPA

Assignee(s): (std): ISOCLIMA GMBH ; ISOCOLIMA GMBH

Assignee(s): ISOCLIMA GMBH 81377 MUENCHEN DE ; ISOCLIMA SPA

Inventor(s): (std): STRANNER SIEGFRIED ; WOELL HERWIG ; WOLL HERWIG ; WILL HERWIG

Inventor(s): HERWIG WOLL ; SIEGFRIED STRANNER

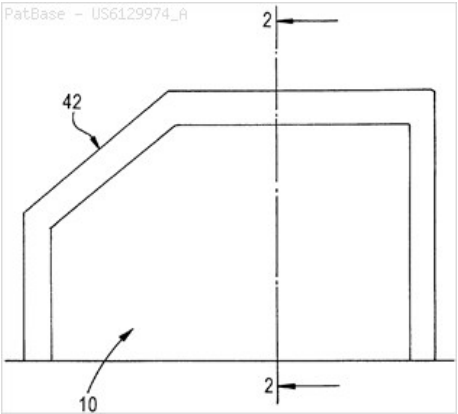
Agent(s): MARGARITA CASTELLANOS ABONDANO

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: **BULLETPROOF GLASS WINDOW** WITH METAL INSERT

Abstract: Source: US6129974 A A **bulletproof glass window**, for preferred use in a **motor vehicle**, includes at least one **glass** pane (10) and a metal insert arranged in a marginal stepped area of the **glass** pane (10). The insert (32) is fixed to the **glass** pane (10) with polyurethane (30).

Classifications:
International (IPC 8-9): B32B17/10 C03C27/12 F41H5/04 F41H5/26 (Advanced/Invention); B32B17/06 C03C27/12 F41H5/00 (Core/Invention)
International (IPC 1-7): B32B17/10 B32B23/02 B60J1/00 C03C27/12 F41H5/00 F41H5/04 F41H5/26
CPC: Y10T428/24777 F41H5/263 B32B17/10045 B32B17/10293 B32B17/10366 F41H5/0407 Y10T428/31518 Y10T428/31522 Y10T428/31525
European: B32B17/10C4B B32B17/10E16 B32B17/10E30 F41H5/04B F41H5/26B
US: 428/192 428/415 428/416 428/417 89/36.01



Family:

Publication number	Publication date	Application number	Application date
AT212121 E	20020215	AT19980119131T	19981009
DE19745248 A1	19990415	DE19971045248	19971013
DE29723970 U1	19990722	DE19972023970U	19971013
DE59802621 D1	20020221	DE19985002621	19981009
EP0915315 A2	19990512	EP19980119131	19981009
EP0915315 A3	19990728	EP19980119131	19981009
EP0915315 B1	20020116	EP19980119131	19981009
ES2132052 T1	19990816	ES19980119131T	19981009
ES2132052 T3	20020616	ES19980119131T	19981009
US6129974 A	20001010	US19980169969	19981013

Priority:
DE19972023970U 19971013 DE19971045248 19971013 DE19985002621 19981009

Probable Assignee: ISOCLIMA SPA

Assignee(s): (std): ISOCLIMA GMBH

Assignee(s): ISOCLIMA GMBH 81377 MUENCHEN DE ; ISOCLIMA SPA

Inventor(s): (std): WOELL HERWIG ; WOLL HERWIG

Inventor(s): WOELL HERWIG 74343 SACHSENHEIM DE

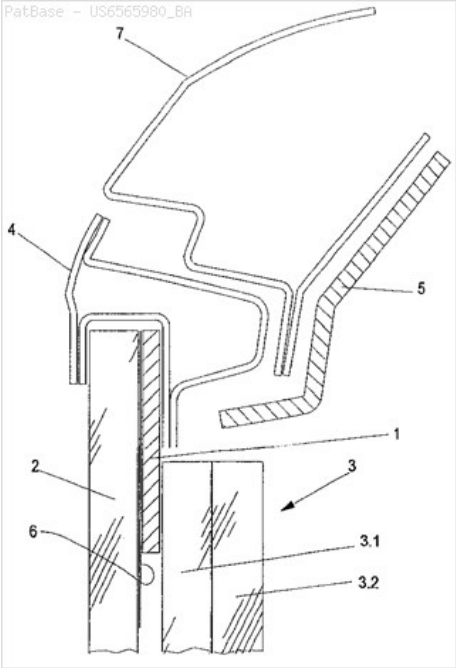
Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: SAFETY **GLASS** CONSTRUCTION FOR SAFETY **MOTOR VEHICLES**

