

CPC**COOPERATIVE PATENT CLASSIFICATION****B60N****VEHICLE PASSENGER ACCOMMODATION NOT OTHERWISE PROVIDED FOR** ([furniture construction A47](#))**NOTES**

1. Attention is drawn to the Explanatory Note following the class title [B60](#)
2. In this subclass the following term is used with the meaning indicated:
 - "cushion": seating part of a seat distinguished from the back-rest

B60N 2/00

Seats specially adapted for vehicles (for facilitating access of invalids to, or exit of invalids from, vehicles [A61G 3/02](#); railway seats [B61D 33/00](#); cycle seats [B62J 1/00](#); aircraft seats [B64D 11/06](#), [B64D 25/04](#), [B64D 25/10](#))

- [B60N 2/002](#)
 - {Passenger detection systems (weighing apparatus, e.g. for airbag systems [G01G 19/4142](#))}
- [B60N 2/005](#)
 - Arrangement or mounting of seats in vehicles {e.g. dismountable auxiliary seats} ([B60N 2/02](#) takes precedence; {for railway vehicles [B61D 1/04](#)})
- [B60N 2002/0055](#)
 - • {characterised by special measures to ensure that no seat or seat part collides, during its movement, with other seats, seat parts or the vehicle itself}
- [B60N 2/01](#)
 - • Arrangement of seats relative to one another
- [B60N 2/012](#)
 - • • {The seat support being a part of the vehicle body or chassis}
- [B60N 2/015](#)
 - • Attaching seats directly to vehicle chassis
- [B60N 2/01508](#)
 - • • {using quick release attachments}
- [B60N 2/01516](#)
 - • • • {with locking mechanisms}
- [B60N 2/01525](#)
 - • • • • {with locking elements expanding inside or under the vehicle floor or rail}
- [B60N 2/01533](#)
 - • • • • {using balls interlocking with notches ([interlocking balls in general E05B 63/121](#))}
- [B60N 2/01541](#)
 - • • • • {using moving hooks ([B60N 2/01583](#) takes precedence)}
- [B60N 2/0155](#)
 - • • • • {with the locking mechanism on the vehicle floor or rail}
- [B60N 2/01558](#)
 - • • • • {with key and slot}
- [B60N 2/01566](#)
 - • • • • {key rotating about a vertical axis}
- [B60N 2/01575](#)
 - • • • • {key sliding inside the vehicle floor or rail}
- [B60N 2/01583](#)
 - • • • • {locking on transversal elements on the vehicle floor or rail, e.g. transversal rods}
- [B60N 2/01591](#)
 - • • • • {with wheels coupled to the seat}
- [B60N 2/02](#)
 - the seat or part thereof being movable, e.g. adjustable ([B60N 2/427](#) takes precedence) ; adjustable arm-rests [B60N 2/46](#); adjustable head-rests [B60N 2/48](#))
- [B60N 2002/0204](#)
 - • {characterised by the seat or seat part turning about or moving along a non-standard, particular axis, i.e. an axis different from the axis characterising the conventional movement}
- [B60N 2002/0208](#)
 - • • {the seat or seat part turning about or moving along an inclined axis}

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| B60N 2002/0212 | . . . | {the seat or seat part turning about or moving along a longitudinal axis} |
| B60N 2002/0216 | . . . | {the seat or seat part turning about or moving along a transversal axis} |
| B60N 2002/022 | . . . | {the seat or seat part turning about or moving along a vertical axis} |
| B60N 2/0224 | . . | {Non-manual adjustment, e.g. with electrical operation} |
| B60N 2/0228 | . . . | {Hand-activated switches} |
| B60N 2/0232 | . . . | {electric motors} |
| B60N 2002/0236 | | {characterised by details of the transmission between the electric motor and the seat or seat parts} |
| B60N 2002/024 | | {characterised by details of the mounting of the electric motor} |
| B60N 2/0244 | . . . | {with logic circuits} |
| B60N 2/0248 | | {with memory of positions} |
| B60N 2/0252 | | {with relations between different adjustments, e.g. height of headrest following longitudinal position of seat} |
| B60N 2002/0256 | | {Arrangements helping the passenger to get in or out} |
| B60N 2002/026 | | {varying hardness or support of upholstery, e.g. when driving curved roads} |
| B60N 2002/0264 | | {characterised by the type of electrical connection, e.g. wiring, plugs or USB} |
| B60N 2002/0268 | | {using sensors or detectors for adapting the seat or seat part, e.g. to the position of a passenger} |
| B60N 2002/0272 | | {using sensors or detectors for detecting the position of seat parts} |
| B60N 2/0276 | | {reaction to emergency situations, e.g. crash} |
| B60N 2/028 | . . | {Elastically mounted back-rests} |
| B60N 2/0284 | . . | {Adjustable seat-cushion length (B60N 2/0224 takes precedence)} |
| B60N 2002/0288 | . . | {Adjustable seat width} |
| B60N 2/0292 | . . | {Multiple configuration seats, e.g. for spacious vehicles or mini-buses} |
| B60N 2/0296 | . . | {Central command actuator to selectively switch on or engage one of several special purpose circuits or mechanisms} |
| B60N 2/04 | . . | the whole seat being movable |
| B60N 2/045 | . . . | {Longitudinal adjustment by means of articulated rods supporting the seat, e.g. parallelogram mechanisms (B60N 2/38 takes precedence)} |
| B60N 2/06 | . . . | slidable (B60N 2/12 B60N 2/2209 takes precedence) |
| B60N 2/062 | | {transversally slidable} |
| B60N 2/065 | | {Rear seats} |
| B60N 2/067 | | {by linear actuators, e.g. linear screw mechanisms} |
| B60N 2/07 | | Slide construction |
| B60N 2/0702 | | {characterised by its cross-section} |
| B60N 2/0705 | | {omega-shaped} |
| B60N 2/0707 | | {J-shaped} |
| B60N 2/071 | | {T-shaped} |
| B60N 2/0712 | | {H or double T-shaped} |
| B60N 2/0715 | | {C or U-shaped} |

