

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING
(NOTES omitted)

TRANSPORTING

B60 VEHICLES IN GENERAL
(NOTE omitted)

B60N SEATS SPECIALLY ADAPTED FOR VEHICLES; VEHICLE PASSENGER
ACCOMMODATION NOT OTHERWISE PROVIDED FOR

NOTES

1. Attention is drawn to the 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}
3. {In this subclass, it is desirable to add the indexing codes [B60N 2210/00](#) - [B60N 2210/50](#), [B60N 2220/00](#) - [B60N 2220/30](#) and [B60N 2230/00](#) - [B60N 2230/30](#) with the exception of groups [B60N 2/0021](#) and [B60N 2/0035](#), where the allocation of the indexing codes is mandatory in accordance with their note}

2/00	Seats specially adapted for vehicles; Arrangement or mounting of seats in vehicles (railway seats B61D 33/00 ; cycle seats B62J 1/00 ; aircraft seats B64D 11/06 , B64D 25/04 , B64D 25/10)	2/0024	. . . {for identifying, categorising or investigation of the occupant or object on the seat}
2/002	. {Seats provided with an occupancy detection means mounted therein or thereon (detection means responsive to presence or absence of children B60N 2/266)}	2/0025	. . . . {by using weight measurement}
	WARNING Group B60N 2/002 is impacted by reclassification into groups B60N 2/0021 - B60N 2/0035 , B60N 2/266 - B60N 2/272 , B60N 2210/00 - B60N 2210/50 , B60N 2220/00 - B60N 2220/30 , and B60N 2230/00 - B60N 2230/30 . All groups listed in this Warning should be considered in order to perform a complete search.	2/0026	. . . . {for distinguishing between humans, animals or objects}
2/0021	. . {characterised by the type of sensor or measurement}	2/0027	. . . . {for detecting the position of the occupant or of occupant's body part}
	NOTE {In this group, it is mandatory to add the indexing codes of groups B60N 2210/00 - B60N 2210/50 }	2/0028	. . . . . {of a body part, e.g. of an arm or a leg}
	WARNING Groups B60N 2/0021 - B60N 2/0035 are incomplete pending reclassification of documents from group B60N 2/002 . All groups listed in this Warning should be considered in order to perform a complete search.	2/0029	. . . . {for detecting the motion of the occupant}
2/0022	. . . {for sensing anthropometric parameters, e.g. heart rate or body temperature}	2/003	. . . {characterised by the sensor mounting location in or on the seat}
2/0023	. . . {for detection of driver fatigue}	2/0031	. . . . {mounted on the frame}
		2/0032	. . . . {mounted on springs}
		2/0033	. . . . {mounted on or in the foam cushion}
		2/0034	. . . . {in, under or on the seat cover}
		2/0035	. . . {characterised by the sensor data transmission, e.g. wired connections or wireless transmitters therefor; characterised by the sensor data processing, e.g. seat sensor signal amplification or electric circuits for providing seat sensor information}
			NOTE {In this group, it is mandatory to add the indexing codes of groups B60N 2220/00 - B60N 2220/30 and B60N 2230/00 - B60N 2230/30 }
		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 })
		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}
		2/01	. . Arrangement of seats relative to one another
		2/012	. . . {The seat support being a part of the vehicle body or chassis}
		2/015	. . Attaching seats directly to vehicle chassis
		2/01508	. . . {using quick release attachments}
		2/01516	. . . . {with locking mechanisms}

- 2/01525 {with locking elements expanding inside or under the vehicle floor or rail}
- 2/01533 {using balls interlocking with notches}
- 2/01541 {using moving hooks ([B60N 2/01583](#) takes precedence)}
- 2/0155 {with the locking mechanism on the vehicle floor or rail}
- 2/01558 {with key and slot}
- 2/01566 {key rotating about a vertical axis}
- 2/01575 {key sliding inside the vehicle floor or rail}
- 2/01583 {locking on transversal elements on the vehicle floor or rail, e.g. transversal rods}
- 2/01591 {with wheels coupled to the seat}
- 2/02 the seat or part thereof being movable, e.g. adjustable ([adjustable arm-rests B60N 2/75](#); [adjustable head-rests B60N 2/806](#))
- 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}
- 2002/0208 {the seat or seat part turning about or moving along an inclined axis}
- 2002/0212 {the seat or seat part turning about or moving along a longitudinal axis}
- 2002/0216 {the seat or seat part turning about or moving along a transversal axis}
- 2002/022 {the seat or seat part turning about or moving along a vertical axis}
- 2/0224 {Non-manual adjustments, e.g. with electrical operation}

