

ECLA EUROPEAN 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

- B60R1/00** **Optical viewing arrangements** ([N: house mirrors and spies [A47G1/00](#)]; ant glare equipment, e.g. polarising, for windcreens or windows [B60J3/00](#); [N: visual aids for tractors [B62D49/06C](#)]; devices per se [G02B](#))
- B60R1/00F** . [N: integrated in the windows, e.g. Fresnel lenses]
- B60R1/00G** . [N: specially adapted for covering the peripheral part of the vehicle, e.g. for viewing tyres, bumpers or the like (integrated in the windows [B60R1/00F](#); combined with rear-view mirrors [B60R1/08](#))]
- B60R1/00G2** . . [N: for viewing trailer hitches]
- B60R1/00H** . [N: specially adapted for viewing traffic-lights]
- B60R1/00K** . [N: Side-view mirrors, e.g. V-shaped mirrors located at the front or rear part of the vehicle (combined with rear-view mirrors [B60R1/08](#); side-view periscopes [B60R1/10](#))]
- B60R1/00K2** . . [N: specially adapted for covering the lateral blind spot not covered by the usual rear-view mirror]
- B60R1/00L** . [N: allowing the driver to see passengers, e.g. for busses (combined with rear-view mirrors [B60R1/08](#))]
- B60R1/02** . Rear-view mirror arrangements ([periscope arrangements B60R1/10](#))
- B60R1/02F** . . [N: comprising special mechanical means for correcting the field of view in relation to particular driving conditions, e.g. change of lane; scanning mirrors]
- B60R1/04** . . mounted inside vehicle [N: ([B60R1/02F](#), [B60R1/08](#) take precedence)]
- B60R1/06** . . mounted on vehicle exterior [N: ([B60R1/02F](#), [B60R1/08](#) take precedence)]
- B60R1/06C** . . . [N: comprising means for cleaning or deicing]
- B60R1/06F** . . . [N: specially adapted for mounting on trucks, e.g. by C-shaped support means]
- B60R1/06F2** [N: with remote position control adjustment]
- B60R1/06F2B** [N: by manually actuated mechanical means, e.g. push-pull cables]
- B60R1/06F2C** [N: by electrically actuated means]
- B60R1/06F2D** [N: by hydraulically or pneumatically actuated means]
- B60R1/06F4** [N: foldable along the vehicle, e.g. in case of external force applied thereon]
- B60R1/062** . . . with remote control for adjusting position [N: ([B60R1/06F2](#) takes precedence)] [N0101]
- B60R1/062B** [N: by hydraulically or pneumatically powered actuators] [N0101]
- B60R1/064** by manually powered actuators [N0101]
- B60R1/066** for adjusting the mirror relative to its housing [N0101]
- B60R1/068** using cables [N0101]

- B60R1/07 by electrically powered actuators [N0101]
- B60R1/072 for adjusting the mirror relative to its housing [N0101]
- B60R1/074 for retracting the mirror arrangements to a non-use position alongside the vehicle [N0101]
- B60R1/076 yieldable to excessive external force and provided with an indexed use position ([N: [B60R1/06F4](#), [B60R1/074](#)] take precedence) [N0101]
- B60R1/078 easily removable; mounted for bodily outward movement, e.g. when towing [N0101]
- B60R1/08 involving special optical features, e.g. avoiding blind spots [N: ,e.g. convex mirrors; Side-by-side associations of rear-view and other mirrors ([B60R1/02F](#), [B60R1/10](#) take precedence)]
- B60R1/08D [N: avoiding blind spots, e.g. by using a side-by-side association of mirrors]
- B60R1/08D2 [N: using a single wide field mirror or an association of rigidly connected mirrors]
- B60R1/08G [N: Anti-glare mirrors, e.g. "day-night" mirrors]
- B60R1/08G2 [N: using a removable filtering or hiding screen (associated with windows or windscreens [B60J3/00](#))]
- B60R1/08G3 [N: using a combination of interchangeable reflecting surfaces, e.g. reversible mirrors]
- B60R1/08G4 [N: 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]
- B60R1/08G4B [N: with remote or automatic control means]
- B60R1/08G5 [N: using a cell of electrically changeable optical characteristic, e.g. liquid-crystal or electrochromic mirrors]
- B60R1/08G6 [N: using a liquid filtering layer of variable thickness]
- B60R1/10 Front-view mirror arrangements; [N: (specially adapted for covering the peripheral part of the vehicle [B60R1/00G](#))]; periscope arrangements [N: ,i.e. optical devices using combinations of mirrors, lenses, prisms or the like (specially adapted for covering the peripheral part of the vehicle [B60R1/00G](#); for viewing traffic-lights [B60R1/00H](#)); Other mirror arrangements giving a view from above or under the vehicle]
- B60R1/10B [N: Optical arrangements giving a view under the vehicle, e.g. using periscopes]
- B60R1/12 Mirror assemblies combined with other articles, e.g. clocks
- B60R1/12A [N: with lamps; with turn indicators] [N9604]
- B60R3/00** **Arrangements of steps [N: or ladders facilitating access to or on the vehicle], e.g. running-boards** ([N: construction of steps for railway vehicles [B61D23/00](#)]; ladders [E06C](#)) [C9410]
- B60R3/00A [N: Running boards (for vehicle tops [3/00B](#); at the sides of the vehicle for carrying loads [B60R9/02](#))]
- B60R3/00B [N: Catwalks, running boards for vehicle tops, access means for vehicle tops; Handrails therefor]
- B60R3/00C [N: Removable steps or ladders, e.g. foldable (as access means for vehicle tops [B60R3/00B](#))]
- B60R3/02 Retractable steps [N: or ladders, e.g. movable under shock ([B60R3/00B](#) takes

precedence)]

- B60R3/04 . with provisions for shoe scraping
- B60R5/00** **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 [B62D43/00](#))
- B60R5/00B . [N: Luggage racks, e.g. for busses (primarily intended for passengers` property smaller than suitcases [B60R7/04](#); [B60R7/08](#); luggage racks for rail vehicles [B61D37/00B](#))] [C9607]
- B60R5/00D . [N: stowing or holding means for elongated articles, e.g. skis inside vehicles]
- B60R5/02 . arranged at front of vehicle [N: ([B60R5/00B](#) takes precedence)]
- B60R5/04 . arranged at rear of vehicle [N: ([B60R5/00B](#), [B60R5/00D](#) take precedence; external trunks arranged at rear of vehicle [B60R9/06A](#))] [C9604]
- B60R5/04A . . [N: 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 [E05C17/04B](#))] [N9604]
- B60R5/04A2 . . . [N: to create an enclosed luggage compartment of increased capacity, e.g. with ventilation apertures for transporting dogs] [N9604]
- B60R5/04B . . [N: luggage covering means, e.g. parcel shelves] [N9604]
- B60R5/04B2 . . . [N: collapsible or transformable] [N9604]
- B60R5/04B2B [N: collapsible by rolling-up] [N9604]
- B60R5/04B2C [N: of accordion-type, i.e. collapsible by sliding and folding] [N9604]
- B60R7/00** **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 [B60R11/00](#); for receptacles for refuse, food, beverages, cigarettes [B60N](#))
- B60R7/00B . [N: Nets or elastic pockets tensioned against walls or backrests] [N9607]
- B60R7/02 . in separate luggage compartment [N: ([B60R7/00B](#) takes precedence)] [C9607]
- B60R7/04 . in driver or passenger space, [N: e.g. using racks ([B60R7/00B](#), [B60R7/08](#) take precedence)] [C9607]
- B60R7/04B . . [N: mounted on or under a seat]
- B60R7/04D . . [N: mounted on door]
- B60R7/05 . . mounted on sun visor
- B60R7/06 . . mounted on or below dashboards
- B60R7/08 . Disposition of racks, clips, [N: holders, containers] or the like [N: for supporting specific articles ([B60R7/00B](#) takes precedence)] [C9607]
- B60R7/08B . . [N: for supporting maps]
- B60R7/08C . . [N: for supporting spectacles]

