

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](#)

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)	1/074	. . . . . for retracting the mirror arrangements to a non-use position alongside the vehicle
1/001	. {integrated in the windows, e.g. Fresnel lenses}	1/076	. . . yieldable to excessive external force and provided with an indexed use position ({ B60R 1/0617 , B60R 1/074 } take precedence)
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)}	1/078	. . . easily removable; mounted for bodily outward movement, e.g. when towing
1/003	. . {for viewing trailer hitches}	1/08	. . involving special optical features, e.g. avoiding blind spots {, e.g. convex mirrors; Side-by-side associations of rear-view and other mirrors (B60R 1/025 , B60R 1/10 take precedence)}
1/005	. {specially adapted for viewing traffic-lights}	1/081	. . . {avoiding blind spots, e.g. by using a side-by-side association of mirrors}
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)}	1/082	. . . . {using a single wide field mirror or an association of rigidly connected mirrors}
1/007	. . {specially adapted for covering the lateral blind spot not covered by the usual rear-view mirror}	1/083	. . . {Anti-glare mirrors, e.g. "day-night" mirrors}
1/008	. {allowing the driver to see passengers, e.g. for busses (combined with rear-view mirrors B60R 1/08)}	1/084	. . . . {using a removable filtering or hiding screen (associated with windows or windscreens B60J 3/00)}
1/02	. Rear-view mirror arrangements (periscope arrangements B60R 1/10)	1/085	. . . . {using a combination of interchangeable reflecting surfaces, e.g. reversible mirrors}
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}	1/086	. . . . {using a mirror angularly movable between a position of use and a non-glare position reflecting a dark field to the user, e.g. situated behind a transparent glass used as low-reflecting surface; Wedge-shaped mirrors}
1/04	. . mounted inside vehicle {(B60R 1/025 , B60R 1/08 take precedence)}	1/087	. . . . . {with remote or automatic control means}
1/06	. . mounted on vehicle exterior {(B60R 1/025 , B60R 1/08 take precedence)}	1/088	. . . . {using a cell of electrically changeable optical characteristic, e.g. liquid-crystal or electrochromic mirrors}
1/0602	. . . {comprising means for cleaning or deicing}	1/089	. . . . {using a liquid filtering layer of variable thickness}
1/0605	. . . {specially adapted for mounting on trucks, e.g. by C-shaped support means}	1/10	. Front-view mirror arrangements; {(specially adapted for covering the peripheral part of the vehicle B60R 1/002); periscope arrangements {, i.e. optical devices using combinations of mirrors, lenses, prisms or the like (specially adapted for covering the peripheral part of the vehicle B60R 1/002 ; for viewing traffic-lights B60R 1/005); Other mirror arrangements giving a view from above or under the vehicle}
1/0607	. . . . {with remote position control adjustment}	1/105	. . {Optical arrangements giving a view under the vehicle, e.g. using periscopes}
1/061	. . . . . {by manually actuated mechanical means, e.g. push-pull cables}	1/12	. Mirror assemblies combined with other articles, e.g. clocks
1/0612	. . . . . {by electrically actuated means}	1/1207	. . {with lamps; with turn indicators}
1/0615	. . . . . {by hydraulically or pneumatically actuated means}	2001/1215	. . {with information displays}
1/0617	. . . . {foldable along the vehicle, e.g. in case of external force applied thereon}	2001/1223	. . {with sensors or transducers}
1/062	. . . with remote control for adjusting position {(B60R 1/0607 takes precedence)}	2001/123	. . {with thermometers}
1/0625	. . . . {by hydraulically or pneumatically powered actuators}	2001/1238	. . {with vanity mirrors}
1/064	. . . . by manually powered actuators	2001/1246	. . {with clocks}
1/066	. . . . . for adjusting the mirror relative to its housing	2001/1253	. . {with cameras, video cameras or video screens}
1/068	. . . . . using cables	2001/1261	. . {with antennae}
1/07	. . . . by electrically powered actuators		
1/072	. . . . . for adjusting the mirror relative to its housing		

2001/1269	. . {with sun visors}	7/05	. . mounted on sun visor
2001/1276	. . {with radio receivers, loud-speakers or buzzers}	7/06	. . mounted on or below dashboards
2001/1284	. . {with communication systems other than radio-receivers, e.g. keyless entry systems, navigation systems; with anti-collision systems}	7/08	. Disposition of racks, clips, {holders, containers} or the like {for supporting specific articles (B60R 7/005 takes precedence)}
2001/1292	. . {with holding means for personal articles}	7/081	. . {for supporting maps}
3/00	Arrangements of steps {or ladders facilitating access to or on the vehicle}, e.g. running-boards ({construction of steps for railway vehicles B61D 23/00 }; ladders E06C)	7/082	. . {for supporting spectacles}
3/002	. {Running boards (for vehicle tops B60R 3/005 ; at the sides of the vehicle for carrying loads B60R 9/02)}	7/084	. . {for supporting tissues or tissue boxes}
3/005	. {Catwalks, running boards for vehicle tops, access means for vehicle tops; Handrails therefor}	7/085	. . {for supporting flowers or flower vases}
3/007	. {Removable steps or ladders, e.g. foldable (as access means for vehicle tops B60R 3/005)}	7/087	. . {for stowing money or valuables, e.g. using safes}
3/02	. Retractable steps {or ladders, e.g. movable under shock (B60R 3/005 takes precedence)}	7/088	. . {for stowing tape cartridges, compact discs, or the like}
3/04	. with provisions for shoe scraping	7/10	. . for supporting hats, clothes or clothes hangers
5/00	Compartments within vehicle body primarily intended or sufficiently spacious for trunks, suit-cases, or the like (primarily intended for stowing loads in load-transporting vehicles B60P ; arrangements for stowing spare wheels B62D 43/00)	7/12	. . for supporting umbrellas
5/003	. {Luggage racks, e.g. for busses (primarily intended for passengers' property smaller than suitcases B60R 7/04 ; B60R 7/08 ; luggage racks for rail vehicles B61D 37/003)}	7/14	. . for supporting weapons
5/006	. {stowing or holding means for elongated articles, e.g. skis inside vehicles}	9/00	Supplementary fittings on vehicle exterior for carrying loads, e.g. luggage, sports gear or the like
5/02	. arranged at front of vehicle {(B60R 5/003 takes precedence)}	9/02	. at the sides, e.g. on running-board
5/04	. arranged at rear of vehicle {(B60R 5/003 , B60R 5/006 take precedence; external trunks arranged at rear of vehicle B60R 9/065)}	9/04	. Carriers associated with vehicle roof (B60R 9/08 takes precedence)
5/041	. . {extensible externally of the vehicle body, e.g. to create an open luggage compartment of increased capacity (devices for anchoring the boot lid while carrying oversize objects E05C 17/042)}	9/042	. . Carriers characterised by means to facilitate loading or unloading of the load, e.g. rollers, tracks, or the like
5/042	. . . {to create an enclosed luggage compartment of increased capacity, e.g. with ventilation apertures for transporting dogs}	9/0423	. . . {for ladders}
5/044	. . {luggage covering means, e.g. parcel shelves}	9/0426	. . . {for small vehicles, e.g. invalid chairs, perambulators}
5/045	. . . {collapsible or transformable}	9/045	. . Carriers being adjustable or transformable, e.g. expansible, collapsible {(transformable into tents B60P 3/36 ; into beds B60P 3/38)}
5/047	. . . . {collapsible by rolling-up}	9/048	. . Carriers characterised by article-gripping, {-covering,}-retaining, or -locking means
5/048	. . . . {of accordion-type, i.e. collapsible by sliding and folding}	9/0485	. . . {for ladders (B60R 9/0423 takes precedence)}
7/00	Stowing or holding appliances inside vehicle primarily intended for personal property smaller than suit-cases, e.g. travelling articles, or maps (for radio sets, television sets, telephones or the like, mounting of cameras operative during drive, tools, or spare parts B60R 11/00 ; for receptacles for refuse, food, beverages, cigarettes B60N)	9/05	. . Carriers characterised by wind deflecting means (wind deflectors for open roofs B60J 7/22)
7/005	. {Nets or elastic pockets tensioned against walls or backrests}	9/052	. . Carriers comprising elongate members extending only transversely of vehicle (B60R 9/08 takes precedence)
7/02	. in separate luggage compartment {(B60R 7/005 takes precedence)}	9/055	. . Enclosure-type carriers, e.g. containers, boxes (B60R 9/048 takes precedence)
7/04	. in driver or passenger space, {e.g. using racks (B60R 7/005 , B60R 7/08 take precedence)}	9/058	. . characterised by releasable attaching means between carrier and roof
7/043	. . {mounted on or under a seat}	9/06	. at vehicle front or rear {(rear luggage compartments within vehicle extensible externally of the vehicle body B60R 5/041)}
7/046	. . {mounted on door}	9/065	. . {Enclosure-type carriers, e.g. trunks}
		9/08	. specially adapted for sports gear (vehicles specially adapted for carrying aeroplanes, for carrying boats B60P)
		9/10	. . for cycles
		9/12	. . for skis
		11/00	Arrangements for holding or mounting articles, not otherwise provided for
		2011/0001	. {characterised by position}
		2011/0003	. . {inside the vehicle}
		2011/0005	. . . {Dashboard}
		2011/0007	. . . {Mid-console}
		2011/0008	. . . {Ventilation grilles}
		2011/001	. . . {Vehicle control means, e.g. steering-wheel or column}
		2011/0012	. . . {Seats or parts thereof}
		2011/0014	. . . . {Arm-rests}