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| B60N 2/0717 | | {Rounded, e.g. circular} |
| B60N 2/072 | | {Complex cross-section, e.g. obtained by extrusion} |
| B60N 2/0722 | | {Constructive details} |
| B60N 2/0725 | | {Closing members for covering the slide} |
| B60N 2/0727 | | {Stop members for limiting sliding movement} |
| B60N 2/073 | | {Reinforcement members preventing slide dislocation} |
| B60N 2/0732 | | {Attachment of seat frame to the slide, e.g. eyelets} |
| B60N 2/0735 | | {Position and orientation of the slide as a whole} |
| B60N 2/0737 | | {the slide path being substantially in a direction different from the longitudinal} |
| B60N 2/074 | | {rotated about the transversal axis} |
| B60N 2/0742 | | {rotated about the vertical axis} |
| B60N 2/0745 | | {the slide path being curved} |
| B60N 2/0747 | | {the opening of the cross section being oriented in a direction different from the vertical, e.g. transversal} |
| B60N 2/075 | | roller-less |
| B60N 2/08 | | characterised by the locking device |
| B60N 2/0806 | | {with pin alignment systems, e.g. with at least one of a plurality of locking pins always aligned w.r.t. at least one of a plurality of pin-receiving elements} |
| B60N 2/0812 | | {Location of the latch} |
| B60N 2/0818 | | {inside the rail} |
| B60N 2/0825 | | {outside the rail} |
| B60N 2/0831 | | {Movement of the latch} |
| B60N 2/0837 | | {pivoting} |
| B60N 2/0843 | | {about a longitudinal axis} |
| B60N 2/085 | | {about a transversal axis} |
| B60N 2/0856 | | {about a vertical axis} |
| B60N 2/0862 | | {sliding} |
| B60N 2/0868 | | {in a transversal direction} |
| B60N 2/0875 | | {in a vertical direction} |
| B60N 2/0881 | | {Activation of the latches by the control mechanism} |
| B60N 2/0887 | | {with synchronised movements} |
| B60N 2/0893 | | {allowing independent movement of the latches, e.g. to recover tolerance errors} |
| B60N 2/10 | . . . | tiltable {(B60N 2/2875 takes precedence)} |
| B60N 2/12 | . . . | slidable and tiltable |
| B60N 2/123 | | {and provided with memory locks} |
| B60N 2002/126 | | {the backrest being maintained in its tilted position until the seat has slid to its memorised position} |
| B60N 2/14 | . . . | rotatable, e.g. to permit easy access {(B60N 2/2869 takes precedence)} |
| B60N 2/143 | | {taking a position opposite to the original one} |

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| B60N 2/146 | {characterised by the locking device} |
| B60N 2/16 | . . . height-adjustable |
| B60N 2/1605 | {characterised by the cinematic} |
| B60N 2/161 | {Rods} |
| B60N 2/1615 | {Parallelogram-like structure} |
| B60N 2/162 | {Scissors-like structure} |
| B60N 2/1625 | {Combination of rods and slides} |
| B60N 2/163 | {Slides only} |
| B60N 2/1635 | {characterised by the drive mechanism} |
| B60N 2/164 | {Linear actuator, e.g. screw mechanism} |
| B60N 2/1645 | {Eccentric mechanism} |
| B60N 2/165 | {Gear wheel driven mechanism} |
| B60N 2/1655 | {Cycloidal or planetary mechanism} |
| B60N 2/166 | {Worm and worm gear articulations} |
| B60N 2/1665 | {Hydraulic or pneumatic actuation} |
| B60N 2/167 | {Ratchet mechanism} |
| B60N 2/1675 | {with weight compensating means} |
| B60N 2/168 | {and provided with braking systems} |
| B60N 2/1685 | {characterised by a lock} |
| B60N 2/169 | {Stepwise movement mechanisms, e.g. ratchets (B60N 2/167 takes precedence; ratchets in general G05G 7/06)} |
| B60N 2/1695 | {with simultaneous height and inclination adjustment} |
| B60N 2/18 | the front or the rear portion of the seat being adjustable, e.g. independently of each other |
| B60N 2/1803 | {with independent front and/or rear adjustment} |
| B60N 2/1807 | {characterised by the cinematic} |
| B60N 2/181 | {Rods} |
| B60N 2/1814 | {Parallelogram-like structure} |
| B60N 2/1817 | {Scissors-like structure} |
| B60N 2/1821 | {Combination of Rods and slides} |
| B60N 2/1825 | {including a curved slide} |
| B60N 2/1828 | {Slides only} |
| B60N 2/1832 | {including a curved slide} |
| B60N 2/1835 | {pivoting about an axis located in the front} |
| B60N 2/1839 | {pivoting about an axis located in an intermediate position} |
| B60N 2/1842 | {pivoting about an axis located in the rear} |
| B60N 2/1846 | {pivoting about a distant axis, e.g. virtual} |
| B60N 2/185 | {characterised by the drive mechanism} |
| B60N 2/1853 | {Linear actuator, e.g. screw mechanism} |
| B60N 2/1857 | {Eccentric mechanism} |