- B60R7/08D . . [N: for supporting tissues or tissue boxes]
- B60R7/08F . . [N: for supporting flowers or flower vases]
- B60R7/08G . . [N: for stowing money or valuables, e.g. using safes] [C9607]
- B60R7/08H . . [N: for stowing tape cartridges, compact discs, or the like]
- B60R7/10 . . for supporting hats, clothes or clothes hangers
- B60R7/12 . . for supporting umbrellas
- B60R7/14 . . for supporting weapons

B60R9/00 **Supplementary fittings on vehicle exterior for carrying loads, e.g. luggage, sports gear or the like**

- B60R9/02 . . at the sides, e.g. on running-board [M1204]
- B60R9/04 . . Carriers associated with vehicle roof ([B60R9/08](#) takes precedence)
- B60R9/042 . . Carriers characterised by means to facilitate loading or unloading of the load, e.g. rollers, tracks, or the like [M1204]
- B60R9/042B . . . [N: for ladders]
- B60R9/042D . . . [N: for small vehicles, e.g. invalid chairs, perambulators]
- B60R9/045 . . Carriers being adjustable or transformable, e.g. expansible, collapsible [N: (transformable into tents [B60P3/36](#); into beds [B60P3/38](#))]
- B60R9/048 . . Carriers characterised by article-gripping, [N: -covering,] -retaining, or -locking means
- B60R9/048B . . . [N: for ladders ([B60R9/042B](#) takes precedence)]
- B60R9/05 . . Carriers characterised by wind deflecting means ([wind deflectors for open roofs B60J7/22](#))
- B60R9/052 . . Carriers comprising elongate members extending only transversely of vehicle ([B60R9/08](#) takes precedence) [M1204]
- B60R9/055 . . Enclosure-type carriers, e.g. containers, boxes ([B60R9/048](#) takes precedence)
- B60R9/058 . . characterised by releasable attaching means between carrier and roof
- B60R9/06 . . at vehicle front or rear [N: (rear luggage compartments within vehicle extensible externally of the vehicle body [B60R5/04A](#))] [C9604]
- B60R9/06A . . [N: Enclosure-type carriers, e.g. trunks] [N9507]
- B60R9/08 . . specially adapted for sports gear ([vehicles specially adapted for carrying aeroplanes, for carrying boats B60P](#))
- B60R9/10 . . for cycles
- B60R9/12 . . for skis

B60R11/00 **Arrangements for holding or mounting articles, not otherwise provided for**

- B60R11/02 . . for radio sets, television sets, telephones, or the like; Arrangements of control thereof ([N: stowing of tape cartridges, compact discs or the like [B60R7/08H](#);] of aerials [H01Q](#))
- B60R11/02A . . [N: for radio sets ([B60R11/02C](#) takes precedence)] [N0302]
- B60R11/02C . . [N: for record carriers apparatus, e.g. video recorders, tape players or CD players] [N0302]

- B60R11/02D . . [N: for loud-speakers] [C0302]
- B60R11/02D2 . . . [N: of flat type][N0302]
- B60R11/02E . . [N: for displays, e.g. cathodic tubes] [N0302]
- B60R11/02E2 . . . [N: of flat type, e.g. LCD] [N0302]
- B60R11/02G . . [N: for telephones]
- B60R11/02H . . [N: for microphones or earphones] [N0302]
- B60R11/02J . . [N: for personal computers, e.g. laptops, notebooks] [N0302]
- B60R11/02K . . [N: for navigation systems] [N0302]
- B60R11/02P . . [N: for control means] [N0302]

- B60R11/04 . Mounting of cameras operative during drive; Arrangement of controls thereof relative to the vehicle (cameras per se G03B)

- B60R11/06 . for tools or spare parts (for vehicle roof parts [B60J7/20](#); for spare wheels [B62D](#))

B60R13/00 Elements for body-finishing, identifying, or decorating; Arrangements or adaptations for advertising purposes

- B60R13/00B . [N: Manufacturers` emblems, name plates, bonnet ornaments, mascots or the like; Mounting means therefor]

- B60R13/01 . Liners for load platforms or load compartments
- B60R13/01B . . [N: for internal load compartments, e.g. car trunks] [N0308]
- B60R13/01B2 . . . [N: comprising removable or hinged parts, e.g. for accessing storage compartments] [N0308]

- B60R13/02 . [N: Internal] Trim mouldings; [N: Internal] Ledges; Wall liners [N: for passenger compartments]; Roof liners ([B60R13/01](#) takes precedence; [N: padded linings for the vehicle interior [B60R21/04](#); arrangements or adaptations of floor mats or carpets in vehicles [B60N3/04](#); internal lining for trains [B61D17/18](#)])
- B60R13/02B . . [N: Arrangements of fasteners and clips specially adapted for attaching inner vehicle liners or mouldings (devices for fastening or securing [F16B](#))]
- B60R13/02C . . [N: Roof or head liners (movable head-liners [B60J7/00B](#))] [C0308]
- B60R13/02C1 . . . [N: supported by adhesion with the roof panel] [N0308]
- B60R13/02C2 . . . [N: self supporting head liners]
- B60R13/02C3 . . . [N: specially adapted for roofs with openings] [N0308]
- B60R13/02D . . [N: Side or rear panels] [N0308]
- B60R13/02D2 . . . [N: Doors] [N0308]
- B60R13/02D4 . . . [N: Pillars; Roof rails] [N0308]
- B60R13/02G . . [N: Dashboard liners] [N0308]
- B60R13/02H . . [N: Mid-console liners] [N0309]
- B60R13/02K . . [N: Rear parcel liners (used as luggage covering means [B60R5/04B](#))] [N0308]
- B60R13/02P . . [N: comprising removable or hinged parts (for accessing storage compartments [B60R7/04](#); for airbag deployment [B60R21/20B](#))] [N0308]

- B60R13/04 . [N: External] Ornamental or guard strips; Ornamental inscriptive devices [N: thereon (fastening strips or bars to sheets or plates by means of clips [F16B5/12](#))]