2011/0015	. . . . {Back-rests}	11/0211	. . {for record carriers apparatus, e.g. video recorders, tape players or CD players}
2011/0017	. . . . {Head-rests}	11/0217	. . {for loud-speakers}
2011/0019	. . . {Side or rear panels}	11/0223	. . . {of flat type}
2011/0021	. . . . {Doors}	11/0229	. . {for displays, e.g. cathodic tubes}
2011/0022	. . . . {Pillars}	11/0235	. . . {of flat type, e.g. LCD}
2011/0024	. . . . {Rear shelves}	11/0241	. . {for telephones}
2011/0026	. . . {Windows, e.g. windscreen}	11/0247	. . {for microphones or earphones}
2011/0028	. . . {Ceiling, e.g. roof rails}	11/0252	. . {for personal computers, e.g. laptops, notebooks}
2011/0029	. . . {Floor, e.g. side sills, fire wall}	11/0258	. . {for navigation systems}
2011/0031	. . . {Seat belts}	11/0264	. . {for control means}
2011/0033	. . . {Rear-view mirrors}	2011/027	. . {for Din-sized apparatus}
2011/0035	. . . {Sun visors}	2011/0276	. . {for rear passenger use}
2011/0036	. . . {Luggage compartment}	2011/0282	. . {for the use of several passengers, e.g. simultaneously}
2011/0038	. . . {Engine compartment}	2011/0288	. . {Apparatus made of several modules independently mounted}
2011/004	. . {outside the vehicle}	2011/0294	. . {Apparatus with multi-functionalities, e.g. radio and telephone}
2011/0042	. {characterised by mounting means}	11/04	. Mounting of cameras operative during drive; Arrangement of controls thereof relative to the vehicle
2011/0043	. . {for integrated articles, i.e. not substantially protruding from the surrounding parts}	11/06	. for tools or spare parts (for vehicle roof parts B60J 7/20 ; for spare wheels B62D)
2011/0045	. . . {with visible part, e.g. flush mounted}	13/00	Elements for body-finishing, identifying, or decorating; Arrangements or adaptations for advertising purposes
2011/0047	. . . . {using hidden fastening means}	13/005	. {Manufacturers' emblems, name plates, bonnet ornaments, mascots or the like; Mounting means therefor}
2011/0049	. . {for non integrated articles}	13/01	. Liners for load platforms or load compartments
2011/005	. . . {Connection with the vehicle part}	13/011	. . {for internal load compartments, e.g. car trunks}
2011/0052	. . . . {using screws, bolts, rivets or the like}	13/013	. . . {comprising removable or hinged parts, e.g. for accessing storage compartments}
2011/0054	. . . . {using cigarette lighter}	2013/015	. . {made of a plurality of visible parts}
2011/0056	. . . . {using suction cups}	2013/016	. . {integrating other functions or accessories}
2011/0057	. . . . {using magnetic means}	2013/018	. . {Connection or positioning of adjacent panels}
2011/0059	. . . . {using clips, clamps, straps or the like}	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)
2011/0061	. . . . {using key-type connections}	13/0206	. . {Arrangements of fasteners and clips specially adapted for attaching inner vehicle liners or mouldings (devices for fastening or securing F16B)}
2011/0063	. . . . {using adhesive means, e.g. hook and loop fasteners}	13/0212	. . {Roof or head liners (movable head-liners B60J 7/0007)}
2011/0064	. . . {Connection with the article}	13/0218	. . . {supported by adhesion with the roof panel}
2011/0066	. . . . {using screws, bolts, rivets or the like}	13/0225	. . . {self supporting head liners}
2011/0068	. . . . {using suction cups}	13/0231	. . . {specially adapted for roofs with openings}
2011/007	. . . . {using magnetic means}	13/0237	. . {Side or rear panels}
2011/0071	. . . . {using latches, clips, clamps, straps or the like}	13/0243	. . . {Doors}
2011/0073	. . . . {using key-type connections}	13/025	. . . {Pillars; Roof rails}
2011/0075	. . . . {using a containment or docking space}	13/0256	. . {Dashboard liners}
2011/0077	. . . . {using adhesive means, e.g. hook and loop fasteners}	13/0262	. . {Mid-console liners}
2011/0078	. . . {Quick-disconnect two-parts mounting means}	13/0268	. . {Rear parcel liners (used as luggage covering means B60R 5/044)}
2011/008	. . {Adjustable or movable supports}	13/0275	. . {comprising removable or hinged parts (for accessing storage compartments B60R 7/04 ; for airbag deployment B60R 21/215)}
2011/0082	. . . {collapsible, e.g. for storing after use}	2013/0281	. . {made of a plurality of visible parts}
2011/0084	. . . {with adjustment by linear movement in their operational position}		
2011/0085	. . . {with adjustment by rotation in their operational position}		
2011/0087	. . . . {around two axes}		
2011/0089	. . . . {around three axes, i.e. universally mounted}		
2011/0091	. . . . {the article being mounted on a flexible shaft}		
2011/0092	. . . {with motorization}		
2011/0094	. {characterised by means for covering after user, e.g. boxes, shutters or the like}		
2011/0096	. {Theft prevention of articles}		
2011/0098	. . {using electric or electronic means, e.g. alarms, codes}		
11/02	. for radio sets, television sets, telephones, or the like; Arrangements of control thereof ({stowing of tape cartridges, compact discs or the like B60R 7/088 ; } of aerials H01Q)		
11/0205	. . {for radio sets (B60R 11/0211 takes precedence)}		