Abstract: Source: US6565980B The invention relates to a safety **glass** construction for safety **motor vehicles** whose body parts are lined with bullet-proof matting or other bullet-proof material in a direction toward the passenger area. The **motor vehicle** has an armored pane in which at least one pane (3.1) made of safety **glass** or one pane packet comprises of at least two bonded panes (3.1 and 3.2) also made of safety **glass** is connected to the outer pane (2). A strip (1) made of a bullet-proof material is arranged between the outer pane (2) and the pane packet (3) and/or between at least two panes (3.1, 3.2) of the pane packet (3) and/or on the pane of the packet (3) pointing toward the passenger area. Said strip overlaps the area up to the bullet-proof matting (5) or to the bullet-proof material of the connecting body parts (7).

Classifications:

International (IPC 8-9): B32B17/06 B32B17/10 B60J1/00 B60J10/00 B60J10/02 B60J10/04 C03C27/12 F41H5/04 F41H5/26 (Advanced/Invention); C03C27/12 (Advanced/Non-invention); B32B17/06 B60J1/00 B60J10/00 B60J10/02 C03C27/12 F41H5/00 (Core/Invention)
International (IPC 1-7): B32B17/06 B32B17/10 B32B25/00 B60J1/00 C03C27/12 F41H5/04 F41H5/26
CPC: Y10T428/31601 B32B17/10293 B32B17/10009 B32B17/10045 B32B17/10055 B32B17/10366 B60J1/001 B60J1/008 B60J10/00 B60J10/0062 B60J10/02 B60J10/04 F41H5/0407 F41H5/263
European: B32B17/10C B32B17/10C4B B32B17/10C4B4 B32B17/10E16 B32B17/10E30 B60J1/00B B60J1/00H B60J10/00 B60J10/00G B60J10/02 B60J10/04 F41H5/04B F41H5/26B
US: 296/144.15 296/188 428/425.6 428/426



Family:

Publication number	Publication date	Application number	Application date
AU199932471 A1	19990816	AU19990032471	19990127
DE19803435 C1	19990812	DE19981003435	19980129
DE19803435 C5	20100624	DE19981003435	19980129
DE59903967 D1	20030213	DE19995003967	19990127
EP1051592 A1	20001115	EP19990947070	19990127
EP1051592 B1	20030108	EP19990947070	19990127
US6565980 BA	20030520	US20000601392	20000731
WO9939152 A1	19990805	WO1999DE00251	19990127

Priority:

DE19981003435 19980129 DE19995003967 19990127 WO1999DE00251 19990127
WO1999DE00251 19990127

Probable Assignee: VOLKSWAGEN AG

Assignee(s): (std): ACKERMANN JOERG ; SACHSENRING ENTWICKLUNGS GMBH ; SACHSENRING ENTWICKLUNGSGESELL ; SACHSENRING ENTWICKLUNGSGMBH ; VOLKSWAGEN AG
Assignee(s): SACHSENRING ENTWICKLUNGSGESELLSCHAFT MBH 08058 ZWICKAU DE ; SACHSENRING ENTWICKLUNGSGESELLSCHAFT MBH CRIMMITSC ; SACHSENRING ZWICKAU AG ; SACHSENRING ENTWICKLUNGSGESELLSCHAFT MBH ; SACHSENRING ENTWICKLUNGSGESELLSCHAFT MBH 08058 ZWI ; CHSENRING ZWICKAU AG SA ; SACHSENRING ENTWICKLUNGS GES MBH ; SACHSENRING ENTWICKLUNGS GESELLSCHAFT MBH