- B60R13/04B . . [N: Door edge guards]
- B60R13/06 . Sealing strips (sealing arrangements for vehicle windows, windscreens, non-fixed roofs, doors, or similar devices [B60J10/00](#))
- B60R13/07 . Water drainage or guide means not integral with roof structure ([B60R13/06](#), [N: [B60J10/00D6](#)] take precedence; [N: integral with roof structure [B62D25/07](#); drainage openings having movable or removable closures [B62D25/24](#)]) [C9609]
- B60R13/08 . Insulating elements, e.g. for sound insulation [N: (sound insulating linings for trains [B61D17/18B](#); drivers` cabs for load-carrying vehicles insulated against vibrations or noise [B62D33/06C](#); thermal or acoustic insulation of engines [F02B77/11](#); damping of sounds using compensation by electro-acoustic methods [G10K11/178](#))] [C9410]
- B60R13/08B . . [N: Acoustic of thermal insulation of passenger compartments (wall or roof liners integrating the insulating function [B60R13/02](#); insulating floor mats or carpets [B60N3/04](#))] [N0308]
- B60R13/08B1 . . . [N: Insulating partitions, e.g. between front and rear seats] [N0308]
- B60R13/08B2 . . . [N: for fire walls or floors] [N0308]
- B60R13/08C . . [N: for engine compartments] [N0308]
- B60R13/08D . . [N: for duct, cable or rod passages, e.g. between engine and passenger compartments] [N0308]
- B60R13/08D2 . . . [N: specially adapted for movable parts, e.g. gears levers, pedals] [N0308]
- B60R13/08F . . [N: for covering undersurfaces of vehicles, e.g. wheel houses] [N0308]
- B60R13/08H . . [N: for protecting heat sensitive parts, e.g. electronic components] [N0308]
- B60R13/08K . . [N: for mounting around heat sources, e.g. exhaust pipes] [N0308]
- B60R13/08L . . [N: for mounting around noise sources, e.g. air blowers] [N0308]
- B60R13/08N . . [N: for humidity insulation (sealing strips [B60R13/06](#))] [N0308]
- B60R13/10 . Registration, licencing, or like devices
- B60R13/10B . . [N: Licence- or registration plates, provided with mounting means, e.g. frames, holders, retainers, brackets] [N9510]
- B60R15/00 Arrangements or adaptations of sanitation devices**
- B60R15/02 . Washing facilities [N: (in railway vehicles [B61D35/00B](#))]
- B60R15/04 . Toilet facilities [N: (in railway vehicles [B61D35/00C](#))]
- B60R16/00 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 [N: (devices for protecting vehicle occupants in case of accidents [B60R21/00](#); safety belts [B60R22/00](#); central door locking [E05B65/36B](#), [E05B65/38](#))] [C0606]**
- B60R16/00A . [N: Electro-mechanical devices, e.g. switched (electric switches in general [H01H](#))]
- B60R16/02 . electric [N: constitutive elements]
- B60R16/02C . . [N: Wire harnesses] [N9902]
- B60R16/02C2 . . . [N: Protecting, fastening and routing means therefor] [N9902]

- B60R16/02C2A [N: Grommets] [N9902]
- B60R16/023 . . for transmission of signals between vehicle parts or subsystems [N0606]
- B60R16/023D . . . [N:Circuits relating to the driving or the functioning of the vehicle (for dash boards B60K37/00, B60Q3/04; for indicating emergencies B60Q1/52; registering or indicating the working of vehicles G07C5/00; measuring distance G01C, e.g. combinations of speed and distance G01C23/00; engine indicators G01L; measuring speed or acceleration G01P; brake control systems B60T; monitoring tyres B60C23/00; indicating overspeed B60K31/00)] [N0606]
- B60R16/023D3 [N: for measuring vehicle parameters and indicating critical, abnormal or dangerous conditions] [N0606]
- B60R16/023D3F [N: Vehicle tilting, overturning or roll over] [N0606]
- B60R16/023D3H [N: related to maintenance or repairing of vehicles] [N0606]
- B60R16/023D5 [N: for lighting devices combined with starting or ignition devices for road vehicles] [N0606]
- B60R16/023D7 [N: for economical driving] [N0606]
- B60R16/023G . . . [N: circuits concerning the atmospheric environment (meteorology G01W)] [N0606]
- B60R16/023K . . . [N: Electrical distribution centers] [N0606]
- B60R16/023L . . . [N: Electronic boxes] [N0606]
- B60R16/027 . . . between relatively movable parts of the vehicle, e.g. between steering wheel and column [N: (devices for measuring, signalling or controlling tyre pressure or temperature specially adapted for mounting on vehicles B60C23/00)] [N0606]
- B60R16/03 . . for supply of electrical power to vehicle subsystems [N: or for (circuit arrangements for charging batteries H02J7/00)] [N0606]
- B60R16/03G . . . [N: using generators driven by a machine different from the vehicle motor] [N0606]
- B60R16/03M . . . [N: using multiplexing techniques (multiplexing for transmission of signals G08C15/00; multiplexing for electrical communication in general H04J)] [N0606]
- B60R16/033 . . . characterised by the use of electrical cells or batteries (for propulsion puposes B60K1/04; supplying batteries to, or removing batteries from, vehicles B60S5/06; testing of charge state G01R31/36) [N0606]
- B60R16/037 . . for occupant comfort, [N: e.g. for automatic adjustment of appliances according to personal settings, e.g. seats, mirrors, steering wheel] [N0606]
- B60R16/037B . . . [N: Voice control (in general G10L)] [N0606]
- B60R16/037D . . . [N: Gear-shift lever position (indicating position of controlling members in general G05G1/00)] [N0606]
- B60R16/04 . . Arrangement of batteries [N0606]
- B60R16/06 . . for removing electrostatic charges (carrying-off electrostatic charges in general H05F3/00)
- B60R16/08 . fluid
- B60R17/00** **Arrangements or adaptations of lubricating systems or devices (lubricating in general [F16N](#))**
- B60R17/02 . Systems, e.g. central lubrication systems
- B60R19/00** **Wheel guards; Radiator guards, [N: e.g. grilles]; Obstruction removers; Fittings damping bouncing force in collisions ([N: reinforcement elements for side doors [B60J5/04D](#);] mudguards B62D)**