WARNING

Group [B60N 2/0224](#) is impacted by reclassification into groups [B60N 2/0226](#), [B60N 2/0229](#), [B60N 2/0231](#), [B60N 2/0233](#), [B60N 2/0235](#), [B60N 2/0237](#), [B60N 2/0239](#), [B60N 2/0241](#), [B60N 2/0273](#), [B60N 2/0274](#), [B60N 2/0277](#), and [B60N 2/0278](#) - [B60N 2/0279](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/02246 {Electric motors therefor}
- 2/02253 {characterised by the transmission between the electric motor and the seat or seat parts}
- 2/02258 {characterised by the mounting of the electric motor for adjusting the seat}
- 2/0226 {User interfaces specially adapted for seat adjustment}

WARNING

Group [B60N 2/0226](#) is incomplete pending reclassification of documents from group [B60N 2/0224](#).

Groups [B60N 2/0224](#) and [B60N 2/0226](#) should be considered in order to perform a complete search.

- 2/0228 {Hand-activated mechanical switches ([B60N 2/0229](#) takes precedence)}

WARNING

Group [B60N 2/0228](#) is impacted by reclassification into groups [B60N 2/0229](#), [B60N 2/0231](#), [B60N 2/0233](#), [B60N 2/0235](#), [B60N 2/0237](#), [B60N 2/0239](#), [B60N 2/0241](#), [B60N 2/0277](#), and [B60N 2/0278](#) - [B60N 2/0279](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/0229 {characterised by the shape, e.g. switches having cushion or backrest shape}

WARNING

Group [B60N 2/0229](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0228](#).

Groups [B60N 2/0224](#), [B60N 2/0228](#), and [B60N 2/0229](#) should be considered in order to perform a complete search.

- 2/0231 {concealed interfaces, e.g. hidden below seat cover}

WARNING

Group [B60N 2/0231](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0228](#).

Groups [B60N 2/0224](#), [B60N 2/0228](#), and [B60N 2/0231](#) should be considered in order to perform a complete search.

- 2/0233 {Touchscreens}

WARNING

Group [B60N 2/0233](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0228](#).

Groups [B60N 2/0224](#), [B60N 2/0228](#), and [B60N 2/0233](#) should be considered in order to perform a complete search.

- 2/0235 {Joysticks}

WARNING

Group [B60N 2/0235](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0228](#).

Groups [B60N 2/0224](#), [B60N 2/0228](#), and [B60N 2/0235](#) should be considered in order to perform a complete search.

2/0237 {using portable terminals, e.g. smartphones}

WARNING

Group [B60N 2/0237](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0228](#).

Groups [B60N 2/0224](#), [B60N 2/0228](#), and [B60N 2/0237](#) should be considered in order to perform a complete search.

2/0239 {using movement detection or gesture recognition}

WARNING

Group [B60N 2/0239](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0228](#).

Groups [B60N 2/0224](#), [B60N 2/0228](#), and [B60N 2/0239](#) should be considered in order to perform a complete search.

2/0241 {using augmented or virtual reality}

WARNING

Group [B60N 2/0241](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0228](#).

Groups [B60N 2/0224](#), [B60N 2/0228](#), and [B60N 2/0241](#) should be considered in order to perform a complete search.

2/0244 {with logic circuits}

WARNING

Group [B60N 2/0244](#) is impacted by reclassification into groups [B60N 2/0273](#), [B60N 2/0274](#), [B60N 2/0277](#), and [B60N 2/0278 - B60N 2/0279](#).

All groups listed in this Warning should be considered in order to perform a complete search.

2/0248 {with memory of positions}

WARNING

Group [B60N 2/0248](#) is impacted by reclassification into groups [B60N 2/0273](#), [B60N 2/0277](#), and [B60N 2/0278 - B60N 2/0279](#).

All groups listed in this Warning should be considered in order to perform a complete search.

2/0252 {with relations between different adjustments, e.g. height of headrest following longitudinal position of seat}

WARNING

Group [B60N 2/0252](#) is impacted by reclassification into groups [B60N 2/0273](#), [B60N 2/0277](#), and [B60N 2/0278 - B60N 2/0279](#).

All groups listed in this Warning should be considered in order to perform a complete search.

2/0256 {Arrangements for facilitating the occupant to get in or out of the vehicle, e.g. stowing a seat forward}

2/026 {varying hardness or support of upholstery, e.g. for tuning seat comfort when driving curved roads}

2/0264 {characterised by the type of electrical connection, e.g. wiring, plugs or USB}

2/0268 {using sensors or detectors for adapting the seat or seat part, e.g. to the position of an occupant}

2/0272 {using sensors or detectors for detecting the position of seat parts}

2/0273 {taking into account user data, e.g. knee height or physical state}

WARNING

Group [B60N 2/0273](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#), [B60N 2/0244](#), [B60N 2/0248](#), and [B60N 2/0252](#).

