

CPC**COOPERATIVE PATENT CLASSIFICATION****B60J****WINDOWS, WINDSCREENS, NON-FIXED ROOFS, DOORS, OR SIMILAR DEVICES FOR VEHICLES; REMOVABLE EXTERNAL PROTECTIVE COVERINGS SPECIALLY ADAPTED FOR VEHICLES**(fastening, suspending, closing, or opening of such devices [E05](#))**NOTE**

Windows, windcreens, non-fixed roofs, doors, or similar devices which are of general applicability, irrespective of whether described or claimed only for vehicles, are also classified in subclass [E06B](#).

Attention is drawn to the Note following the title of class [B60](#).

B60J 1/00

Windows; Windcreens; Accessories therefor ([B60J 10/00](#) takes precedence; air curtains instead of windows [B60J 9/04](#); { sealing strips for windshields [B60J 10/02](#); sealing sash guides for sliding window panes [B60J 10/04](#); glass partitions inside vehicles to protect occupants against personal attack [B60R 21/12](#) })

B60J 1/001

. { Double glazing for vehicles }

B60J 1/002

. { with means for clear vision, e.g. anti-frost or defog panes, rain shields (window heating in [H05B 3/84](#), [H05B 3/86](#)) }

B60J 1/003

. { Rear seat windcreens }

B60J 1/004

. { Mounting of windows }

B60J 1/005

.. { using positioning means during mounting }

B60J 1/006

.. { characterised by fixation means such as clips, adhesive, etc. (incorporated in seal [B60J 10/02](#)) }

B60J 1/007

.. { received in frames to be attached to vehicle }

B60J 1/008

. { of special shape, e.g. beveled edges, holes for attachment, bent windows, peculiar curvatures such as when being integrally formed with roof, door, etc. }

B60J 1/02

. arranged at the vehicle front { e.g. structure of the glazing, mounting of the glazing (on windscreen mounted antenna wire [H01Q 1/1271](#)) }

B60J 1/025

.. { Temporary windcreens }

B60J 1/04

.. adjustable

B60J 1/06

... comprising more than one pane

B60J 1/08

. arranged at vehicle sides

B60J 1/085

.. { removably mounted }

B60J 1/10

.. fixedly mounted { ([B60J 1/085](#) takes precedence) }

B60J 1/12

.. adjustable

B60J 1/14

... with pivotal or rotary movement

B60J 1/16

... slidable

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| B60J 1/17 | | vertically |
| B60J 1/18 | . | arranged at the vehicle rear ({ optical viewing arrangements integrated in rear windows, e.g. Fresnel lenses B60R 1/001 }) |
| B60J 1/1807 | .. | { movable for vehicles with convertible top } |
| B60J 1/1815 | ... | { non-adjustably mounted in and moving with the soft-top cover } |
| B60J 1/1823 | ... | { adjustable relative to hard- or soft-top, e.g. pivotable } |
| B60J 1/183 | .... | { slidable } |
| B60J 1/1838 | .. | { movable for non-convertible vehicles, including vehicles with versatile load area } |
| B60J 1/1846 | ... | { where the window can slide } |
| B60J 1/1853 | .... | { horizontally in direction transverse to vehicle longitudinal axis } |
| B60J 1/1861 | .... | { vertically, e.g. into lower part of rear door before opening rear door } |
| B60J 1/1869 | .... | { to an end position parallel to roof } |
| B60J 1/1876 | ... | { where the window is pivotable relative to a stationary axis } |
| B60J 1/1884 | .... | { about a horizontal axis } |
| B60J 1/1892 | ... | { where the window is translated by a linkage system } |
| B60J 1/20 | . | Accessories, e.g. wind deflectors, blinds (antiglare provisions B60J 3/00 ; wind deflectors associated with roof openings B60J 7/22 ; removable external protective coverings for windows or windscreens B60J 11/08 ; { aerodynamical spoiler for vehicles B62D 35/00 ; } heating arrangements specially adapted for transparent or reflecting areas H05B 3/84) |
| B60J 1/2002 | .. | { Wind deflectors specially adapted for preventing soiling, e.g. for side windows (integral with sealing arrangements B60J 10/025) } |
| B60J 1/2005 | ... | { for windscreens } |
| B60J 1/2008 | ... | { for rear windows } |
| B60J 1/2011 | .. | { Blinds; curtains or screens reducing heat or light intensity (means against intense light blinding the driver or passengers B60J3) } |
| B60J 1/2013 | ... | { Roller blinds (for roofs B60J 7/0015 ; for luggage covering B60R 5/047 ; for openings in buildings E06B 9/40) } |
| B60J 1/2016 | .... | { Control means for actuating the roller blind, e.g. using electronic control } |
| B60J 1/2019 | .... | { powered, e.g. by electric, hydraulic or pneumatic actuators } |
| B60J 1/2022 | ..... | { with screw rods or extensible rods acting on the draw bar for pushing or push-pulling (pivoting arms B60J 1/2055) } |
| B60J 1/2025 | ..... | { with flexible actuating elements connected to the draw bar for pulling only, e.g. cords, wires or cables } |
| B60J 1/2027 | ..... | { with a buckle-proof guided flexible actuating element acting on the draw bar for pushing or push-pulling, e.g. a Bowden cable } |
| B60J 1/203 | .... | { Mechanism for actuation by hand, e.g. cranks or curtain cords } |
| B60J 1/2033 | .... | { characterised by the spring motor } |
| B60J 1/2036 | .... | { characterised by structural elements } |
| B60J 1/2038 | ..... | { Storage boxes } |
| B60J 1/2041 | ..... | { Blind sheets, e.g. shape of sheets, reinforcements in sheets, materials therefor } |
| B60J 1/2044 | ..... | { Draw bars, including elements attached to it, e.g. sliding shoes, gripping elements or pull cords } |
| B60J 1/2047 | | { End position holding means, e.g. suction cups, hooks on a vehicle, |