- B60R19/02 . Bumpers, i.e. impact receiving or absorbing members for protecting vehicles or fending off blows from other vehicles or objects ([N: [B60R19/56](#) takes precedence;] initiating brake action by contact of bumper with an external object [B60T7/22](#); for rail vehicles [B61F19/04](#); safety equipment for cycles [B62J27/00](#);] integral with waterborne vessels or specially adapted therefor [B63B59/02](#)) [C1207]
- B60R19/02B . . [N: Details]
- B60R19/03 . . characterised by material, e.g. composite ([B60R19/18](#) takes precedence)
- B60R19/04 . . formed from more than one section [N: in a side-by-side arrangement] [C0309]
- B60R19/12 . . . vertically spaced
- B60R19/14 . . . having folding parts
- B60R19/16 . . . having deflecting members, e.g. rollers, balls
- B60R19/18 . . [N: characterised by the cross-section;] Means within the bumper to absorb impact
- B60R19/20 . . . containing [N: mainly] gas or liquid, e.g. inflatable (connection of valves to inflatable elastic bodies [B60C29/00](#))
- B60R19/20C [N: inflatable in the direction of an obstacle upon impending impact, e.g. using air bags] [N9705]
- B60R19/22 . . . containing [N: mainly] cellular material, e.g. solid foam
- B60R19/24 . . Arrangements for mounting bumpers on vehicles [C0309] [C0612]
- B60R19/26 . . . comprising yieldable mounting means ([N: [19/38](#) takes precedence;] springs, shock absorbers, or means for damping vibrations per se [F16F](#))
- B60R19/28 Metallic springs
- B60R19/28B [N: comprising only leaf springs, e.g. the mounting means forming part of the guard itself]
- B60R19/30 Elastomeric material [N: ([19/34](#) takes precedence)]
- B60R19/32 Fluid shock absorbers [N: , e.g. with coaxial coil springs]
- B60R19/34 destroyed upon impact, e.g. one-shot type
- B60R19/36 Combinations of yieldable mounting means of different types [N: (fluid shock absorbers with coaxial coil springs [B60R19/32](#))]
- B60R19/38 adjustably or movably mounted, e.g. horizontally displaceable for securing a space between parked vehicles [N: (adjustably mounted for compensating manufacturing tolerances [B60R19/24](#), [B60R19/26](#))]
- B60R19/40 in the direction of an obstacle before a collision, [N: or extending during driving of the vehicle, i.e. to increase the energy absorption capacity of the bumper (inflatable bumpers [B60R19/20](#))] [C9705]
- B60R19/42 . . extending primarily along the sides of, or completely encircling, a vehicle (ornamental or guard strips [B60R13/04](#)) [C0612]
- B60R19/44 . . Bumper guards
- B60R19/44C . . . [N: Guard strips] [N9709]
- B60R19/46 . . . spring- or pivotally-mounted
- B60R19/48 . . combined with, or convertible into, other devices or objects, e.g. bumpers combined with road brushes, bumpers convertible into beds
- B60R19/48D . . . [N: with obstacle sensors of electric or electronic type] [N9807]
- B60R19/50 . . . with lights or registration plates
- B60R19/52 . Radiator or grille guards [N: ; Radiator grilles (cooling aspects [B60K11/08](#))]
- B60R19/54 . Obstruction removers or deflectors ([B60R19/16](#), [B60R21/34](#) take precedence)

- B60R19/54B . . [N: Devices for cutting wire-type obstructions]
- B60R19/56 . [N: 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 [C0612]
- B60R19/56B . . [N: on vehicle sides]

- B60R21/00** **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 [B60R22/00](#); devices, apparatus or methods for life-saving in general [A62B](#); safety devices for propulsion unit control specially adapted for, or arranged in, vehicles [B60K28/00](#); seats constructed to protect the occupant from the effect of abnormal g-forces, e.g. crash or safety seats, [B60N2/42](#); energy-absorbing arrangements for hand wheels for steering vehicles [B62D1/11](#); energy-absorbing arrangements for vehicle steering columns [B62D1/19](#); harnessing in aircraft [B64D25/00](#))

- B60R21/01 . Electrical circuits for triggering [N: passive] safety arrangements, [N: e.g. airbags, safety belt tighteners,] in case of vehicle accidents or impending vehicle accidents [N: (electrical circuits for transmission of signals between steering wheel and the vehicle itself [B60R16/027](#); for electrically actuating belt retractor locking means [B60R22/343](#))] [N0006] [C0605]
- B60R21/013 . . including means for detecting collisions, impending collision or roll-over [N: (inclination sensors per se G01C9/00; acceleration sensors per se G01P15/00; radar systems per se G01S13/00; inertia switches per se H01H35/14)] [N0605]
- B60R21/0132 . . . responsive to vehicle motion parameters [N: ,e.g. to vehicle longitudinal or transversal deceleration or speed value] [N0605]
- B60R21/0134 . . . responsive to imminent contact with an obstacle [N: ,e.g. using radar systems] [N0605]
- B60R21/0136 . . . responsive to actual contact with an obstacle [N: ,e.g. to vehicle deformation, bumper displacement or bumper velocity relative to the vehicle] [N0605]
- B60R21/015 . . including means for detecting the presence or position of passengers, passenger seats or child seats, e.g. for disabling triggering [N: ; Including means for controlling the safety arrangement actuation parameters, e.g. rate, speed or timing of airbag inflation, in relation to external conditions, e.g. temperature, crash strength, occupant position, seat belt use or the like; Inhibition means for cases of useless or dangerous conditions, e.g. passengers out of position] [N0605]
- B60R21/017 . . including arrangements for providing electric power to safety arrangements [N: or their actuating means, e.g. to pyrotechnic fuses or electro-mechanic valves] [N0605]
- B60R21/017D . . . [N: Diagnostic or recording means therefor] [N0605]
- B60R21/017D3 [N: for firing circuits using only mechanical switches as collision detecting means, in series with pyrotechnic fuses] [N0605]

- B60R21/02 . Occupant safety arrangements or fittings, [N: e.g. crash pads (seat belts with crash pads [B60R22/14](#); removable children's seats having a front guard or barrier [B60N2/28F](#))] [N1204]
- B60R21/02B . . [N: Rigid partitions inside vehicles, e.g. between passengers and load compartments ([B60R21/12](#) takes precedence)] [C9709]
- B60R21/02P . . [N: Padded or energy absorbing driving control initiating means, e.g. gear lever, pedals ([B60R21/09](#) takes precedence; padded linings for steering control means [B60R21/05](#))] [N9610]
- B60R21/04 . . Padded linings for the vehicle interior; [N: Energy absorbing structures associated with padded or non-padded linings]