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| B60N 2/186 | | {with a transversal pin displaced by a moving slot or a cam along a predetermined path} |
| B60N 2/1864 | | {Gear wheel driven mechanism} |
| B60N 2/1867 | | {Cycloidal or planetary mechanism} |
| B60N 2/1871 | | {Worm and worm gear articulations} |
| B60N 2/1875 | | {Racks} |
| B60N 2/1878 | | {Hydraulic or pneumatic actuation} |
| B60N 2/1882 | | {Ratchet mechanism} |
| B60N 2/1885 | | {with weight compensating means} |
| B60N 2/1889 | | {and provided with braking systems} |
| B60N 2/1892 | | {characterised by a lock} |
| B60N 2/1896 | | {Stepwise movement mechanisms, e.g. ratchets (B60N 2/1882 takes precedence; ratchets in general G05G 7/06)} |
| B60N 2/20 | . . . | the back-rest being tiltable, e.g. to permit easy access (B60N 2/0224 , B60N 2/04 , B60N 2/22 , B60N 2/3002 take precedence) |
| B60N 2/203 | . . . | {taking a position opposite to the original one} |
| B60N 2/206 | . . . | {to a position in which it can be used as a support for objects, e.g. as a tray} |
| B60N 2/22 | . . . | the back-rest being adjustable (B60N 2/2878 takes precedence)} |
| B60N 2002/2204 | . . . | {Adjustable back-rest height or length} |
| B60N 2/2209 | . . . | {by longitudinal displacement of the cushion, e.g. back-rest hinged on the bottom to the cushion and linked on the top to the vehicle frame} |
| B60N 2/2213 | . . . | {Gear wheel driven mechanism (B60N 2/2231 , B60N 2/225 take precedence)} |
| B60N 2/2218 | . . . | {Transversally moving locks} |
| B60N 2/2222 | . . . | {the back-rest having two or more parts} |
| B60N 2/2227 | . . . | {and provided with braking systems} |
| B60N 2/2231 | . . . | {Worm and worm gear articulations} |
| B60N 2/2236 | . . . | {with a transversal pin displaced by a slot or a cam along a predetermined path} |
| B60N 2/224 | . . . | {Stepwise movement mechanisms, e.g. ratchets (ratchets in general G05G 7/06)} |
| B60N 2/2245 | . . . | {provided with a lock mechanism on the upper part of the back-rest} |
| B60N 2/225 | . . . | by cycloidal or planetary mechanisms {(transmissions with orbital motion in general F16H 1/28 , F16H 1/32)} |
| B60N 2/2251 | | {with gears having orbital motion, e.g. sun and planet gears (in general F16H 1/28)} |
| B60N 2/2252 | | {in which the central axis of the gearing lies inside the periphery of an orbital gear, e.g. one gear without sun gear (in general F16H 1/32)} |
| B60N 2/2254 | | {provided with braking systems} |
| B60N 2/2255 | | {with coiled springs} |
| B60N 2/2257 | | {with rollers or balls} |
| B60N 2/2258 | | {with ratchets} |

- B60N 2/23 . . . by {linear actuators, e.g.} linear screw mechanisms
- B60N 2/231 {by hydraulic actuators}
- B60N 2/232 {provided with memory locks}
- B60N 2/233 {by linear screw mechanisms}
- B60N 2/235 . . . by gear-pawl type mechanisms
- B60N 2/2352 {with external pawls}
- B60N 2/2354 {and provided with memory locks}
- B60N 2/2356 {with internal pawls}

WARNING

Group [B60N 2/2362](#) is incomplete pending reclassification of documents from group [B60N 2/2356](#).

Groups [B60N 2/2356](#) and [B60N 2/2362](#) should be considered in order to perform a complete search.

- B60N 2/2358 {and provided with memory locks}
- B60N 2/236 {linearly movable}

WARNING

Group [B60N 2/236](#) is incomplete pending reclassification of documents from group [B60N 2/2356](#).

Group [B60N 2/2356](#) and [B60N 2/236](#) should be considered in order to perform a complete search.

- B60N 2/2362 {rotatably movable}

WARNING

Group [B60N 2/2362](#) is/are incomplete pending reclassification of documents from group [B60N 2/2356](#).

Group [B60N 2/2356](#) and [B60N 2/2362](#) should be considered in order to perform a complete search.