2013/0287	. . {integrating other functions or accessories}	16/005	. {Electro-mechanical devices, e.g. switched (electric switches in general H01H)}
2013/0293	. . {Connection or positioning of adjacent panels}	16/02	. electric {constitutive elements}
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)}	16/0207	. . {Wire harnesses}
13/043	. . {Door edge guards}	16/0215	. . . {Protecting, fastening and routing means therefor}
2013/046	. . {Foot boards}	16/0222	. . . . {Grommets}
13/06	. Sealing strips (sealing arrangements for vehicle windows, windscreens, non-fixed roofs, doors, or similar devices B60J 10/00)	16/023	. . for transmission of signals between vehicle parts or subsystems
13/07	. Water drainage or guide means not integral with roof structure (B60R 13/06 , { B60J 10/25 } take precedence; {integral with roof structure B62D 25/07 ; drainage openings having movable or removable closures B62D 25/24 })	16/0231	. . . {Circuits relating to the driving or the functioning of the vehicle (monitoring tyres B60C 23/00 ; indicating overspeed B60K 31/00 ; for dash boards B60K 37/00 , B60Q 3/10 ; for indicating emergencies B60Q 1/52 ; brake control systems B60T ; 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)}
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)}	16/0232	. . . . {for measuring vehicle parameters and indicating critical, abnormal or dangerous conditions}
2013/0807	. . {Arrangements of fasteners or clips specially adapted therefore}	16/0233	. . . . . {Vehicle tilting, overturning or roll over}
13/0815	. . {Acoustic or thermal insulation of passenger compartments (wall or roof liners integrating the insulating function B60R 13/02 ; insulating floor mats or carpets B60N 3/04)}	16/0234	. . . . . {related to maintenance or repairing of vehicles}
13/0823	. . . {Insulating partitions, e.g. between front and rear seats}	16/0235	. . . . {for lighting devices combined with starting or ignition devices for road vehicles}
13/083	. . . {for fire walls or floors}	16/0236	. . . . {for economical driving}
13/0838	. . {for engine compartments}	16/0237	. . . {circuits concerning the atmospheric environment (meteorology G01W)}
13/0846	. . {for duct, cable or rod passages, e.g. between engine and passenger compartments}	16/0238	. . . {Electrical distribution centers}
13/0853	. . . {specially adapted for movable parts, e.g. gears levers, pedals}	16/0239	. . . {Electronic boxes}
13/0861	. . {for covering undersurfaces of vehicles, e.g. wheel houses}	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)}
13/0869	. . {for protecting heat sensitive parts, e.g. electronic components}	16/03	. . for supply of electrical power to vehicle subsystems {or for (circuit arrangements for charging batteries H02J 7/00)}
13/0876	. . {for mounting around heat sources, e.g. exhaust pipes}	16/0307	. . . {using generators driven by a machine different from the vehicle motor}
13/0884	. . {for mounting around noise sources, e.g. air blowers}	16/0315	. . . {using multiplexing techniques (multiplexing for transmission of signals G08C 15/00 ; multiplexing for electrical communication in general H04J)}
13/0892	. . {for humidity insulation (sealing strips B60R 13/06)}	2016/0322	. . . . {Temporary code for documents to be reclassified to G08C , H04L or H04Q }
13/10	. Registration, licencing, or like devices	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)
13/105	. . {Licence- or registration plates, provided with mounting means, e.g. frames, holders, retainers, brackets}	16/037	. . for occupant comfort, {e.g. for automatic adjustment of appliances according to personal settings, e.g. seats, mirrors, steering wheel}
15/00	Arrangements or adaptations of sanitation devices	16/0373	. . . {Voice control (in general G10L)}
15/02	. Washing facilities {(in railway vehicles B61D 35/002)}	16/04	. . Arrangement of batteries
15/04	. Toilet facilities {(in railway vehicles B61D 35/005)}	16/06	. . for removing electrostatic charges (carrying-off electrostatic charges in general H05F 3/00)
16/00	Electric or fluid circuits specially adapted for vehicles and not otherwise provided for; Arrangement of elements of electric or fluid circuits specially adapted for vehicles and not otherwise provided for {(devices for protecting vehicle occupants in case of accidents B60R 21/00; safety belts B60R 22/00; central door locking E05B 49/00, E05B 77/50)}	16/08	. fluid
		17/00	Arrangements or adaptations of lubricating systems or devices (lubricating in general F16N)

17/02	. Systems, e.g. central lubrication systems	2019/247	. . . {Fastening of bumpers' side ends}
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)	19/26	. . . comprising yieldable mounting means ({ B60R 19/38 takes precedence;} springs, shock absorbers, or means for damping vibrations per se F16F)
2019/002	. {Wheel guards}	2019/262	. . . . {with means to adjust or regulate the amount of energy to be absorbed}
2019/005	. {Crash attenuators, i.e. means added to highway service vehicles for softening high speed impacts}	2019/264	. . . . {using cellular structures}
2019/007	. {Means for adjusting or regulating the crash absorption capacity of the vehicle, e.g. when detecting an impending collision}	2019/266	. . . . {using friction surfaces}
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)	2019/268	. . . . {with rebound preventing means, e.g. ratchets}
19/023	. . {Details}	19/28	. . . . Metallic springs
2019/026	. . {Buffers, i.e. bumpers of limited extent}	19/285	. . . . . {comprising only leaf springs, e.g. the mounting means forming part of the guard itself}
19/03	. . characterised by material, e.g. composite (B60R 19/18 takes precedence)	19/30	. . . . Elastomeric material ({ B60R 19/34 takes precedence})
19/04	. . formed from more than one section {in a side-by-side arrangement}	19/32	. . . . Fluid shock absorbers {, e.g. with coaxial coil springs}
19/12	. . . vertically spaced	19/34	. . . . destroyed upon impact, e.g. one-shot type
19/14	. . . having folding parts	19/36	. . . . Combinations of yieldable mounting means of different types {(fluid shock absorbers with coaxial coil springs B60R 19/32)}
19/16	. . . having deflecting members, e.g. rollers, balls	19/38	. . . adjustably or movably mounted, e.g. horizontally displaceable for securing a space between parked vehicles {(adjustably mounted for compensating manufacturing tolerances B60R 19/24 , B60R 19/26)}
19/18	. . {characterised by the cross-section;} Means within the bumper to absorb impact	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)}
2019/1806	. . . {Structural beams therefor, e.g. shock-absorbing (bumper beams made of cellular materials B60R 19/22)}	19/42	. . extending primarily along the sides of, or completely encircling, a vehicle (ornamental or guard strips B60R 13/04)
2019/1813	. . . . {made of metal}	19/44	. . Bumper guards
2019/182	. . . . . {of light metal, e.g. extruded}	19/445	. . . {Guard strips}
2019/1826	. . . . . {of high-tension steel}	19/46	. . . spring- or pivotally-mounted
2019/1833	. . . . {made of plastic material}	19/48	. . combined with, or convertible into, other devices or objects, e.g. bumpers combined with road brushes, bumpers convertible into beds
2019/184	. . . . . {Blow moulded}	19/483	. . . {with obstacle sensors of electric or electronic type}
2019/1846	. . . . . {comprising a cellular structure}	2019/486	. . . {with air passages, e.g. for cooling}
2019/1853	. . . . . {of reinforced plastic material}	19/50	. . . with lights or registration plates
2019/186	. . . {Additional energy absorbing means supported on bumper beams, e.g. cellular structures or material}	2019/505	. . . . {with lights}
2019/1866	. . . . {Cellular structures}	19/52	. Radiator or grille guards {; Radiator grilles (cooling aspects B60K 11/08)}
2019/1873	. . . . {Cellular materials}	2019/522	. . {Bull bars}
2019/188	. . . . {Blow molded structures}	2019/525	. . {Radiator grilles}
2019/1886	. . . {Bumper fascias and fastening means therefor (on fenders B60R 2019/247)}	2019/527	. . . {integral with bumpers}
2019/1893	. . . {comprising a multiplicity of identical adjacent shock-absorbing means}	19/54	. Obstruction removers or deflectors (B60R 19/16 , B60R 21/34 take precedence)
19/20	. . . containing {mainly} gas or liquid, e.g. inflatable (connection of valves to inflatable elastic bodies B60C 29/00)	19/545	. . {Devices for cutting wire-type obstructions}
19/205	. . . . {inflatable in the direction of an obstacle upon impending impact, e.g. using air bags}	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
19/22	. . . containing {mainly} cellular material, e.g. solid foam	19/565	. . {on vehicle sides}
19/24	. . Arrangements for mounting bumpers on vehicles		
2019/242	. . . {on two vertical sleeves, e.g. on energy absorber ends}		
2019/245	. . . {with adjusting means to compensate manufacturing tolerances, e.g. between bumper and energy absorbers}		