- B60R21/04F . . . [N: associated with the side doors or panels, e.g. displaced towards the occupants in case of a side collision] [N9611]
- B60R21/045 . . . associated with the instrument panel or dashboard
- B60R21/05 . . . associated with the steering wheel, [N: steering] hand lever or [N: steering] column (yieldable steering columns [B62D1/18](#)) [C9610]
- B60R21/055 . . . Padded [N: or energy-absorbing] fittings, [N: e.g. seat belt anchors (sun visors [B60J3/00](#); head rests [B60N2/48](#))]
- B60R21/06 . . . Safety nets, transparent sheets, curtains, or the like, e.g. between occupants and glass ([N: [B60R21/02B](#)], [B60R21/11](#), [B60R21/12](#), [B60R21/16](#) take precedence) [C9709]
- B60R21/08 . . . [N: automatically] movable from an inoperative to an operative position, e.g. in a collision (electrical circuits for triggering safety arrangements [B60R21/01](#)) [C0006]
- B60R21/09 . . . Control elements or operating handles movable from an operative to an out-of-the way position, e.g. [N: pedals,] switch knobs, window cranks [N: (specially adapted for brake pedals, e.g. by venting of master cylinder or destruction of force transmitting rod, [B60T7/06B](#))] [C9702]
- B60R21/11 . . . Overhead guards, e.g. against loads falling down [N: (specially adapted for fork-lift trucks [B66F9/075D](#))]
- B60R21/12 . . . which protect the occupants against personal attack from the inside or the outside of the vehicle
- B60R21/13 . . . Roll-over protection (electrical circuits for triggering safety arrangements [B60R21/01](#)) [C0006]
- B60R21/13B . . . [N: Protective devices for drivers in case of overturning of tractors (means for preventing overturning or tipping of tractors [B62D49/08](#))]
- B60R21/16 . . . Inflatable occupant restraints or confinements designed to inflate upon impact or impending impact, e.g. air bags ([N: protective garments with automatically inflatable shock-absorbing means [A41D13/018](#);] connection of valves to inflatable elastic bodies [B60C29/00](#)) [C1003]
- B60R21/16H . . . [N: combined with vehicle venting means for reducing or avoiding the passenger compartment overpressure during inflation] [N9503]
- B60R21/18 . . . the inflatable member formed as a belt or harness or combined with a belt or harness arrangement
- B60R21/20 . . . Arrangements for storing inflatable members in their non-use or deflated condition; Arrangement or mounting of air bag modules or components [C0606]
- B60R21/201 Packaging straps or envelopes for inflatable members [N1003][M1207]
- B60R21/203 in steering wheels or steering columns [N0606]
- B60R21/203F [N: 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] [N0606]
- B60R21/203H [N: using modules containing inflator, bag and cover attachable to the steering wheel as a complete sub-unit (steering wheel covers with tear lines [B60R21/2165S](#); assembling of modules [B60R21/217](#))] [N0606] [C1003]
- B60R21/203H2 [N: 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 [B60R21/2165S2](#))] [N0606] [C1003]
- B60R21/205 in dashboards [N0606] [C1003]
- B60R21/206 in the lower part of dashboards, e.g. for protecting the knees [N1003]

- [M1207]
- B60R21/207 in vehicle seats [N0606] [C1003]
 - B60R21/207C [N: in children's seats] [N0606]
 - B60R21/21 in vehicle side panels, e.g. doors (pillar mounted arrangements [B60R21/213](#)) [N0606] [C1003]
 - B60R21/213 in vehicle roof frames or pillars [N0606] [C1003] [M2010.12]
 - B60R21/214 in roof panels [N1003] [M1207]
 - B60R21/215 characterised by the covers for the inflatable member [N: ([B60R21/217J](#) takes precedence)] [N0606] [C1003] [M1207]
 - B60R21/2155 with complex motion of the cover; Retraction under the lining during opening [N1003]
 - B60R21/216 comprising tether means for limitation of cover motion during deployment [N1003]
 - B60R21/2165 characterised by a tear line for defining a deployment opening [N1003]
 - B60R21/2165S [N: Steering wheel covers or similar cup-shaped covers] [N1003]
 - B60R21/2165S2 {7 dots} [N: with integrated switches, e.g. horn switches] [N1003]
 - B60R21/217 Inflation fluid source retainers, e.g. reaction canisters; Connection of bags, covers, diffusers or inflation fluid sources therewith or together [N0606] [C1003] [M2010.12]
 - B60R21/217D [N: 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 ([B60R21/217J](#) takes precedence)] [N0606]
 - B60R21/217J [N: the air bag components being completely enclosed in a soft or semi-rigid housing or cover] [N0606] [C1003]
 - B60R21/23 Inflatable members ([N: [B60R21/18](#) takes precedence; connection to inflation fluid source retainers [B60R21/217](#)]) [N0606]
 - B60R21/231 characterised by their shape, construction or spatial configuration [N0606] [C1003] [M2011.01]
- [N: **WARNING** [N1003] [M2011.01]
Groups [B60R21/2334](#) - [B60R21/2346](#) are not complete, pending a reorganisation; see provisionally also group [B60R21/233](#)]
- B60R21/231L [N: specially adapted for side protection ([B60R21/231T](#), [B60R21/232](#) take precedence)] [N0606] [C1003]
 - B60R21/231T [N: Tubular air bags connected to the vehicle at their two extremities] [N0606] [C1003]
 - B60R21/232 Curtain-type airbags deploying mainly in a vertical direction from their top edge [N1003]
 - B60R21/233 comprising a plurality of individual compartments; comprising two or more bag-like members, one within the other ([B60R21/232](#) takes precedence) [N0606] [C1003]
 - B60R21/2334 Expansion regulating features [N1003]
 - B60R21/2338 Tethers [N1003]
 - B60R21/2342 Tear seams [N1003]
 - B60R21/2346 Soft diffusers [N1003]
 - B60R21/235 characterised by their material [N0606] [C1003]
 - B60R21/237 characterised by the way they are folded [N0606] [C1003]

- B60R21/239 characterised by their venting means [N0606] [C1003]
- B60R21/26 characterised by the inflation fluid source or means to control inflation fluid flow
[N: (arrangement or mounting thereof to the vehicle [B60R21/20](#); blasting cartridges for producing gas under pressure in general [F42B3/04](#); Initiators or igniters therefor [F42B3/10](#))] [C1003] [M2011.01]
- [N: **WARNING** [N1003] [M2011.01]
Groups [B60R21/261](#) - [B60R21/264](#) are not complete, pending a reorganisation; see provisionally also this group
]
- B60R21/26A [N: the inflation fluid being transferred to the inflatable member by the mechanical deformation of the fluid container during an impact] [N9410] [C1003]
- B60R21/261 with means other than bag structure to diffuse or guide inflation fluid [N1003]
- B60R21/262 Elongated tubular diffusers, e.g. curtain-type [N1003]
- B60R21/263 using a variable source, e.g. plural stage or controlled output (hybrid inflators [B60R21/272](#)) [N1003]
- B60R21/264 using instantaneous generation of gas, e.g. pyrotechnic ([B60R21/268](#) takes precedence) [N0606] [C1003]
- B60R21/264C [N: using only solid reacting substances, e.g. pellets, powder] [N0606]
- B60R21/264C3 [N: the reacting substances being supported by the inflatable member walls, or by a flexible support within it] [N0606]
- B60R21/268 using instantaneous release of stored pressurized gas [N: ([B60R21/26A](#) takes precedence)] [N0606] [C1003]
- B60R21/272 with means for increasing the pressure of the gas just before or during liberation, e.g. hybrid inflators [N0606] [C1003]
- B60R21/274 characterised by means to rupture or open the fluid source [N1003]
- [N: **WARNING** [N1003]
This group is not complete, pending a reorganisation; see provisionally also group [B60R21/268](#)
]
- B60R21/276 with means to vent the inflation fluid source, e.g. in case of overpressure [N: ([B60R21/30](#) takes precedence; venting means on inflatable member walls [B60R21/239](#))] [N0606] [C1003]
- B60R21/30 with means to draw ambient air into the flow line and mix such air with the inflation fluid
- B60R21/33 Arrangements for non-electric triggering of inflation (electrical circuits for triggering safety arrangements [B60R21/01](#)) [N0606] [C1003]
- B60R21/34 Protecting non-occupants of a vehicle, e.g. pedestrians [N: ([B60R19/02](#) takes precedence)] [C0309] [M1207]
- B60R21/36 using airbags [N1003]
- B60R21/38 using means for lifting bonnets [N1003]
- B60R22/00** **Safety belts or body harnesses in vehicles** (safety belts or body harnesses in general [A62B35/00](#))
- B60R22/00F [N: Knee, leg or head belts] [N9510]
- B60R22/02 Semi-passive restraint systems, e.g. systems applied or removed automatically but not both; [N: Manual restraint systems (knee, leg or head belts [B60R22/00F](#); devices