- B60N 2/24 . . for particular purposes or particular vehicles
- B60N 2/242 . . {Bus seats}
- B60N 2/245 . . {for handicapped persons (facilitating access or loading of wheelchairs in ambulances [A61G 3/00](#))}
- B60N 2002/247 . . {to support passengers in a half-standing position}
- B60N 2/26 . . for children ([B60N 2/30](#) takes precedence)
- B60N 2/265 . . . {Adaptations for seat belts}
- B60N 2/28 . . . Seats readily mountable on, and dismountable from, existing seats {or other parts} of the vehicle
- B60N 2/2803 {Adaptations for seat belts (seat belts for children in general [B60R 22/105](#))}
- B60N 2/2806 {securing the child seat to the vehicle}
- B60N 2/2809 {with additional tether connected to the top of the child seat and passing above the top of the back-rest}
- B60N 2/2812 {securing the child to the child seat}

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| B60N 2002/2815 | | {with seat belt accessories, e.g. a belt tension detector} |
| B60N 2002/2818 | | {characterised by guiding means for children belts} |
| B60N 2/2821 | | {having a seat and a base part} |
| B60N 2/2824 | | {part of the base being supported by the vehicle frame (B60N 2/289 takes precedence)} |
| B60N 2/2827 | | {part of the base being supported by the seat sub-frame (B60N 2/2893 takes precedence)} |
| B60N 2/283 | | {suspended} |
| B60N 2/2833 | | {back-rest suspended} |
| B60N 2/2836 | | {window-frame suspended} |
| B60N 2/2839 | | {having a front guard or barrier} |
| B60N 2/2842 | | {adapted to carry the child, when dismantled from the vehicle} |
| B60N 2/2845 | | {having handles} |
| B60N 2/2848 | | {being convertible or adaptable to a preambulator, e.g. a baby-carriage or a push-chair (preambulators in general B62B 7/14)} |
| B60N 2/2851 | | {provided with head-rests} |
| B60N 2/2854 | | {Children's cots; Hammocks (children's chairs in general A47D 1/00)} |
| B60N 2/2857 | | {characterised by the peculiar orientation of the child (B60N 2/2869 takes precedence)} |
| B60N 2/286 | | {forward facing (B60N 2/2866 takes precedence)} |
| B60N 2/2863 | | {backward facing} |
| B60N 2/2866 | | {booster cushions, e.g. to lift a child to allow proper use of the conventional safety belts} |
| B60N 2/2869 | | {rotatable about a vertical axis} |
| B60N 2/2872 | | {provided with side rests} |
| B60N 2/2875 | | {inclinable, as a whole or partially} |
| B60N 2/2878 | | {the back-rest being inclinable} |
| B60N 2/2881 | | {Upholstery, padded or cushioned members therefor} |
| B60N 2/2884 | | {with protection systems against abnormal g-forces} |
| B60N 2/2887 | | {Fixation to a transversal anchorage bar, e.g. isofix} |
| B60N 2/289 | | {coupled to the vehicle frame} |
| B60N 2/2893 | | {coupled to the seat sub-frame} |
| B60N 2002/2896 | | {the child seat being foldable, e.g. to facilitate transport} |
| B60N 2/30 | | Non-dismountable {or dismountable} seats storable in a non-use position, e.g. foldable spare seats (convertible for other use B60N 2/32) |
| B60N 2/3002 | | {back-rest movements} |
| B60N 2/3004 | | {by rotation only} |
| B60N 2/3006 | | {about longitudinal axis} |
| B60N 2/3009 | | {about transversal axis} |
| B60N 2/3011 | | {the back-rest being hinged on the cushion, e.g. "portefeuille movement"} |
| B60N 2/3013 | | {the back-rest being hinged on the vehicle frame} |

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| B60N 2/3015 | {the axis being located at the top of the back-rest} |
| B60N 2/3018 | {about vertical axis} |
| B60N 2/302 | {by translation only} |
| B60N 2/3022 | {along longitudinal axis} |
| B60N 2/3025 | {along transversal axis} |
| B60N 2/3027 | {along vertical axis} |
| B60N 2/3029 | {by composed movement} |
| B60N 2/3031 | {in a longitudinal-vertical plane} |
| B60N 2/3034 | {in a longitudinal-transversal plane} |
| B60N 2/3036 | {in a transversal-vertical plane} |
| B60N 2/3038 | . . . {Cushion movements} |
| B60N 2/304 | {by rotation only} |
| B60N 2/3043 | {about longitudinal axis} |
| B60N 2/3045 | {about transversal axis} |
| B60N 2/3047 | {the cushion being hinged at the back-rest} |
| B60N 2/305 | {the cushion being hinged on the vehicle frame} |
| B60N 2/3052 | {about vertical axis} |
| B60N 2/3054 | {by translation only} |
| B60N 2/3056 | {along longitudinal axis} |
| B60N 2/3059 | {along transversal axis} |
| B60N 2/3061 | {along vertical axis} |
| B60N 2/3063 | {by composed movement} |
| B60N 2/3065 | {in a longitudinal-vertical plane} |
| B60N 2/3068 | {in a longitudinal-transversal plane} |
| B60N 2/307 | {in a transversal-vertical plane} |
| B60N 2/3072 | . . . {on a lower level of a multi-level vehicle floor} |
| B60N 2/3075 | {stowed in recess (B60N 2/3079 takes precedence)} |
| B60N 2/3077 | {stowed in the luggage compartment} |
| B60N 2/3079 | {in a recess} |
| B60N 2/3081 | . . . {Seats convertible into parts of the seat cushion or the back-rest or disappearing therein, e.g. for children} |
| B60N 2/3084 | {Disappearing in a recess of the back-rest} |
| B60N 2/3086 | {Disappearing in a recess of the cushion} |
| B60N 2/3088 | . . . {characterised by the mechanical link} |
| B60N 2/309 | {rods} |
| B60N 2/3093 | {slides} |
| B60N 2/3095 | . . . {Auxiliary rear seats accessible from outside the vehicle when in an in-use position} |
| B60N 2/3097 | . . . {Dismountable seats storable in a non-use position (B60N 2/015 , B60N 2/28 take precedence)} |
| B60N 2/32 | . . convertible for other use |

