

CPC**COOPERATIVE PATENT CLASSIFICATION****B60R****VEHICLES, VEHICLE FITTINGS, OR VEHICLE PARTS, NOT OTHERWISE PROVIDED FOR****NOTE**

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

B60R 1/00

Optical viewing arrangements ({house mirrors and spies [A47G 1/00](#); } antiglare equipment, e.g. polarising, for windscreens or windows [B60J 3/00](#); {visual aids for tractors [B62D 49/0614](#); } devices per se [G02B](#))

B60R 1/001

- {integrated in the windows, e.g. Fresnel lenses}

B60R 1/002

- {specially adapted for covering the peripheral part of the vehicle, e.g. for viewing tyres, bumpers or the like (integrated in the windows [B60R 1/001](#); combined with rear-view mirrors [B60R 1/08](#))}

B60R 1/003

- . {for viewing trailer hitches}

B60R 1/005

- {specially adapted for viewing traffic-lights}

B60R 1/006

- {Side-view mirrors, e.g. V-shaped mirrors located at the front or rear part of the vehicle (combined with rear-view mirrors [B60R 1/08](#); side-view periscopes [B60R 1/10](#))}

B60R 1/007

- . {specially adapted for covering the lateral blind spot not covered by the usual rear-view mirror}

B60R 1/008

- {allowing the driver to see passengers, e.g. for busses (combined with rear-view mirrors [B60R 1/08](#))}

B60R 1/02

- Rear-view mirror arrangements ([periscope arrangements B60R 1/10](#))

B60R 1/025

- . {comprising special mechanical means for correcting the field of view in relation to particular driving conditions, e.g. change of lane; scanning mirrors}

B60R 1/04

- . mounted inside vehicle {([B60R 1/025](#), [B60R 1/08](#) take precedence)}

B60R 1/06

- . mounted on vehicle exterior {([B60R 1/025](#), [B60R 1/08](#) take precedence)}

B60R 1/0602

- . . {comprising means for cleaning or deicing}

B60R 1/0605

- . . {specially adapted for mounting on trucks, e.g. by C-shaped support means}

B60R 1/0607

- . . . {with remote position control adjustment}

B60R 1/061

- {by manually actuated mechanical means, e.g. push-pull cables}

B60R 1/0612

- {by electrically actuated means}

B60R 1/0615

- {by hydraulically or pneumatically actuated means}

B60R 1/0617

- {foldable along the vehicle, e.g. in case of external force applied thereon}

B60R 1/062

- . . . with remote control for adjusting position {([B60R 1/0607](#) takes precedence)}

B60R 1/0625

- {by hydraulically or pneumatically powered actuators}

B60R 1/064

- by manually powered actuators

B60R 1/066

- for adjusting the mirror relative to its housing

- B60R 1/068 using cables
- B60R 1/07 by electrically powered actuators
- B60R 1/072 for adjusting the mirror relative to its housing
- B60R 1/074 for retracting the mirror arrangements to a non-use position alongside the vehicle
- B60R 1/076 yieldable to excessive external force and provided with an indexed use position ([B60R 1/0617](#), [B60R 1/074](#) take precedence)
- B60R 1/078 easily removable; mounted for bodily outward movement, e.g. when towing
- B60R 1/08 involving special optical features, e.g. avoiding blind spots {e.g. convex mirrors; Side-by-side associations of rear-view and other mirrors ([B60R 1/025](#), [B60R 1/10](#) take precedence)}
- B60R 1/081 {avoiding blind spots, e.g. by using a side-by-side association of mirrors}
- B60R 1/082 {using a single wide field mirror or an association of rigidly connected mirrors}
- B60R 1/083 {Anti-glare mirrors, e.g. "day-night" mirrors}
- B60R 1/084 {using a removable filtering or hiding screen (associated with windows or windscreens [B60J 3/00](#))}
- B60R 1/085 {using a combination of interchangeable reflecting surfaces, e.g. reversible mirrors}
- B60R 1/086 {using a mirror angularly movable between a position of use and a non-glare position reflecting a dark field to the user, e.g. situated behind a transparent glass used as low-reflecting surface; Wedge-shaped mirrors}
- B60R 1/087 {with remote or automatic control means}
- B60R 1/088 {using a cell of electrically changeable optical characteristic, e.g. liquid-crystal or electrochromic mirrors}
- B60R 1/089 {using a liquid filtering layer of variable thickness}
- B60R 1/10 Front-view mirror arrangements; {(specially adapted for covering the peripheral part of the vehicle [B60R 1/002](#)); periscope arrangements {i.e. optical devices using combinations of mirrors, lenses, prisms or the like (specially adapted for covering the peripheral part of the vehicle [B60R 1/002](#); for viewing traffic-lights [B60R 1/005](#)); Other mirror arrangements giving a view from above or under the vehicle}
- B60R 1/105 {Optical arrangements giving a view under the vehicle, e.g. using periscopes}
- B60R 1/12 Mirror assemblies combined with other articles, e.g. clocks
- B60R 1/1207 {with lamps; with turn indicators}
- B60R 2001/1215 {with information displays}
- B60R 2001/1223 {with sensors or transducers}
- B60R 2001/123 {with thermometers}
- B60R 2001/1238 {with vanity mirrors}
- B60R 2001/1246 {with clocks}
- B60R 2001/1253 {with cameras, video cameras or video screens}
- B60R 2001/1261 {with antennae}

- B60R 2001/1269 . . {with sun visors}
- B60R 2001/1276 . . {with radio receivers, loud-speakers or buzzers}
- B60R 2001/1284 . . {with communication systems other than radio-receivers, e.g. keyless entry systems, navigation systems; with anti-collision systems}
- B60R 2001/1292 . . {with holding means for personal articles}

B60R 3/00 Arrangements of steps {or ladders facilitating access to or on the vehicle}, e.g. running-boards ({construction of steps for railway vehicles [B61D 23/00](#) ; ladders [E06C](#))

- B60R 3/002 . {Running boards (for vehicle tops [B60R 3/005](#); at the sides of the vehicle for carrying loads [B60R 9/02](#))}
- B60R 3/005 . {Catwalks, running boards for vehicle tops, access means for vehicle tops; Handrails therefor}
- B60R 3/007 . {Removable steps or ladders, e.g. foldable (as access means for vehicle tops [B60R 3/005](#))}
- B60R 3/02 . Retractable steps {or ladders, e.g. movable under shock ([B60R 3/005](#) takes precedence)}
- B60R 3/04 . with provisions for shoe scraping

B60R 5/00 Compartments within vehicle body primarily intended or sufficiently spacious for trunks, suit-cases, or the like (primarily intended for stowing loads in load-transporting vehicles [B60P](#); arrangements for stowing spare wheels [B62D 43/00](#))

- B60R 5/003 . {Luggage racks, e.g. for busses (primarily intended for passengers' property smaller than suitcases [B60R 7/04](#); [B60R 7/08](#); luggage racks for rail vehicles [B61D 37/003](#))}
- B60R 5/006 . {stowing or holding means for elongated articles, e.g. skis inside vehicles}
- B60R 5/02 . arranged at front of vehicle {([B60R 5/003](#) takes precedence)}
- B60R 5/04 . arranged at rear of vehicle {([B60R 5/003](#), [B60R 5/006](#) take precedence; external trunks arranged at rear of vehicle [B60R 9/065](#))}
- B60R 5/041 . . {extensible externally of the vehicle body, e.g. to create an open luggage compartment of increased capacity (devices for anchoring the boot lid while carrying oversize objects [E05C 17/042](#))}
- B60R 5/042 . . . {to create an enclosed luggage compartment of increased capacity, e.g. with ventilation apertures for transporting dogs}
- B60R 5/044 . . {luggage covering means, e.g. parcel shelves}
- B60R 5/045 . . . {collapsible or transformable}
- B60R 5/047 {collapsible by rolling-up}
- B60R 5/048 {of accordion-type, i.e. collapsible by sliding and folding}

B60R 7/00 Stowing or holding appliances inside vehicle primarily intended for personal property smaller than suit-cases, e.g. travelling articles, or maps (for radio sets, television sets, telephones or the like, mounting of cameras operative during drive, tools, or spare parts [B60R 11/00](#); for receptacles for refuse, food, beverages, cigarettes [B60N](#))

- B60R 7/005 . {Nets or elastic pockets tensioned against walls or backrests}
- B60R 7/02 . in separate luggage compartment {([B60R 7/005](#) takes precedence)}

- B60R 7/04
 - in driver or passenger space, {e.g. using racks ([B60R 7/005](#), [B60R 7/08](#) take precedence)}
- B60R 7/043
 - • {mounted on or under a seat}
- B60R 7/046
 - • {mounted on door}
- B60R 7/05
 - • mounted on sun visor
- B60R 7/06
 - • mounted on or below dashboards
- B60R 7/08
 - Disposition of racks, clips, {holders, containers} or the like {for supporting specific articles ([B60R 7/005](#) takes precedence)}
- B60R 7/081
 - • {for supporting maps}
- B60R 7/082
 - • {for supporting spectacles}
- B60R 7/084
 - • {for supporting tissues or tissue boxes}
- B60R 7/085
 - • {for supporting flowers or flower vases}
- B60R 7/087
 - • {for stowing money or valuables, e.g. using safes}
- B60R 7/088
 - • {for stowing tape cartridges, compact discs, or the like}
- B60R 7/10
 - • for supporting hats, clothes or clothes hangers
- B60R 7/12
 - • for supporting umbrellas
- B60R 7/14
 - • for supporting weapons
- B60R 9/00**

Supplementary fittings on vehicle exterior for carrying loads, e.g. luggage, sports gear or the like
- B60R 9/02
 - at the sides, e.g. on running-board
- B60R 9/04
 - Carriers associated with vehicle roof ([B60R 9/08](#) takes precedence)
- B60R 9/042
 - • Carriers characterised by means to facilitate loading or unloading of the load, e.g. rollers, tracks, or the like
- B60R 9/0423
 - • • {for ladders}
- B60R 9/0426
 - • • {for small vehicles, e.g. invalid chairs, perambulators}
- B60R 9/045
 - • Carriers being adjustable or transformable, e.g. expansible, collapsible {(transformable into tents [B60P 3/36](#); into beds [B60P 3/38](#))}
- B60R 9/048
 - • Carriers characterised by article-gripping, {-covering,}-retaining, or -locking means
- B60R 9/0485
 - • • {for ladders ([B60R 9/0423](#) takes precedence)}
- B60R 9/05
 - • Carriers characterised by wind deflecting means (wind deflectors for open roofs [B60J 7/22](#))
- B60R 9/052
 - • Carriers comprising elongate members extending only transversely of vehicle ([B60R 9/08](#) takes precedence)
- B60R 9/055
 - • Enclosure-type carriers, e.g. containers, boxes ([B60R 9/048](#) takes precedence)
- B60R 9/058
 - • characterised by releasable attaching means between carrier and roof
- B60R 9/06
 - at vehicle front or rear {(rear luggage compartments within vehicle extensible externally of the vehicle body [B60R 5/041](#))}
- B60R 9/065
 - • {Enclosure-type carriers, e.g. trunks}
- B60R 9/08
 - specially adapted for sports gear (vehicles specially adapted for carrying aeroplanes, for carrying boats [B60P](#))

- B60R 9/10 . . for cycles
- B60R 9/12 . . for skis

B60R 11/00**Arrangements for holding or mounting articles, not otherwise provided for**

- B60R 2011/0001 . {characterised by position}
- B60R 2011/0003 . . {inside the vehicle}
- B60R 2011/0005 . . . {Dashboard}
- B60R 2011/0007 . . . {Mid-console}
- B60R 2011/0008 . . . {Ventilation grilles}
- B60R 2011/001 . . . {Vehicle control means, e.g. steering-wheel or column}
- B60R 2011/0012 . . . {Seats or parts thereof}
- B60R 2011/0014 {Arm-rests}
- B60R 2011/0015 {Back-rests}
- B60R 2011/0017 {Head-rests}
- B60R 2011/0019 . . . {Side or rear panels}
- B60R 2011/0021 {Doors}
- B60R 2011/0022 {Pillars}
- B60R 2011/0024 {Rear shelves}
- B60R 2011/0026 . . . {Windows, e.g. windscreen}
- B60R 2011/0028 . . . {Ceiling, e.g. roof rails}
- B60R 2011/0029 . . . {Floor, e.g. side sills, fire wall}
- B60R 2011/0031 . . . {Seat belts}
- B60R 2011/0033 . . . {Rear-view mirrors}
- B60R 2011/0035 . . . {Sun visors}
- B60R 2011/0036 . . . {Luggage compartment}
- B60R 2011/0038 . . . {Engine compartment}
- B60R 2011/004 . . {outside the vehicle}
- B60R 2011/0042 . {characterised by mounting means}
- B60R 2011/0043 . . {for integrated articles, i.e. not substantially protruding from the surrounding parts}
- B60R 2011/0045 . . . {with visible part, e.g. flush mounted}
- B60R 2011/0047 {using hidden fastening means}
- B60R 2011/0049 . . {for non integrated articles}
- B60R 2011/005 . . . {Connection with the vehicle part}
- B60R 2011/0052 {using screws, bolts, rivets or the like}
- B60R 2011/0054 {using cigarette lighter}
- B60R 2011/0056 {using suction cups}
- B60R 2011/0057 {using magnetic means}
- B60R 2011/0059 {using clips, clamps, straps or the like}
- B60R 2011/0061 {using key-type connections}
- B60R 2011/0063 {using adhesive means, e.g. hook and loop fasteners}

B60R 2011/0064	. . . {Connection with the article}
B60R 2011/0066	. . . . {using screws, bolts, rivets or the like}
B60R 2011/0068	. . . . {using suction cups}
B60R 2011/007	. . . . {using magnetic means}
B60R 2011/0071	. . . . {using latches, clips, clamps, straps or the like}
B60R 2011/0073	. . . . {using key-type connections}
B60R 2011/0075	. . . . {using a containment or docking space}
B60R 2011/0077	. . . . {using adhesive means, e.g. hook and loop fasteners}
B60R 2011/0078	. . . {Quick-disconnect two-parts mounting means}
B60R 2011/008	. . {Adjustable or movable supports}
B60R 2011/0082	. . . {collapsible, e.g. for storing after use}
B60R 2011/0084	. . . {with adjustment by linear movement in their operational position}
B60R 2011/0085	. . . {with adjustment by rotation in their operational position}
B60R 2011/0087	. . . . {around two axes}
B60R 2011/0089	. . . . {around three axes, i.e. universally mounted}
B60R 2011/0091	. . . . . {the article being mounted on a flexible shaft}
B60R 2011/0092	. . . {with motorization}
B60R 2011/0094	. {characterised by means for covering after user, e.g. boxes, shutters or the like}
B60R 2011/0096	. {Theft prevention of articles}
B60R 2011/0098	. . {using electric or electronic means, e.g. alarms, codes}
B60R 11/02	. for radio sets, television sets, telephones, or the like; Arrangements of control thereof ({stowing of tape cartridges, compact discs or the like B60R 7/088 ; } of aerials H01Q)
B60R 11/0205	. . {for radio sets (B60R 11/0211 takes precedence)}
B60R 11/0211	. . {for record carriers apparatus, e.g. video recorders, tape players or CD players}
B60R 11/0217	. . {for loud-speakers}
B60R 11/0223	. . . {of flat type}
B60R 11/0229	. . {for displays, e.g. cathodic tubes}
B60R 11/0235	. . . {of flat type, e.g. LCD}
B60R 11/0241	. . {for telephones}
B60R 11/0247	. . {for microphones or earphones}
B60R 11/0252	. . {for personal computers, e.g. laptops, notebooks}
B60R 11/0258	. . {for navigation systems}
B60R 11/0264	. . {for control means}
B60R 2011/027	. . {for Din-sized apparatus}
B60R 2011/0276	. . {for rear passenger use}
B60R 2011/0282	. . {for the use of several passengers, e.g. simultaneously}
B60R 2011/0288	. . {Apparatus made of several modules independently mounted}
B60R 2011/0294	. . {Apparatus with multi-functionalities, e.g. radio and telephone}

- B60R 11/04
 - Mounting of cameras operative during drive; Arrangement of controls thereof relative to the vehicle ([cameras per se G03B](#))
- B60R 11/06
 - for tools or spare parts ([for vehicle roof parts B60J 7/20](#); [for spare wheels B62D](#))
- B60R 13/00**
 - Elements for body-finishing, identifying, or decorating; Arrangements or adaptations for advertising purposes**
- B60R 13/005
 - {Manufacturers' emblems, name plates, bonnet ornaments, mascots or the like; Mounting means therefor}
- B60R 13/01
 - Liners for load platforms or load compartments
- B60R 13/011
 - . {for internal load compartments, e.g. car trunks}
- B60R 13/013
 - . . {comprising removable or hinged parts, e.g. for accessing storage compartments}
- B60R 2013/015
 - . . {made of a plurality of visible parts}
- B60R 2013/016
 - . . {integrating other functions or accessories}
- B60R 2013/018
 - . . {Connection or positioning of adjacent panels}
- B60R 13/02
 - {Internal} Trim mouldings; {Internal} Ledges; Wall liners {for passenger compartments}; Roof liners ([B60R 13/01](#) takes precedence; {padded linings for the vehicle interior [B60R 21/04](#); arrangements or adaptations of floor mats or carpets in vehicles [B60N 3/04](#); internal lining for trains [B61D 17/18](#)})
- B60R 13/0206
 - . . {Arrangements of fasteners and clips specially adapted for attaching inner vehicle liners or mouldings ([devices for fastening or securing F16B](#))}
- B60R 13/0212
 - . . {Roof or head liners ([movable head-liners B60J 7/0007](#))}
- B60R 13/0218
 - . . . {supported by adhesion with the roof panel}
- B60R 13/0225
 - . . . {self supporting head liners}
- B60R 13/0231
 - . . . {specially adapted for roofs with openings}
- B60R 13/0237
 - . . {Side or rear panels}
- B60R 13/0243
 - . . . {Doors}
- B60R 13/025
 - . . . {Pillars; Roof rails}
- B60R 13/0256
 - . . {Dashboard liners}
- B60R 13/0262
 - . . {Mid-console liners}
- B60R 13/0268
 - . . {Rear parcel liners ([used as luggage covering means B60R 5/044](#))}
- B60R 13/0275
 - . . {comprising removable or hinged parts ([for accessing storage compartments B60R 7/04](#); [for airbag deployment B60R 21/215](#))}
- B60R 2013/0281
 - . . {made of a plurality of visible parts}
- B60R 2013/0287
 - . . {integrating other functions or accessories}
- B60R 2013/0293
 - . . {Connection or positioning of adjacent panels}
- B60R 13/04
 - {External} Ornamental or guard strips; Ornamental inscriptive devices {thereon ([fastening strips or bars to sheets or plates by means of clips F16B 5/12](#))}
- B60R 13/043
 - . . {Door edge guards}
- B60R 2013/046
 - . . {Foot boards}
- B60R 13/06
 - Sealing strips ([sealing arrangements for vehicle windows, windscreens, non-fixed roofs, doors, or similar devices B60J 10/00](#))

- B60R 13/07
 - Water drainage or guide means not integral with roof structure ([B60R 13/06](#), [{B60J 10/25}](#) take precedence; {integral with roof structure [B62D 25/07](#); drainage openings having movable or removable closures [B62D 25/24](#)})
- B60R 13/08
 - Insulating elements, e.g. for sound insulation {(sound insulating linings for trains [B61D 17/185](#); drivers' cabs for load-carrying vehicles insulated against vibrations or noise [B62D 33/0604](#); thermal or acoustic insulation of engines [F02B 77/11](#); damping of sounds using compensation by electro-acoustic methods [G10K 11/178](#))}
- B60R 2013/0807
 - • {Arrangements of fasteners or clips specially adapted therefore}
- B60R 13/0815
 - • {Acoustic or thermal insulation of passenger compartments (wall or roof liners integrating the insulating function [B60R 13/02](#); insulating floor mats or carpets [B60N 3/04](#))}
- B60R 13/0823
 - • • {Insulating partitions, e.g. between front and rear seats}
- B60R 13/083
 - • • {for fire walls or floors}
- B60R 13/0838
 - • {for engine compartments}
- B60R 13/0846
 - • {for duct, cable or rod passages, e.g. between engine and passenger compartments}
- B60R 13/0853
 - • • {specially adapted for movable parts, e.g. gears levers, pedals}
- B60R 13/0861
 - • {for covering undersurfaces of vehicles, e.g. wheel houses}
- B60R 13/0869
 - • {for protecting heat sensitive parts, e.g. electronic components}
- B60R 13/0876
 - • {for mounting around heat sources, e.g. exhaust pipes}
- B60R 13/0884
 - • {for mounting around noise sources, e.g. air blowers}
- B60R 13/0892
 - • {for humidity insulation (sealing strips [B60R 13/06](#))}
- B60R 13/10
 - Registration, licencing, or like devices
- B60R 13/105
 - • {Licence- or registration plates, provided with mounting means, e.g. frames, holders, retainers, brackets}
- B60R 15/00**

Arrangements or adaptations of sanitation devices
- B60R 15/02
 - Washing facilities {(in railway vehicles [B61D 35/002](#))}
- B60R 15/04
 - Toilet facilities {(in railway vehicles [B61D 35/005](#))}
- B60R 16/00**

Electric or fluid circuits specially adapted for vehicles and not otherwise provided for; Arrangement of elements of electric or fluid circuits specially adapted for vehicles and not otherwise provided for {(devices for protecting vehicle occupants in case of accidents [B60R 21/00](#); safety belts [B60R 22/00](#); central door locking [E05B 49/00](#), [E05B 77/50](#))}
- B60R 16/005
 - {Electro-mechanical devices, e.g. switched (electric switches in general [H01H](#))}
- B60R 16/02
 - electric {constitutive elements}
- B60R 16/0207
 - • {Wire harnesses}
- B60R 16/0215
 - • • {Protecting, fastening and routing means therefor}
- B60R 16/0222
 - • • • {Grommets}
- B60R 16/023
 - • for transmission of signals between vehicle parts or subsystems

B60R 16/0231	<ul style="list-style-type: none"> • {Circuits relating to the driving or the functioning of the vehicle (for dash boards B60K 37/00, B60Q 3/04; for indicating emergencies B60Q 1/52; registering or indicating the working of vehicles G07C 5/00; measuring distance G01C, e.g. combinations of speed and distance G01C 23/00; engine indicators G01L; measuring speed or acceleration G01P; brake control systems B60T; monitoring tyres B60C 23/00; indicating overspeed B60K 31/00)}
B60R 16/0232	<ul style="list-style-type: none"> • {for measuring vehicle parameters and indicating critical, abnormal or dangerous conditions}
B60R 16/0233	<ul style="list-style-type: none"> • {Vehicle tilting, overturning or roll over}
B60R 16/0234	<ul style="list-style-type: none"> • {related to maintenance or repairing of vehicles}
B60R 16/0235	<ul style="list-style-type: none"> • {for lighting devices combined with starting or ignition devices for road vehicles}
B60R 16/0236	<ul style="list-style-type: none"> • {for economical driving}
B60R 16/0237	<ul style="list-style-type: none"> • {circuits concerning the atmospheric environment (meteorology G01W)}
B60R 16/0238	<ul style="list-style-type: none"> • {Electrical distribution centers}
B60R 16/0239	<ul style="list-style-type: none"> • {Electronic boxes}
B60R 16/027	<ul style="list-style-type: none"> • between relatively movable parts of the vehicle, e.g. between steering wheel and column {(devices for measuring, signalling or controlling tyre pressure or temperature specially adapted for mounting on vehicles B60C 23/00)}
B60R 16/03	<ul style="list-style-type: none"> • for supply of electrical power to vehicle subsystems {or for (circuit arrangements for charging batteries H02J 7/00)}
B60R 16/0307	<ul style="list-style-type: none"> • {using generators driven by a machine different from the vehicle motor}
B60R 16/0315	<ul style="list-style-type: none"> • {using multiplexing techniques (multiplexing for transmission of signals G08C 15/00; multiplexing for electrical communication in general H04J)}
B60R 2016/0322	<ul style="list-style-type: none"> • {Temporary code for documents to be reclassified to G08C, H04L or H04Q}
B60R 16/033	<ul style="list-style-type: none"> • characterised by the use of electrical cells or batteries (for propulsion puposes B60K 1/04; supplying batteries to, or removing batteries from, vehicles B60S 5/06; testing of charge state G01R 31/36)
B60R 16/037	<ul style="list-style-type: none"> • for occupant comfort, {e.g. for automatic adjustment of appliances according to personal settings, e.g. seats, mirrors, steering wheel}
B60R 16/0373	<ul style="list-style-type: none"> • {Voice control (in general G10L)}
B60R 16/04	<ul style="list-style-type: none"> • Arrangement of batteries
B60R 16/06	<ul style="list-style-type: none"> • for removing electrostatic charges (carrying-off electrostatic charges in general H05F 3/00)
B60R 16/08	<ul style="list-style-type: none"> • fluid
B60R 17/00	Arrangements or adaptations of lubricating systems or devices (lubricating in general F16N)
B60R 17/02	<ul style="list-style-type: none"> • Systems, e.g. central lubrication systems
B60R 19/00	Wheel guards; Radiator guards, {e.g. grilles}; Obstruction removers; Fittings damping bouncing force in collisions ({reinforcement elements for side doors B60J 5/0412; } mudguards B62D)
B60R 2019/002	<ul style="list-style-type: none"> • {Wheel guards}

- B60R 2019/005 . {Crash attenuators, i.e. means added to highway service vehicles for softening high speed impacts}
- B60R 2019/007 . {Means for adjusting or regulating the crash absorption capacity of the vehicle, e.g. when detecting an impending collision}
- B60R 19/02 . Bumpers, i.e. impact receiving or absorbing members for protecting vehicles or fending off blows from other vehicles or objects ([B60R 19/56](#) takes precedence; initiating brake action by contact of bumper with an external object [B60T 7/22](#); for rail vehicles [B61F 19/04](#); safety equipment for cycles [B62J 27/00](#);} integral with waterborne vessels or specially adapted therefor [B63B 59/02](#))
- B60R 19/023 . . {Details}
- B60R 2019/026 . . {Buffers, i.e. bumpers of limited extent}
- B60R 19/03 . . characterised by material, e.g. composite ([B60R 19/18](#) takes precedence)
- B60R 19/04 . . formed from more than one section {in a side-by-side arrangement}
- B60R 19/12 . . . vertically spaced
- B60R 19/14 . . . having folding parts
- B60R 19/16 . . . having deflecting members, e.g. rollers, balls
- B60R 19/18 . . {characterised by the cross-section;} Means within the bumper to absorb impact
- B60R 2019/1806 . . . {Structural beams therefor, e.g. shock-absorbing (bumper beams made of cellular materials [B60R 19/22](#))}
- B60R 2019/1813 {made of metal}
- B60R 2019/182 {of light metal, e.g. extruded}
- B60R 2019/1826 {of high-tension steel}
- B60R 2019/1833 {made of plastic material}
- B60R 2019/184 {Blow moulded}
- B60R 2019/1846 {comprising a cellular structure}
- B60R 2019/1853 {of reinforced plastic material}
- B60R 2019/186 . . . {Additional energy absorbing means supported on bumper beams, e.g. cellular structures or material}
- B60R 2019/1866 {Cellular structures}
- B60R 2019/1873 {Cellular materials}
- B60R 2019/188 {Blow molded structures}
- B60R 2019/1886 . . . {Bumper fascias and fastening means therefor ([on fenders B60R 2019/247](#))}
- B60R 2019/1893 . . . {comprising a multiplicity of identical adjacent shock-absorbing means}
- B60R 19/20 . . . containing {mainly} gas or liquid, e.g. inflatable ([connection of valves to inflatable elastic bodies B60C 29/00](#))
- B60R 19/205 {inflatable in the direction of an obstacle upon impending impact, e.g. using air bags}
- B60R 19/22 . . . containing {mainly} cellular material, e.g. solid foam
- B60R 19/24 . . Arrangements for mounting bumpers on vehicles
- B60R 2019/242 . . . {on two vertical sleeves, e.g. on energy absorber ends}

- B60R 2019/245 . . . {with adjusting means to compensate manufacturing tolerances, e.g. between bumper and energy absorbers}
- B60R 2019/247 . . . {Fastening of bumpers' side ends}
- B60R 19/26 . . . comprising yieldable mounting means ({B60R 19/38 takes precedence;} springs, shock absorbers, or means for damping vibrations per se F16F)
- B60R 2019/262 {with means to adjust or regulate the amount of energy to be absorbed}
- B60R 2019/264 {using cellular structures}
- B60R 2019/266 {using friction surfaces}
- B60R 2019/268 {with rebound preventing means, e.g. ratchets}
- B60R 19/28 Metallic springs
- B60R 19/285 {comprising only leaf springs, e.g. the mounting means forming part of the guard itself}
- B60R 19/30 Elastomeric material {(B60R 19/34 takes precedence)}
- B60R 19/32 Fluid shock absorbers {, e.g. with coaxial coil springs}
- B60R 19/34 destroyed upon impact, e.g. one-shot type
- B60R 19/36 Combinations of yieldable mounting means of different types {(fluid shock absorbers with coaxial coil springs B60R 19/32)}
- B60R 19/38 . . . adjustably or movably mounted, e.g. horizontally displaceable for securing a space between parked vehicles {(adjustably mounted for compensating manufacturing tolerances B60R 19/24, B60R 19/26)}
- B60R 19/40 in the direction of an obstacle before a collision, {or extending during driving of the vehicle, i.e. to increase the energy absorption capacity of the bumper (inflatable bumpers B60R 19/20)}
- B60R 19/42 . . extending primarily along the sides of, or completely encircling, a vehicle (ornamental or guard strips B60R 13/04)
- B60R 19/44 . . Bumper guards
- B60R 19/445 . . . {Guard strips}
- B60R 19/46 . . . spring- or pivotally-mounted
- B60R 19/48 . . combined with, or convertible into, other devices or objects, e.g. bumpers combined with road brushes, bumpers convertible into beds
- B60R 19/483 . . . {with obstacle sensors of electric or electronic type}
- B60R 2019/486 . . . {with air passages, e.g. for cooling}
- B60R 19/50 . . . with lights or registration plates
- B60R 2019/505 {with lights}
- B60R 19/52 . Radiator or grille guards {; Radiator grilles (cooling aspects B60K 11/08)}
- B60R 2019/522 . . {Bull bars}
- B60R 2019/525 . . {Radiator grilles}
- B60R 2019/527 . . . {integral with bumpers}
- B60R 19/54 . Obstruction removers or deflectors (B60R 19/16, B60R 21/34 take precedence)
- B60R 19/545 . . {Devices for cutting wire-type obstructions}
- B60R 19/56 . {Fittings damping bouncing force in truck collisions, e.g. bumpers;} Arrangements on high-riding vehicles, e.g. lorries, for preventing vehicles or objects from running thereunder

B60R 19/565 . . {on vehicle sides}

B60R 21/00

Arrangements or fittings on vehicles for protecting or preventing injuries to occupants or pedestrians in case of accidents or other traffic risks
(safety belts or body harnesses in vehicles [B60R 22/00](#); devices, apparatus or methods for life-saving in general [A62B](#); safety devices for propulsion unit control specially adapted for, or arranged in, vehicles [B60K 28/00](#); seats constructed to protect the occupant from the effect of abnormal g-forces, e.g. crash or safety seats, [B60N 2/42](#); energy-absorbing arrangements for hand wheels for steering vehicles [B62D 1/11](#); energy-absorbing arrangements for vehicle steering columns [B62D 1/19](#); harnessing in aircraft [B64D 25/00](#))

- B60R 2021/0002 . {Type of accident}
- B60R 2021/0004 . . {Frontal collision}
- B60R 2021/0006 . . {Lateral collision}
- B60R 2021/0009 . . {Oblique collision}
- B60R 2021/0011 . . {Rear collision or recoiling bounce after frontal collision}
- B60R 2021/0013 . . {Free fall}
- B60R 2021/0016 . . {Fall in water}
- B60R 2021/0018 . . {Roll-over}
- B60R 2021/002 . . {Underrun collision}
- B60R 2021/0023 . . {Offset collision}
- B60R 2021/0025 . . {Pole collision}
- B60R 2021/0027 . {Post collision measures, e.g. notifying emergency services}
- B60R 2021/003 . {characterised by occupant or pedestrian}
- B60R 2021/0032 . . {Position of passenger}
- B60R 2021/0034 . . . {lying down}
- B60R 2021/0037 . . . {standing}
- B60R 2021/0039 . . {Body parts of the occupant or pedestrian affected by the accident}
- B60R 2021/0041 . . . {Arms}
- B60R 2021/0044 . . . {Chest}
- B60R 2021/0046 . . . {Feet}
- B60R 2021/0048 . . . {Head}
- B60R 2021/0051 . . . {Knees}
- B60R 2021/0053 . . . {Legs}
- B60R 2021/0055 . . . {Pelvis}
- B60R 2021/0058 . . . {Shoulders}
- B60R 2021/006 . . {Type of passenger}
- B60R 2021/0062 . . . {woman, e.g. pregnant}
- B60R 2021/0065 . {Type of vehicles}
- B60R 2021/0067 . . {Buses}
- B60R 2021/0069 . . {Trailers, e.g. caravans}
- B60R 2021/0072 . . {Convertible cars}
- B60R 2021/0074 . . {Utility vehicles}

B60R 2021/0076	. . . {Agricultural vehicles, e.g. tractors}
B60R 2021/0079	. . . {Fork-lift trucks}
B60R 2021/0081	. . . {Working vehicles}
B60R 2021/0083	. . . {Pick-up trucks; Light trucks; Sport utility vehicles}
B60R 2021/0086	. . {Racing cars}
B60R 2021/0088	. . {Cycles, e.g. motorcycles}
B60R 2021/009	. . {Railway vehicles}
B60R 2021/0093	. . {Aircraft}
B60R 2021/0095	. . {Boats}
B60R 2021/0097	. . {Amusement vehicles}
B60R 21/01	. Electrical circuits for triggering {passive} safety arrangements, {e.g. airbags, safety belt tighteners,} in case of vehicle accidents or impending vehicle accidents {(electrical circuits for transmission of signals between steering wheel and the vehicle itself B60R 16/027 ; for electrically actuating belt retractor locking means B60R 22/343)}
B60R 2021/01006	. . {Mounting of electrical components in vehicles}
B60R 2021/01013	. . {Means for detecting collision, impending collision or roll-over}
B60R 2021/0102	. . . {the monitored value being used for calculating occupant displacement}
B60R 2021/01027	. . . {Safing sensors}
B60R 2021/01034	. . {Controlling a plurality of restraint devices}
B60R 2021/0104	. . {Communication circuits for data transmission}
B60R 2021/01047	. . . {Architecture}
B60R 2021/01054	. . . . {Bus}
B60R 2021/01061	. . . . . {between the airbag system and other vehicle electronic systems}
B60R 2021/01068	. . . . . {between different sensors and airbag control unit}
B60R 2021/01075	. . . . . {between the airbag control unit and pyrotechnic fuses or equivalent actuators}
B60R 2021/01081	. . . {Transmission medium}
B60R 2021/01088	. . . . {wireless}
B60R 2021/01095	. . . . {optical}
B60R 2021/01102	. . . {Transmission method}
B60R 2021/01109	. . . . {power and data signal using transmission medium}
B60R 2021/01115	. . . . {specific data frames}
B60R 2021/01122	. . {Prevention of malfunction}
B60R 2021/01129	. . . {Problems or faults}
B60R 2021/01136	. . . . {Cut lines}
B60R 2021/01143	. . . . {Short circuits}
B60R 2021/0115	. . . . {Current leakage}
B60R 2021/01156	. . . . {Current or voltage overload}
B60R 2021/01163	. . . . {Insufficient current or voltage}
B60R 2021/0117	. . . . {Noise}

B60R 2021/01177	. . . .	{Misdeployment, e.g. during assembly, disassembly, accident salvage or recycling}
B60R 2021/01184	. . .	{Fault detection or diagnostic circuits (in power circuits B60R 2021/01129)}
B60R 2021/0119	. . . .	{Plausibility check}
B60R 2021/01197	. . . .	{Warning devices}
B60R 2021/01204	. .	{Actuation parameters of safety arrangements}
B60R 2021/01211	. . .	{Expansion of air bags}
B60R 2021/01218	. . . .	{control of expansion speed}
B60R 2021/01225	. . . .	{control of expansion volume}
B60R 2021/01231	. . . .	{control of expansion timing or sequence}
B60R 2021/01238	. . . .	{control of expansion shape}
B60R 2021/01245	. . . .	{selection of seat for bag expansion}
B60R 2021/01252	. . .	{Devices other than bags}
B60R 2021/01259	. . . .	{Brakes}
B60R 2021/01265	. . . .	{Seat belts}
B60R 2021/01272	. . . . .	{Belt tensioners}
B60R 2021/01279	. . . . .	{Load limiters}
B60R 2021/01286	. .	{Electronic control units}
B60R 2021/01293	. . .	{programmable for use in different vehicles or with different airbags configurations}
B60R 21/013	. .	including means for detecting collisions, impending collision or roll-over
B60R 2021/01302	. . .	{monitoring vehicle body vibrations or noise}
B60R 2021/01304	. . .	{monitoring rough road condition}
B60R 2021/01306	. . .	{monitoring vehicle inclination}
B60R 2021/01308	. . .	{monitoring distance between vehicle body and road}
B60R 2021/01311	. . .	{monitoring the braking system, e.g. ABS}
B60R 2021/01313	. . .	{monitoring the vehicle steering system or the dynamic control system}
B60R 2021/01315	. . .	{monitoring occupant displacement}
B60R 2021/01317	. . .	{monitoring seat belt tension}
B60R 21/0132	. . .	responsive to vehicle motion parameters {,e.g. to vehicle longitudinal or transversal deceleration or speed value}
B60R 2021/01322	. . . .	{comprising variable thresholds, e.g. depending from other collision parameters}
B60R 2021/01325	. . . .	{Vertical acceleration}
B60R 2021/01327	. . . .	{Angular velocity or angular acceleration}

B60R 21/0133 {by integrating the amplitude of the input signal}

WARNING

Group(s) [B60R 21/0133](#) - [B60R 21/01338](#) are incomplete pending reclassification of documents from group [B60R 21/0132](#).

Until reclassification is complete, groups [B60R 21/0132](#) and [B60R 21/0133](#) - [B60R 21/01338](#) should be considered in order to perform a complete search.

B60R 21/01332 {by frequency or waveform analysis}

B60R 21/01334 {using Fourier analysis}

B60R 21/01336 {using filtering}

B60R 21/01338 {using vector analysis}

B60R 21/0134 . . . responsive to imminent contact with an obstacle {,e.g. using radar systems}

B60R 2021/01345 {using mechanical sensing means}

B60R 21/0136 . . . responsive to actual contact with an obstacle {, e.g. to vehicle deformation, bumper displacement or bumper velocity relative to the vehicle (monitoring crash strength in combination with passenger seat detection [B60R 21/01558](#))}

B60R 21/015 . . including means for detecting the presence or position of passengers, passenger seats or child seats {, and the related safety parameters therefor, e.g. speed or timing of airbag inflation in relation to occupant position or seat belt use}

WARNING

Group(s) [B60R 21/01504](#) - [B60R 21/01566](#) is/are incomplete pending reclassification of documents from group(s) [B60R 21/015](#).

Until reclassification is complete, group [B60R 21/015](#) should be considered in order to perform a complete search.

B60R 21/01504 . . . {detecting bag displacement}

B60R 21/01508 . . . {detecting forces or pressure in bags or modules}

B60R 21/01512 . . . {Passenger detection systems}

B60R 21/01516 {using force or pressure sensing means}

B60R 21/0152 {using strain gauges}

B60R 21/01522 {using fluid means}

B60R 21/01524 {using electric switches}

B60R 21/01526 {using piezoelectric elements}

B60R 21/01528 {mounted on the bag}

B60R 21/0153 {using field detection presence sensors}

B60R 21/01532 {using electric or capacitive field sensors}

B60R 21/01534 {using electromagnetic waves, e.g. infrared}

B60R 21/01536 {using ultrasonic waves}

B60R 21/01538 {for image processing, e.g. cameras or sensor arrays}

B60R 21/0154 {in combination with seat heating}

B60R 21/01542	. . . . {detecting passenger motion}
B60R 21/01544	. . . . {detecting seat belt parameters, e.g. length, tension or height-adjustment}
B60R 21/01546	. . . . . {using belt buckle sensors}
B60R 21/01548	. . . . . {sensing the amount of belt winded on retractor}
B60R 21/0155	. . . . . {sensing belt tension}
B60R 21/01552	. . . . {detecting position of specific human body parts, e.g. face, eyes or hands}
B60R 21/01554	. . . {Seat position sensors}
B60R 21/01556	. . . {Child-seat detection systems}
B60R 21/01558	. . . {monitoring crash strength}
B60R 21/0156	. . . . {by deceleration}
B60R 21/01562	. . . . {by speed}
B60R 21/01564	. . . {Manually or key-actuated inhibition switches}
B60R 21/01566	. . . {Devices for warning or indicating mode of inhibition}
B60R 21/017	. . including arrangements for providing electric power to safety arrangements {or their actuating means, e.g. to pyrotechnic fuses or electro-mechanic valves}
B60R 21/0173	. . . {Diagnostic or recording means therefor}
B60R 21/0176	. . . . {for firing circuits using only mechanical switches as collision detecting means, in series with pyrotechnic fuses}
B60R 21/02	. Occupant safety arrangements or fittings, {e.g. crash pads (seat belts with crash pads B60R 22/14 ; removable children's seats having a front guard or barrier B60N 2/2839)}
B60R 2021/0206	. . {Self-supporting restraint systems, e.g. restraining arms, plates or the like}
B60R 2021/0213	. . . {mounted on floor}
B60R 2021/022	. . . {mounted on seats}
B60R 2021/0226	. . . {mounted on fire wall}
B60R 2021/0233	. . . {mounted on steering-wheel}
B60R 2021/024	. . . {mounted on dash-board}
B60R 2021/0246	. . . {mounted on side walls}
B60R 2021/0253	. . . {mounted on roof}
B60R 21/026	. . {Rigid partitions inside vehicles, e.g. between passengers and load compartments (B60R 21/12 takes precedence)}
B60R 2021/0266	. . . {comprising energy absorbing means}
B60R 2021/0273	. . {automatically movable to an operative position, e.g. in case of collision or impending collision}
B60R 2021/028	. . {Means preventing passenger from falling out of vehicles}
B60R 21/0286	. . {Padded or energy absorbing driving control initiating means, e.g. gear lever, pedals (B60R 21/09 takes precedence; padded linings for steering control means B60R 21/05)}
B60R 2021/0293	. . {Additional pads or cushions in vehicle compartments, e.g. movably mounted}

- B60R 21/04 . . Padded linings for the vehicle interior; {Energy absorbing structures associated with padded or non-padded linings}
- B60R 2021/0407 . . . {using gas or liquid as energy absorbing means}
- B60R 2021/0414 . . . {using energy absorbing ribs}
- B60R 2021/0421 . . . {using honeycomb structures}
- B60R 21/0428 . . . {associated with the side doors or panels, e.g. displaced towards the occupants in case of a side collision}
- B60R 2021/0435 . . . {associated with the side or roof pillars}
- B60R 2021/0442 . . . {associated with the roof panel}
- B60R 21/045 . . . associated with the instrument panel or dashboard
- B60R 21/05 . . . associated with the steering wheel, {steering} hand lever or {steering} column (yieldable steering columns [B62D 1/18](#))
- B60R 21/055 . . Padded {or energy-absorbing} fittings, {e.g. seat belt anchors (sun visors [B60J 3/00](#); head rests [B60N 2/48](#))}
- B60R 21/06 . . Safety nets, transparent sheets, curtains, or the like, e.g. between occupants and glass ({[B60R 21/026](#)}, [B60R 21/11](#), [B60R 21/12](#), [B60R 21/16](#) take precedence)
- B60R 2021/065 . . . {comprising energy absorbing mounting means}
- B60R 21/08 . . . {automatically} movable from an inoperative to an operative position, e.g. in a collision (electrical circuits for triggering safety arrangements [B60R 21/01](#))
- B60R 21/09 . . Control elements or operating handles movable from an operative to an out-of-the way position, e.g. {pedals,} switch knobs, window cranks ({(specially adapted for brake pedals, e.g. by venting of master cylinder or destruction of force transmitting rod, [B60T 7/065](#))}
- B60R 21/11 . . Overhead guards, e.g. against loads falling down ({(specially adapted for fork-lift trucks [B66F 9/07545](#))}
- B60R 21/12 . . which protect the occupants against personal attack from the inside or the outside of the vehicle
- B60R 21/13 . . Roll-over protection (electrical circuits for triggering safety arrangements [B60R 21/01](#))
- B60R 21/131 . . . {Protective devices for drivers in case of overturning of tractors (means for preventing overturning or tipping of tractors [B62D 49/08](#))}
- B60R 2021/132 . . . {Roll bars for convertible vehicles}
- B60R 2021/134 {movable from a retracted to a protection position}
- B60R 2021/135 {automatically during an accident}
- B60R 2021/137 . . . {Reinforcement cages for closed vehicle bodies}
- B60R 2021/138 . . . {using external airbags}
- B60R 21/16 . . Inflatable occupant restraints or confinements designed to inflate upon impact or impending impact, e.g. air bags ({protective garments with automatically inflatable shock-absorbing means [A41D 13/018](#); } connection of valves to inflatable elastic bodies [B60C 29/00](#))
- B60R 2021/161 . . . {characterised by additional means for controlling deployment trajectory}
- B60R 2021/162 . . . {Means for diverting, destroying or blocking the bag in case of dangerous deployment, e.g. during rescue operations or use of rear-facing children seats}

B60R 21/164	. . .	{combined with vehicle venting means for reducing or avoiding the passenger compartment overpressure during inflation}
B60R 2021/165	. . .	{reusable, e.g. in case of multiple collisions}
B60R 2021/167	. . .	{comprising anti-theft devices}
B60R 2021/168	. . .	{for restraining luggages}
B60R 21/18	. . .	the inflatable member formed as a belt or harness or combined with a belt or harness arrangement
B60R 21/20	. . .	Arrangements for storing inflatable members in their non-use or deflated condition; Arrangement or mounting of air bag modules or components
B60R 21/201	. . . .	Packaging straps or envelopes for inflatable members
B60R 21/203	. . . .	in steering wheels or steering columns
B60R 21/2032	. . . . .	{the inflator or inflatable member not being rotatable with the steering wheel; Arrangements using the steering column or steering wheel rim for storing, supplying or evacuating the inflation gas or for storing the inflatable member}
B60R 21/2035	. . . . .	{using modules containing inflator, bag and cover attachable to the steering wheel as a complete sub-unit (steering wheel covers with tear lines B60R 21/21656 ; assembling of modules B60R 21/217)}
B60R 21/2037	. . . . .	{the module or a major component thereof being yieldably mounted, e.g. for actuating the horn switch or for protecting the driver in a non-deployment situation (horn switches integrated in steering wheel covers with tear lines B60R 21/21658)}
B60R 21/205	. . . .	in dashboards
B60R 21/206	. . . . .	in the lower part of dashboards, e.g. for protecting the knees
B60R 21/207	. . . .	in vehicle seats
B60R 21/2072	. . . . .	{in children's seats}
B60R 2021/2074	. . . . .	{in head rests}
B60R 2021/2076	. . . . .	{Removable covers with tear seams}
B60R 2021/2078	. . . . .	{in rear seats}
B60R 21/21	. . . .	in vehicle side panels, e.g. doors (pillar mounted arrangements B60R 21/213)
B60R 21/213	. . . .	in vehicle roof frames or pillars
B60R 21/214	. . . .	in roof panels
B60R 21/215	. . . .	characterised by the covers for the inflatable member ({ B60R 21/2176 takes precedence})
B60R 2021/21506	. . . . .	{comprising tearing tabs, legs or the like for holding the lid before deployment}
B60R 2021/21512	. . . . .	{the lid being displaced towards the occupant during deployment (B60R 2021/2161 , B60R 2021/21525 take precedence)}
B60R 2021/21518	. . . . .	{comprising a lock unlocked during deployment}
B60R 2021/21525	. . . . .	{the lid being fixed on the bag, or forming part of the bag wall, or the bag itself being used as wall liner}
B60R 2021/21531	. . . . .	{using a stretchable wall liner}
B60R 2021/21537	. . . . .	{characterised by hinges}
B60R 2021/21543	. . . . .	{with emblems}

B60R 21/2155	. . . . .	with complex motion of the cover; Retraction under the lining during opening
B60R 21/216	. . . . .	comprising tether means for limitation of cover motion during deployment
B60R 2021/2161	. . . . .	{the cover being displaced towards the occupant during deployment}
B60R 2021/2163	. . . . .	{with energy absorbing or elastic means}
B60R 21/2165	. . . . .	characterised by a tear line for defining a deployment opening
B60R 2021/21652	. . . . .	{the tearing being done or assisted by cutters}
B60R 2021/21654	. . . . .	{the tearing being done or assisted by heating or pyrotechnic means}
B60R 21/21656	. . . . .	{Steering wheel covers or similar cup-shaped covers}
B60R 21/21658	. . . . .	{with integrated switches, e.g. horn switches}
B60R 21/217	. . . . .	Inflation fluid source retainers, e.g. reaction canisters; Connection of bags, covers, diffusers or inflation fluid sources therewith or together
B60R 21/2171	. . . . .	{specially adapted for elongated cylindrical or bottle-like inflators with a symmetry axis perpendicular to the main direction of bag deployment, e.g. extruded reaction canisters (B60R 21/2176 takes precedence)}
B60R 2021/2172	. . . . .	{the cover being connected to the surrounding part and to the module, e.g. floating mounts}
B60R 2021/2173	. . . . .	{the module or part thereof being movably mounted on the vehicle}
B60R 2021/2175	. . . . .	{using energy absorbing means}
B60R 21/2176	. . . . .	{the air bag components being completely enclosed in a soft or semi-rigid housing or cover}
B60R 2021/2177	. . . . .	{Reaction canisters characterised by material}
B60R 2021/2178	. . . . .	{Plastic}
B60R 21/23	. . . . .	Inflatable members (B60R 21/18 takes precedence; connection to inflation fluid source retainers B60R 21/217)
B60R 21/231	. . . . .	characterised by their shape, construction or spatial configuration

WARNING

Groups [B60R 21/2334](#) - [B60R 21/2346](#) are not complete, pending a reorganisation; see provisionally also group [B60R 21/233](#)

B60R 2021/23107	. . . . .	{the bag being integrated in a multi-bag system}
B60R 2021/23115	. . . . .	{with inflatable support compartments creating an internal suction volume}
B60R 2021/23123	. . . . .	{Heat protection panels}
B60R 2021/2313	. . . . .	{comprising sensitive compartments}
B60R 21/23138	. . . . .	{specially adapted for side protection (B60R 21/23184 , B60R 21/232 take precedence)}
B60R 2021/23146	. . . . .	{seat mounted}
B60R 2021/23153	. . . . .	{specially adapted for rear seat passengers}

B60R 2021/23161	. . . . .	{specially adapted for protecting at least two passengers, e.g. preventing them from hitting each other}
B60R 2021/23169	. . . . .	{specially adapted for knee protection}
B60R 2021/23176	. . . . .	{specially adapted for foot protection}
B60R 21/23184	. . . . .	{Tubular air bags connected to the vehicle at their two extremities}
B60R 2021/23192	. . . . .	{Roof bags, i.e. protecting the occupant in a roll-over situation}
B60R 21/232	. . . . .	Curtain-type airbags deploying mainly in a vertical direction from their top edge
B60R 21/233	. . . . .	comprising a plurality of individual compartments; comprising two or more bag-like members, one within the other (B60R 21/232 takes precedence)
B60R 2021/23308	. . . . .	{the individual compartments defining the external shape of the bag}
B60R 2021/23316	. . . . .	{Inner seams, e.g. creating separate compartments or used as tethering means}
B60R 2021/23324	. . . . .	{Inner walls crating separate compartments, e.g. communicating with vents}
B60R 2021/23332	. . . . .	{using independent bags, one within the other}
B60R 21/2334	. . . . .	Expansion regulating features
B60R 21/2338	. . . . .	Tethers
B60R 2021/23382	. . . . .	{Internal tether means}
B60R 2021/23384	. . . . .	{having ends which are movable or detachable during deployment}
B60R 2021/23386	. . . . .	{External tether means}
B60R 2021/23388	. . . . .	{having ends which are movable or detachable during deployment}
B60R 21/2342	. . . . .	Tear seams
B60R 21/2346	. . . . .	Soft diffusers
B60R 21/235	. . . . .	characterised by their material
B60R 2021/23504	. . . . .	{characterised by material}
B60R 2021/23509	. . . . .	{Fabric}
B60R 2021/23514	. . . . .	{coated fabric}
B60R 2021/23519	. . . . .	{Resin (for coating fabric B60R 2021/23514)}
B60R 2021/23523	. . . . .	{Composite (coated fabric B60R 2021/23514)}
B60R 2021/23528	. . . . .	{Metal}
B60R 2021/23533	. . . . .	{characterised by the manufacturing process}
B60R 2021/23538	. . . . .	{Sewing}
B60R 2021/23542	. . . . .	{Weaving}
B60R 2021/23547	. . . . .	{one piece weaving}
B60R 2021/23552	. . . . .	{Knitting}
B60R 2021/23557	. . . . .	{Molding}
B60R 2021/23561	. . . . .	{Sealing}

B60R 2021/23566	. . . . .	{Nesting of panels, i.e. for material utilisation}
B60R 2021/23571	. . . . .	{characterised by connections between panels}
B60R 2021/23576	. . . . .	{Sewing}
B60R 2021/2358	. . . . .	{Bonding}
B60R 2021/23585	. . . . .	{Vulcanisation}
B60R 2021/2359	. . . . .	{Welding}
B60R 2021/23595	. . . . .	{Sealing}
B60R 21/237	. . . . .	characterised by the way they are folded
B60R 2021/2375	. . . . .	{Folding devices}
B60R 21/239	. . . . .	characterised by their venting means
B60R 2021/2395	. . . . .	{comprising means to control the venting}
B60R 21/26	. . . . .	characterised by the inflation fluid source or means to control inflation fluid flow {(arrangement or mounting thereof to the vehicle B60R 21/20 ; blasting cartridges for producing gas under pressure in general F42B 3/04 ; Initiators or igniters therefor F42B 3/10)}

WARNING

Groups [B60R 21/261](#) - [B60R 21/264](#) are not complete, pending a reorganisation; see provisionally also this group

B60R 21/26005	. . . . .	{the inflation fluid being transferred to the inflatable member by the mechanical deformation of the fluid container during an impact}
B60R 2021/26011	. . . . .	{using a filter through which the inflation gas passes}
B60R 2021/26017	. . . . .	{a cooling agent being added to the inflation fluid}
B60R 2021/26023	. . . . .	{for filling the bag with foam}
B60R 2021/26029	. . . . .	{Igniters}
B60R 2021/26035	. . . . .	{triggered by mechanical means}
B60R 2021/26041	. . . . .	{of elongated shape}
B60R 2021/26047	. . . . .	{of film shape}
B60R 2021/26052	. . . . .	{using fluid materials}
B60R 2021/26058	. . . . .	{using a combination of inflators}
B60R 2021/26064	. . . . .	{characterised by auto-ignition means}
B60R 2021/2607	. . . . .	{characterised by heating or heat insulating means, e.g. for use under extreme temperatures}
B60R 2021/26076	. . . . .	{characterised by casing}
B60R 2021/26082	. . . . .	{Material}
B60R 2021/26088	. . . . .	{Plastic}
B60R 2021/26094	. . . . .	{characterised by fluid flow controlling valves}
B60R 21/261	. . . . .	with means other than bag structure to diffuse or guide inflation fluid
B60R 2021/2612	. . . . .	{Gas guiding means, e.g. ducts}
B60R 2021/2615	. . . . .	{for diverting the gas into a plurality of bags}
B60R 2021/2617	. . . . .	{Curtain bag nozzles}
B60R 21/262	. . . . .	Elongated tubular diffusers, e.g. curtain-type

- B60R 21/263 using a variable source, e.g. plural stage or controlled output ([hybrid inflators B60R 21/272](#))
- B60R 2021/2633 {with a plurality of inflation levels}
- B60R 2021/2636 {The volume of gas being continuously adjustable}
- B60R 21/264 using instantaneous generation of gas, e.g. pyrotechnic ([B60R 21/268 takes precedence](#))
- B60R 2021/2642 {comprising a plurality of combustion chambers or sub-chambers}
- B60R 21/2644 {using only solid reacting substances, e.g. pellets, powder}
- B60R 21/2646 {the reacting substances being supported by the inflatable member walls, or by a flexible support within it}
- B60R 2021/2648 {comprising a plurality of combustion chambers or sub-chambers}
- B60R 21/268 using instantaneous release of stored pressurized gas
{([B60R 21/26005 takes precedence](#))}
- B60R 2021/2685 {comprising a plurality of pressure chambers}
- B60R 21/272 with means for increasing the pressure of the gas just before or during liberation, e.g. hybrid inflators
- B60R 2021/2725 {using a fluid fuel gas generator}
- B60R 21/274 characterised by means to rupture or open the fluid source

WARNING

This group is not complete, pending a reorganisation; see provisionally also group [B60R 21/268](#)

- B60R 21/276 with means to vent the inflation fluid source, e.g. in case of overpressure {([B60R 21/30 takes precedence](#); venting means on inflatable member walls [B60R 21/239](#))}
- B60R 2021/2765 {comprising means to control the venting}
- B60R 21/30 with means to draw ambient air into the flow line and mix such air with the inflation fluid
- B60R 21/33 Arrangements for non-electric triggering of inflation ([electrical circuits for triggering safety arrangements B60R 21/01](#))
- B60R 2021/335 {Connections between collision detecting means and inflators using pyrotechnic transmission lines}
- B60R 21/34 Protecting non-occupants of a vehicle, e.g. pedestrians {([B60R 19/02 takes precedence](#))}
- B60R 2021/343 . . . {using deformable body panel, bodywork or components}
- B60R 2021/346 . . . {means outside vehicle body}
- B60R 21/36 . . . using airbags
- B60R 21/38 . . . using means for lifting bonnets
- B60R 22/00** **Safety belts or body harnesses in vehicles** ([safety belts or body harnesses in general A62B 35/00](#))
- B60R 22/001 . . . {Knee, leg or head belts}
- B60R 2022/003 . . . {for restraining detainees}
- B60R 2022/005 . . . {for restraining luggages}

- B60R 22/006 . {Sleeve or tubular members enveloping the seat belt for enhancing comfort or protection}
- B60R 22/008 . {Belts; Fixing thereof specially adapted for pregnant users}
- B60R 22/02 . Semi-passive restraint systems, e.g. systems applied or removed automatically but not both; {Manual restraint systems (knee, leg or head belts [B60R 22/001](#); devices for releasing in an emergency, remote or automatic unbuckling devices [B60R 22/32](#))}
- B60R 22/021 . . {Means for holding the tongue or buckle in a non-use position, e.g. for easy access by the user}
- B60R 22/022 . . {with means for facilitating access to rear seats in two-door cars}
- B60R 22/023 . . {Three-point seat belt systems comprising two side lower and one side upper anchoring devices ([B60R 22/022](#), [B60R 22/03](#) take precedence)}
- B60R 22/024 . . . {Adaptations for use by small passengers, e.g. children ([B60R 22/20](#) takes precedence; using belt anti-slip devices [B60R 22/30](#))}
- B60R 22/025 . . . {Adaptations for use with children seats or luggages}
- B60R 22/026 . . . {at least two ends of the belt being retractable after use}
- B60R 22/027 . . {Four-point seat belt systems, e.g. with the two upper points connected together}
- B60R 22/028 . . {specially adapted for use in sleeping position, e.g. for reclining seats}
- B60R 22/029 . . {Belt storage; Devices or systems for controlling winding up of unused seat belt}
- B60R 22/03 . . Means for presenting the belt or part thereof to the wearer, {e.g. foot-operated}
- B60R 22/04 . Passive restraint systems, i.e. systems both applied and removed automatically, e.g. by movement of the vehicle door
- B60R 22/06 . . having the belt or harness connected to a member slidable in a vehicle-mounted track
- B60R 22/08 . . having the belt retractor mounted on or in a vehicle closure, e.g. the door
- B60R 22/10 . specially adapted for children or animals ([children's seats B60N 2/24](#))

NOTE

Groups [B60R 22/02](#){[B60R 22/022](#)} to [B60R 22/08](#), [B60R 22/18](#) to [B60R 22/48](#) take precedence over group [B60R 22/10](#)

- B60R 22/105 . . {for children (adaptation of children's seats for seat belts [B60N 2/265](#), [B60N 2/2803](#))}
- B60R 22/12 . Construction of belts or harnesses ([B60R 21/18](#) takes precedence; {woven fabrics for safety belts [D03D 1/0005](#)})
- B60R 22/14 . . incorporating enlarged restraint areas, e.g. vests, nets {, crash pads, optionally for children (crash pads for occupants' safety on vehicles in general [B60R 21/02](#))}
- B60R 22/16 . . using belts which become permanently deformed, i.e. one time use
- B60R 22/18 . Anchoring devices
- B60R 22/1806 . . {for buckles}
- B60R 22/1812 . . {Connections between seat belt and buckle tongue}
- B60R 22/1818 . . {Belt guides}

- B60R 2022/1825 . . . {using rollers}
- B60R 2022/1831 . . . {comprising a slotted plate sliding in its plane, e.g. inside circular guides}
- B60R 2022/1837 . . . {comprising a universal mounting. e.g. spherical or cardan-type}
- B60R 2022/1843 . . . {comprising an elongated sleeve}
- B60R 22/185 . . with stopping means for acting directly upon the belt in an emergency, e.g. by clamping or friction {(B60R 22/195 takes precedence; combined with the retractor B60R 22/42)}
- B60R 22/1855 . . . {the means being sensitive to belt tension}
- B60R 22/19 . . with means for reducing belt tension during use under normal conditions {(included in the retractor B60R 22/44)}
- B60R 22/195 . . with means to tension the belt in an emergency, {e.g. means of the through-anchor or splitted reel type} (electrical circuits for triggering safety arrangements {B60R 21/01})

NOTE

If the type of belt tensioner is not specified and can be used indifferently for pulling belt anchors or rotating belt reels, the documents are classified in [B60R 22/46](#)

- B60R 22/1951 . . . {characterised by arrangements in vehicle or relative to seat belt}
- B60R 22/1952 . . . {Transmission of tensioning power by cable; Return motion locking means therefor}
- B60R 22/1953 {the cable being pulled by mechanical means, e.g. pre-stressed springs, bumper displacement during crash}
- B60R 22/1954 {characterised by fluid actuators, e.g. pyrotechnic gas generators (actuating a cable [B60R 22/1952](#))}
- B60R 22/1955 {Linear actuators}
- B60R 22/1956 {Mechanical triggering means therefor (also adapted for air bag inflators [B60R 21/33](#))}
- B60R 2022/1957 . . . {characterised by electric actuators}
- B60R 22/1958 . . . {characterised by spring actuators ([B60R 22/1953](#) takes precedence)}
- B60R 22/20 . . adjustable in position, e.g. in height
- B60R 22/201 . . . {with the belt anchor connected to a slider movable in a vehicle-mounted track (for passive restraint systems [B60R 22/06](#))}
- B60R 22/202 {the slider comprising spring-actuated locking means ([B60R 22/205](#) takes precedence)}
- B60R 22/203 {the locking means being movably mounted on the slider}
- B60R 22/205 {the slider comprising emergency actuated locking means}
- B60R 22/206 . . . {Adjustable stop members for restraint systems comprising belt anchor vehicle mounted tracks, e.g. for passive seat belts}
- B60R 2022/207 . . . {Horizontally or transversally adjustable}
- B60R 2022/208 . . . {by automatic or remote control means}
- B60R 22/22 . . secured to the vehicle floor
- B60R 22/24 . . secured to the side, door, or roof of the vehicle
- B60R 22/26 . . secured to the seat

- B60R 2022/263 . . . {Front seats}
- B60R 2022/266 . . . {Rear seats, e.g. benches}
- B60R 22/28 . incorporating energy-absorbing devices {(belt anchors provided with energy-absorbing means for protecting the occupants in case of physical contact therewith [B60R 21/055](#); belt retractors comprising energy-absorbing means [B60R 22/341](#), [B60R 22/4676](#))}
- B60R 2022/281 . . {for buckles}
- B60R 2022/282 . . {using fluids or vico-elastic materials}
- B60R 2022/283 . . {using tearing or scoring of material}
- B60R 2022/284 . . {using electric or magnetic braking means}
- B60R 2022/285 . . {using friction surfaces}
- B60R 2022/286 . . {using deformation of material}
- B60R 2022/287 . . . {of torsion rods or tubes}
- B60R 2022/288 . . {with means to adjust or regulate the amount of energy to be absorbed}
- B60R 2022/289 . . {Energy-absorption curves}
- B60R 22/30 . Coupling devices other than buckles, including length-adjusting fittings {or anti-slip devices (adaptations of manual three-point seat belt systems for use by small passengers using other means than belt anti-slip devices [B60R 22/024](#); buckles [A44B 11/00](#); releasable fastenings in general [F16B](#))}
- B60R 22/32 . Devices for releasing in an emergency, e.g. after an accident; {Remote or automatic unbuckling devices (unlocking devices for retractors [B60R 22/3416](#))}
- B60R 22/321 . . {using electric means}
- B60R 22/322 . . {using automatic actuating means ([B60R 22/321](#) takes precedence)}
- B60R 22/324 . . . {triggered by strong traction on the seat belt, e.g. with temporisation}
- B60R 22/325 . . {using remote control means ([B60R 22/321](#), [B60R 22/322](#) take precedence)}
- B60R 2022/327 . . {using pyrotechnic means}
- B60R 2022/328 . . {comprising means for cutting the belt}
- B60R 22/34 . Belt retractors, e.g. reels (anchoring devices {e.g. guide loops} , with means to tension the belt in an emergency [B60R 22/195](#))
- B60R 2022/3402 . . {Retractor casings; Mounting thereof}
- B60R 22/3405 . . {of the non-rotary type}
- B60R 22/3408 . . {without locking means ([B60R 22/3405](#) takes precedence)}
- B60R 22/341 . . {comprising energy-absorbing means}
- B60R 22/3413 . . . {operating between belt reel and retractor frame ([B60R 22/4676](#) takes precedence)}
- B60R 22/3416 . . {Unlocking devices for retractors ([B60R 22/3405](#) takes precedence)}
- B60R 2022/3419 . . {with end lock preventing means}
- B60R 2022/3421 . . {with means for locking the belt reel in a non-use position, e.g. for seat mounted retractor when the seat is in a non-locked condition}
- B60R 2022/3424 . . {Multi-spool or multi-belt retractors}
- B60R 2022/3427 . . {Seat belt connection on reels}
- B60R 22/343 . . with electrically actuated locking means {([B60R 22/3405](#) takes precedence)}

- B60R 22/347 . . . with means for permanently locking the retractor during the wearing of the belt ([B60R 22/3405](#) , [B60R 22/343](#), [B60R 22/415](#) take precedence)
- B60R 22/3475 . . . {having means for acting directly upon the belt, e.g. by clamping or friction}
- B60R 22/35 . . . the locking means being automatically actuated
- B60R 22/353 in response to belt movement when a wearer applies the belt
- B60R 22/3535 {comprising anti-cinch devices}
- B60R 22/357 in response to fastening of the belt buckle
- B60R 22/36 . . self-locking in an emergency ([B60R 22/3405](#) , [B60R 22/343](#) take precedence)
- B60R 22/38 . . . responsive only to belt movement
- B60R 22/385 {with adjustable sensitivity}
- B60R 22/40 . . . responsive only to vehicle movement
- B60R 22/401 {with adjustable sensor}
- B60R 22/402 {automatically adjustable to keep a vertical position, e.g. irrespective of seat or vehicle tilting}
- B60R 22/403 {using externally controlled means, e.g. linked with seat back hinge}
- B60R 22/404 {with remote sensor, e.g. for mounting on seat}
- B60R 22/405 . . . responsive to belt movement and vehicle movement
- B60R 22/41 . . . with additional means for preventing locking {during unwinding} under predetermined conditions
- B60R 22/415 . . . with additional means allowing a permanent locking of the retractor during the wearing of the belt
- B60R 22/42 . . . having means for acting directly upon the belt, e.g. by clamping or friction {[\(not combined with the retractor B60R 22/185\)](#)}
- B60R 22/44 . . with means for reducing belt tension during use under normal conditions {[\(not included in the retractor B60R 22/19; B60R 22/3405 takes precedence\)](#)}
- B60R 22/4406 . . . {Spring shapes; Spring characteristic; Springs with adjustable anchoring means}
- B60R 22/4413 . . . {by connecting the retracting spring to the belt reel by means of a transmission which decreases the spring force when the belt is pulled out, e.g. using conical pulleys}
- B60R 22/442 . . . {using one spring and one additional retraction device in parallel}
- B60R 22/4426 {the additional retraction device being a second spring}
- B60R 22/4433 {externally controlled}
- B60R 22/444 {the additional retraction device being an electric actuator}
- B60R 22/4446 . . . {using one spring and one additional retraction device in series}
- B60R 22/4453 {the additional retraction device being a second spring}
- B60R 22/446 {with external control means}
- B60R 22/4466 {the additional retraction device being an electric actuator}
- B60R 22/4473 . . . {using an electric retraction device [\(combined with a spring B60R 22/444, B60R 22/4466\)](#)}

B60R 2022/448	. . . {using a fluid actuated retraction device}
B60R 2022/4486	. . . {for cancelling the belt tension}
B60R 2022/4493	. . . {for braking the belt reel using friction surfaces or the like}
B60R 22/46	. . {Reels} with means to tension the belt in an emergency {by forced winding up} (electrical circuits for triggering safety arrangements B60R 21/01 {tensioners using reels only guiding the belt during normal use, e.g. splitted reels B60R 22/195 })
B60R 22/4604	. . . {characterised by arrangements in vehicle or relative to seat belt}
B60R 2022/4609	. . . . {using a plurality of tensioners}
B60R 2022/4614	. . . . {one pretensioner acting on a plurality of belts}
B60R 22/4619	. . . {Transmission of tensioning power by cable, e.g. using a clutch on reel side}
B60R 22/4623	. . . . {the cable being pulled by mechanical means, e.g. pre-stressed springs, bumper displacement during crash}
B60R 22/4628	. . . {characterised by fluid actuators, e.g. pyrotechnic gas generators (actuating a cable B60R 22/4619)}
B60R 22/4633	. . . . {Linear actuators, e.g. comprising a piston moving along reel axis and rotating along its own axis}
B60R 2022/4638	. . . . . {comprising a piston moving along or in parallel to the reel axis}
B60R 2022/4642	. . . . {the gas directly propelling a flexible driving means, e.g. a plurality of successive masses, in a tubular chamber}
B60R 2022/4647	. . . . . {the driving means being a belt, a chain or the like}
B60R 22/4652	. . . . {Mechanical triggering means therefor (also adapted for air bag inflators B60R 21/33)}
B60R 2022/4657	. . . . {comprising a plurality of charges}
B60R 2022/4661	. . . . {comprising venting means, e.g. for avoiding overpressure in case of fire or for allowing return motion with energy absorption}
B60R 2022/4666	. . . {characterised by electric actuators}
B60R 22/4671	. . . {characterised by spring actuators (B60R 22/4623 takes precedence)}
B60R 22/4676	. . . {comprising energy-absorbing means operating between belt reel and retractor frame}
B60R 2022/468	. . . {characterised by clutching means between actuator and belt reel}
B60R 2022/4685	. . . {with means to adjust or regulate the tensioning force in relation to external parameters}
B60R 2022/469	. . . {reusable}
B60R 2022/4695	. . . {without winding function during normal use}
B60R 22/48	. Control systems, alarms, or interlock systems, for the correct application of the belt or harness
B60R 2022/4808	. . {Sensing means arrangements therefor}
B60R 2022/4816	. . . {for sensing locking of buckle}
B60R 2022/4825	. . . {for sensing amount of belt wound on retractor}
B60R 2022/4833	. . . {for sensing locking of retractor}
B60R 2022/4841	. . . {for sensing belt tension}
B60R 2022/485	. . . {for sensing belt anchor position, belt orientation, or the like}

- B60R 2022/4858 . . . {for sensing pressure on seat}
- B60R 2022/4866 . . {Displaying or indicating arrangements thereof}
- B60R 2022/4875 . . . {on vehicle exterior}
- B60R 2022/4883 . . {Interlock systems}
- B60R 2022/4891 . . . {preventing use of the vehicle when the seatbelt is not fastened}

B60R 25/00 **Fittings or systems for preventing or indicating unauthorised use or theft of vehicles** (locks for vehicles [E05B 77/00-E05B 85/00](#))

WARNING

Subgroups of [B60R 25/00](#) corresponding to IPC2013.01 are not complete pending the completion of a reclassification; see also [B60R 25/00](#) and its other subgroups

- B60R 25/001 . {Anti-theft devices acting on jacking means or props, e.g. for trailers}
- B60R 25/002 . {Locking of control actuating or transmitting means (of steering mechanism [B60R 25/02](#))}
- B60R 25/003 . . {locking of control actuating means}
- B60R 25/005 . . . {of foot actuated control means (rods connecting pedals and steering wheels [B60R 25/0221](#))}
- B60R 25/006 {using means preventing access, e.g. boxes, shutters}
- B60R 25/007 {of hand actuated control means}
- B60R 25/008 {comprising means for locking two or more control means together, e.g. hand-brake handle and gear shift lever}
- B60R 25/01 . operating on vehicle systems or fittings, e.g. on doors, seats or windcreens
- B60R 25/012 . . {Airbags triggered}
- B60R 25/014 . . {comprising means for locking the seat or parts thereof in a driving prevention position}
- B60R 25/016 . . {comprising means for shuttering the windscreen or part thereof}
- B60R 25/018 . . {Thief traps}
- B60R 25/02 . . operating on the steering mechanism
- B60R 25/021 . . . restraining movement of the steering column or steering wheel hub, e.g. restraining means controlled by ignition switch
- B60R 25/02102 {with supplementary safety device preventing operation of the starter of an engine already running}
- B60R 25/02105 {Arrangement of the steering column thereof}
- B60R 25/02107 {comprising overload clutching means}
- B60R 25/0211 {comprising a locking member radially and linearly moved towards the steering column}
- B60R 25/02113 {manually actuated, e.g. using removable locking means}
- B60R 25/02115 {key actuated}
- B60R 25/02118 {with linear bolt motion parallel to the lock axis}
- B60R 25/02121 {comprising safety devices avoiding locking until removal of the key}
- B60R 25/02123 {using an axially slidable lock cylinder}

B60R 25/02126	. . . . . {with linear bolt motion perpendicular to the lock axis}
B60R 25/02128	. . . . . {comprising safety devices avoiding locking until removal of the key}
B60R 25/02131	. . . . . {by using an axially slidable lock cylinder}
B60R 25/02134	. . . . {comprising a locking member axially moved along the steering column}
B60R 25/02136	. . . . . {manually actuated, e.g. using removable locking members}
B60R 25/02139	. . . . . {key actuated}
B60R 25/02142	. . . . {comprising externally controlled safety devices for preventing locking during vehicle running condition}
B60R 25/02144	. . . . . {interlocked with gear box or gear lever}
B60R 25/02147	. . . . {comprising a locking member having other than linear, axial or radial motion, e.g. rotatable; Steering column locking using balls, rollers or the like}
B60R 25/0215	. . . . using electric means, e.g. electric motors or solenoids
B60R 25/02153	. . . . . {comprising a locking member radially and linearly moved towards the steering column}
B60R 25/02156	. . . . . {comprising a locking member axially moved along the steering column}
B60R 25/022	. . . operating on the steering wheel, e.g. bars locked to the steering wheel rim (B60R 25/021 takes precedence)
B60R 25/0221	. . . . {restraining means joining the steering wheel with another part of the car, e.g. pedals}
B60R 25/0222	. . . . {by disjoining steering wheel and column}
B60R 25/0224	. . . . {restraining of steering wheel by collapsing against column}
B60R 25/0225	. . . . {using a rod locked on the steering wheel rim (B60R 25/0221 takes precedence)}
B60R 25/0227	. . . . {using means preventing access, e.g. boxes enclosing the steering wheel (B60R 25/014 takes precedence)}
B60R 25/0228	. . . . {comprising a locking bolt or fork slidable between or around the steering wheel spokes}
B60R 25/023	. . . countermeasures against the physical destruction of the steering lock
B60R 25/04	. . operating on the propulsion system, e.g. engine or drive motor
B60R 2025/0405	. . . {from the external}
B60R 2025/041	. . . {Preventing use of engine operating on the fluid supply}
B60R 2025/0415	. . . {with safe immobilisation}

WARNING

Not complete pending reclassification; see also other subgroups of [B60R 25/00](#)

B60R 25/042	. . . operating on the fuel supply
B60R 25/043	. . . by blocking the exhaust
B60R 25/044	. . . by limiting or blocking the air supply
B60R 25/045	. . . by limiting or cutting the electrical supply to the propulsion unit

B60R 25/06	. . . operating on the vehicle transmission
B60R 25/063	. . . . {Locking of foot actuated control actuating means}
B60R 25/066	. . . . {Locking of hand actuated control actuating means}
B60R 25/08	. . operating on brakes or brake system
B60R 25/083	. . . {Locking of foot-actuated control actuating means}
B60R 25/086	. . . {Locking of hand-actuated control actuating means}
B60R 25/09	. . by restraining wheel rotation, e.g. wheel clamps
B60R 25/093	. . . {comprising ground-engaging means}
B60R 25/096	. . . {comprising means for deflating tyres}
B60R 25/10	. actuating a signalling device
B60R 25/1001	. . {Alarm systems associated with another car fitting or mechanism, e.g. door lock or knob, pedals (features related to the general power supply B60R 25/1018)}
B60R 25/1003	. . {Alarm systems characterised by arm or disarm features}
B60R 25/1004	. . {Alarm systems characterised by the type of sensor, e.g. current sensing means (using door lock sensors B60R 25/1001)}
B60R 25/1006	. . . {Mechanical sensors, e.g. pendulums (B60R 25/101 takes precedence)}
B60R 25/1007	. . . . {comprising associated circuitry}
B60R 25/1009	. . . {Sonic sensors; Signal treatment therefor}
B60R 25/101	. . . {Fuel level sensors}
B60R 25/1012	. . . {Zone surveillance means, e.g. parking lots, truck depots}
B60R 2025/1013	. . {Alarm systems characterised by the type of warning signal, e.g. visual, audible}
B60R 2025/1015	. . . {Signal coming from the exhaust}
B60R 2025/1016	. . . {Remote signals alerting owner or authorities, e.g. radio signals}
B60R 25/1018	. . {Alarm systems characterised by features related to the general power supply}
B60R 25/102	. . a signal being sent to a remote location, e.g. a radio signal being transmitted to a police station, a security company or the owner
B60R 25/1025	. . . {preventing jamming or interference of said signal}
B60R 25/104	. . characterised by the type of theft warning signal, e.g. visual or audible signals with special characteristics
B60R 25/1045	. . . {Signal coming from the exhaust}
B60R 25/20	. Means to switch the anti-theft system on or off
B60R 25/2009	. . {Antitheft state indicator}
B60R 25/2018	. . {Central base unlocks or authorises unlocking}
B60R 25/2027	. . {with data signals passing through the human body}
B60R 25/2036	. . {by using the door logic and door and engine unlock means}
B60R 25/2045	. . {by hand gestures}
B60R 25/2054	. . {by foot gestures}
B60R 25/2063	. . {Ignition switch geometry}

B60R 25/2072	<ul style="list-style-type: none"> • {with means for preventing jamming or interference of a remote switch control signal}
B60R 25/2081	<ul style="list-style-type: none"> • {combined with personal settings of other vehicle devices, e.g. mirrors, seats, steering wheels}
B60R 25/209	<ul style="list-style-type: none"> • {Remote starting of engine}
B60R 25/21	<ul style="list-style-type: none"> • using hidden switches
B60R 25/22	<ul style="list-style-type: none"> • using mechanical identifiers
B60R 25/225	<ul style="list-style-type: none"> • {key in lock presence switch}
B60R 25/23	<ul style="list-style-type: none"> • using manual input or alphanumerical codes
B60R 25/24	<ul style="list-style-type: none"> • using electronic identifiers containing a code not memorised by the user
B60R 25/241	<ul style="list-style-type: none"> • {whereby access privileges are related to the identifiers}
B60R 25/243	<ul style="list-style-type: none"> • {with more than one way to gain access}
B60R 25/245	<ul style="list-style-type: none"> • {where the antenna reception area plays a role}
B60R 25/246	<ul style="list-style-type: none"> • {characterised by the challenge triggering}
B60R 25/248	<ul style="list-style-type: none"> • {Electronic key extraction prevention}
B60R 25/25	<ul style="list-style-type: none"> • using biometry
B60R 25/252	<ul style="list-style-type: none"> • {Fingerprint recognition}
B60R 25/255	<ul style="list-style-type: none"> • {Eye recognition}
B60R 25/257	<ul style="list-style-type: none"> • {Voice recognition}
B60R 25/30	<ul style="list-style-type: none"> • Detection related to theft or to other events relevant to anti-theft systems
B60R 25/302	<ul style="list-style-type: none"> • {using recording means, e.g. black box}
B60R 25/305	<ul style="list-style-type: none"> • {using a camera}
B60R 25/307	<ul style="list-style-type: none"> • {using data concerning maintenance or configuration}
B60R 25/31	<ul style="list-style-type: none"> • of human presence inside or outside the vehicle
B60R 25/32	<ul style="list-style-type: none"> • of vehicle dynamic parameters, e.g. speed or acceleration
B60R 25/33	<ul style="list-style-type: none"> • of global position, e.g. by providing GPS coordinates
B60R 25/34	<ul style="list-style-type: none"> • of conditions of vehicle components, e.g. of windows, door locks or gear selectors
B60R 25/40	<ul style="list-style-type: none"> • Features of the power supply for the anti-theft system, e.g. anti-theft batteries, back-up power supply or means to save battery power
B60R 25/403	<ul style="list-style-type: none"> • {Power supply in the vehicle}
B60R 25/406	<ul style="list-style-type: none"> • {Power supply in the remote key}
B60R 99/00	Subject matter not provided for in other groups of this subclass
B60R 2099/005	<ul style="list-style-type: none"> • {Protections against martens or rodents}
B60R 2225/00	Means indicating the functioning state of the alarm system, e.g. indicating arming, using leds
B60R 2300/00	Details of viewing arrangements using cameras and displays, specially adapted for use in a vehicle
B60R 2300/10	<ul style="list-style-type: none"> • characterised by the type of camera system used
B60R 2300/101	<ul style="list-style-type: none"> • using cameras with adjustable capturing direction

- B60R 2300/102 . . using 360 degree surveillance camera system
- B60R 2300/103 . . using camera systems provided with artificial illumination device, e.g. IR light source
- B60R 2300/105 . . using multiple cameras
- B60R 2300/106 . . using night vision cameras
- B60R 2300/107 . . using stereoscopic cameras
- B60R 2300/108 . . using 'non-standard' camera systems, e.g. camera sensor used for additional purposes i.a. rain sensor, camera sensor split in multiple image areas
- B60R 2300/20 . . characterised by the type of display used
- B60R 2300/202 . . displaying a blind spot scene on the vehicle part responsible for the blind spot
- B60R 2300/205 . . using a head-up display
- B60R 2300/207 . . using multi-purpose displays, e.g. camera image and navigation or video on same display
- B60R 2300/30 . . characterised by the type of image processing
- B60R 2300/301 . . combining image information with other obstacle sensor information, e.g. using RADAR/LIDAR/SONAR sensors for estimating risk of collision
- B60R 2300/302 . . combining image information with GPS information or vehicle data, e.g. vehicle speed, gyro, steering angle data
- B60R 2300/303 . . using joined images, e.g. multiple camera images
- B60R 2300/304 . . using merged images, e.g. merging camera image with stored images
- B60R 2300/305 . . . merging camera image with lines or icons
- B60R 2300/306 . . using a re-scaling of images
- B60R 2300/307 . . virtually distinguishing relevant parts of a scene from the background of the scene
- B60R 2300/308 . . . by overlaying the real scene, e.g. through a head-up display on the windscreen
- B60R 2300/40 . . characterised by the details of the power supply or the coupling to vehicle components
- B60R 2300/402 . . Image calibration
- B60R 2300/404 . . triggering from stand-by mode to operation mode
- B60R 2300/406 . . using wireless transmission
- B60R 2300/408 . . using a data bus
- B60R 2300/50 . . characterised by the display information being shared, e.g. external display, data transfer to other traffic participants or centralised traffic controller
- B60R 2300/60 . . characterised by monitoring and displaying vehicle exterior scenes from a transformed perspective
- B60R 2300/602 . . with an adjustable viewpoint
- B60R 2300/605 . . . the adjustment being automatic
- B60R 2300/607 . . from a bird's eye viewpoint
- B60R 2300/70 . . characterised by an event-triggered choice to display a specific image among a selection of captured images
- B60R 2300/80 . . characterised by the intended use of the viewing arrangement

- B60R 2300/8006 . . for monitoring and displaying scenes of vehicle interior, e.g. for monitoring passengers or cargo
- B60R 2300/8013 . . . for child monitoring
- B60R 2300/802 . . for monitoring and displaying vehicle exterior blind spot views
- B60R 2300/8026 . . . in addition to a rear-view mirror system
- B60R 2300/8033 . . for pedestrian protection
- B60R 2300/804 . . for lane monitoring
- B60R 2300/8046 . . for replacing a rear-view mirror system
- B60R 2300/8053 . . for bad weather conditions or night vision
- B60R 2300/806 . . for aiding parking
- B60R 2300/8066 . . for monitoring rearward traffic
- B60R 2300/8073 . . for vehicle security, e.g. parked vehicle surveillance, burglar detection
- B60R 2300/808 . . for facilitating docking to a trailer
- B60R 2300/8086 . . for vehicle path indication
- B60R 2300/8093 . . for obstacle warning

B60R 2325/00**Indexing scheme relating to vehicle anti-theft devices**

- B60R 2325/10 . Communication protocols, communication systems of vehicle anti-theft devices
- B60R 2325/101 . . Bluetooth
- B60R 2325/103 . . Near field communication [NFC]
- B60R 2325/105 . . Radio frequency identification data [RFID]
- B60R 2325/106 . . Internet
- B60R 2325/108 . . Encryption
- B60R 2325/20 . Communication devices for vehicle anti-theft devices
- B60R 2325/202 . . Personal digital assistant [PDA]
- B60R 2325/205 . . Mobile phones
- B60R 2325/207 . . Satellites
- B60R 2325/30 . Vehicles applying the vehicle anti-theft devices
- B60R 2325/302 . . Airplanes
- B60R 2325/304 . . Boats
- B60R 2325/306 . . Motorcycles
- B60R 2325/308 . . Industrial vehicles
- B60R 2325/40 . Programmable elements