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| | | indentations on guides } |
| B60J 1/205 | | { Winding tubes, e.g. telescopic tubes or conically shaped tubes } |
| B60J 1/2052 | ..... | { Guides } |
| B60J 1/2055 | ..... | { Pivoting arms } |
| B60J 1/2058 | ..... | { Springs for compensating the number of windings of the blind on the tube in case winding tube and draw bar are driven together } |
| B60J 1/2061 | ..... | { Tensioning systems for keeping the blind taut when in use, other than spring motors } |
| B60J 1/2063 | .... | { Mounting arrangements for roller blind or its storage box, e.g. integration into beltline or window frame } |
| B60J 1/2066 | .... | { Arrangement of blinds in vehicles } |
| B60J 1/2069 | ..... | { of multiple blinds, e.g. more than one blind per window or per actuation system } |
| B60J 1/2072 | ..... | { Blinds with inclined or vertical orientation of the winding axis } |
| B60J 1/2075 | ..... | { specially adapted for fixed windows } |
| B60J 1/2077 | ..... | N: for windshields] |
| B60J 1/208 | ..... | { for rear windows } |
| B60J 1/2083 | ..... | { for side windows, e.g. quarter windows } |
| B60J 1/2086 | ..... | { specially adapted for openable windows, e.g. side window } |
| B60J 1/2088 | ... | { Lamellar or like blinds } |
| B60J 1/2091 | ... | { Foldable sunscreens (B60J 1/2088 takes precedence) } |
| B60J 1/2094 | .. | { Protective means for window, e.g. additional panel or foil, against vandalism, dirt, wear, shattered glass, etc. } |
| B60J 1/2097 | .. | { means to prevent rattling of vehicle windows (anti-rattling means for vehicle doors E05F 7/02) } |

B60J 3/00 **Antiglare equipment associated with windows or windscreens** (optical viewing arrangements for vehicles [B60R 1/00](#)); **Sun visors for vehicles** (sun visors having appliances for storing or holding personal property [B60R 7/05](#))

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| B60J 3/002 | . | { External sun shield, e.g. awning or visor } |
| B60J 3/005 | .. | { for side windows } |
| B60J 3/007 | . | { Sun glare reduction by coatings, interposed foils in laminar windows, or permanent screens (layered glass products B32B 17/00 ; process of coating windows C03C 17/00) } |
| B60J 3/02 | . | adjustable in position { B60J 3/002 , B60J 3/005 take precedence } |
| B60J 3/0204 | .. | { Sun visors } |
| B60J 3/0208 | ... | { combined with auxiliary visor } |
| B60J 3/0213 | ... | { characterised by the mounting means (B60J 3/0208 takes precedence) } |
| B60J 3/0217 | .... | { Brackets for mounting the sun visor support arm to the vehicle } |
| B60J 3/0221 | ..... | { self mounting, i.e. no tools or screws required } |
| B60J 3/0226 | ..... | { comprising a ball joint or at least two axes of rotation } |
| B60J 3/023 | .... | { Additional support bracket releasably holding the sun visor } |
| B60J 3/0234 | .... | { Mounted slidably } |