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)	21/01	Electrical circuits for triggering {passive} safety arrangements, {e.g. airbags, safety belt tighteners,} in case of vehicle accidents or impending vehicle accidents {(electrical circuits for transmission of signals between steering wheel and the vehicle itself B60R 16/027 ; for electrically actuating belt retractor locking means B60R 22/343)}
2021/0002	. {Type of accident}	2021/01006	. . {Mounting of electrical components in vehicles}
2021/0004	. . {Frontal collision}	2021/01013	. . {Means for detecting collision, impending collision or roll-over}
2021/0006	. . {Lateral collision}	2021/0102	. . . {the monitored value being used for calculating occupant displacement}
2021/0009	. . {Oblique collision}	2021/01027	. . . {Safing sensors}
2021/0011	. . {Rear collision or recoiling bounce after frontal collision}	2021/01034	. . {Controlling a plurality of restraint devices}
2021/0013	. . {Free fall}	2021/0104	. . {Communication circuits for data transmission}
2021/0016	. . {Fall in water}	2021/01047	. . . {Architecture}
2021/0018	. . {Roll-over}	2021/01054	. . . . {Bus}
2021/002	. . {Underrun collision}	2021/01061	. . . . . {between the airbag system and other vehicle electronic systems}
2021/0023	. . {Offset collision}	2021/01068	. . . . . {between different sensors and airbag control unit}
2021/0025	. . {Pole collision}	2021/01075	. . . . . {between the airbag control unit and pyrotechnic fuses or equivalent actuators}
2021/0027	. {Post collision measures, e.g. notifying emergency services}	2021/01081	. . . . {Transmission medium}
2021/003	. {characterised by occupant or pedestrian}	2021/01088	. . . . . {wireless}
2021/0032	. . {Position of passenger}	2021/01095	. . . . . {optical}
2021/0034	. . . {lying down}	2021/01102	. . . . {Transmission method}
2021/0037	. . . {standing}	2021/01109	. . . . . {power and data signal using transmission medium}
2021/0039	. . {Body parts of the occupant or pedestrian affected by the accident}	2021/01115	. . . . . {specific data frames}
2021/0041	. . . {Arms}	2021/01122	. . . {Prevention of malfunction}
2021/0044	. . . {Chest}	2021/01129	. . . . {Problems or faults}
2021/0046	. . . {Feet}	2021/01136	. . . . . {Cut lines}
2021/0048	. . . {Head}	2021/01143	. . . . . {Short circuits}
2021/0051	. . . {Knees}	2021/0115	. . . . . {Current leakage}
2021/0053	. . . {Legs}	2021/01156	. . . . . {Current or voltage overload}
2021/0055	. . . {Pelvis}	2021/01163	. . . . . {Insufficient current or voltage}
2021/0058	. . . {Shoulders}	2021/0117	. . . . . {Noise}
2021/006	. . {Type of passenger}	2021/01177	. . . . . {Misdeployment, e.g. during assembly, disassembly, accident salvage or recycling}
2021/0062	. . . {woman, e.g. pregnant}	2021/01184	. . . . {Fault detection or diagnostic circuits (in power circuits B60R 2021/01129)}
2021/0065	. {Type of vehicles}	2021/0119	. . . . . {Plausibility check}
2021/0067	. . {Buses}	2021/01197	. . . . . {Warning devices}
2021/0069	. . {Trailers, e.g. caravans}	2021/01204	. . {Actuation parameters of safety arrangements}
2021/0072	. . {Convertible cars}	2021/01211	. . . {Expansion of air bags}
2021/0074	. . {Utility vehicles}	2021/01218	. . . . {control of expansion speed}
2021/0076	. . . {Agricultural vehicles, e.g. tractors}	2021/01225	. . . . . {control of expansion volume}
2021/0079	. . . {Fork-lift trucks}	2021/01231	. . . . . {control of expansion timing or sequence}
2021/0081	. . . {Working vehicles}	2021/01238	. . . . . {control of expansion shape}
2021/0083	. . . {Pick-up trucks; Light trucks; Sport utility vehicles}	2021/01245	. . . . . {selection of seat for bag expansion}
2021/0086	. . {Racing cars}	2021/01252	. . . . {Devices other than bags}
2021/0088	. . {Cycles, e.g. motorcycles}	2021/01259	. . . . . {Brakes}
2021/009	. . {Railway vehicles}	2021/01265	. . . . . {Seat belts}
2021/0093	. . {Aircraft}	2021/01272	. . . . . {Belt tensioners}
2021/0095	. . {Boats}	2021/01279	. . . . . {Load limiters}
2021/0097	. . {Amusement vehicles}	2021/01286	. . . {Electronic control units}
		2021/01293	. . . . {programmable for use in different vehicles or with different airbags configurations}
		21/013	. . including means for detecting collisions, impending collision or roll-over
		2021/01302	. . . {monitoring vehicle body vibrations or noise}
		2021/01304	. . . {monitoring rough road condition}

2021/01306	. . .	{monitoring vehicle inclination}	21/01544	. . . .	{detecting seat belt parameters, e.g. length, tension or height-adjustment}
2021/01308	. . .	{monitoring distance between vehicle body and road}	21/01546	. . . . .	{using belt buckle sensors}
2021/01311	. . .	{monitoring the braking system, e.g. ABS}	21/01548	. . . . .	{sensing the amount of belt winded on retractor}
2021/01313	. . .	{monitoring the vehicle steering system or the dynamic control system}	21/0155	. . . . .	{sensing belt tension}
2021/01315	. . .	{monitoring occupant displacement}	21/01552	. . . . .	{detecting position of specific human body parts, e.g. face, eyes or hands}
2021/01317	. . .	{monitoring seat belt tension}	21/01554	. . .	{Seat position sensors}
21/0132	. . .	responsive to vehicle motion parameters {, e.g. to vehicle longitudinal or transversal deceleration or speed value}	21/01556	. . .	{Child-seat detection systems}
2021/01322	. . . .	{comprising variable thresholds, e.g. depending from other collision parameters}	21/01558	. . .	{monitoring crash strength}
2021/01325	. . . . .	{Vertical acceleration}	21/0156	. . . .	{by deceleration}
2021/01327	. . . . .	{Angular velocity or angular acceleration}	21/01562	. . . . .	{by speed}
21/0133	. . . . .	{by integrating the amplitude of the input signal}	21/01564	. . .	{Manually or key-actuated inhibition switches}
			21/01566	. . .	{Devices for warning or indicating mode of inhibition}
			21/017	. .	including arrangements for providing electric power to safety arrangements {or their actuating means, e.g. to pyrotechnic fuses or electro-mechanic valves}
			21/0173	. . .	{Diagnostic or recording means therefor}
			21/0176	. . . .	{for firing circuits using only mechanical switches as collision detecting means, in series with pyrotechnic fuses}
			21/02	. .	Occupant safety arrangements or fittings, {e.g. crash pads (seat belts with crash pads B60R 22/14; removable children's seats having a front guard or barrier B60N 2/2839)}
			2021/0206	. .	{Self-supporting restraint systems, e.g. restraining arms, plates or the like}
			2021/0213	. . .	{mounted on floor}
			2021/022	. . .	{mounted on seats}
			2021/0226	. . .	{mounted on fire wall}
			2021/0233	. . .	{mounted on steering-wheel}
			2021/024	. . .	{mounted on dash-board}
			2021/0246	. . .	{mounted on side walls}
			2021/0253	. . .	{mounted on roof}
			21/026	. .	{Rigid partitions inside vehicles, e.g. between passengers and load compartments (B60R 21/12 takes precedence)}
			2021/0266	. . .	{comprising energy absorbing means}
			2021/0273	. . .	{automatically movable to an operative position, e.g. in case of collision or impending collision}
			2021/028	. .	{Means preventing passenger from falling out of vehicles}
			21/0286	. .	{Padded or energy absorbing driving control initiating means, e.g. gear lever, pedals (B60R 21/09 takes precedence; padded linings for steering control means B60R 21/05)}
			2021/0293	. .	{Additional pads or cushions in vehicle compartments, e.g. movably mounted}
			21/04	. .	Padded linings for the vehicle interior; {Energy absorbing structures associated with padded or non-padded linings}
			2021/0407	. . .	{using gas or liquid as energy absorbing means}
			2021/0414	. . .	{using energy absorbing ribs}
			2021/0421	. . .	{using honeycomb structures}
			21/0428	. . .	{associated with the side doors or panels, e.g. displaced towards the occupants in case of a side collision}
			2021/0435	. . .	{associated with the side or roof pillars}
			2021/0442	. . .	{associated with the roof panel}