All groups listed in this Warning should be considered in order to perform a complete search.

2/0274 {movement of the seat following a virtual reality simulation}

WARNING

Group [B60N 2/0274](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#) and [B60N 2/0244](#).

Groups [B60N 2/0224](#), [B60N 2/0244](#), and [B60N 2/0274](#) should be considered in order to perform a complete search.

2/0276 {reaction to emergency situations, e.g. crash}

2/0277 {characterised by the calculation method or calculation flow chart of sensor data for adjusting the seat}

WARNING

Group [B60N 2/0277](#) is incomplete pending reclassification of documents from groups [B60N 2/0224](#), [B60N 2/0228](#), [B60N 2/0244](#), [B60N 2/0248](#), and [B60N 2/0252](#).

All groups listed in this Warning should be considered in order to perform a complete search.

2/0278	. . . . {using sensors external to the seat for measurements in relation to the seat adjustment, e.g. for identifying the presence of obstacles or the appropriateness of the occupants position}	2/0745	. . . . . {the slide path being curved}
	WARNING	2/0747	. . . . . {the opening of the cross section being oriented in a direction different from the vertical, e.g. transversal}
	Groups B60N 2/0278 and B60N 2/0279 are incomplete pending reclassification of documents from groups B60N 2/0224 , B60N 2/0228 , B60N 2/0244 , B60N 2/0248 , and B60N 2/0252 .	2/075	. . . . . roller-less
	All groups listed in this Warning should be considered in order to perform a complete search.	2/08	. . . . . characterised by the locking device
2/0279	. . . . . {for detecting objects outside the vehicle, e.g. for user identification}	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}
2/028	. . {Elastically mounted back-rests}	2/0812	. . . . . {Location of the latch}
2/0284	. . {Adjustable seat-cushion length (B60N 2/0224 takes precedence)}	2/0818	. . . . . {inside the rail}
2002/0288	. . {Adjustable seat width}	2/0825	. . . . . {outside the rail}
2/0292	. . {Multiple configuration seats, e.g. for spacious vehicles or mini-buses}	2/0831	. . . . . {Movement of the latch}
2/0296	. . {Central command actuator to selectively switch on or engage one of several special purpose circuits or mechanisms}	2/0837	. . . . . {pivoting}
2/04	. . the whole seat being movable	2/0843	. . . . . {about a longitudinal axis}
2/045	. . . {Longitudinal adjustment by means of articulated rods supporting the seat, e.g. parallelogram mechanisms (B60N 2/38 takes precedence)}	2/085	. . . . . {about a transversal axis}
2/06	. . . slidable (B60N 2/12 {, B60N 2/2209 } take precedence)	2/0856	. . . . . {about a vertical axis}
2/062	. . . . {transversally slidable}	2/0862	. . . . . {sliding}
2/065	. . . . {Rear seats}	2/0868	. . . . . {in a transversal direction}
2/067	. . . . {by linear actuators, e.g. linear screw mechanisms}	2/0875	. . . . . {in a vertical direction}
2/07	. . . . Slide construction	2/0881	. . . . . {Activation of the latches by the control mechanism}
2/0702	. . . . . {characterised by its cross-section}	2/0887	. . . . . {with synchronised movements}
2/0705	. . . . . {omega-shaped}	2/0893	. . . . . {allowing independent movement of the latches, e.g. to recover tolerance errors}
2/0707	. . . . . {J-shaped}	2/10	. . . tiltable (B60N 2/12 {, B60N 2/2875 } take precedence)
2/071	. . . . . {T-shaped}	2/12	. . . slidable and tiltable
2/0712	. . . . . {H or double T-shaped}	2/123	. . . . {and provided with memory locks}
2/0715	. . . . . {C or U-shaped}	2002/126	. . . . {the backrest being maintained in its tilted position until the seat has slid to its memorised position}
2/0717	. . . . . {Rounded, e.g. circular}	2/14	. . . rotatable, e.g. to permit easy access (B60N 2/10 {, B60N 2/2869 } take precedence)
2/072	. . . . . {Complex cross-section, e.g. obtained by extrusion}	2/143	. . . . {taking a position opposite to the original one}
2/0722	. . . . . {Constructive details}	2/146	. . . . {characterised by the locking device}
2/0725	. . . . . {Closing members for covering the slide}	2/16	. . . height-adjustable
2/0727	. . . . . {Stop members for limiting sliding movement}	2/1605	. . . . {characterised by the cinematic}
2/073	. . . . . {Reinforcement members preventing slide dislocation}	2/161	. . . . . {Rods}
2/0732	. . . . . {Attachment of seat frame to the slide, e.g. eyelets}	2/1615	. . . . . {Parallelogram-like structure}
2/0735	. . . . . {Position and orientation of the slide as a whole}	2/162	. . . . . {Scissors-like structure}
2/0737	. . . . . {the slide path being substantially in a direction different from the longitudinal}	2/1625	. . . . . {Combination of rods and slides}
2/074	. . . . . {rotated about the transversal axis}	2/163	. . . . . {Slides only}
2/0742	. . . . . {rotated about the vertical axis}	2/1635	. . . . {characterised by the drive mechanism}
		2/164	. . . . . {Linear actuator, e.g. screw mechanism}
		2/1645	. . . . . {Eccentric mechanism}
		2/165	. . . . . {Gear wheel driven mechanism}
		2/1655	. . . . . {Cycloidal or planetary mechanism}
		2/166	. . . . . {Worm and worm gear articulations}
		2/1665	. . . . . {Hydraulic or pneumatic actuation}
		2/167	. . . . . {Ratchet mechanism}
		2/1675	. . . . {with weight compensating means}
		2/168	. . . . {and provided with braking systems}
		2/1685	. . . . {characterised by a lock}
		2/169	. . . . {Stepwise movement mechanisms, e.g. ratchets (B60N 2/167 takes precedence)}
		2/1695	. . . . {with simultaneous height and inclination adjustment}
		2/18	. . . . the front or the rear portion of the seat being adjustable, e.g. independently of each other