- B60J 3/0239 { and pivoting on a support arm (bearing members regulating the rotational friction on the support arm [B60J 3/0265](#)) }
- B60J 3/0243 { sliding out from ceiling }
- B60J 3/0247 { using a suction cup }
- B60J 3/0252 { Structure of the support arm }
- B60J 3/0256 { telescopic }
- B60J 3/026 { articulated, e.g. comprising pivot joints or lazy-tong structure }
- B60J 3/0265 { Attachments of sun visors to mounting means including details of sun visor bearing member regulating the rotational friction on the support arm }
- B60J 3/0269 { in middle region of sun visor }
- B60J 3/0273 { on both end regions of sun visor }
- B60J 3/0278 ... { structure of the body ([B60J 3/0208](#), [B60J 3/0213](#) take precedence) }
- B60J 3/0282 { specially adapted for a courtesy mirror }
- B60J 3/0286 .. { Sunglare reduction by temporary translucent screens or foils removably attached to window }
- B60J 3/0291 .. { Preventing dazzlement during driving in the dark }
- B60J 3/0295 ... { due to reflections in side or rear mirror }

- B60J 3/04 . adjustable in transparency

- B60J 3/06 . using polarising effect

- B60J 5/00** **Doors** ([B60J 10/00](#) takes precedence; window aspects [B60J 1/00](#); { side board or tailgate structures for open load compartments [B62D 33/023](#) })

- B60J 5/02 . arranged at the vehicle front ({ lids or bonnets [B62D 25/10](#) })

- B60J 5/04 . arranged at the vehicle sides ({ panel mounted arm-rests [B60N 2/466](#); wall liners [B60R 13/02](#); door edge guards [B60R 13/043](#); padded linings associated with the side doors [B60R 21/0428](#) })
- B60J 5/0401 .. { Upper door structure }
- B60J 5/0402 ... { window frame details, including sash guides and glass runs }
- B60J 5/0404 ... { Outside rear view mirror support }
- B60J 5/0405 ... { Inboard or outboard side of window frame formed integrally with the lower door structure }
- B60J 5/0406 ... { window frame formed separately as module }
- B60J 5/0408 ... { fastening window frame or parts of window frame to lower door structure }
- B60J 5/0409 ... { mechanism preventing outward displacement of window frame at high speeds (ventilation valves [B60H](#)) }
- B60J 5/0411 .. { Beltline }
- B60J 5/0412 .. { Lower door structure }
- B60J 5/0413 ... { Inner panel, e.g. characterised by carrying components }
- B60J 5/0415 ... { Outer panel }
- B60J 5/0416 ... { Assembly panels to be installed in doors as a module with components, e.g. lock or window lifter, attached thereto }
- B60J 5/0418 ... { Water or sound barrier, e.g. watershields or seals between dry/wet

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| | | compartment, sound or vibration dampers } |
| B60J 5/0419 | ... | { Windows in lower door structures } |
| B60J 5/042 | .. | { Reinforcement elements } |
| B60J 5/0422 | ... | { Elongated type elements, e.g. beams, cables, belts or wires } |
| B60J 5/0423 | .... | { characterised by position in the lower door structure } |
| B60J 5/0425 | ..... | { the elements being arranged essentially horizontal in the centre of the lower door structure (B60J 5/0426 to B60J 5/0448 take precedence) } |
| B60J 5/0426 | ..... | { the elements being arranged at the beltline } |
| B60J 5/0427 | ..... | { the elements being arranged along the lower edge of door } |
| B60J 5/0429 | ..... | { the elements being arranged diagonally } |
| B60J 5/043 | ..... | { the elements being arranged vertically } |
| B60J 5/0431 | ..... | { the elements being arranged at the hinge area } |
| B60J 5/0433 | ..... | { the elements being arranged at the lock area } |
| B60J 5/0434 | ..... | { the elements being arranged at the handle area } |
| B60J 5/0436 | ..... | { the elements being arranged at the mirror area } |
| B60J 5/0437 | .... | { characterised by the attachment means to the door, e.g. releasable attachment means } |
| B60J 5/0438 | .... | { characterised by the type of elongated elements } |
| B60J 5/044 | ..... | { the elements being flexible, e.g. belts, cables or wires } |
| B60J 5/0441 | ..... | { the elements having a grid-like structure, i.e. interconnected or interwoven elements } |
| B60J 5/0443 | ..... | { Beams } |
| B60J 5/0444 | ..... | { characterised by a special cross section } |
| B60J 5/0445 | ..... | { formed of several elements arranged in series } |
| B60J 5/0447 | ..... | { formed of several elements arranged in parallel } |
| B60J 5/0448 | ..... | { with branched structures } |
| B60J 5/045 | ... | { Panel type elements (B60J 5/0455 takes precedence) } |
| B60J 5/0451 | ... | { Block or short strip-type elements (beams B60J 5/0443 , position thereof B60J 5/0423) } |
| B60J 5/0452 | ... | { including foams or expanded materials } |
| B60J 5/0454 | .... | { being expanded onto door panel and forming a laminar structure with door panel, e.g. a rib } |
| B60J 5/0455 | ... | { integrated in door structure or other door elements, e.g. beam-like shapes stamped in inner door panel } |
| B60J 5/0456 | ... | { Behaviour during impact } |
| B60J 5/0458 | .... | { Passive coupling of the reinforcement elements to the door or to the vehicle body } |
| B60J 5/0459 | .... | { Active coupling of the reinforcement elements to the door or to the vehicle body, e.g. through releasing of pressurized gas } |
| B60J 5/0461 | .... | { characterised by a pre-defined mode of deformation or displacement in order to absorb impact } |
| B60J 5/0462 | .... | { the impact being a frontal impact } |
| B60J 5/0463 | .. | { Conceptual assembling of door, i.e. how door frame parts should be fitted together to form door } |
| B60J 5/0465 | ... | { using tailored blanks } |