Inventor(s): (std): ACKERMANN JOERG ; ACKERMANN JORG

Inventor(s): JORG ACKERMANN ; ACKERMANN JOERG 72124 PLIEZHAUSEN DE

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

Title: **BULLETPROOF GLASS WINDOW** FOR A **MOTOR VEHICLE**

Abstract: Source: US6280826B The present invention relates to a **bulletproof glass window**, in particular for use as a lowerable side **window** of a **motor vehicle**, with plural **glass** panes (1, 3, 5) arranged in layers and laminates (2, 4), with at least one laminate being positioned between two adjoining **glass** panes in each case, in order to join the two **glass** panes, with a grading or stepped portion that is formed at the edge of the **bulletproof glass window** and with a projection (8) for lodging the **bulletproof glass window** in a chassis (14) or door frame, and with a metal armoring which, in the area of the projection (8), at least covers the inner surface of the projection, in the area of the grading or stepped portion a recess (12) being formed on the face, and the metal armoring (6) extending into the recess (12).

Classifications:

International (IPC 8-9): B32B17/10 B60J1/00 C03B19/00 F41H5/00 F41H5/04 F41H5/26 (Advanced/Invention);

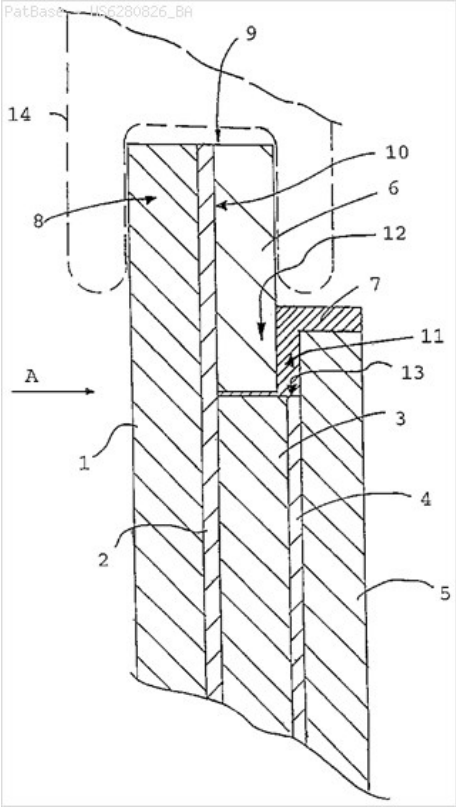
B32B17/06 B60J1/00 C03B19/00 F41H5/00 (Core/Invention)

International (IPC 1-7): B32B23/02 B60J1/00 B60J1/17 C03B19/00 F41H5/00 F41H5/04 F41H5/26

CPC: Y10S428/911 B32B17/1077 B32B17/10045 B32B17/10293 B32B17/10366 F41H5/26 F41H5/263 Y10T428/162 Y10T428/166 Y10T428/24777 F41H5/0407

European: B32B17/10C4B B32B17/10E16 B32B17/10E30 B32B17/10G30 F41H5/26 F41H5/26B

US: 109/49.5 296/84.1 428/14 428/192 428/38 428/426 428/432 428/433 428/46 428/49 428/911



Family:

Publication number	Publication date	Application number	Application date
AT283468 E	20041215	AT19990120097T	19991021
BRPI9907601 A	20011002	BR1999PI07601	19991112
CO5021183 A1	20010327	CO19990074598	19991126
DE19858082 A1	20000914	DE19981058082	19981216
DE19858082 C2	20020502	DE19981058082	19981216
DE19858082 C5	20051013	DE19981058082	19981216
DE59911135 D1	20041230	DE19995011135	19991021
EP1010963 A2	20000621	EP19990120097	19991021
EP1010963 A3	20010418	EP19990120097	19991021
EP1010963 B1	20041124	EP19990120097	19991021
ES2148130 T1	20001016	ES19990120097T	19991021
ES2148130 T3	20050601	ES19990120097T	19991021
PE110500 A1	20001027	PE19990001238	19991213
PE11052000 A1	20001027	PE19990001238	19991213
US6280826 BA	20010828	US19990460981	19991215

Priority:

DE19981058082 19981216 DE19995011135 19991021

Probable Assignee: ISOCLIMA SPA

Assignee(s): (std): ISOCLIMA GMBH

Assignee(s): ISOCLIMA SPA

Inventor(s): (std): STRANNER SIEGFRIED ; WOELL HERWIG ; WOLL HERWIG

Inventor(s): HERWIG WOLL ; SIEGFRIED STRANNER

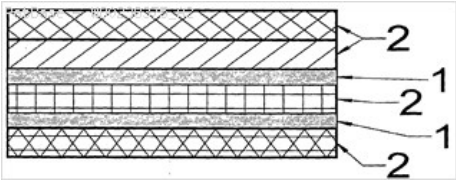
Agent(s): MARGARITA CASTELLANOS ABONDANO

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: TEMPERATURE INDEPENDENT COMPOSITE SECURITY PLATE

Abstract: The invention relates to an anti-breakthrough and/or bullet-proof and/or explosion-proof and/or sound-proof composite security plate comprising at least one support (1) with at least two functional energy consuming and energy dissipating plastic layers (2) applied thereto. Each plastic layer (2) and/or support (1) has a maximum energy-consuming, dissipating effect at other temperatures or within another temperature range enabling the composite security plate in order to have an anti-breakthrough and/or bullet-proof and/or sound-proofing effect within a wide temperature range of at least 40 DEG C.

Classifications:
International (IPC 8-9): B32B17/10 F41H5/04 (Advanced/Invention); B32B17/06 F41H5/00 (Core/Invention)
International (IPC 1-7): B32B17/10 B32B27/00 B32B27/06 B32B7/02 F41H5/02 F41H7/04
CPC: B32B17/10018 B32B17/10036 B32B17/10064 B32B17/10073 F41H5/0478
European: B32B17/10C2 B32B17/10C4 B32B17/10C6 B32B17/10C8 F41H5/04F2



Family:

Publication number	Publication date	Application number	Application date
AU2002215844 AA	20020521	AU20020215844	20011109
DE20019104 U1	20010308	DE20002019104U	20001111
WO0238375 A2	20020516	WO2001DE04186	20011109
WO0238375 A3	20020906	WO2001DE04186	20011109

Priority:
DE20002019104U 20001111 WO2001DE04186 20011109

Probable Assignee: CHEMETALL GMBH

Assignee(s): (std): BASTIAN VOLKER ; CHEMETALL GMBH ; TOMALA ANDRZEJ ; SCHWAMB MICHAEL

Assignee(s): ANDRZEJ TOMALA ; VOLKER BASTIAN

Inventor(s): (std): BASTIAN VOLKER ; TOMALA ANDRZEJ ; SCHWAMB MICHAEL

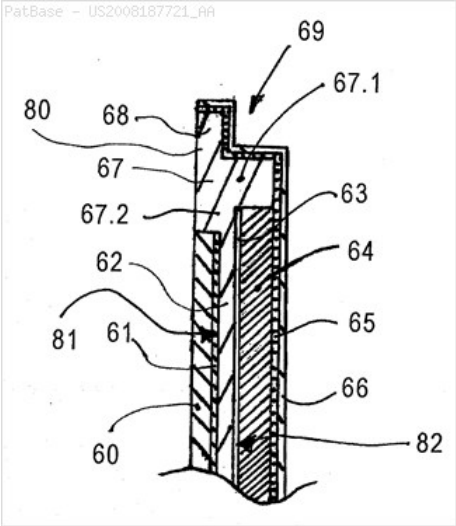
Inventor(s): VOLKER BASTIAN ; MICHAEL SCHWAMB ; ANDRZEJ TOMALA

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

Title: **BULLETPROOF WINDOW**

Abstract: Source: US2008187721A The present invention relates to an armoured glazing, particularly for use as a moveable side **window** of a **motor vehicle**, comprising at least one sheet (3) of an optically transparent, sintered ceramic material which is preferably aluminum oxynitride (AlON).