2/1803	. . . . . {with independent front and/or rear adjustment}	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}
2/1807	. . . . . {characterised by the cinematic}	2/2254	. . . . . {provided with braking systems}
2/181	. . . . . {Rods}	2/2255	. . . . . {with coiled springs}
2/1814	. . . . . {Parallelogram-like structure}	2/2257	. . . . . {with rollers or balls}
2/1817	. . . . . {Scissors-like structure}	2/2258	. . . . . {with ratchets}
2/1821	. . . . . {Combination of Rods and slides}	2/23	. . . by {linear actuators, e.g.} linear screw mechanisms
2/1825	. . . . . {including a curved slide}	2/231	. . . . . {by hydraulic actuators}
2/1828	. . . . . {Slides only}	2/232	. . . . . {provided with memory locks}
2/1832	. . . . . {including a curved slide}	2/233	. . . . . {by linear screw mechanisms}
2/1835	. . . . . {pivoting about an axis located in the front}	2/235	. . . by gear-pawl type mechanisms
2/1839	. . . . . {pivoting about an axis located in an intermediate position}	2/2352	. . . . . {with external pawls}
2/1842	. . . . . {pivoting about an axis located in the rear}	2/2354	. . . . . {and provided with memory locks}
2/1846	. . . . . {pivoting about a distant axis, e.g. virtual}	2/2356	. . . . . {with internal pawls}
2/185	. . . . . {characterised by the drive mechanism}	2/2358	. . . . . {and provided with memory locks}
2/1853	. . . . . {Linear actuator, e.g. screw mechanism}	2/236	. . . . . {linearly movable}
2/1857	. . . . . {Eccentric mechanism}	2/2362	. . . . . {rotatably movable}
2/186	. . . . . {with a transversal pin displaced by a moving slot or a cam along a predetermined path}	2/24	. for particular purposes or particular vehicles
2/1864	. . . . . {Gear wheel driven mechanism}	2/242	. . {Bus seats}
2/1867	. . . . . {Cycloidal or planetary mechanism}	2/245	. . {for handicapped persons}
2/1871	. . . . . {Worm and worm gear articulations}	2002/247	. . {to support passengers in a half-standing position}
2/1875	. . . . . {Racks}	2/26	. . for children (B60N 2/30 takes precedence)
2/1878	. . . . . {Hydraulic or pneumatic actuation}	WARNING	
2/1882	. . . . . {Ratchet mechanism}	Group B60N 2/26 is impacted by reclassification into groups B60N 2/266 - B60N 2/272 , B60N 2/273 , and B60N 2/274 .	
2/1885	. . . . . {with weight compensating means}	All groups listed in this Warning should be considered in order to perform a complete search.	
2/1889	. . . . . {and provided with braking systems}	WARNING	
2/1892	. . . . . {characterised by a lock}	Groups B60N 2/266 - B60N 2/272 are incomplete pending reclassification of documents from groups B60N 2/002 , B60N 2/26 , B60N 2/28 , B60N 2/2803 , B60N 2/2806 , B60N 2/2809 , B60N 2/2812 , and B60N 2002/2815 .	
2/1896	. . . . . {Stepwise movement mechanisms, e.g. ratchets (B60N 2/1882 takes precedence)}	All groups listed in this Warning should be considered in order to perform a complete search.	
2/20	. . the back-rest being tiltable, e.g. to permit easy access (B60N 2/04 , B60N 2/22 {, B60N 2/3002 take precedence)	2/265	. . . {Adaptations for seat belts}
2/203	. . . {taking a position opposite to the original one}	2/266	. . . {with detection or alerting means responsive to presence or absence of children; with detection or alerting means responsive to improper locking or installation of the child seats or parts thereof}
2/206	. . . {to a position in which it can be used as a support for objects, e.g. as a tray}	WARNING	
2/22	. . the back-rest being adjustable {(B60N 2/2878 takes precedence)}	Groups B60N 2/266 - B60N 2/272 are incomplete pending reclassification of documents from groups B60N 2/002 , B60N 2/26 , B60N 2/28 , B60N 2/2803 , B60N 2/2806 , B60N 2/2809 , B60N 2/2812 , and B60N 2002/2815 .	
2002/2204	. . . {Adjustable back-rest height or length}	All groups listed in this Warning should be considered in order to perform a complete search.	
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}	2/267	. . . . . {alerting means responsive to presence or absence of children}
2/2213	. . . {Gear wheel driven mechanism (B60N 2/2231 , B60N 2/225 take precedence)}	2/268	. . . . . {detecting or alerting means responsive to the installation of the child seats in the vehicle}
2/2218	. . . {Transversally moving locks}	2/269	. . . . . {detecting or alerting means responsive to the Isofix locking on the child seat or vehicle}
2/2222	. . . {the back-rest having two or more parts}	2/271	. . . . . {detecting or alerting means responsive to securing the child in the seat}
2/2227	. . . {and provided with braking systems}	2/272	. . . . . {Buckle lock sensors for child seat safety belts}
2/2231	. . . {Worm and worm gear articulations}		
2/2236	. . . {with a transversal pin displaced by a slot or a cam along a predetermined path}		
2/224	. . . {Stepwise movement mechanisms, e.g. ratchets}		
2/2245	. . . {provided with a lock mechanism on the upper part of the back-rest}		
2/225	. . . by cycloidal or planetary mechanisms		
2/2251	. . . . . {with gears having orbital motion, e.g. sun and planet gears}		