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| B60N 2/34 | . . . into a bed (sleeping arrangements in caravans B60P 3/38) |
| B60N 2/345 | {by adding parts} |
| B60N 2/36 | . . . into a loading platform {(ski-bags in B60R 5/006 , B60N 2/065 takes precedence)} |
| B60N 2002/363 | {characterised by provisions for enhancing the cargo floor surface, e.g. elements closing gaps or enlarging the back-rest surface} |
| B60N 2/366 | {characterised by the locking device} |
| B60N 2/38 | . . specially constructed for use on tractors or like off-road vehicles |
| B60N 2/39 | . . . Seats tiltable to compensate for roll inclination of vehicles |
| B60N 2/40 | . . . saddle type |
| B60N 2/42 | . . the seat constructed to protect the occupant from the effect of abnormal g-forces, e.g. crash or safety seats (B60N 2/26 , B60N 2/46 , B60N 2/48 take precedence {; built-in air bags B60R 21/207 }) |
| B60N 2/4207 | . . . {characterised by the direction of the g-forces} |
| B60N 2/4214 | {longitudinal} |
| B60N 2/4221 | {due to impact coming from the front} |
| B60N 2/4228 | {due to impact coming from the rear} |
| B60N 2/4235 | {transversal} |
| B60N 2/4242 | {vertical} |
| B60N 2/4249 | . . . {fixed structures, i.e. where neither the seat nor a part thereof are displaced during a crash} |
| B60N 2/4256 | {the shape of the seat being specially adapted for a particular purpose or for particular vehicles} |
| B60N 2/4263 | {with anti-submarining systems} |
| B60N 2/427 | . . . Seats or parts thereof displaced during a crash |
| B60N 2/42709 | {involving residual deformation or fracture of the structure} |
| B60N 2/42718 | {with anti-submarining systems} |
| B60N 2/42727 | {involving substantially rigid displacement} |
| B60N 2/42736 | {of the whole seat} |
| B60N 2/42745 | {of the back-rest (B60N 2/433 takes precedence; higher part of the back-rest moving together with the headrest B60N 2/4885)} |
| B60N 2/42754 | {of the cushion} |
| B60N 2/42763 | {with anti-submarining systems} |
| B60N 2/42772 | {characterised by the triggering system} |
| B60N 2/42781 | {mechanical triggering} |
| B60N 2/4279 | {electric or electronic triggering} |
| B60N 2/43 | . . . {Safety locks (for back-rests B60N 2/433)} |
| B60N 2/433 | . . . Safety locks for back-rests, e.g. with locking bars activated by inertia |
| B60N 2/44 | . Details or parts not otherwise provided for {(seats in general A47C 7/00 ; storage compartments mounted on or under a seat B60R 7/043)} |
| B60N 2002/4405 | . . {the head-rest or seat being used as an anchorage point, for an object not covered by groups in B60N , e.g. for a canvas} |

- B60N 2/441 . . {Panels between front seats}
- B60N 2/4415 . . {Hydro-pneumatic adjustments of the shape (for lumbar supports [B60N 2/665](#); for coach-like constructions [B60N 2/7082](#); arrangement or mounting of air bags in vehicle seats [B60R 21/207](#))}
- B60N 2/442 . . {Positioning and locking mechanisms ([B60N 2/16](#), [B60N 2/18](#), [B60N 2/22](#), [B60N 2/225](#) take precedence)}
- B60N 2002/4425 . . . {using electric or hydraulic energy}
- B60N 2/443 . . . {linear}
- B60N 2/4435 . . . {rotatable}
- B60N 2/444 {and provided with braking systems}
- B60N 2/4445 {Stepwise movement mechanisms, e.g. ratchets (ratchets in general [G05G 7/06](#))}
- B60N 2002/445 . . . {the actuation of the positioning or locking mechanism for one seat part being dependent on the position of another seat part, e.g. the seats floor lock being unlocked when the back-rest is inclined or the backrest can be tilted only when the seat is in its rear position}
- B60N 2002/4455 . . . {characterised by details of the locking system}
- B60N 2002/446 {the locking system prevents an abnormal or wrong mounting situation, i.e. deployment or functioning of a seat part being prevented if the seat or seat part is not properly mounted}
- B60N 2002/4465 {the locking system disabling tilting of the back-rest to the vertical position, when the seat is not properly installed}
- B60N 2002/447 {the locking system prevents tilt of whole seat by retaining and locking the seat in a vertical storage position}
- B60N 2002/4475 {the locking system being an element distinct from articulation means, retaining the seat or seat part in its folded position, e.g. controlled by a wire}
- B60N 2/448 . . {massaging systems (massaging systems in general [A61H 1/00](#))}
- B60N 2002/4485 . . {Warning systems, e.g. the seat or seat parts vibrates to warn the passenger when facing a danger}
- B60N 2/449 . . {Side-rests ([B60N 2/2872](#), [B60N 2/4882](#) take precedence)}
- B60N 2/4492 . . . {adjustable}