- for releasing in an emergency, remote or automatic unbuckling devices [B60R22/32](#)] [C9510]
- [B60R22/02D](#) . . [N: with means for facilitating access to rear seats in two-door cars]
- [B60R22/02F](#) . . [N: Three-point seat belt systems comprising two side lower and one side upper anchoring devices ([B60R22/02D](#), [B60R22/03](#) take precedence)] [C9410]
- [B60R22/02F2](#) . . . [N: Adaptations for use by small passengers, e.g. children ([B60R22/20](#) takes precedence; using belt anti-slip devices [B60R22/30](#))]
- [B60R22/03](#) . . Means for presenting the belt or part thereof to the wearer, [N: e.g. foot-operated] [N9410] [C9605]
- [B60R22/04](#) . Passive restraint systems, i.e. systems both applied and removed automatically, e.g. by movement of the vehicle door [C9410]
- [B60R22/06](#) . . having the belt or harness connected to a member slidable in a vehicle-mounted track
- [B60R22/08](#) . . having the belt retractor mounted on or in a vehicle closure, e.g. the door
- [B60R22/10](#) . specially adapted for children or animals (children`s seats [B60N2/24](#)) [C9410]

Note

Groups [B60R22/02](#) [N: [B60R22/02D](#)] to [B60R22/08](#), [B60R22/18](#) to [B60R22/48](#) take precedence over group [B60R22/10](#)

- [B60R22/10B](#) . . [N: for children (adaptation of children`s seats for seat belts [B60N2/26B](#), [B60N2/28B](#))] [C9410]
- [B60R22/12](#) . Construction of belts or harnesses ([B60R21/18](#) takes precedence; [N: woven fabrics for safety belts [D03D1/00A](#)]) [C9410]
- [B60R22/14](#) . . incorporating enlarged restraint areas, e.g. vests, nets [N: , crash pads, optionally for children (crash pads for occupants` safety on vehicles in general [B60R21/02](#))]
- [B60R22/16](#) . . using belts which become permanently deformed, i.e. one time use
- [B60R22/18](#) . Anchoring devices
- [B60R22/185](#) . . with stopping means for acting directly upon the belt in an emergency, e.g. by clamping or friction [N: ([B60R22/195](#) takes precedence; combined with the retractor [B60R22/42](#))] [N9605]
- [B60R22/185C](#) . . . [N: the means being sensitive to belt tension] [N9605]
- [B60R22/19](#) . . with means for reducing belt tension during use under normal conditions [N: (included in the retractor [B60R22/44](#))] [N0101]
- [B60R22/195](#) . . with means to tension the belt in an emergency, [N: e.g. means of the through-anchor or splitted reel type] (electrical circuits for triggering safety arrangements [N: [B60R21/00B](#)]) [N9605]

[N: 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 [B60R22/46](#)]

- [B60R22/195A](#) . . . [N: characterised by arrangements in vehicle or relative to seat belt] [N9605]
- [B60R22/195B](#) . . . [N: Transmission of tensioning power by cable; Return motion locking means therefor] [N9605]
- [B60R22/195B2](#) [N: the cable being pulled by mechanical means, e.g. pre-stressed springs, bumper displacement during crash] [N9605]

- B60R22/195D . . . [N: characterised by fluid actuators, e.g. pyrotechnic gas generators (actuating a cable [B60R22/195B](#))] [N9605]
- B60R22/195D2 [N: Linear actuators] [N9605]
- B60R22/195D4 [N: Mechanical triggering means therefor (also adapted for air bag inflators [B60R21/32](#))] [N9605]
- B60R22/195F . . . [N: characterised by spring actuators ([B60R22/195B2](#) takes precedence)] [N9605]
- B60R22/20 . . adjustable in position, e.g. in height
- B60R22/20B . . . [N: with the belt anchor connected to a slider movable in a vehicle-mounted track (for passive restraint systems [B60R22/06](#))]
- B60R22/20B2 [N: the slider comprising spring-actuated locking means ([B60R22/20B4](#) takes precedence)]
- B60R22/20B2B [N: the locking means being movably mounted on the slider]
- B60R22/20B4 [N: the slider comprising emergency actuated locking means]
- B60R22/20D . . . [N: Adjustable stop members for restraint systems comprising belt anchor vehicle mounted tracks, e.g. for passive seat belts]
- B60R22/22 . . secured to the vehicle floor
- B60R22/24 . . secured to the side, door, or roof of the vehicle
- B60R22/26 . . secured to the seat

- B60R22/28 . . incorporating energy-absorbing devices [N: (belt anchors provided with energy-absorbing means for protecting the occupants in case of physical contact therewith [B60R21/055](#); belt retractors comprising energy-absorbing means [B60R22/34E](#), [B60R22/46H](#))] [C9709]

- B60R22/30 . . Coupling devices other than buckles, including length-adjusting fittings [N: 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 [B60R22/02F2](#); buckles [A44B11/00](#); releasable fastenings in general F16B)] [C9411]

- B60R22/32 . . Devices for releasing in an emergency, e.g. after an accident; [N: Remote or automatic unbuckling devices (unlocking devices for retractors [B60R22/34G](#))] [C9410]
- B60R22/32B . . . [N: using electric means]
- B60R22/32C . . . [N: using automatic actuating means ([B60R22/32B](#) takes precedence)]
- B60R22/32C2 [N: triggered by strong traction on the seat belt, e.g. with temporisation]
- B60R22/32D . . . [N: using remote control means ([B60R22/32B](#), [B60R22/32C](#) take precedence)]

- B60R22/34 . . Belt retractors, e.g. reels (anchoring devices [N: e.g. guide loops], with means to tension the belt in an emergency [B60R22/195](#)) [N9605]
- B60R22/34B . . . [N: of the non-rotary type]
- B60R22/34C . . . [N: without locking means ([B60R22/34B](#) takes precedence)]
- B60R22/34E . . . [N: comprising energy-absorbing means] [N9709]
- B60R22/34E2 [N: operating between belt reel and retractor frame ([B60R22/46H](#) takes precedence)] [N9709]
- B60R22/34G . . . [N: Unlocking devices for retractors ([B60R22/34B](#) takes precedence)]
- B60R22/343 . . . with electrically actuated locking means [N: ([B60R22/34B](#) takes precedence)] [N9410]
- B60R22/347 . . . with means for permanently locking the retractor during the wearing of the belt ([N: [B60R22/34B](#)], [B60R22/343](#), [B60R22/415](#) take precedence) [N9410]

- B60R22/35 . . . the locking means being automatically actuated [N9410]
- B60R22/353 in response to belt movement when a wearer applies the belt [N9410]
- B60R22/357 in response to fastening of the belt buckle [N9410]
- B60R22/36 . . self-locking in an emergency ([N: [B60R22/34B](#)], [B60R22/343](#) take precedence) [C9410]
- B60R22/38 . . . responsive only to belt movement [C9410]
- B60R22/40 . . . responsive only to vehicle movement [C9410]
- B60R22/405 . . . responsive to belt movement and vehicle movement [N9410]
- B60R22/41 . . . with additional means for preventing locking [N: during unwinding] under predetermined conditions [N9410] [C9510]
- B60R22/415 . . . with additional means allowing a permanent locking of the retractor during the wearing of the belt [N9410]
- B60R22/42 . . . having means for acting directly upon the belt, e.g. by clamping or friction [N: (not combined with the retractor [B60R22/185](#))] [C9605]
- B60R22/44 . . with means for reducing belt tension during use under normal conditions [N: (not included in the retractor [B60R22/19](#); [B60R22/34B](#) takes precedence)] [C0101]
- B60R22/46 . . [N: Reels] with means to tension the belt in an emergency [N: by forced winding up] (electrical circuits for triggering safety arrangements [B60R21/01](#)) [N: tensioners using reels only guiding the belt during normal use, e.g. splitted reels [B60R22/195](#)] [C9605]
- B60R22/46A . . . [N: characterised by arrangements in vehicle or relative to seat belt] [N9605]
- B60R22/46B . . . [N: Transmission of tensioning power by cable, e.g. using a clutch on reel side] [N9605] [C9605]
- B60R22/46B2 [N: the cable being pulled by mechanical means, e.g. pre-stressed springs, bumper displacement during crash] [N9605]
- B60R22/46D [N: characterised by fluid actuators, e.g. pyrotechnic gas generators (actuating a cable [B60R22/46B](#))] [N9605]
- B60R22/46D2 [N: Linear actuators, e.g. comprising a piston moving along reel axis and rotating along its own axis] [N9605]
- B60R22/46D4 [N: Mechanical triggering means therefor (also adapted for air bag inflators [B60R21/32](#))] [N9605]
- B60R22/46F . . . [N: characterised by spring actuators ([B60R22/46B2](#) takes precedence)] [N9605]
- B60R22/46H . . . [N: comprising energy-absorbing means operating between belt reel and retractor frame] [N9709]

- B60R22/48 . Control systems, alarms, or interlock systems, for the correct application of the belt or harness

B60R25/00

Fittings or systems for preventing or indicating unauthorised use or theft of vehicles ([N: for accessories, see the relevant groups, e.g. for radio sets [B60R11/02B](#); anti-theft devices for wheel cover discs, rings or the like [B60B7/16](#); covers, caps or guards for hitches, e.g. comprising anti-theft devices [B60D1/60](#); anti-theft devices for spare wheels [B62D43/00D](#); king pins with anti-coupling devices [B62D53/08C2](#); locks for vehicles [E05B65/12](#)] [N1205]

[N: **WARNING**

Subgroups of [B60R25/00](#) corresponding to IPC2013.01 are not complete pending the completion of a reclassification; see also [B60R25/00](#) and its other subgroups

]

- B60R25/00D . [N: Anti-theft devices acting on jacking means or props, e.g. for trailers]
- B60R25/00G . [N: Locking of control actuating or transmitting means (of steering mechanism [B60R25/02](#))]
- B60R25/00G2 . . [N: locking of control actuating means]
- B60R25/00G2B . . . [N: of foot actuated control means (rods connecting pedals and steering wheels [B60R25/02C2](#))]
- B60R25/00G2B2 [N: using means preventing access, e.g. boxes, shutters]
- B60R25/00G2C . . . [N: of hand actuated control means]
- B60R25/00G2C2 [N: comprising means for locking two or more control means together, e.g. hand-brake handle and gear shift lever]

- B60R25/01 . [N: IPC 2013.01] operating on vehicle systems or fittings, e.g. on doors, seats or windscreens [N1205]
- B60R25/01B . . [N: Airbags triggered] [N1205]
- B60R25/01K . . [N: comprising means for locking the seat or parts thereof in a driving prevention position] [N1205]
- B60R25/01L . . [N: comprising means for shuttering the windscreen or part thereof] [N1205]
- B60R25/01M . . [N: Thief traps] [N1205]
- B60R25/02 . . operating on the steering mechanism [N1205]
- B60R25/021 . . . [N: IPC 2013.01] restraining movement of the steering column or steering wheel hub, e.g. restraining means controlled by ignition switch [N1205]
- B60R25/021A [N: with supplementary safety device preventing operation of the starter of an engine already running] [N1205]
- B60R25/021B [N: Arrangement of the steering column thereof] [N1205]
- B60R25/021B1 [N: comprising overload clutching means] [N1205]
- B60R25/021C [N: comprising a locking member radially and linearly moved towards the steering column] [N1205]
- B60R25/021C1 [N: manually actuated, e.g. using removable locking means] [N1205]
- B60R25/021C2 [N: key actuated] [N1205]
- B60R25/021C2A [N: with linear bolt motion parallel to the lock axis] [N1205]
- B60R25/021C2A1 {7 dots} [N: comprising safety devices avoiding locking until removal of the key] [N1205]
- B60R25/021C2A1A {8 dots} [N: using an axially slidable lock cylinder] [N1205]
- B60R25/021C2B [N: with linear bolt motion perpendicular to the lock axis] [N1205]
- B60R25/021C2B1 {7 dots} [N: comprising safety devices avoiding locking until removal of the key] [N1205]
- B60R25/021C2B1A {8 dots} [N: by using an axially slidable lock cylinder] [N1205]
- B60R25/021D [N: comprising a locking member axially moved along the steering column] [N1205]
- B60R25/021D1 [N: manually actuated, e.g. using removable locking members] [N1205]
- B60R25/021D2 [N: key actuated] [N1205]
- B60R25/021E [N: comprising externally controlled safety devices for preventing locking during vehicle running condition] [N1205]
- B60R25/021E1 [N: interlocked with gear box or gear lever] [N1205]
- B60R25/021F [N: comprising a locking member having other than linear, axial or radial