- 2/273 . . . {with detection or alerting means responsive to crashes}

WARNING

Group [B60N 2/273](#) is incomplete pending reclassification of documents from groups [B60N 2/26](#), [B60N 2/28](#), [B60N 2/2803](#), [B60N 2/2806](#), [B60N 2/2809](#), [B60N 2/2812](#), and [B60N 2002/2815](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/274 . . . {characterised by the communication means between the child seat and another entity, e.g. vehicle or portable device}

WARNING

Group [B60N 2/274](#) is incomplete pending reclassification of documents from groups [B60N 2/26](#), [B60N 2/28](#), [B60N 2/2803](#), [B60N 2/2806](#), [B60N 2/2809](#), [B60N 2/2812](#), and [B60N 2002/2815](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/28 . . . Seats readily mountable on, and dismountable from, existing seats {or other parts} of the vehicle

WARNING

Group [B60N 2/28](#) is impacted by reclassification into groups [B60N 2/266](#) - [B60N 2/272](#), [B60N 2/273](#), and [B60N 2/274](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/2803 {Adaptations for seat belts}

WARNING

Group [B60N 2/2803](#) is impacted by reclassification into groups [B60N 2/266](#) - [B60N 2/272](#), [B60N 2/273](#), and [B60N 2/274](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/2806 {for securing the child seat to the vehicle}

WARNING

Group [B60N 2/2806](#) is impacted by reclassification into groups [B60N 2/266](#) - [B60N 2/272](#), [B60N 2/273](#), and [B60N 2/274](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/2809 {with additional tether connected to the top of the child seat and passing above the top of the back-rest}

WARNING

Group [B60N 2/2809](#) is impacted by reclassification into groups [B60N 2/266](#) - [B60N 2/272](#), [B60N 2/273](#), and [B60N 2/274](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/2812 {for securing the child to the child seat}

WARNING

Group [B60N 2/2812](#) is impacted by reclassification into groups [B60N 2/266](#) - [B60N 2/272](#), [B60N 2/273](#), and [B60N 2/274](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2002/2815 {with additional belt accessories, e.g. a belt tension detector}

WARNING

Group [B60N 2002/2815](#) is no longer used for the classification of documents as of August 1, 2023.

The content of this group is being reclassified into groups [B60N 2/266](#) - [B60N 2/272](#), [B60N 2/273](#), [B60N 2/274](#), and [B60N 2/2816](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2/2816 {with additional belt accessories, e.g. belt tension detectors}

WARNING

Group [B60N 2/2816](#) is incomplete pending reclassification of documents from group [B60N 2002/2815](#).