21/045	. . . associated with the instrument panel or dashboard	21/20	. . . Arrangements for storing inflatable members in their non-use or deflated condition; Arrangement or mounting of air bag modules or components
21/05	. . . associated with the steering wheel, {steering} hand lever or {steering} column (yieldable steering columns B62D 1/18)	21/201	. . . . Packaging straps or envelopes for inflatable members
21/055	. . Padded {or energy-absorbing} fittings, {e.g. seat belt anchors (sun visors B60J 3/00; head rests B60N 2/48)}	21/203	. . . . in steering wheels or steering columns
21/06	. . Safety nets, transparent sheets, curtains, or the like, e.g. between occupants and glass ({B60R 21/026} , B60R 21/11, B60R 21/12, B60R 21/16 take precedence)	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}
2021/065	. . . {comprising energy absorbing mounting means}	21/2035	. . . . {using modules containing inflator, bag and cover attachable to the steering wheel as a complete sub-unit (steering wheel covers with tear lines B60R 21/21656; assembling of modules B60R 21/217)}
21/08	. . . {automatically} movable from an inoperative to an operative position, e.g. in a collision (electrical circuits for triggering safety arrangements B60R 21/01)	21/2037	. . . . . {the module or a major component thereof being yieldably mounted, e.g. for actuating the horn switch or for protecting the driver in a non-deployment situation (horn switches integrated in steering wheel covers with tear lines B60R 21/21658)}
21/09	. . Control elements or operating handles movable from an operative to an out-of-the way position, e.g. {pedals,} switch knobs, window cranks {(specially adapted for brake pedals, e.g. by venting of master cylinder or destruction of force transmitting rod, B60T 7/065)}	21/205	. . . . in dashboards
21/11	. . Overhead guards, e.g. against loads falling down {(specially adapted for fork-lift trucks B66F 9/07545)}	21/206	. . . . in the lower part of dashboards, e.g. for protecting the knees
21/12	. . which protect the occupants against personal attack from the inside or the outside of the vehicle	21/207	. . . . in vehicle seats
21/13	. . Roll-over protection (electrical circuits for triggering safety arrangements B60R 21/01)	21/2072	. . . . {in children's seats}
21/131	. . . {Protective devices for drivers in case of overturning of tractors (means for preventing overturning or tipping of tractors B62D 49/08)}	2021/2074	. . . . {in head rests}
2021/132	. . . {Roll bars for convertible vehicles}	2021/2076	. . . . {Removable covers with tear seams}
2021/134	. . . . {movable from a retracted to a protection position}	2021/2078	. . . . {in rear seats}
2021/135	. . . . {automatically during an accident}	21/21	. . . . in vehicle side panels, e.g. doors (pillar mounted arrangements B60R 21/213)
2021/137	. . . {Reinforcement cages for closed vehicle bodies}	21/213	. . . . in vehicle roof frames or pillars
2021/138	. . . {using external airbags}	21/214	. . . . in roof panels
21/16	. . Inflatable occupant restraints or confinements designed to inflate upon impact or impending impact, e.g. air bags ({protective garments with automatically inflatable shock-absorbing means A41D 13/018; } connection of valves to inflatable elastic bodies B60C 29/00)	21/215	. . . . characterised by the covers for the inflatable member ({B60R 21/2176 takes precedence})
2021/161	. . . {characterised by additional means for controlling deployment trajectory}	2021/21506	. . . . {comprising tearing tabs, legs or the like for holding the lid before deployment}
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}	2021/21512	. . . . {the lid being displaced towards the occupant during deployment (B60R 2021/2161, B60R 2021/21525 take precedence)}
21/164	. . . {combined with vehicle venting means for reducing or avoiding the passenger compartment overpressure during inflation}	2021/21518	. . . . {comprising a lock unlocked during deployment}
2021/165	. . . {reusable, e.g. in case of multiple collisions}	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}
2021/167	. . . {comprising anti-theft devices}	2021/21531	. . . . {using a stretchable wall liner}
2021/168	. . . {for restraining luggages}	2021/21537	. . . . {characterised by hinges}
21/18	. . . the inflatable member formed as a belt or harness or combined with a belt or harness arrangement	2021/21543	. . . . {with emblems}
		21/2155	. . . . with complex motion of the cover; Retraction under the lining during opening
		21/216	. . . . comprising tether means for limitation of cover motion during deployment
		2021/2161	. . . . . {the cover being displaced towards the occupant during deployment}
		2021/2163	. . . . . {with energy absorbing or elastic means}
		21/2165	. . . . . characterised by a tear line for defining a deployment opening

2021/21652	. . . . .	{ the tearing being done or assisted by cutters }	2021/23316	. . . . .	{ Inner seams, e.g. creating separate compartments or used as tethering means }
2021/21654	. . . . .	{ the tearing being done or assisted by heating or pyrotechnic means }	2021/23324	. . . . .	{ Inner walls crating separate compartments, e.g. communicating with vents }
21/21656	. . . . .	{ Steering wheel covers or similar cup-shaped covers }	2021/23332	. . . . .	{ using independent bags, one within the other }
21/21658	. . . . .	{ with integrated switches, e.g. horn switches }	21/2334	. . . . .	Expansion control features
21/217	. . . .	Inflation fluid source retainers, e.g. reaction canisters; Connection of bags, covers, diffusers or inflation fluid sources therewith or together	21/2338	. . . . .	Tethers
21/2171	. . . . .	{ specially adapted for elongated cylindrical or bottle-like inflators with a symmetry axis perpendicular to the main direction of bag deployment, e.g. extruded reaction canisters (B60R 21/2176 takes precedence) }	2021/23382	. . . . .	{ Internal tether means }
2021/2172	. . . . .	{ the cover being connected to the surrounding part and to the module, e.g. floating mounts }	2021/23384	. . . . .	{ having ends which are movable or detachable during deployment }
2021/2173	. . . . .	{ the module or part thereof being movably mounted on the vehicle }	2021/23386	. . . . .	{ External tether means }
2021/2175	. . . . .	{ using energy absorbing means }	2021/23388	. . . . .	{ having ends which are movable or detachable during deployment }
21/2176	. . . . .	{ the air bag components being completely enclosed in a soft or semi-rigid housing or cover }	21/2342	. . . . .	Tear seams
2021/2177	. . . . .	{ Reaction canisters characterised by material }	21/2346	. . . . .	Soft diffusers
2021/2178	. . . . .	{ Plastic }	21/235	. . . .	characterised by their material
21/23	. . .	Inflatable members (B60R 21/18 takes precedence; connection to inflation fluid source retainers B60R 21/217)	2021/23504	. . . . .	{ characterised by material }
21/231	. . . .	characterised by their shape, construction or spatial configuration	2021/23509	. . . . .	{ Fabric }
2021/23107	. . . . .	{ the bag being integrated in a multi-bag system }	2021/23514	. . . . .	{ coated fabric }
2021/23115	. . . . .	{ with inflatable support compartments creating an internal suction volume }	2021/23519	. . . . .	{ Resin (for coating fabric B60R 2021/23514) }
2021/23123	. . . . .	{ Heat protection panels }	2021/23523	. . . . .	{ Composite (coated fabric B60R 2021/23514) }
2021/2313	. . . . .	{ comprising sensitive compartments }	2021/23528	. . . . .	{ Metal }
21/23138	. . . . .	{ specially adapted for side protection (B60R 21/23184 , B60R 21/232 take precedence) }	2021/23533	. . . . .	{ characterised by the manufacturing process }
2021/23146	. . . . .	{ seat mounted }	2021/23538	. . . . .	{ Sewing }
2021/23153	. . . . .	{ specially adapted for rear seat passengers }	2021/23542	. . . . .	{ Weaving }
2021/23161	. . . . .	{ specially adapted for protecting at least two passengers, e.g. preventing them from hitting each other }	2021/23547	. . . . .	{ one piece weaving }
2021/23169	. . . . .	{ specially adapted for knee protection }	2021/23552	. . . . .	{ Knitting }
2021/23176	. . . . .	{ specially adapted for foot protection }	2021/23557	. . . . .	{ Molding }
21/23184	. . . . .	{ Tubular air bags connected to the vehicle at their two extremities }	2021/23561	. . . . .	{ Sealing }
2021/23192	. . . . .	{ Roof bags, i.e. protecting the occupant in a roll-over situation }	2021/23566	. . . . .	{ Nesting of panels, i.e. for material utilisation }
21/232	. . . . .	Curtain-type airbags deploying mainly in a vertical direction from their top edge	2021/23571	. . . . .	{ characterised by connections between panels }
21/233	. . . . .	comprising a plurality of individual compartments; comprising two or more bag-like members, one within the other (B60R 21/232 takes precedence)	2021/23576	. . . . .	{ Sewing }
2021/23308	. . . . .	{ the individual compartments defining the external shape of the bag }	2021/2358	. . . . .	{ Bonding }
			2021/23585	. . . . .	{ Vulcanisation }
			2021/2359	. . . . .	{ Welding }
			2021/23595	. . . . .	{ Sealing }
			21/237	. . . .	characterised by the way they are folded
			2021/2375	. . . . .	{ Folding devices }
			21/239	. . . .	characterised by their venting means
			2021/2395	. . . . .	{ comprising means to control the venting }
			21/26	. . .	characterised by the inflation fluid source or means to control inflation fluid flow { (arrangement or mounting thereof to the vehicle B60R 21/20 ; blasting cartridges for producing gas under pressure in general F42B 3/04 ; Initiators or igniters therefor F42B 3/10) }
			21/26005	. . . .	{ the inflation fluid being transferred to the inflatable member by the mechanical deformation of the fluid container during an impact }
			2021/26011	. . . .	{ using a filter through which the inflation gas passes }
			2021/26017	. . . .	{ a cooling agent being added to the inflation fluid }