WARNING

Group [B60N 2/4492](#) is incomplete pending reclassification of documents from group [B60N 2/449](#).

Groups [B60N 2/449](#) and [B60N 2/4492](#) should be considered in order to perform a complete search.

- B60N 2/4495 . . {Lower-leg-rests, e.g. calf-rests}
- B60N 2/46 . . Arm-rests
- B60N 2/4606 . . . {movable to an inoperative position}
- B60N 2/4613 {in a recess of the back-rest}
- B60N 2/462 {in a recess of the cushion}
- B60N 2/4626 . . . {adjustable}
- B60N 2/4633 {Angle adjustment}

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|-------------|--|
| B60N 2/464 | {Height adjustment} |
| B60N 2/4646 | {Longitudinal adjustment} |
| B60N 2/4653 | {Transversal adjustment} |
| B60N 2/466 | . . . {post or panel mounted} |
| B60N 2/4666 | {sill suspended, e.g. window sill} |
| B60N 2/4673 | . . . {detachable} |
| B60N 2/468 | . . . {Adaptations for additional use of the arm-rests} |
| B60N 2/4686 | {for use as storage compartments} |
| B60N 2/4693 | {for use as electrical control means, e.g. switches} |
| B60N 2/48 | . . Head-rests {(B60N 2/2851 takes precedence)} |
| B60N 2/4802 | . . . {fixed (B60N 2/487 and B60N 2/4876 take precedence)} |
| B60N 2/4805 | . . . {movable or adjustable (B60N 2/4876 takes precedence)} |
| B60N 2/4808 | {slidable (B60N 2/4864, B60N 2/4867 take precedence)} |
| B60N 2/4811 | {characterised by the locking device} |
| B60N 2/4814 | {Release mechanism, e.g. buttons} |
| B60N 2/4817 | {Stepwise positioning} |
| B60N 2/482 | {Continuous positioning} |
| B60N 2/4823 | {using springs} |
| B60N 2/4826 | {using elastic materials} |
| B60N 2/4829 | {characterised by adjusting mechanism, e.g. electric motors} |
| B60N 2/4832 | {movable to an inoperative position} |
| B60N 2/4835 | {for rear seats} |
| B60N 2/4838 | {tiltable} |
| B60N 2/4841 | {characterised by the locking device} |
| B60N 2/4844 | {Release mechanism, e.g. buttons} |
| B60N 2/4847 | {Stepwise positioning} |
| B60N 2/485 | {Continuous positioning} |
| B60N 2/4852 | {characterised by the adjusting mechanism, e.g. electric motors} |
| B60N 2/4855 | {movable to an inoperative position} |
| B60N 2/4858 | {for rear seats} |
| B60N 2/4861 | {provided with attitude keeping devices, e.g. parallelogram mechanism} |
| B60N 2/4864 | {longitudinally movable} |
| B60N 2/4867 | {transversally movable} |
| B60N 2/487 | . . . {movable to an inoperative position (B60N 2/4832, B60N 2/4855 take precedence)} |
| B60N 2/4873 | {for rear seats (B60N 2/4835, B60N 2/4858 take precedence)} |
| B60N 2/4876 | . . . {with diverse use, e.g. loud-speakers, magnetic devices, heating or cooling devices (roll-over protection B60R 21/13)} |
| B60N 2/4879 | . . . {detachable} |
| B60N 2/4882 | . . . {provided with side rests} |