- B60J 5/0466 ... { using cast parts }
- B60J 5/0468 .. { Fixation or mounting means specific for door components (fasteners in general [F16B 21/00](#)) }
- B60J 5/0469 ... { for door panels, e.g. hemming (hemming equipment [B21D 39/00](#)) }
- B60J 5/047 .. { characterised by the opening or closing movement }
- B60J 5/0472 ... { the door having a hinge axis in horizontal direction transverse to vehicle longitudinal axis }
- B60J 5/0473 ... { the door having a hinge axis in the direction of the vehicle longitudinal axis }
- B60J 5/0476 ... { convertible doors, e.g. window frame is stored in lower door structure }
- B60J 5/0477 ... { with two doors opening in opposite direction }
- B60J 5/0479 { without B-pillar or releasable B-pillar, i.e. the pillar is moving with door }
- B60J 5/048 .. { characterised by the material }
- B60J 5/0481 ... { plastic }
- B60J 5/0483 ... { lightweight metal, e.g. aluminum, magnesium }
- B60J 5/0484 ... { hybrid, i.e. plastic moulded onto metal parts }
- B60J 5/0486 .. { Special type }
- B60J 5/0487 ... { simplified doors related to cabins of e.g. golf carts, tractors, jeeps, cranes, forklifts, etc. }
- B60J 5/0488 ... { rectangular of shape, e.g. as found in old fashioned cars and coaches }
- B60J 5/049 ... { caravan door }
- B60J 5/0491 ... { lid, e.g. for luggage compartment accessible at vehicle side ([B60J 5/0498](#) takes precedence) }
- B60J 5/0493 .. { Appurtenances }
- B60J 5/0494 ... { Rain covers deployed upon opening door }
- B60J 5/0495 ... { Finger guards (for doors in general [E06B 7/36](#), with sensors [E05F 15/0021](#)) }
- B60J 5/0497 .. { for load transporting vehicles or public transport, e.g. lorries, trucks, buses }
- B60J 5/0498 ... { with rigid panels pivoting about a horizontal axis }
- B60J 5/06 .. slidable; foldable
- B60J 5/062 ... { for utility vehicles or public transport ([B60J 5/08](#) takes precedence) }
- B60J 5/065 { with non-rigid elements, e.g. side curtains ([B60J 7/062](#), [B60J 7/068](#) take precedence) }
- B60J 5/067 { vertically movable }
- B60J 5/08 ... of roller-blind type { made of rigid elements }
- B60J 5/10 . arranged at the vehicle rear ([B60J 5/04](#) takes precedence { ; bonnets or lids [B62D 25/10](#); tail gates for pick-up trucks [B62D 33/0273](#); counterbalancing [E05F](#); springs, e.g. pneumatic [F16F](#) })
- B60J 5/101 .. { for non-load transporting vehicles, i.e. family cars including vans }
- B60J 5/102 ... { comprising door or part of door being pivotable downwards about horizontal axis to open position }
- B60J 5/103 { where lower door part moves independently from other door structures, e.g. by being hinged on the vehicle body }
- B60J 5/104 { where lower door part optionally moves independently, or follows as component the movement of the entire door structure, e.g. by being hinged in a door frame or releasably connected to upper door part }
- B60J 5/105 ... { comprising door or part of door being pivotable about vertical axis }

- B60J 5/106 . . . { comprising door or part of door being moveable by a linkage system to open/close position }
- B60J 5/107 . . . { constructional details, e.g. about door frame, panels, materials used, reinforcements }
- B60J 5/108 . . { for load transporting vehicles or public transport, e.g. lorries, trucks, buses }
- B60J 5/12 . . slidable; foldable
- B60J 5/125 . . . { for utility vehicles or public transport ([B60J 5/14](#) takes precedence) }
- B60J 5/14 . . . of roller-blind type { made of rigid elements }

- B60J 7/00** **Non-fixed roofs; Roofs with movable panels** { e.g. rotary sunroofs } ([B60J 10/00](#) takes precedence; window aspects [B60J 1/00](#); fixed roofs [B62D 25/06](#); mechanisms for operating wings [E05F 11/00](#), [E05F 15/00](#))

- B60J 7/0007 . { moveable head-liners, screens, curtains or blinds for ceilings }
- B60J 7/0015 . . { roller blind }
- B60J 7/0023 . . { flexible and foldable }
- B60J 7/003 . . { one or more sliding rigid plate or lammellae }
- B60J 7/0038 . . . { stored in stacked fashion }
- B60J 7/0046 . . { side blind between roof and panel in vent mode }

- B60J 7/0053 . { Collapsible lateral roof side beams }
- B60J 7/0061 . . { where the beam moves inwardly during folding of roof, e.g. by swiveling, sliding or translation, to disconnect the beam from windshield header }
- B60J 7/0069 . . { where the beam itself is folded and moves inwardly, e.g. concertina type }

- B60J 7/0076 . { separately collapsible C-pillars, e.g. by folding inwardly or sliding ([B60J 7/126](#) takes precedence) }

- B60J 7/0084 . { Water draining for non-fixed roofs or roof panels (for fixed roofs not integral with roof structure [B60R 13/06](#), for fixed roofs integral with roof structure [B62D 25/07](#)) }
- B60J 7/0092 . . { by inflating the roof (inflatable soft tops [B60J 7/1256](#)) }

- B60J 7/02 . of sliding type { e.g. comprising guide shoes }
- B60J 7/022 . . { Sliding roof trays or assemblies }
- B60J 7/024 . . { characterised by the height regulating mechanism of the sliding panel ([B60J 7/043](#) to [B60J 7/053](#) take precedence) }
- B60J 7/026 . . { with rigid non plate-like elements, e.g. for convertible vehicles }
- B60J 7/028 . . . { the sliding movement being combined with a pivoting movement }
- B60J 7/04 . . with rigid plate-like element or elements { e.g. open roofs with harmonica-type folding rigid panels ([B60J 7/061](#) takes precedence) }
- B60J 7/041 . . . { for utility vehicles, e.g. with slidable and foldable rigid panels }
- B60J 7/042 { with a vertical lifting or folding movement (non-sliding roof panels movable for lifting [B60J 7/1614](#)) }
- B60J 7/043 . . . Sunroofs ([B60J 7/047](#) to [B60J 7/053](#) take precedence) { e.g. sliding above the roof }
- B60J 7/0435 { pivoting upwardly to vent mode and moving at the outside of the roof to fully open mode }

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| B60J 7/047 | ... | movable to overlapping or nested relationship { (B60J 7/041 takes precedence) } |
| B60J 7/05 | ... | pivoting upwardly to vent mode and moving downward before sliding to fully open mode |
| B60J 7/053 | ... | sliding with final closing motion having vertical component to attain closed and sealed condition { e.g. sliding under the roof } |
| B60J 7/057 | ... | Driving or actuating arrangements (B60J 7/047 to B60J 7/053 take precedence) { e.g. manually operated levers or knobs } |
| B60J 7/0573 | .... | { power driven arrangements, e.g. electrical } |
| B60J 7/0576 | ..... | { fluid } |
| B60J 7/06 | .. | with non-rigid element or elements |
| B60J 7/061 | ... | { sliding and folding } |
| B60J 7/062 | .... | { for utility vehicles (B60J 7/065 takes precedence) } |
| B60J 7/063 | .... | { for public transport (B60J 7/066 takes precedence) } |
| B60J 7/064 | .... | { using folding arms sliding in longitudinal tracks for supporting the soft roof } |
| B60J 7/065 | ..... | { for utility vehicles } |
| B60J 7/066 | ..... | { for public transport } |
| B60J 7/067 | ... | { sliding and winding up } |
| B60J 7/068 | .... | { for utility vehicles, e.g. of tarpaulin or roller-blind type } |
| B60J 7/08 | . | of non-sliding type, i.e. movable or removable roofs or panels, e.g. let-down tops or roofs capable of being easily detached or of assuming a collapsed or inoperative position |
| B60J 7/085 | .. | { winding up, e.g. for utility vehicles } |
| B60J 7/10 | .. | readily detachable, e.g. tarpaulins with frames, or fastenings for tarpaulins (covering of loads on vehicles by tarpaulins B60P 7/04) |
| B60J 7/102 | ... | { Readily detachable tarpaulins, e.g. for utility vehicles; Frames therefor } |
| B60J 7/104 | .... | { Fastening means for tarpaulins } |
| B60J 7/106 | ... | { readily detachable hard-tops (storage compartment for collapsible flexible tops B60J 7/20) } |
| B60J 7/108 | .... | { Foldable rear hoods therefor } |
| B60J 7/11 | ... | Removable panels, e.g. sunroofs |
| B60J 7/12 | .. | foldable; Tensioning mechanisms therefor, e.g. struts (B60J 7/10 , { B60J 7/20 } take precedence) |
| B60J 7/1204 | ... | { Control devices, e.g. for compensating tolerances, for defining movement or end position of top, for tensioning the top or for switching to an emergency mode } |
| B60J 7/1226 | ... | { Soft tops for convertible vehicles } |
| B60J 7/123 | .... | { characterised by means for fastening the soft top cloth to the arches or vehicle body work } |
| B60J 7/1234 | .... | { characterised by arches, e.g. shape or material } |
| B60J 7/1239 | ..... | { Front bow } |
| B60J 7/1243 | ..... | { Intermediate bows } |
| B60J 7/1247 | ..... | { Tensioning bow at rear of soft top } |
| B60J 7/1252 | | { characterised by lateral arches (foldable side roof beams B60J 7/0053 ; linkage arms B60J 7/1265) } |