2021/26023	. . . .	{for filling the bag with foam}	2021/335	. . . .	{Connections between collision detecting means and inflators using pyrotechnic transmission lines}
2021/26029	. . . .	{Ignitors}	21/34	. . .	Protecting non-occupants of a vehicle, e.g. pedestrians (B60R 19/02 takes precedence)
2021/26035	. . . .	{triggered by mechanical means}	2021/343	. .	{using deformable body panel, bodywork or components}
2021/26041	. . . .	{of elongated shape}	2021/346	. .	{means outside vehicle body}
2021/26047	. . . .	{of film shape}	21/36	. .	using airbags
2021/26052	. . . .	{using fluid materials}	21/38	. .	using means for lifting bonnets
2021/26058	. . . .	{using a combination of inflators}	22/00		Safety belts or body harnesses in vehicles (safety belts or body harnesses in general A62B 35/00)
2021/26064	. . . .	{characterised by auto-ignition means}	22/001	. .	{Knee, leg or head belts}
2021/2607	. . . .	{characterised by heating or heat insulating means, e.g. for use under extreme temperatures}	2022/003	. .	{for restraining detainees}
2021/26076	. . . .	{characterised by casing}	2022/005	. .	{for restraining luggages}
2021/26082	. . . .	{Material}	2022/006	. .	{Sleeve or tubular members enveloping the seat belt for enhancing comfort or protection}
2021/26088	. . . .	{Plastic}	2022/008	. .	{Belts; Fixing thereof specially adapted for pregnant users}
2021/26094	. . . .	{characterised by fluid flow controlling valves}	22/02	. .	Semi-passive restraint systems, e.g. systems applied or removed automatically but not both; {Manual restraint systems (knee, leg or head belts B60R 22/001 ; devices for releasing in an emergency, remote or automatic unbuckling devices B60R 22/32)}
21/261	. . . .	with means other than bag structure to diffuse or guide inflation fluid	2022/021	. .	{Means for holding the tongue or buckle in a non-use position, e.g. for easy access by the user}
2021/2612	. . . .	{Gas guiding means, e.g. ducts}	22/022	. .	{with means for facilitating access to rear seats in two-door cars}
2021/2615	. . . .	{for diverting the gas into a plurality of bags}	22/023	. .	{Three-point seat belt systems comprising two side lower and one side upper anchoring devices (B60R 22/022 , B60R 22/03 take precedence)}
2021/2617	. . . .	{Curtain bag nozzles}	22/024	. . .	{Adaptations for use by small passengers, e.g. children (B60R 22/20 takes precedence ; using belt anti-slip devices B60R 22/30)}
21/262	. . . .	Elongated tubular diffusers, e.g. curtain-type	2022/025	. . .	{Adaptations for use with children seats or luggages}
21/263	. . . .	using a variable source, e.g. plural stage or controlled output (hybrid inflators B60R 21/272)	2022/026	. . .	{at least two ends of the belt being retractable after use}
2021/2633	. . . .	{with a plurality of inflation levels}	2022/027	. .	{Four-point seat belt systems, e.g. with the two upper points connected together}
2021/2636	. . . .	{The volume of gas being continuously adjustable}	2022/028	. .	{specially adapted for use in sleeping position, e.g. for reclining seats}
21/264	. . . .	using instantaneous generation of gas, e.g. pyrotechnic (B60R 21/268 takes precedence)	2022/029	. .	{Belt storage; Devices or systems for controlling winding up of unused seat belt}
2021/2642	. . . .	{comprising a plurality of combustion chambers or sub-chambers}	22/03	. .	Means for presenting the belt or part thereof to the wearer, {e.g. foot-operated}
21/2644	. . . .	{using only solid reacting substances, e.g. pellets, powder}	22/04	. .	Passive restraint systems, i.e. systems both applied and removed automatically, e.g. by movement of the vehicle door
21/2646	. . . .	{the reacting substances being supported by the inflatable member walls, or by a flexible support within it}	22/06	. .	having the belt or harness connected to a member slidable in a vehicle-mounted track
2021/2648	. . . .	{comprising a plurality of combustion chambers or sub-chambers}	22/08	. .	having the belt retractor mounted on or in a vehicle closure, e.g. the door
21/268	. . . .	using instantaneous release of stored pressurized gas (B60R 21/26005 takes precedence)	22/10	. .	specially adapted for children or animals (children's seats B60N 2/24)
2021/2685	. . . .	{comprising a plurality of pressure chambers}	NOTE		
21/272	. . . .	with means for increasing the pressure of the gas just before or during liberation, e.g. hybrid inflators	Groups		
2021/2725	. . . .	{using a fluid fuel gas generator}	B60R 22/02 { B60R 22/022 } - B60R 22/08 , B60R 22/18 - B60R 22/48 take precedence over group B60R 22/10		
21/274	. . . .	characterised by means to rupture or open the fluid source			
21/276	. . . .	with means to vent the inflation fluid source, e.g. in case of overpressure (B60R 21/30 takes precedence ; venting means on inflatable member walls B60R 21/239)			
2021/2765	. . . .	{comprising means to control the venting}			
21/30	. . . .	with means to draw ambient air into the flow line and mix such air with the inflation fluid			
21/33	. . .	Arrangements for non-electric triggering of inflation (electrical circuits for triggering safety arrangements B60R 21/01)			

22/105	. . {for children (adaptation of children's seats for seat belts B60N 2/265 , B60N 2/2803)}	22/203	. . . . {the locking means being movably mounted on the slider}
22/12	. Construction of belts or harnesses (B60R 21/18 takes precedence; {woven fabrics for safety belts D03D 1/0005 })	22/205	. . . . {the slider comprising emergency actuated locking means}
22/14	. . incorporating enlarged restraint areas, e.g. vests, nets {, crash pads, optionally for children (crash pads for occupants' safety on vehicles in general B60R 21/02)}	22/206	. . . {Adjustable stop members for restraint systems comprising belt anchor vehicle mounted tracks, e.g. for passive seat belts}
22/16	. . using belts which become permanently deformed, i.e. one time use	22/207	. . . {Horizontally or transversally adjustable}
22/18	. Anchoring devices	22/208	. . . {by automatic or remote control means}
22/1806	. . {for buckles}	22/22	. . secured to the vehicle floor
22/1812	. . {Connections between seat belt and buckle tongue}	22/24	. . secured to the side, door, or roof of the vehicle
22/1818	. . {Belt guides}	22/26	. . secured to the seat
22/1825	. . . {using rollers}	22/263	. . . {Front seats}
22/1831	. . . {comprising a slotted plate sliding in its plane, e.g. inside circular guides}	22/266	. . . {Rear seats, e.g. benches}
22/1837	. . . {comprising a universal mounting, e.g. spherical or cardan-type}	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)}
22/1843	. . . {comprising an elongated sleeve}	22/281	. . {for buckles}
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)}	22/282	. . {using fluids or vico-elastic materials}
22/1855	. . . {the means being sensitive to belt tension}	22/283	. . {using tearing or scoring of material}
22/19	. . with means for reducing belt tension during use under normal conditions {(included in the retractor B60R 22/44)}	22/284	. . {using electric or magnetic braking means}
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 })	22/285	. . {using friction surfaces}
NOTE		22/286	. . {using deformation of material}
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		22/287	. . . {of torsion rods or tubes}
		22/288	. . {with means to adjust or regulate the amount of energy to be absorbed}
22/1951	. . . {characterised by arrangements in vehicle or relative to seat belt}	22/289	. . {Energy-absorption curves}
22/1952	. . . {Transmission of tensioning power by cable; Return motion locking means therefor}	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)}
22/1953	. . . . {the cable being pulled by mechanical means, e.g. pre-stressed springs, bumper displacement during crash}	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)}
22/1954	. . . {characterised by fluid actuators, e.g. pyrotechnic gas generators (actuating a cable B60R 22/1952)}	22/321	. . {using electric means}
22/1955	. . . . {Linear actuators}	22/322	. . {using automatic actuating means (B60R 22/321 takes precedence)}
22/1956	. . . . {Mechanical triggering means therefor (also adapted for air bag inflators B60R 21/33)}	22/324	. . . {triggered by strong traction on the seat belt, e.g. with temporisation}
22/1957	. . . {characterised by electric actuators}	22/325	. . {using remote control means (B60R 22/321 , B60R 22/322 take precedence)}
22/1958	. . . {characterised by spring actuators (B60R 22/1953 takes precedence)}	22/327	. . {using pyrotechnic means}
22/20	. . adjustable in position, e.g. in height	22/328	. . {comprising means for cutting the belt}
22/201	. . . {with the belt anchor connected to a slider movable in a vehicle-mounted track (for passive restraint systems B60R 22/06)}	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)
22/202	. . . . {the slider comprising spring-actuated locking means (B60R 22/205 takes precedence)}	22/3402	. . {Retractor casings; Mounting thereof}
		22/3405	. . {of the non-rotary type}
		22/3408	. . {without locking means (B60R 22/3405 takes precedence)}
		22/341	. . {comprising energy-absorbing means}
		22/3413	. . . {operating between belt reel and retractor frame (B60R 22/4676 takes precedence)}
		22/3416	. . {Unlocking devices for retractors (B60R 22/3405 takes precedence)}
		22/3419	. . {with end lock preventing means}