- B60N 2/4885 . . . {with protection systems against abnormal g-forces, e.g. the headrest or the higher part of the back-rest displacing}
- B60N 2002/4888 . . . {characterised by other structural or mechanical details}
- B60N 2002/4891 {the head-rest being in the shape of a comma}
- B60N 2002/4894 {rods solidly attached to the backrest}
- B60N 2002/4897 {characterised by details of guide sleeves guiding the rods of the head-rest}
- B60N 2/50 . . . Seat suspension devices
- B60N 2/501 . . . {actively controlled suspension, e.g. electronic control}
- B60N 2/502 . . . {attached to the base of the seat ([B60N 2/504](#) takes precedence)}
- B60N 2/503 . . . {attached to the backrest ([B60N 2/504](#) takes precedence)}
- B60N 2/504 . . . {attached to the base and the backrest}
- B60N 2/505 . . . {Adjustable suspension including height adjustment}
- B60N 2/506 . . . {Seat guided by rods}
- B60N 2/507 {Parallelogram-like structure}
- B60N 2/508 {Scissors-like structure}
- B60N 2/509 . . . {Seat guided by slides or the like}
- B60N 2/52 . . . using fluid means
- B60N 2/522 {characterised by dampening means}
- B60N 2/525 {using gas}
- B60N 2/527 {using liquids}
- B60N 2/54 . . . using mechanical springs {(springs in general [F16F](#))}
- B60N 2/542 {made of rubber or other material having high internal friction, e.g. polymers}
- B60N 2/544 {Compression or tension springs ([B60N 2/542](#) takes precedence)}
- B60N 2/546 {Leaf- or flexion springs}
- B60N 2/548 {Torsion springs e.g. torsion helicoidal springs}
- B60N 2/56 . . . Heating or ventilating devices {(heating, cooling, ventilating or other air-treating in vehicles in general [B60H 1/00](#); control of temperature in general [G05D 23/00](#); ventilation, heating or cooling of chairs in general [A47C 7/74](#))}
- B60N 2/5607 . . . {characterised by convection}
- B60N 2/5614 {by liquid}
- B60N 2/5621 {by air}
- B60N 2/5628 {coming from the vehicle ventilation system, e.g. air-conditioning system}
- B60N 2/5635 {coming from the passenger compartment}
- B60N 2/5642 {with circulation of air through a layer inside the seat}
- B60N 2/565 {sucked from the seat surface}
- B60N 2/5657 {blown towards the seat surface}
- B60N 2/5664 {with unforced air circulation, i.e. not using a fan or the like}
- B60N 2/5671 {forming a windbreak, e.g. warm air blown on the neck of the passenger of an open vehicle}

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|----------------|---|
| B60N 2/5678 | . . . {characterised by electrical systems} |
| B60N 2/5685 | {Resistance} |
| B60N 2/5692 | {Refrigerating means} |
| B60N 2/58 | . . Seat coverings |
| B60N 2002/5808 | . . . {comprising opening zones for airbags} |
| B60N 2/5816 | . . . {attachments thereof} |
| B60N 2/5825 | {by hooks, staples, clips, snap fasteners or the like} |
| B60N 2/5833 | {by hook-and-loop type fasteners} |
| B60N 2/5841 | {by clamping means} |
| B60N 2/585 | {by buckle passages} |
| B60N 2/5858 | {by elastic means} |
| B60N 2/5866 | {by thermal welding} |
| B60N 2/5875 | {by adhesion, e.g. gluing} |
| B60N 2/5883 | {by sewing, stitching or threading} |
| B60N 2/5891 | . . . {Manufacturing methods specially adapted therefor (manufacturing of seat covers in general A47C 3/00)} |
| B60N 2/60 | . . . Removable protective coverings |
| B60N 2/6009 | {covering more than only the seat} |
| B60N 2/6018 | {attachments thereof} |
| B60N 2/6027 | {by hooks, staples, clips, snap fasteners or the like} |
| B60N 2/6036 | {by hook and loop-type fasteners} |
| B60N 2/6045 | {by clamping means} |
| B60N 2/6054 | {by buckle passages} |
| B60N 2/6063 | {by elastic means} |
| B60N 2/6072 | {by thermal welding} |
| B60N 2/6081 | {by adhesion, e.g. glueing} |
| B60N 2/609 | {by sewing, stitching or threading} |
| B60N 2/62 | . . Thigh-rests {(B60N 2/4415 takes precedence)} |
| B60N 2/64 | . . Back-rests {or cushions (B60N 2/2222 takes precedence)} |
| B60N 2/643 | . . . {shape of the back-rests (B60N 2/66 takes precedence)} |
| B60N 2/646 | . . . {shape of the cushion} |
| B60N 2/66 | . . . Lumbar supports |
| B60N 2/663 | {portable with attachment to the back-rest} |

WARNING

Group [B60N 2/663](#) is incomplete pending reclassification of documents from group [B60N 2/66](#).

Groups [B60N 2/66](#) and [B60N 2/663](#) should be considered in order to perform a complete search.

B60N 2/665 {using inflatable bladders}

WARNING

Group [B60N 2/665](#) is incomplete pending reclassification of documents from groups [B60N 2/66](#).

Groups [B60N 2/66](#) and [B60N 2/665](#) should be considered in order to perform a complete search.

B60N 2/666 {vertically adjustable}

WARNING

Group [B60N 2/666](#) is incomplete pending reclassification of documents from groups [B60N 2/66](#).

Groups [B60N 2/66](#) and [B60N 2/666](#) should be considered in order to perform a complete search.

B60N 2/667 {having flexible support member bowed by applied forces}

B60N 2/6671 {with cable actuators}

WARNING

Group [B60N 2/6671](#) is/are incomplete pending reclassification of documents from group [B60N 2/66](#).

Groups [B60N 2/66](#) and [B60N 2/6671](#) should be considered in order to perform a complete search.

B60N 2/6673 {with motor driven adjustments}

WARNING

Group [B60N 2/6673](#) is incomplete pending reclassification of documents from group [B60N 2/66](#)

Groups [B60N 2/66](#) and [B60N 2/6673](#) should be considered in order to perform a complete search.

B60N 2/68 Seat frames, e.g. for the back-rest, {e.g. reinforced frames}

B60N 2/682 {Joining means}

B60N 2002/684 {the back rest being mounted or joined with an easy attachment system to the seat}

B60N 2/686 {Panel like structures}

B60N 2/688 {Particular seat belt attachment and guiding}

B60N 2/70 {Upholstery, e.g.} upholstery springs

B60N 2/7005 {detachable}

B60N 2/7011 {of substantially two-dimensional shape, e.g. hammock-like, plastic shells, fabrics}

B60N 2/7017 {Manufacturing methods specially adapted therefor (manufacturing of seat upholstery in general [A47C 7/00](#), shaping of substances in a plastic state in general [B29C](#))}

B60N 2/7023 {Coach-like constructions}

B60N 2/7029 {back-rests}

B60N 2/7035 {Cushions}

- B60N 2/7041 {Fixation of covers and springs}
- B60N 2/7047 {Springs}
- B60N 2/7052 {Springs using a combination of metal and rubber}
- B60N 2/7058 {Metallic springs}
- B60N 2/7064 {helicoidal}
- B60N 2/707 {with rubber blocks}
- B60N 2/7076 {with rubber bands}
- B60N 2/7082 {with air or fluid cushions ([B60N 2/4415](#) takes precedence)}
- B60N 2/7088 {with valves ([B60N 2/4415](#) takes precedence)}
- B60N 2/7094 . . . {Upholstery springs}
- B60N 2/72 . . . Attachment or adjustment thereof

B60N 3/00 **Arrangements or adaptations of other passenger fittings, not otherwise provided for** (of radio sets, television sets, telephones, {stowing or holding appliances} , safety belts or the like [B60R](#))

- B60N 3/001 . {of tables or trays (detachable tables in general with provisions for use in vehicles [A47B 31/06](#))}
- B60N 3/002 . . {of trays}
- B60N 3/004 . . . {of foldable trays mounted on the back-rest}
- B60N 3/005 . . . {mounted on the steering wheel}
- B60N 3/007 . . . {mounted on the window sill}
- B60N 3/008 . {of beds (travelling or camp beds adapted to be used in, or connected to, a vehicle [A47C 17/80](#))}
- B60N 3/02 . of hand grips or straps
- B60N 3/023 . . {movable}
- B60N 3/026 . . {characterised by the fixing means ([B60N 3/023](#) takes precedence)}
- B60N 3/04 . of floor mats {or carpets}
- B60N 3/042 . . {of carpets ([B60N 3/046](#), [B60N 3/048](#) take precedence)}
- B60N 3/044 . . {of removable mats ([B60N 3/046](#), [B60N 3/048](#) take precedence)}
- B60N 3/046 . . {characterised by the fixing means}
- B60N 3/048 . . {characterised by their structure}
- B60N 3/06 . of footrests (floors of road vehicles {[B62D 25/20](#)})
- B60N 3/063 . . {with adjustment systems}
- B60N 3/066 . . {with protection systems against abnormal g-forces}
- B60N 3/08 . of receptacles for refuse, e.g. ash-trays (ashtrays per se [A24F](#))
- B60N 3/083 . . {Ash-trays}
- B60N 3/086 . . . {with refuse evacuation means}
- B60N 3/10 . of receptacles for food or beverages, e.g. refrigerated (picnic sets [A45F](#) {cup holders in general [A47G 23/02](#)})
- B60N 3/101 . . {fixed}
- B60N 3/102 . . {storable or foldable in a non-use position}
- B60N 3/103 . . {detachable}

- B60N 3/104 . . {with refrigerating or warming systems}
- B60N 3/105 . . {for receptacles of different size or shape}
- B60N 3/106 . . . {with adjustable clamping mechanisms}
- B60N 3/107 . . . {with different elements of fixed geometry}
- B60N 3/108 . . . {with resilient holding elements}
- B60N 3/12 . of receptacles for cigarettes or the like ({[B60N 2/4686](#) takes precedence } ;
receptacles for cigarettes or the like [A24F](#))
- B60N 3/14 . of electrically-heated lighters {(arrangements of lighting devices for vehicle
interiors for lighting passenger or driving compartment [B60Q 3/02](#), igniters using
electrically-produced heat [F23Q 7/00](#))}
- B60N 3/16 . of cooking or boiling devices ([cooking of boiling devices per se A47](#), [F24C](#))
- B60N 3/18 . of drinking-water {or other beverage} dispensing devices

- B60N 5/00** **Arrangements or devices on vehicles for entrance or exit control of
passengers, e.g. turnstiles** ([turnstiles in general E06B 11/08](#))

- B60N 99/00** **Subject matter not provided for in other groups of this subclass**

- B60N 2205/00** **General mechanical or structural details**
- B60N 2205/20 . Measures for elimination or compensation of play or backlash
- B60N 2205/30 . Seat or seat parts characterised by comprising plural parts or pieces
- B60N 2205/35 . . Seat, bench or back-rests being split laterally in two or more parts
- B60N 2205/40 . Dual or redundant actuating means, e.g. backrest tilting can be actuated
alternatively by a lever at the backrest or a lever in the luggage compartment
- B60N 2205/50 . Interlocking shaft arrangements transmitting movement between hinge
mechanisms on both sides of a seat