Classifications:
International (IPC 8-9): B32B17/06 B32B27/40 B32B3/02 B32B3/30 C01B21/20 C03C27/12 C04B35/581 F41H5/04 F41H5/26 (Advanced/Invention); B32B17/06 B32B27/40 B32B3/02 B32B3/30 C01B21/00 C03C27/12 C04B35/581 F41H5/00 (Core/Invention)
CPC: Y10T428/24612 Y10T428/24777 B32B17/10293 B32B17/10045 B32B17/1055 F41H5/013 F41H5/04 F41H5/0407 F41H5/0414 F41H5/0428 F41H5/263 Y10T428/31551
European: B32B17/10C4B B32B17/10E16 B32B17/10G F41H5/013 F41H5/04 F41H5/04B F41H5/04C F41H5/04C4 F41H5/26
US: 423/385 423/385S 428/172 428/172P 428/192 428/192S 428/423.1 428/423.100S 428/426 428/426S



Family:

Publication number	Publication date	Application number	Application date
DE202007001565 U1	20070405	DE200720001565U	20070202
EP1953492 A2	20080806	EP20080001924	20080201
EP1953492 A3	20081119	EP20080001924	20080201
US2008187721 AA	20080807	US20080024713	20080201

Priority:

DE200720001565U 20070202

Probable Assignee: ISOCLIMA GMBH

Assignee(s): (std): ISOCLIMA GMBH

Inventor(s): (std): ENGL ANDREAS

Agent(s): SEITZ RALF HANS FRANK; LOWE HAUPTMAN HAM AND BERNER LLP

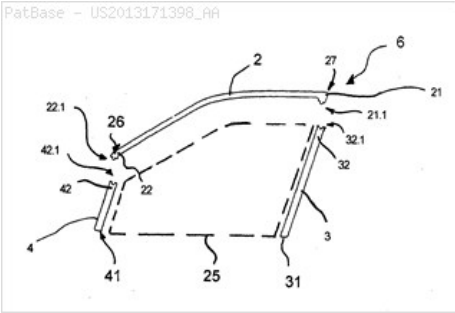
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

Title: BULLET-PROOF GLASS PANE WITH EDGE REINFORCEMENT

Abstract: Source: US2013171398A The invention relates to a bulletproof glass pane for use in a motor vehicle having a plurality of panes and layers of glass, ceramics or plastics connected two-dimensionally to each other in layers to form a composite, and having an edge reinforcement that extends at the periphery of the bulletproof glass pane, wherein the edge reinforcement comprises at least two or more reinforcing elements that are in loose mutual engagement.

Classifications:

International (IPC 8-9): B23B17/10 B32B17/10 F41H5/013 F41H5/04 F41H5/13 (Advanced/Invention)
CPC: F41H5/013 B32B17/10045 B32B17/10293 F41H5/0407
European: B32B17/10C4B B32B17/10E16 F41H5/013 F41H5/04B
US: 428/38



Family:

Publication number	Publication date	Application number	Application date
CN103459971 A	20131218	CN201180045635	20110921
CN103459971 B	20151125	CN201180045635	20110921
CO6761347 A2	20130930	CO20130101175	20130419
EP2434249 A1	20120328	EP20100010233	20100922
EP2434249 B1	20130501	EP20100010233	20100922
MX2013003200 A1	20130808	MX20130003200	20130321
MX2013003200 A1	20130808	MX20130003200	20110921
RU2013118465 A	20141027	RU20130118465	20110921
RU2570523 C2	20151210	RU20130118465	20110921
US2013171398 AA	20130704	US20110824280	20110921
WO12038095 A1	20120329	WO2011EP04803	20110921

Priority:

EP20100010233 20100922 WO2011EP04803 20110921

Probable Assignee: ISOCLIMA SPA

Assignee(s): (std): ISOCLIMA GMBH ; ISOCLIMA SPA ; STRANNER SIEGFRIED

Assignee(s): ISOCLIMA S P A

Inventor(s): (std): STRANNER SIEGFRIED

Inventor(s): SIEGFRIED STRANNER

Agent(s): GERMAN CASTILLO GRAU; SEITZ RALF HANS FRANK; SEITZ RALF

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 QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW