

**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 ( <a href="#">B60R 1/0617</a> , <a href="#">B60R 1/074</a> ) <a href="#">take precedence</a> )
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{ <a href="#">e.g. convex mirrors</a> ; <a href="#">Side-by-side associations of rear-view and other mirrors</a> ( <a href="#">B60R 1/025</a> , <a href="#">B60R 1/10</a> <a href="#">take precedence</a> )}
B60R 1/081	...	{ <a href="#">avoiding blind spots, e.g. by using a side-by-side association of mirrors</a> }
B60R 1/082	....	{ <a href="#">using a single wide field mirror or an association of rigidly connected mirrors</a> }
B60R 1/083	...	{ <a href="#">Anti-glare mirrors, e.g. "day-night" mirrors</a> }
B60R 1/084	....	{ <a href="#">using a removable filtering or hiding screen</a> ( <a href="#">associated with windows or windscreens</a> <a href="#">B60J 3/00</a> )}
B60R 1/085	....	{ <a href="#">using a combination of interchangeable reflecting surfaces, e.g. reversible mirrors</a> }
B60R 1/086	....	{ <a href="#">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</a> ; <a href="#">Wedge-shaped mirrors</a> }
B60R 1/087	.....	{ <a href="#">with remote or automatic control means</a> }
B60R 1/088	....	{ <a href="#">using a cell of electrically changeable optical characteristic, e.g. liquid-crystal or electrochromic mirrors</a> }
B60R 1/089	....	{ <a href="#">using a liquid filtering layer of variable thickness</a> }
B60R 1/10	.	Front-view mirror arrangements; {( <a href="#">specially adapted for covering the peripheral part of the vehicle</a> <a href="#">B60R 1/002</a> ); <a href="#">periscope arrangements</a> { <a href="#">i.e. optical devices using combinations of mirrors, lenses, prisms or the like</a> ( <a href="#">specially adapted for covering the peripheral part of the vehicle</a> <a href="#">B60R 1/002</a> ; <a href="#">for viewing traffic-lights</a> <a href="#">B60R 1/005</a> ); <a href="#">Other mirror arrangements giving a view from above or under the vehicle</a> }
B60R 1/105	..	{ <a href="#">Optical arrangements giving a view under the vehicle, e.g. using periscopes</a> }
B60R 1/12	.	Mirror assemblies combined with other articles, e.g. clocks
B60R 1/1207	..	{ <a href="#">with lamps</a> ; <a href="#">with turn indicators</a> }
B60R 2001/1215	..	{ <a href="#">with information displays</a> }
B60R 2001/1223	..	{ <a href="#">with sensors or transducers</a> }
B60R 2001/123	..	{ <a href="#">with thermometers</a> }
B60R 2001/1238	..	{ <a href="#">with vanity mirrors</a> }
B60R 2001/1246	..	{ <a href="#">with clocks</a> }
B60R 2001/1253	..	{ <a href="#">with cameras, video cameras or video screens</a> }
B60R 2001/1261	..	{ <a href="#">with antennae</a> }
B60R 2001/1269	..	{ <a href="#">with sun visors</a> }
B60R 2001/1276	..	{ <a href="#">with radio receivers, loud-speakers or buzzers</a> }
B60R 2001/1284	..	{ <a href="#">with communication systems other than radio-receivers, e.g. keyless entry systems, navigation systems</a> ; <a href="#">with anti-collision systems</a> }
B60R 2001/1292	..	{ <a href="#">with holding means for personal articles</a> }

<b>B60R 3/00</b>	<b>Arrangements of steps {or ladders facilitating access to or on the vehicle}, e.g. running-boards</b> ({construction of steps for railway vehicles <a href="#">B61D 23/00</a> ; ladders <a href="#">E06C</a> )
B60R 3/002	. {Running boards (for vehicle tops <a href="#">B60R 3/005</a> ; at the sides of the vehicle for carrying loads <a href="#">B60R 9/02</a> )}
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 <a href="#">B60R 3/005</a> )}
B60R 3/02	. Retractable steps {or ladders, e.g. movable under shock ( <a href="#">B60R 3/005</a> takes precedence)}
B60R 3/04	. with provisions for shoe scraping
<b>B60R 5/00</b>	<b>Compartments within vehicle body primarily intended or sufficiently spacious for trunks, suit-cases, or the like</b> (primarily intended for stowing loads in load-transporting vehicles <a href="#">B60P</a> ; arrangements for stowing spare wheels <a href="#">B62D 43/00</a> )
B60R 5/003	. {Luggage racks, e.g. for busses (primarily intended for passengers` property smaller than suitcases <a href="#">B60R 7/04</a> ; <a href="#">B60R 7/08</a> ; luggage racks for rail vehicles <a href="#">B61D 37/003</a> )}
B60R 5/006	. {stowing or holding means for elongated articles, e.g. skis inside vehicles}
B60R 5/02	. arranged at front of vehicle {( <a href="#">B60R 5/003</a> takes precedence)}
B60R 5/04	. arranged at rear of vehicle {( <a href="#">B60R 5/003</a> , <a href="#">B60R 5/006</a> take precedence; external trunks arranged at rear of vehicle <a href="#">B60R 9/065</a> )}
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 <a href="#">E05C 17/042</a> )}
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}
<b>B60R 7/00</b>	<b>Stowing or holding appliances inside vehicle primarily intended for personal property smaller than suit-cases, e.g. travelling articles, or maps</b> (for radio sets, television sets, telephones or the like, mounting of cameras operative during drive, tools, or spare parts <a href="#">B60R 11/00</a> ; for receptacles for refuse, food, beverages, cigarettes <a href="#">B60N</a> )
B60R 7/005	. {Nets or elastic pockets tensioned against walls or backrests}
B60R 7/02	. in separate luggage compartment {( <a href="#">B60R 7/005</a> takes precedence)}
B60R 7/04	. in driver or passenger space,{e.g. using racks ( <a href="#">B60R 7/005</a> , <a href="#">B60R 7/08</a> 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
<b>B60R 9/00</b>	<b>Supplementary fittings on vehicle exterior for carrying loads, e.g. luggage, sports gear or the like</b>
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
<b>B60R 11/00</b>	<b>Arrangements for holding or mounting articles, not otherwise provided for</b>
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 ( <u>stowing of tape cartridges, compact discs or the like B60R 7/088</u> ; <u>of aerials H01Q</u> )
B60R 11/0205	..	{for radio sets ( <u>B60R 11/0211</u> 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 ( <u>cameras per se G03B</u> )
B60R 11/06	.	for tools or spare parts ( <u>for vehicle roof parts B60J 7/20</u> ; <u>for spare wheels B62D</u> )
<b>B60R 13/00</b>		<b>Elements for body-finishing, identifying, or decorating; Arrangements or adaptations for advertising purposes</b>
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 10/0045](#)}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 of 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](#) , [E05B65/38](#))}**

- 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 ... {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 .... {for measuring vehicle parameters and indicating critical, abnormal or dangerous conditions}
- B60R 16/0233 ..... {Vehicle tilting, overturning or roll over}
- B60R 16/0234 ..... {related to maintenance or repairing of vehicles}
- B60R 16/0235 .... {for lighting devices combined with starting or ignition devices for road vehicles}
- B60R 16/0236 .... {for economical driving}
- B60R 16/0237 ... {circuits concerning the atmospheric environment (meteorology [G01W](#))}
- B60R 16/0238 ... {Electrical distribution centers}
- B60R 16/0239 ... {Electronic boxes}



- B60R 16/027 . . . 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 . . for supply of electrical power to vehicle subsystems {or for (circuit arrangements for charging batteries [H02J 7/00](#))}
- B60R 16/0307 . . . {using generators driven by a machine different from the vehicle motor}
- B60R 16/0315 . . . {using multiplexing techniques (multiplexing for transmission of signals [G08C 15/00](#) ; multiplexing for electrical communication in general [H04J](#))}
- B60R 2016/0322 . . . . {Temporary code for documents to be reclassified to [G08C](#), [H04L](#) or [H04Q](#)}
- B60R 16/033 . . . 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 . . for occupant comfort,{e.g. for automatic adjustment of appliances according to personal settings, e.g. seats, mirrors, steering wheel}
- B60R 16/0373 . . . {Voice control (in general [G10L](#))}
- B60R 16/04 . . Arrangement of batteries
- B60R 16/06 . . for removing electrostatic charges (carrying-off electrostatic charges in general [H05F 3/00](#))
- B60R 16/08 . fluid
- B60R 17/00 Arrangements or adaptations of lubricating systems or devices (lubricating in general [F16N](#))**
- B60R 17/02 . 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 . {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 <a href="#">B60R 19/22</a> )}
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 <a href="#">B60R 2019/247</a> )}
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 <a href="#">B60C 29/00</a> )
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 ({ <a href="#">B60R 19/38</a> takes precedence;} springs, shock absorbers, or means for damping vibrations per se <a href="#">F16F</a> )
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 ({ <a href="#">B60R 19/34</a> 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 <a href="#">B60R 19/32</a> )}
B60R 19/38	...	adjustably or movably mounted, e.g. horizontally displaceable for securing a space between parked vehicles {(adjustably mounted for compensating manufacturing tolerances <a href="#">B60R 19/24</a> , <a href="#">B60R 19/26</a> )}

- 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 <a href="#">B60R 16/027</a> ; for electrically actuating belt retractor locking means <a href="#">B60R 22/343</a> )}
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 <a href="#">B60R 2021/01129</a> )}
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 ( <a href="#">monitoring crash strength in combination with passenger seat detection B60R 21/01558</a> )}
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}
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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 wound 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 <a href="#">B60R 22/14</a> ; removable children's seats having a front guard or barrier <a href="#">B60N 2/2839</a> )}
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 ( <a href="#">B60R 21/12</a> 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 ( <a href="#">B60R 21/09</a> takes precedence; padded linings for steering control means <a href="#">B60R 21/05</a> )}
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 ( <a href="#">yieldable steering columns B62D 1/18</a> )
B60R 21/055	..	Padded {or energy-absorbing}fittings,{e.g. seat belt anchors ( <a href="#">sun visors B60J 3/00</a> ; <a href="#">head rests B60N 2/48</a> )}
B60R 21/06	..	Safety nets, transparent sheets, curtains, or the like, e.g. between occupants and glass ({ <a href="#">B60R 21/026</a> }, <a href="#">B60R 21/11</a> , <a href="#">B60R 21/12</a> , <a href="#">B60R 21/16</a> 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 ( <a href="#">electrical circuits for triggering safety arrangements B60R 21/01</a> )
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, <a href="#">B60T 7/065</a> )}
B60R 21/11	..	Overhead guards, e.g. against loads falling down {(specially adapted for fork-lift trucks <a href="#">B66F 9/07545</a> )}
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 ( <a href="#">electrical circuits for triggering safety arrangements B60R 21/01</a> )
B60R 21/131	...	{Protective devices for drivers in case of overturning of tractors (means for preventing overturning or tipping of tractors <a href="#">B62D 49/08</a> )}
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 <a href="#">A41D 13/018</a> ; } connection of valves to inflatable elastic bodies <a href="#">B60C 29/00</a> )
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 <a href="#">B60R 21/21656</a> ; assembling of modules <a href="#">B60R 21/217</a> )}
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 <a href="#">B60R 21/21658</a> )}
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 ( <a href="#">pillar mounted arrangements B60R 21/213</a> )
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 ({ <a href="#">B60R 21/2176</a> 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 ( <a href="#">B60R 2021/2161</a> , <a href="#">B60R 2021/21525</a> 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 ( <a href="#">B60R 21/2176</a> 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 ( <a href="#">B60R 21/18</a> takes precedence; connection to inflation fluid source retainers <a href="#">B60R 21/217</a> )
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 ( <a href="#">B60R 21/23184</a> , <a href="#">B60R 21/232</a> 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 ( <a href="#">B60R 21/232</a> 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 <a href="#">B60R 2021/23514</a> )}
B60R 2021/23523	.....	{Composite (coated fabric <a href="#">B60R 2021/23514</a> )}
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 <a href="#">B60R 21/20</a> ; blasting cartridges for producing gas under pressure in general <a href="#">F42B 3/04</a> ; Initiators or igniters therefor <a href="#">F42B 3/10</a> )}

**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 ( <a href="#">hybrid inflators B60R 21/272</a> )
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 ( <a href="#">B60R 21/268 takes precedence</a> )
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 ( <a href="#">B60R 21/26005 takes precedence</a> )
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 ( <a href="#">B60R 21/30 takes precedence</a> ; venting means on inflatable member walls <a href="#">B60R 21/239</a> )
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 ( <a href="#">electrical circuits for triggering safety arrangements B60R 21/01</a> )
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 ( <a href="#">B60R 19/02 takes precedence</a> )
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

<b>B60R 22/00</b>	<b>Safety belts or body harnesses in vehicles</b> (safety belts or body harnesses in general <a href="#">A62B 35/00</a> )
B60R 22/001	. {Knee, leg or head belts}
B60R 22/003	. {for restraining detainees}
B60R 22/005	. {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 <a href="#">B60R 22/001</a> ; devices for releasing in an emergency, remote or automatic unbuckling devices <a href="#">B60R 22/32</a> )}
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 ( <a href="#">B60R 22/022</a> , <a href="#">B60R 22/03</a> take precedence)}
B60R 22/024	... {Adaptations for use by small passengers, e.g. children ( <a href="#">B60R 22/20</a> takes precedence; using belt anti-slip devices <a href="#">B60R 22/30</a> )}
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 ( <a href="#">children`s seats B60N 2/24</a> )

**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 <a href="#">B60N 2/265</a> , <a href="#">B60N 2/2803</a> )}
B60R 22/12	. Construction of belts or harnesses ( <a href="#">B60R 21/18</a> takes precedence; { woven fabrics for safety belts <a href="#">D03D 1/0005</a> })
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 <a href="#">B60R 21/02</a> )}
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 2022/1812	..	{Connections between seat belt and buckle tongue}
B60R 2022/1818	..	{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 2022/3475	...	{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 2022/3535	.....	{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 2022/385	....	{with adjustable sensitivity}
B60R 22/40	...	responsive only to vehicle movement
B60R 2022/401	....	{with adjustable sensor}
B60R 2022/402	.....	{automatically adjustable to keep a vertical position, e.g. irrespective of seat or vehicle tilting}
B60R 2022/403	.....	{using externally controlled means, e.g. linked with seat back hinge}
B60R 2022/404	....	{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 2022/4406	...	{Spring shapes; Spring characteristic; Springs with adjustable anchoring means}
B60R 2022/4413	...	{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 2022/442	...	{using one spring and one additional retraction device in parallel}
B60R 2022/4426	....	{the additional retraction device being a second spring}
B60R 2022/4433	.....	{externally controlled}
B60R 2022/444	....	{the additional retraction device being an electric actuator}
B60R 2022/4446	...	{using one spring and one additional retraction device in series}
B60R 2022/4453	....	{the additional retraction device being a second spring}
B60R 2022/446	.....	{with external control means}
B60R 2022/4466	....	{the additional retraction device being an electric actuator}
B60R 2022/4473	...	{using an electric retraction device (combined with a spring B60R 2022/444 , B60R 2022/4466)}
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 <a href="#">B60R 21/01</a> { tensioners using reels only guiding the belt during normal use, e.g. splitted reels <a href="#">B60R 22/195</a> )}
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 ( <a href="#">actuating a cable B60R 22/4619</a> )}
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 ( <a href="#">also adapted for air bag inflators B60R 21/33</a> )}
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 ( <a href="#">B60R 22/4623</a> 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 winded 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 25/021](#))}
- 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 ( <a href="#">B60R 25/021</a> 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 ( <a href="#">B60R 25/0221</a> takes precedence)}
B60R 25/0227	....	{using means preventing access, e.g. boxes enclosing the steering wheel ( <a href="#">B60R 25/014</a> 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 <a href="#">B60R 25/1018</a> )}
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 <a href="#">B60R 25/1001</a> )}
B60R 25/1006	...	{Mechanical sensors, e.g. pendulums ( <a href="#">B60R 25/101</a> 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 25/1013	..	{Alarm systems characterised by the type of warning signal, e.g. visual, audible}
B60R 25/1015	...	{Signal coming from the exhaust}
B60R 25/1016	...	{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	..	{with means for preventing jamming or interference of a remote switch control signal}
B60R 25/2081	..	{combined with personal settings of other vehicle devices, e.g. mirrors, seats, steering wheels}
B60R 25/209	..	{Remote starting of engine}

B60R 25/21	.. using hidden switches
B60R 25/22	.. using mechanical identifiers
B60R 25/225	... {key in lock presence switch}
B60R 25/23	.. using manual input or alphanumerical codes
B60R 25/24	.. using electronic identifiers containing a code not memorised by the user
B60R 25/241	... {whereby access privileges are related to the identifiers}
B60R 25/243	... {with more than one way to gain access}
B60R 25/245	... {where the antenna reception area plays a role}
B60R 25/246	... {characterised by the challenge triggering}
B60R 25/248	... {Electronic key extraction prevention}
B60R 25/25	.. using biometry
B60R 25/252	... {Fingerprint recognition}
B60R 25/255	... {Eye recognition}
B60R 25/257	... {Voice recognition}
B60R 25/30	. Detection related to theft or to other events relevant to anti-theft systems
B60R 25/302	.. {using recording means, e.g. black box}
B60R 25/305	.. {using a camera}
B60R 25/307	.. {using data concerning maintenance or configuration}
B60R 25/31	.. of human presence inside or outside the vehicle
B60R 25/32	.. of vehicle dynamic parameters, e.g. speed or acceleration
B60R 25/33	.. of global position, e.g. by providing GPS coordinates
B60R 25/34	.. of conditions of vehicle components, e.g. of windows, door locks or gear selectors
B60R 25/40	. 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	.. {Power supply in the vehicle}
B60R 25/406	.. {Power supply in the remote key}
<b>B60R 99/00</b>	<b>Subject matter not provided for in other groups of this subclass</b>
B60R 2099/005	. {Protections against martens or rodents}
<b>B60R 2225/00</b>	<b>Means indicating the functioning state of the alarm system, e.g. indicating arming, using leds</b>
<b>B60R 2300/00</b>	<b>Details of viewing arrangements using cameras and displays, specially adapted for use in a vehicle</b>
B60R 2300/10	. characterised by the type of camera system used
B60R 2300/101	.. 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