- motion, e.g. rotatable; Steering column locking using balls, rollers or the like]
[N1205]
- B60R25/0215 [N: IPC 2013.01] using electric means, e.g. electric motors or solenoids
[N1205]
- B60R25/0215A [N: comprising a locking member radially and linearly moved towards the
steering column] [N1205]
- B60R25/0215B [N: comprising a locking member axially moved along the steering
column] [N1205]
- B60R25/022 [N: IPC 2013.01] operating on the steering wheel, e.g. bars locked to the
steering wheel rim (B60R25/021 takes precedence) [N1205]
- B60R25/022B [N: restraining means joining the steering wheel with another part of the car,
e.g. pedals] [N1205]
- B60R25/022D [N: by disjoining steering wheel and column] [N1205]
- B60R25/022F [N: restraining of steering wheel by collapsing against column] [N1205]
- B60R25/022H [N: using a rod locked on the steering wheel rim (B60R25/022B takes
precedence)] [N1205]
- B60R25/022J [N: using means preventing access, e.g. boxes enclosing the steering wheel
(B60R25/01K takes precedence)] [N1205]
- B60R25/022L [N: comprising a locking bolt or fork slidable between or around the steering
wheel spokes] [N1205]
- B60R25/023 [N: IPC 2013.01] countermeasures against the physical destruction of the
steering lock [N1205]
- B60R25/04 operating on the propulsion system, e.g. engine or drive motor [N1205]
- B60R25/042 [N: IPC2013.01] operating on the fuel supply [N1205]
- B60R25/043 [N: IPC2013.01] by blocking the exhaust [N1205]
- B60R25/044 [N: IPC2013.01] by limiting or blocking the air supply [N1205]
- B60R25/045 [N: IPC2013.01] by limiting or cutting the electrical supply to the propulsion unit
[N1205]
- B60R25/06 operating on the vehicle transmission [N1205]
- B60R25/06B [N: Locking of foot actuated control actuating means] [N1205]
- B60R25/06D [N: Locking of hand actuated control actuating means] [N1205]
- B60R25/08 operating on brakes or brake system [N1205]
- B60R25/08B [N: Locking of foot-actuated control actuating means] [N1205]
- B60R25/08D [N: Locking of hand-actuated control actuating means] [N1205]
- B60R25/09 [N: IPC2013.01] by restraining wheel rotation, e.g. wheel clamps [N1205]
- B60R25/09B [N: comprising ground-engaging means] [N1205]
- B60R25/09D [N: comprising means for deflating tyres] [N1205]
- B60R25/10 actuating a signalling device
- B60R25/10A [N: Alarm systems associated with another car fitting or mechanism, e.g. door lock
or knob, pedals (features related to the general power supply [B60R25/10F](#))]
- B60R25/10B [N: Alarm systems characterised by arm or disarm features]
- B60R25/10C [N: Alarm systems characterised by the type of sensor, e.g. current sensing means
(using door lock sensors [B60R25/10A](#))]
- B60R25/10C1 [N: Mechanical sensors, e.g. pendulums ([B60R25/10C3](#) takes precedence)]
- B60R25/10C1B [N: comprising associated circuitry]

- B60R25/10C2 . . . [N: Sonic sensors; Signal treatment therefor] [C9609]
- B60R25/10C3 . . . [N: Fuel level sensors]
- B60R25/10C4 . . . [N: Zone surveillance means, e.g. parking lots, truck depots]
- B60R25/10F . . . [N: Alarm systems characterised by features related to the general power supply]
- B60R25/102 . . . [N: IPC 2013.01] 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 [N1205]
- B60R25/102B . . . [N: preventing jamming or interference of said signal] [N1205]
- B60R25/104 . . . [N: IPC 2013.01] characterised by the type of theft warning signal, e.g. visual or audible signals with special characteristics [N1205]
- B60R25/104B . . . [N: Signal coming from the exhaust] [N1205]

- B60R25/20 . . . [N: IPC2013.01] Means to switch the anti-theft system on or off [N1205]
- B60R25/20B . . . [N: Antitheft state indicator] [N1205]
- B60R25/20D . . . [N: Central base unlocks or authorises unlocking] [N1205]
- B60R25/20F . . . [N: with data signals passing through the human body] [N1205]
- B60R25/20H . . . [N: by using the door logic and door and engine unlock means] [N1205]
- B60R25/20J . . . [N: by hand gestures] [N1205]
- B60R25/20L . . . [N: by foot gestures] [N1205]
- B60R25/20N . . . [N: Ignition switch geometry] [N1205]
- B60R25/20P . . . [N: with means for preventing jamming or interference of a remote switch control signal] [N1205]
- B60R25/20R . . . [N: combined with personal settings of other vehicle devices, e.g. mirrors, seats, steering wheels] [N1205]
- B60R25/20S . . . [N: Remote starting of engine] [N1205]
- B60R25/21 . . . [N: IPC2013.01] using hidden switches [N1205]
- B60R25/22 . . . [N: IPC2013.01] using mechanical identifiers [N1205]
- B60R25/22B . . . [N: key in lock presence switch] [N1205]
- B60R25/23 . . . [N: IPC2013.01] using manual input or alphanumerical codes [N1205]
- B60R25/24 . . . [N: IPC2013.01] using electronic identifiers containing a code not memorised by the user [N1205]
- B60R25/24B . . . [N: whereby access privileges are related to the identifiers] [N1205]
- B60R25/24D . . . [N: with more than one way to gain access] [N1205]
- B60R25/24F . . . [N: where the antenna reception area plays a role] [N1205]
- B60R25/24H . . . [N: characterised by the challenge triggering] [N1205]
- B60R25/24J . . . [N: Electronic key extraction prevention] [N1205]
- B60R25/25 . . . [N: IPC2013.01] using biometry [N1205]
- B60R25/25B . . . [N: Fingerprint recognition] [N1205]
- B60R25/25D . . . [N: Eye recognition] [N1205]
- B60R25/25F . . . [N: Voice recognition] [N1205]

- B60R25/30 . . . [N: IPC2013.01] Detection related to theft or to other events relevant to anti-theft systems [N1205]
- B60R25/30B . . . [N: using recording means, e.g. black box] [N1205]
- B60R25/30D . . . [N: using a camera] [N1205]
- B60R25/30F . . . [N: using data concerning maintenance or configuration] [N1205]

- B60R25/31 . . [N: IPC2013.01] of human presence inside or outside the vehicle [N1205]
- B60R25/32 . . [N: IPC2013.01] of vehicle dynamic parameters, e.g. speed or acceleration [N1205]
- B60R25/33 . . [N: IPC2013.01] of global position, e.g. by providing GPS coordinates [N1205]
- B60R25/34 . . [N: IPC2013.01] of conditions of vehicle components, e.g. of windows, door locks or gear selectors [N1205]

- B60R25/40 . [N: IPC2013.01] 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 [N1205]
- B60R25/40B . . [N: Power supply in the vehicle] [N1205]
- B60R25/40D . . [N: Power supply in the remote key] [N1205]

- B60R99/00** **Subject matter not provided for in other groups of this subclass [N1204]**