Groups [B60N 2002/2815](#) and [B60N 2/2816](#) should be considered in order to perform a complete search.

- 2/2818 {characterised by guiding means for children belts}

- 2/2821 {having a seat and a base part}

- 2/2824 {part of the base being supported by the vehicle frame ([B60N 2/289](#) takes precedence)}

- 2/2827 {part of the base being supported by the seat sub-frame ([B60N 2/2893](#) takes precedence)}

- 2/283 {suspended}

- 2/2833 {back-rest suspended}

- 2/2836 {window-frame suspended}

- 2/2839 {having a front guard or barrier}

- 2/2842 {adapted to carry the child, when dismounted from the vehicle}

2/2845	. . . . .	{having handles}	2/3065	. . . . .	{in a longitudinal-vertical plane}
2/2848	. . . . .	{being convertible or adaptable to a preambulator, e.g. a baby-carriage or a push-chair}	2/3068	. . . . .	{in a longitudinal-transversal plane}
2/2851	. . . . .	{provided with head-rests}	2/307	. . . . .	{in a transversal-vertical plane}
2/2854	. . . . .	{Children's cots; Hammocks}	2/3072	. . . . .	{on a lower level of a multi-level vehicle floor}
2/2857	. . . . .	{characterised by the peculiar orientation of the child (B60N 2/2869 takes precedence)}	2/3075	. . . . .	{stowed in recess (B60N 2/3079 takes precedence)}
2/286	. . . . .	{forward facing (B60N 2/2866 takes precedence)}	2/3077	. . . . .	{stowed in the luggage compartment}
2/2863	. . . . .	{backward facing}	2/3079	. . . . .	{in a recess}
2/2866	. . . . .	{booster cushions, e.g. to lift a child to allow proper use of the conventional safety belts}	2/3081	. . . . .	{Seats convertible into parts of the seat cushion or the back-rest or disappearing therein, e.g. for children}
2/2869	. . . . .	{rotatable about a vertical axis}	2/3084	. . . . .	{Disappearing in a recess of the back-rest}
2/2872	. . . . .	{provided with side rests}	2/3086	. . . . .	{Disappearing in a recess of the cushion}
2/2875	. . . . .	{inclinable, as a whole or partially}	2/3088	. . . . .	{characterised by the mechanical link}
2/2878	. . . . .	{the back-rest being inclinable}	2/309	. . . . .	{rods}
2/2881	. . . . .	{Upholstery, padded or cushioned members therefor}	2/3093	. . . . .	{slides}
2/2884	. . . . .	{with protection systems against abnormal g-forces}	2/3095	. . . . .	{Auxiliary rear seats accessible from outside the vehicle when in an in-use position}
2/2887	. . . . .	{Fixation to a transversal anchorage bar, e.g. isofix}	2/3097	. . . . .	{Dismountable seats storable in a non-use position (B60N 2/015 , B60N 2/28 take precedence)}
2/289	. . . . .	{coupled to the vehicle frame}	2/32	. . . . .	convertible for other use
2/2893	. . . . .	{coupled to the seat sub-frame}	2/34	. . . . .	into a bed
2002/2896	. . . . .	{the child seat being foldable, e.g. to facilitate transport}	2/345	. . . . .	{by adding parts}
2/30	. . . . .	Non-dismountable {or dismountable} seats storable in a non-use position, e.g. foldable spare seats	2/36	. . . . .	into a loading platform {(B60N 2/065 takes precedence)}
2/3002	. . . . .	{back-rest movements}	2002/363	. . . . .	{characterised by provisions for enhancing the cargo floor surface, e.g. elements closing gaps or enlarging the back-rest surface}
2/3004	. . . . .	{by rotation only}	2/366	. . . . .	{characterised by the locking device}
2/3006	. . . . .	{about longitudinal axis}	2/38	. . . . .	specially constructed for use on tractors or like off-road vehicles
2/3009	. . . . .	{about transversal axis}	2/39	. . . . .	Seats tiltable to compensate for roll inclination of vehicles
2/3011	. . . . .	{the back-rest being hinged on the cushion, e.g. "portefeuille movement"}	2/40	. . . . .	saddle type
2/3013	. . . . .	{the back-rest being hinged on the vehicle frame}	2/42	. . . . .	the seat constructed to protect the occupant from the effect of abnormal g-forces, e.g. crash or safety seats (for protecting children B60N 2/26 ; arm-rests B60N 2/75 ; head-rests B60N 2/888)
2/3015	. . . . .	{the axis being located at the top of the back-rest}	2/4207	. . . . .	{characterised by the direction of the g-forces}
2/3018	. . . . .	{about vertical axis}	2/4214	. . . . .	{longitudinal}
2/302	. . . . .	{by translation only}	2/4221	. . . . .	{due to impact coming from the front}
2/3022	. . . . .	{along longitudinal axis}	2/4228	. . . . .	{due to impact coming from the rear}
2/3025	. . . . .	{along transversal axis}	2/4235	. . . . .	{transversal}
2/3027	. . . . .	{along vertical axis}	2/4242	. . . . .	{vertical}
2/3029	. . . . .	{by composed movement}	2/4249	. . . . .	{fixed structures, i.e. where neither the seat nor a part thereof are displaced during a crash}
2/3031	. . . . .	{in a longitudinal-vertical plane}	2/4256	. . . . .	{the shape of the seat being specially adapted for a particular purpose or for particular vehicles}
2/3034	. . . . .	{in a longitudinal-transversal plane}	2/4263	. . . . .	{with anti-submarining systems}
2/3036	. . . . .	{in a transversal-vertical plane}	2/427	. . . . .	Seats or parts thereof displaced during a crash
2/3038	. . . . .	{Cushion movements}	2/42709	. . . . .	{involving residual deformation or fracture of the structure}
2/304	. . . . .	{by rotation only}	2/42718	. . . . .	{with anti-submarining systems}
2/3043	. . . . .	{about longitudinal axis}	2/42727	. . . . .	{involving substantially rigid displacement}
2/3045	. . . . .	{about transversal axis}	2/42736	. . . . .	{of the whole seat}
2/3047	. . . . .	{the cushion being hinged at the back-rest}	2/42745	. . . . .	{of the back-rest (B60N 2/433 takes precedence ; higher part of the back-rest moving together with the headrest B60N 2/888)}
2/305	. . . . .	{the cushion being hinged on the vehicle frame}	2/42754	. . . . .	{of the cushion}
2/3052	. . . . .	{about vertical axis}	2/42763	. . . . .	{with anti-submarining systems}
2/3054	. . . . .	{by translation only}			
2/3056	. . . . .	{along longitudinal axis}			
2/3059	. . . . .	{along transversal axis}			
2/3061	. . . . .	{along vertical axis}			
2/3063	. . . . .	{by composed movement}			