- 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}
- 2022/3424 . . {Multi-spool or multi-belt retractors}
- 2022/3427 . . {Seat belt connection on reels}
- 22/343 . . with electrically actuated locking means
{(B60R 22/3405 takes precedence)}
- 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}
- 2022/3475 . . . {having means for acting directly upon the belt, e.g. by clamping or friction}
- 22/35 . . . the locking means being automatically actuated
- 22/353 . . . in response to belt movement when a wearer applies the belt
- 2022/3535 {comprising anti-cinch devices}
- 22/357 in response to fastening of the belt buckle
- 22/36 . . self-locking in an emergency {(B60R 22/3405) , B60R 22/343 take precedence}
- 22/38 . . . responsive only to belt movement
- 2022/385 {with adjustable sensitivity}
- 22/40 . . . responsive only to vehicle movement
- 2022/401 {with adjustable sensor}
- 2022/402 {automatically adjustable to keep a vertical position, e.g. irrespective of seat or vehicle tilting}
- 2022/403 {using externally controlled means, e.g. linked with seat back hinge}
- 2022/404 {with remote sensor, e.g. for mounting on seat}
- 22/405 . . . responsive to belt movement and vehicle movement
- 22/41 . . . with additional means for preventing locking {during unwinding} under predetermined conditions
- 22/415 . . . with additional means allowing a permanent locking of the retractor during the wearing of the belt
- 22/42 . . . having means for acting directly upon the belt, e.g. by clamping or friction {(not combined with the retractor B60R 22/185)}
- 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)}
- 2022/4406 . . . {Spring shapes; Spring characteristic; Springs with adjustable anchoring means}
- 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}
- 2022/442 . . . {using one spring and one additional retraction device in parallel}
- 2022/4426 {the additional retraction device being a second spring}
- 2022/4433 {externally controlled}
- 2022/444 {the additional retraction device being an electric actuator}
- 2022/4446 . . . {using one spring and one additional retraction device in series}
- 2022/4453 {the additional retraction device being a second spring}
- 2022/446 {with external control means}
- 2022/4466 {the additional retraction device being an electric actuator}
- 2022/4473 . . . {using an electric retraction device (combined with a spring B60R 2022/444, B60R 2022/4466)}
- 2022/448 . . . {using a fluid actuated retraction device}
- 2022/4486 . . . {for cancelling the belt tension}
- 2022/4493 . . . {for braking the belt reel using friction surfaces or the like}
- 22/46 . . {Reels} with means to tension the belt in an emergency {by forced winding up} (electrical circuits for triggering safety arrangements B60R 21/01 {tensioners using reels only guiding the belt during normal use, e.g. splitted reels B60R 22/195})
- 22/4604 . . . {characterised by arrangements in vehicle or relative to seat belt}
- 2022/4609 {using a plurality of tensioners}
- 2022/4614 {one pretensioner acting on a plurality of belts}
- 22/4619 . . . {Transmission of tensioning power by cable, e.g. using a clutch on reel side}
- 22/4623 {the cable being pulled by mechanical means, e.g. pre-stressed springs, bumper displacement during crash}
- 22/4628 . . . {characterised by fluid actuators, e.g. pyrotechnic gas generators (actuating a cable B60R 22/4619)}
- 22/4633 {Linear actuators, e.g. comprising a piston moving along reel axis and rotating along its own axis}
- 2022/4638 {comprising a piston moving along or in parallel to the reel axis}
- 2022/4642 {the gas directly propelling a flexible driving means, e.g. a plurality of successive masses, in a tubular chamber}
- 2022/4647 {the driving means being a belt, a chain or the like}
- 22/4652 {Mechanical triggering means therefor (also adapted for air bag inflators B60R 21/33)}
- 2022/4657 {comprising a plurality of charges}
- 2022/4661 {comprising venting means, e.g. for avoiding overpressure in case of fire or for allowing return motion with energy absorption}
- 2022/4666 . . . {characterised by electric actuators}
- 22/4671 . . . {characterised by spring actuators (B60R 22/4623 takes precedence)}
- 22/4676 . . . {comprising energy-absorbing means operating between belt reel and retractor frame}
- 2022/468 . . . {characterised by clutching means between actuator and belt reel}
- 2022/4685 . . . {with means to adjust or regulate the tensioning force in relation to external parameters}
- 2022/469 . . . {reusable}
- 2022/4695 . . . {without winding function during normal use}
- 22/48 . . Control systems, alarms, or interlock systems, for the correct application of the belt or harness
- 2022/4808 . . {Sensing means arrangements therefor}
- 2022/4816 . . . {for sensing locking of buckle}
- 2022/4825 . . . {for sensing amount of belt wound on retractor}
- 2022/4833 . . . {for sensing locking of retractor}
- 2022/4841 . . . {for sensing belt tension}

2022/485	. . . {for sensing belt anchor position, belt orientation, or the like}	25/02136	. . . . . {manually actuated, e.g. using removable locking members}
2022/4858	. . . {for sensing pressure on seat}	25/02139	. . . . . {key actuated}
2022/4866	. . {Displaying or indicating arrangements thereof}	25/02142	. . . . {comprising externally controlled safety devices for preventing locking during vehicle running condition}
2022/4875	. . . {on vehicle exterior}	25/02144	. . . . . {interlocked with gear box or gear lever}
2022/4883	. . {Interlock systems}	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}
2022/4891	. . . {preventing use of the vehicle when the seatbelt is not fastened}	25/0215	. . . . using electric means, e.g. electric motors or solenoids
25/00	Fittings or systems for preventing or indicating unauthorised use or theft of vehicles (locks for vehicles E05B 77/00-E05B 85/00)	25/02153	. . . . . {comprising a locking member radially and linearly moved towards the steering column}
25/001	. {Anti-theft devices acting on jacking means or props, e.g. for trailers}	25/02156	. . . . . {comprising a locking member axially moved along the steering column}
25/002	. {Locking of control actuating or transmitting means (of steering mechanism B60R 25/02)}	25/022	. . . operating on the steering wheel, e.g. bars locked to the steering wheel rim (B60R 25/021 takes precedence)
25/003	. . {locking of control actuating means}	25/0221	. . . . {restraining means joining the steering wheel with another part of the car, e.g. pedals}
25/005	. . . {of foot actuated control means (rods connecting pedals and steering wheels B60R 25/0221)}	25/0222	. . . . {by disjoining steering wheel and column}
25/006	. . . . {using means preventing access, e.g. boxes, shutters}	25/0224	. . . . {restraining of steering wheel by collapsing against column}
25/007	. . . {of hand actuated control means}	25/0225	. . . . {using a rod locked on the steering wheel rim (B60R 25/0221 takes precedence)}
25/008	. . . . {comprising means for locking two or more control means together, e.g. hand-brake handle and gear shift lever}	25/0227	. . . . {using means preventing access, e.g. boxes enclosing the steering wheel (B60R 25/014 takes precedence)}
25/01	. operating on vehicle systems or fittings, e.g. on doors, seats or windscreens	25/0228	. . . . {comprising a locking bolt or fork slidable between or around the steering wheel spokes}
25/012	. . {Airbags triggered}	25/023	. . . countermeasures against the physical destruction of the steering lock
25/014	. . {comprising means for locking the seat or parts thereof in a driving prevention position}	25/04	. . operating on the propulsion system, e.g. engine or drive motor
25/016	. . {comprising means for shuttering the windscreen or part thereof}	2025/0405	. . . {from the external}
25/018	. . {Thief traps}	2025/041	. . . {Preventing use of engine operating on the fluid supply}
25/02	. . operating on the steering mechanism	2025/0415	. . . {with safe immobilisation}
25/021	. . . restraining movement of the steering column or steering wheel hub, e.g. restraining means controlled by ignition switch	25/042	. . . operating on the fuel supply
25/02102	. . . . {with supplementary safety device preventing operation of the starter of an engine already running}	25/043	. . . by blocking the exhaust
25/02105	. . . . {Arrangement of the steering column thereof}	25/044	. . . by limiting or blocking the air supply
25/02107	. . . . . {comprising overload clutching means}	25/045	. . . by limiting or cutting the electrical supply to the propulsion unit
25/0211	. . . . . {comprising a locking member radially and linearly moved towards the steering column}	25/06	. . . operating on the vehicle transmission
25/02113	. . . . . {manually actuated, e.g. using removable locking means}	25/063	. . . . {Locking of foot actuated control actuating means}
25/02115	. . . . . {key actuated}	25/066	. . . . {Locking of hand actuated control actuating means}
25/02118	. . . . . {with linear bolt motion parallel to the lock axis}	25/08	. . operating on brakes or brake system
25/02121	. . . . . . {comprising safety devices avoiding locking until removal of the key}	25/083	. . . {Locking of foot-actuated control actuating means}
25/02123	. . . . . . {using an axially slidable lock cylinder}	25/086	. . . {Locking of hand-actuated control actuating means}
25/02126	. . . . . . {with linear bolt motion perpendicular to the lock axis}	25/09	. . by restraining wheel rotation, e.g. wheel clamps
25/02128	. . . . . . {comprising safety devices avoiding locking until removal of the key}	25/093	. . . {comprising ground-engaging means}
25/02131	. . . . . . {by using an axially slidable lock cylinder}	25/096	. . . {comprising means for deflating tyres}
25/02134	. . . . {comprising a locking member axially moved along the steering column}	25/10	. actuating a signalling device

25/1001	. . {Alarm systems associated with another car fitting or mechanism, e.g. door lock or knob, pedals (features related to the general power supply B60R 25/1018)}	25/30	. Detection related to theft or to other events relevant to anti-theft systems
25/1003	. . {Alarm systems characterised by arm or disarm features}	25/302	. . {using recording means, e.g. black box}
25/1004	. . {Alarm systems characterised by the type of sensor, e.g. current sensing means (using door lock sensors B60R 25/1001)}	25/305	. . {using a camera}
25/1006	. . . {Mechanical sensors, e.g. pendulums (B60R 25/101 takes precedence)}	25/307	. . {using data concerning maintenance or configuration}
25/1007	. . . . {comprising associated circuitry}	25/31	. . of human presence inside or outside the vehicle
25/1009	. . . {Sonic sensors; Signal treatment therefor}	25/32	. . of vehicle dynamic parameters, e.g. speed or acceleration
25/101	. . . {Fuel level sensors}	25/33	. . of global position, e.g. by providing GPS coordinates
25/1012	. . . {Zone surveillance means, e.g. parking lots, truck depots}	25/34	. . of conditions of vehicle components, e.g. of windows, door locks or gear selectors
2025/1013	. . {Alarm systems characterised by the type of warning signal, e.g. visual, audible}	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
2025/1015	. . . {Signal coming from the exhaust}	25/403	. . {Power supply in the vehicle}
2025/1016	. . . {Remote signals alerting owner or authorities, e.g. radio signals}	25/406	. . {Power supply in the remote key}
25/1018	. . {Alarm systems characterised by features related to the general power supply}	99/00	Subject matter not provided for in other groups of this subclass
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	2099/005	. {Protections against martens or rodents}
25/1025	. . . {preventing jamming or interference of said signal}	2225/00	Means indicating the functioning state of the alarm system, e.g. indicating arming, using leds
25/104	. . characterised by the type of theft warning signal, e.g. visual or audible signals with special characteristics	2300/00	Details of viewing arrangements using cameras and displays, specially adapted for use in a vehicle
25/1045	. . . {Signal coming from the exhaust}	2300/10	. characterised by the type of camera system used
25/20	. Means to switch the anti-theft system on or off	2300/101	. . using cameras with adjustable capturing direction
25/2009	. . {Antitheft state indicator}	2300/102	. . using 360 degree surveillance camera system
25/2018	. . {Central base unlocks or authorises unlocking}	2300/103	. . using camera systems provided with artificial illumination device, e.g. IR light source
25/2027	. . {with data signals passing through the human body}	2300/105	. . using multiple cameras
25/2036	. . {by using the door logic and door and engine unlock means}	2300/106	. . using night vision cameras
25/2045	. . {by hand gestures}	2300/107	. . using stereoscopic cameras
25/2054	. . {by foot gestures}	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
25/2063	. . {Ignition switch geometry}	2300/20	. characterised by the type of display used
25/2072	. . {with means for preventing jamming or interference of a remote switch control signal}	2300/202	. . displaying a blind spot scene on the vehicle part responsible for the blind spot
25/2081	. . {combined with personal settings of other vehicle devices, e.g. mirrors, seats, steering wheels}	2300/205	. . using a head-up display
25/209	. . {Remote starting of engine}	2300/207	. . using multi-purpose displays, e.g. camera image and navigation or video on same display
25/21	. . using hidden switches	2300/30	. characterised by the type of image processing
25/22	. . using mechanical identifiers	2300/301	. . combining image information with other obstacle sensor information, e.g. using RADAR/LIDAR/SONAR sensors for estimating risk of collision
25/225	. . . {key in lock presence switch}	2300/302	. . combining image information with GPS information or vehicle data, e.g. vehicle speed, gyro, steering angle data
25/23	. . using manual input or alphanumerical codes	2300/303	. . using joined images, e.g. multiple camera images
25/24	. . using electronic identifiers containing a code not memorised by the user	2300/304	. . using merged images, e.g. merging camera image with stored images
25/241	. . . {whereby access privileges are related to the identifiers}	2300/305	. . . merging camera image with lines or icons
25/243	. . . . {with more than one way to gain access}	2300/306	. . using a re-scaling of images
25/245	. . . . {where the antenna reception area plays a role}	2300/307	. . virtually distinguishing relevant parts of a scene from the background of the scene
25/246	. . . . {characterised by the challenge triggering}	2300/308	. . . by overlaying the real scene, e.g. through a head-up display on the windscreen
25/248	. . . . {Electronic key extraction prevention}	2300/40	. characterised by the details of the power supply or the coupling to vehicle components
25/25	. . using biometry		
25/252	. . . {Fingerprint recognition}		
25/255	. . . {Eye recognition}		
25/257	. . . {Voice recognition}		

- 2300/402 . . Image calibration
- 2300/404 . . triggering from stand-by mode to operation mode
- 2300/406 . . using wireless transmission
- 2300/408 . . using a data bus
- 2300/50 . characterised by the display information being shared, e.g. external display, data transfer to other traffic participants or centralised traffic controller
- 2300/60 . characterised by monitoring and displaying vehicle exterior scenes from a transformed perspective
- 2300/602 . . with an adjustable viewpoint
- 2300/605 . . . the adjustment being automatic
- 2300/607 . . from a bird's eye viewpoint
- 2300/70 . characterised by an event-triggered choice to display a specific image among a selection of captured images
- 2300/80 . characterised by the intended use of the viewing arrangement
- 2300/8006 . . for monitoring and displaying scenes of vehicle interior, e.g. for monitoring passengers or cargo
- 2300/8013 . . . for child monitoring
- 2300/802 . . for monitoring and displaying vehicle exterior blind spot views
- 2300/8026 . . . in addition to a rear-view mirror system
- 2300/8033 . . for pedestrian protection
- 2300/804 . . for lane monitoring
- 2300/8046 . . for replacing a rear-view mirror system
- 2300/8053 . . for bad weather conditions or night vision
- 2300/806 . . for aiding parking
- 2300/8066 . . for monitoring rearward traffic
- 2300/8073 . . for vehicle security, e.g. parked vehicle surveillance, burglar detection
- 2300/808 . . for facilitating docking to a trailer
- 2300/8086 . . for vehicle path indication
- 2300/8093 . . for obstacle warning
- 2325/00 Indexing scheme relating to vehicle anti-theft devices**
- 2325/10 . Communication protocols, communication systems of vehicle anti-theft devices
- 2325/101 . . Bluetooth
- 2325/103 . . Near field communication [NFC]
- 2325/105 . . Radio frequency identification data [RFID]
- 2325/106 . . Internet
- 2325/108 . . Encryption
- 2325/20 . Communication devices for vehicle anti-theft devices
- 2325/202 . . Personal digital assistant [PDA]
- 2325/205 . . Mobile phones
- 2325/207 . . Satellites
- 2325/30 . Vehicles applying the vehicle anti-theft devices
- 2325/302 . . Airplanes
- 2325/304 . . Boats
- 2325/306 . . Motorcycles
- 2325/308 . . Industrial vehicles
- 2325/40 . Programmable elements