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| B60J 7/1256 | | { Inflatable soft tops } |
| B60J 7/126 | | { for landaulet-type vehicles, i.e. using a collapsible upper structure of the vehicle body } |
| B60J 7/1265 | .... | { characterised by kinematic movements, e.g. using parallelogram linkages (B60J 7/126 takes precedence) } |
| B60J 7/1269 | ..... | { with remote power control } |
| B60J 7/1273 | ..... | { using hydraulic means } |
| B60J 7/1278 | ..... | { the complete top rotating around a single main axis on the vehicle body (B60J 7/1282 takes precedence) } |
| B60J 7/1282 | ..... | { foldable against a main arch before attaining fully open mode } |
| B60J 7/1286 | ..... | { including folding of the quarter windows } |
| B60J 7/1291 | ... | { Soft tops for closed vehicle bodies } |
| B60J 7/1295 | ... | { Temporary soft tops for seats outside passenger compartments, e.g. rumble seats, chauffeur seats } |
| B60J 7/14 | ... | with a plurality of { rigid } plate-like elements { or rigid non plate-like elements, e.g. with non-slidable, but pivotable or foldable movement } |
| B60J 7/141 | .... | { for covering load areas, e.g. for pick-up trucks } |
| B60J 7/143 | .... | { for covering the passenger compartment } |
| B60J 7/145 | ..... | { at least two elements being folded in clamp-shell fashion } |
| B60J 7/146 | ..... | { all elements being folded in same orientation and stacked fashion } |
| B60J 7/148 | ..... | { at least one element being stored in vertical fashion } |
| B60J 7/16 | .. | non-foldable { and rigid, e.g. a one-piece hard-top or a single rigid roof panel } (B60J 7/10 takes precedence) |
| B60J 7/1607 | ... | { for covering load areas, e.g. rigid panels for pick-up truck beds } |
| B60J 7/1614 | .... | { with a vertical lifting movement maintaining the inclination of the roof or panel } |
| B60J 7/1621 | .... | { hinged on one side } |
| B60J 7/1628 | ... | { for covering the passenger compartment } |
| B60J 7/1635 | .... | { of non-convertible vehicles } |
| B60J 7/1642 | ..... | { Roof panels, e.g. sunroofs or hatches, movable relative to the main roof structure, e.g. by lifting or pivoting } |
| B60J 7/165 | ..... | { at least a major part of the roof being lifted on all corners } |
| B60J 7/1657 | ..... | { at least a major part of the roof pivoting about a stationary axis } |
| B60J 7/1664 | .... | { of convertible vehicles (foldable rear hoods for readily detachable hard-tops B60J 7/108) } |
| B60J 7/1671 | ..... | { the roof pivoting about a stationary axis } |
| B60J 7/1678 | ..... | { the axis being horizontal } |
| B60J 7/1685 | ..... | { the axis being vertical } |
| B60J 7/1692 | ..... | { the roof being movable by a linkage system } |
| B60J 7/185 | . | Locking arrangements (locks in general E05B) |
| B60J 7/1851 | .. | { for locking the foldable soft- or hard-top to the windshield header } |
| B60J 7/1853 | ... | { locking mechanism arranged in windshield header } |
| B60J 7/1855 | .. | { for locking or immobilising roof elements when stored } |
| B60J 7/1856 | .. | { for interlocking the roof linkage system when deployed } |