- 2/42772 {characterised by the triggering system}
- 2/42781 {mechanical triggering}
- 2/4279 {electric or electronic triggering}
- 2/43 . . . {Safety locks (for back-rests [B60N 2/433](#))}
- 2/433 . . . Safety locks for back-rests, e.g. with locking bars activated by inertia
- 2/50 . Seat suspension devices
- 2/501 . . {actively controlled suspension, e.g. electronic control}
- 2/502 . . {attached to the base of the seat ([B60N 2/504 takes precedence](#))}
- 2/503 . . {attached to the backrest ([B60N 2/504 takes precedence](#))}
- 2/504 . . {attached to the base and the backrest}
- 2/505 . . {Adjustable suspension including height adjustment}
- 2/506 . . {Seat guided by rods}
- 2/507 . . . {Parallelogram-like structure}
- 2/508 . . . {Scissors-like structure}
- 2/509 . . {Seat guided by slides or the like}
- 2/52 . . using fluid means
- 2/522 . . . {characterised by dampening means}
- 2/525 . . . {using gas}
- 2/527 . . . {using liquids}
- 2/54 . . using mechanical springs
- 2/542 . . . {made of rubber or other material having high internal friction, e.g. polymers}
- 2/544 . . . {Compression or tension springs ([B60N 2/542 takes precedence](#))}
- 2/546 . . . {Leaf- or flexion springs}
- 2/548 . . . {Torsion springs, e.g. torsion helicoidal springs}
- 2/56 . Heating or ventilating devices
- 2/5607 . . {characterised by convection}
- 2/5614 . . . {by liquid}
- 2/5621 . . . {by air}
- 2/5628 {coming from the vehicle ventilation system, e.g. air-conditioning system}
- 2/5635 {coming from the passenger compartment}
- 2/5642 {with circulation of air through a layer inside the seat}
- 2/565 {sucked from the seat surface}
- 2/5657 {blown towards the seat surface}
- 2/5664 {with unforced air circulation, i.e. not using a fan or the like}
- 2/5671 {forming a windbreak, e.g. warm air blown on the neck of the passenger of an open vehicle}
- 2/5678 . . {characterised by electrical systems}
- 2/5685 . . . {Resistance}
- 2/5692 . . . {Refrigerating means}
- 2/58 . Seat coverings
- 2002/5808 . . {comprising opening zones for airbags}
- 2/5816 . . {attachments thereof}
- 2/5825 . . . {by hooks, staples, clips, snap fasteners or the like}
- 2/5833 . . . {by hook-and-loop type fasteners}
- 2/5841 . . . {by clamping means}
- 2/585 . . . {by buckle passages}
- 2/5858 . . . {by elastic means}
- 2/5866 . . . {by thermal welding}
- 2/5875 . . . {by adhesion, e.g. gluing}
- 2/5883 . . . {by sewing, stitching or threading}
- 2/5891 . . {characterised by the manufacturing process; manufacturing seat coverings not otherwise provided for}
- 2/60 . Removable protective coverings
- 2/6009 . . . {covering more than only the seat}
- 2/6018 . . . {attachments thereof}
- 2/6027 {by hooks, staples, clips, snap fasteners or the like}
- 2/6036 {by hook and loop-type fasteners}
- 2/6045 {by clamping means}
- 2/6054 {by buckle passages}
- 2/6063 {by elastic means}
- 2/6072 {by thermal welding}
- 2/6081 {by adhesion, e.g. glueing}
- 2/609 {by sewing, stitching or threading}
- 2/62 . Thigh-rests {([B60N 2/914 takes precedence](#))}
- 2/64 . Back-rests {or cushions ([B60N 2/222 takes precedence](#))}
- 2/643 . . {shape of the back-rests ([B60N 2/66 takes precedence](#))}
- 2/646 . . {shape of the cushion}
- 2/66 . Lumbar supports
- 2/663 . . . {portable with attachment to the back-rest}
- 2/665 . . . {using inflatable bladders}
- 2/666 . . . {vertically adjustable}
- 2/667 . . . {having flexible support member bowed by applied forces}
- 2/6671 {with cable actuators}
- 2/6673 {with motor driven adjustments}
- 2/68 . Seat frames
- 2/682 . . {Joining means}
- 2002/684 . . . {the back rest being mounted or joined with an easy attachment system to the seat}
- 2/686 . . {Panel like structures}
- 2/688 . . {Particular seat belt attachment and guiding}
- 2/70 . Upholstery springs {; Upholstery}
- 2/7005 . . {detachable}
- 2/7011 . . {of substantially two-dimensional shape, e.g. hammock-like, plastic shells, fabrics}
- 2/7017 . . {characterised by the manufacturing process; manufacturing upholstery or upholstery springs not otherwise provided for}
- 2/7023 . . {Coach-like constructions}
- 2/7029 . . . {back-rests}
- 2/7035 . . . {Cushions}
- 2/7041 {Fixation of covers and springs}
- 2/7047 {Springs}
- 2/7052 {Springs using a combination of metal and rubber}
- 2/7058 {Metallic springs}
- 2/7064 {helicoidal}
- 2/707 {with rubber blocks}
- 2/7076 {with rubber bands}
- 2/7082 {with air or fluid cushions ([B60N 2/914 takes precedence](#))}
- 2/7088 {with valves ([B60N 2/914 takes precedence](#))}
- 2/7094 . . {Upholstery springs}
- 2/72 . Attachment or adjustment thereof
- 2/75 . Arm-rests
- 2/753 . . {movable to an inoperative position}