- B60J 7/1858 . . { for locking soft tops to a surrounding rigid roof structure, e.g. to a closed vehicle body ([B60J12D](#) takes precedence)}
- B60J 7/19 . . for rigid panels ({ [B60J 7/1851](#) to [B60J 7/1856](#) take precedence)}
- B60J 7/192 . . . { for locking the sunroof panel to the roof }
- B60J 7/194 . . . { for locking detachable hard-tops or removable roof panels to the vehicle body }
- B60J 7/196 . . . { for locking or interconnecting rigid roof panels to each other }
- B60J 7/198 . . . { for locking tonneau covers such as covers for roof storage compartments or for pick-up truck beds }

- B60J 7/20 . Vehicle storage compartments for roof parts { or for collapsible flexible tops }
- B60J 7/201 . . { being outside of vehicle, e.g. onto boot lid, or into a storage compartment to be closed by one of the roof panels itself }
- B60J 7/202 . . { being characterised by moveable cover parts for closing the gap between boot lid and rearmost seats }
- B60J 7/203 . . . { the cover part comprising cover side flaps }
- B60J 7/205 . . { where the boot lid opens in rearward direction to receive the roof and in forward direction to receive luggage }
- B60J 7/206 . . { being arranged at the vehicle front }
- B60J 7/207 . . { being adjustable in volume, i.e. collapsible in order to increase luggage space in boot when roof is not stored }
- B60J 7/208 . . { with improved trunk access by moving the folded roof package when opening the trunk lid for loading or unloading luggage }

- B60J 7/22 . Wind deflectors for open roofs
- B60J 7/223 . . { specially adapted for convertible cars }
- B60J 7/226 . . { immovably attached to vehicle roof section }

- B60J 9/00** **Devices not provided in one of main groups [B60J 1/00](#) to [B60J 7/00](#) ([B60J 10/00](#) takes precedence)**

- B60J 9/02 . Entrance or exit closures other than windows, doors, or in roofs, e.g. emergency escape closures in vehicle bottom ({ [Emergency exits for rail vehicles B61D 19/023](#))}
- B60J 9/04 . Air curtains (in general [F24F](#))

- B60J 10/00** **Sealing arrangements ({ sealing arrangements for other vehicle parts [B60R 13/06](#) }; sealings in general [F16J 15/00](#))**

- B60J 10/0002 . { characterised by the material }
- B60J 10/0005 . . { consisting of a plurality of plastic materials having different physical or chemical properties ([B60J 10/0008](#) takes precedence)}
- B60J 10/0008 . . { provided with a low-friction material on the surface }
- B60J 10/0011 . . { provided with reinforcements or inserts }

- B60J 10/0014 . { characterised by the shape }
- B60J 10/0017 . . { having corner parts or bends }
- B60J 10/002 . . { having variable cross-sections in the longitudinal direction }

- B60J 10/0022 .. { consisting of two or more parts assembled along their longitudinal direction
([B60J 10/0017](#) takes precedence) }
- B60J 10/0025 ... { Modular sealing arrangements, i.e. arrangements built up from a large number
of joined modules }
- B60J 10/0028 { with joined end members, e.g. abutting ends }
- B60J 10/0031 .. { having tubular parts }
- B60J 10/0034 ... { with vent holes }
- B60J 10/0037 ... { being inflatable or deflatable }
- B60J 10/004 ... { having projections within tubular parts, e.g. ribs }
- B60J 10/0042 ... { having more than one tubular sealing cavity, e.g. separate tubular sealing
parts or partitioning walls within tubular sealing part }
- B60J 10/0045 .. { having water drainage means }
- B60J 10/0048 .. { characterised by the surface shape }
- B60J 10/0051 ... { provided with decorations }
- B60J 10/0054 .. { having projections, grooves or channels in the longitudinal direction }
- B60J 10/0057 ... { for enclosing or housing cables or other functional devices }
- B60J 10/006 ... { for facilitating pre-defined deformation of sealing parts, e.g. to enhance proper
folding }

- B60J 10/0062 . { characterised by the fastening means ([arrangements of fasteners and clips for inner
vehicle liners B60R 13/0206](#)); Assembling sealing arrangements with vehicle parts }
- B60J 10/0065 .. { with integral "U"-shaped retainers }
- B60J 10/0068 ... { characterised by the configuration of the retaining lips }
- B60J 10/0071 .. { with adhesives }
- B60J 10/0074 ... { with premoulded adhesive tapes, e.g. double-sided tapes }
- B60J 10/0077 ... { with formless adhesives, e.g. hot melt }
- B60J 10/008 .. { with separately inserted fastening means ([B60J 10/0085](#) takes precedence) }
- B60J 10/0082 ... { comprising beads }
- B60J 10/0085 .. { with magnets }
- B60J 10/0088 .. { Assembling sealing arrangements with vehicle parts }

- B60J 10/0091 . { characterised by the way of contact between two or more cooperating sealing
arrangements }

- B60J 10/0094 . { characterised by means for prevention of noise, e.g. window rattling or vibration }

- B60J 10/0097 . { characterised by defrosting arrangements, e.g. the heating of sealing }

- B60J 10/02 . for windows or windscreens { ([B60J 10/0002](#) to [B60J 10/0091](#) take precedence) }
- B60J 10/025 .. { with integral wind deflecting means for preventing soiling }
- B60J 10/04 .. for sliding window panes, e.g. sash guides
- B60J 10/041 ... { for sealing the lower part of the panes provided at the waist of the vehicle
door }
- B60J 10/042 ... { for the window sash, e.g. glass run channels }
- B60J 10/043 { preventing outward displacement of window at high speed }
- B60J 10/044 { on corner pieces, e.g. on mirror supports or quarter windows }

- B60J 10/045 { with arrangements to reduce air resistance due to glazing not being flush with sash guide }
- B60J 10/046 . . . { for sashless windows }
- B60J 10/047 { preventing outward displacement of window at high speed }
- B60J 10/048 { the sealing arrangement being between the edges of adjacent glazings }
- B60J 10/049 { mounted on the pillar }
- B60J 10/06 . . . for flush-glass windows { i.e. flush with body or window frame ([B60J 10/041](#) takes precedence) }

- B60J 10/08 . for doors, { lids or bonnets ([B60J 10/0002](#) to [B60J 10/0091](#) take precedence) }
- B60J 10/081 . . { arranged on body side }
- B60J 10/083 . . . { with additional seals on body side }
- B60J 10/085 . . { arranged on door side }
- B60J 10/086 . . . { with additional seals on door side }
- B60J 10/088 . . . { mounted on, or integral with, the glass-run sealing }

- B60J 10/10 . for non-fixed roofs, { e.g. foldable roofs, removable hard-tops and tarpaulins ([B60J 10/0002](#) to [B60J 10/0091](#) take precedence) }

- B60J 10/12 . for movable panels in roofs { ([B60J 10/0002](#) to [B60J 10/0091](#) take precedence) }

- B60J 11/00** **Removable external protective coverings specially adapted for vehicles or part of vehicles, e.g. parking covers** (covering of load on vehicles [B60P 7/00](#); guard strips for body finishing, identifying or decorating [B60R 13/04](#); tents for use as garages [E04H 15/00](#))

- B60J 11/02 . Covers wound on rollers
- B60J 11/025 . . { specially adapted for covering vehicle parts, e.g. for doors, windows or windscreens }

- B60J 11/04 . for covering at least the roof of the vehicle, e.g. for covering the whole vehicle

- B60J 11/06 . for covering only specific parts of the vehicle, e.g. for doors (covers or guards for traction couplings, hitches, draw-gear or towing devices [B60D 1/60](#); guards for wheels, radiators or bumpers [B60R 19/00](#))

- B60J 11/08 . . for windows or windscreens (antiglare equipment [B60J 3/00](#))
- B60J 11/10 . . for wheels (hub caps or the like [B60B 7/00](#); external spare wheel stowing, holding or mounting arrangements [B62D 43/02](#))

- B60J 2005/00** **Doors** ([B60J 10/00](#) takes precedence; window aspects [B60J 1/00](#); { side board or tailgate structures for open load compartments [B62D 33/023](#) })

- B60J 2005/04 . arranged at the vehicle sides { (panel mounted arm-rests [B60N 2/466](#); wall liners [B60R 13/02](#); door edge guards [B60R 13/043](#); padded linings associated with the side doors [B60R 21/0428](#)) }
- B60J 2005/047 . . { characterised by the opening or closing movement }
- B60J 2005/0475 . . . due to absence of the B-pillar

- B60J 2007/00** **Non-fixed roofs; Roofs with movable panels** { e.g. rotary sunroofs } ([B60J 10/00](#) takes precedence; window aspects [B60J 1/00](#); fixed roofs [B62D 25/06](#); mechanisms for

operating wings [E05F 11/00](#), [E05F 15/00](#))

- B60J 2007/08 . of non-sliding type, i.e. movable or removable roofs or panels, e.g. let-down tops or roofs capable of being easily detached or of assuming a collapsed or inoperative position
- B60J 2007/12 . . foldable; Tensioning mechanisms therefor, e.g. struts ([B60J 7/10](#), { [B60J 7/20](#) } take precedence)
- B60J 2007/1204 . . . { Control devices, e.g. for compensating tolerances, for defining movement or end position of top, for tensioning the top or for switching to an emergency mode }
- [B60J 2007/1208](#) Control devices
- [B60J 2007/1213](#) Fastening devices
- [B60J 2007/1217](#) Pretensioning devices closing the roof aperture when released
- [B60J 2007/1221](#) construction details of the arches