2/757	. . . {in a recess of the back-rest}	2/90	. Details or parts not otherwise provided for
2/76	. . . {in a recess of the cushion}	2002/905	. . {the head-rest or seat used as an anchorage point, for an object not covered by groups in B60N , e.g. for a canvas}
2/763	. . {adjustable}	2/91	. . {Panels between front seats}
2/767	. . . {Angle adjustment}	2/914	. . {Hydro-pneumatic adjustments of the shape}
2/77	. . . {Height adjustment}	2/919	. . {Positioning and locking mechanisms (B60N 2/16 , B60N 2/18 , B60N 2/22 , B60N 2/225 take precedence)}
2/773	. . . {Longitudinal adjustment}	2002/924	. . . {using electric or hydraulic energy}
2/777	. . . {Transversal adjustment}	2/929	. . . {linear}
2/78	. . {post or panel mounted}	2/933	. . . {rotatable}
2/783	. . . {sill suspended, e.g. window sill}	2/938	. . . . {and provided with braking systems}
2/787	. . {detachable}	2/943	. . . . {Stepwise movement mechanisms, e.g. ratchets}
2/79	. . {Adaptations for additional use of the arm-rests}	2002/948	. . . {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}
2/793	. . . {for use as storage compartments}	2002/952	. . . {characterised by details of the locking system}
2/797	. . . {for use as electrical control means, e.g. switches}	2002/957	. . . . {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}
2/80	. Head-rests	2002/962	. . . . {the locking system disabling tilting of the back-rest to the vertical position, when the seat is not properly installed}
2/803	. . fixed	2002/967	. . . . {the locking system prevents tilt of whole seat by retaining and locking the seat in a vertical storage position}
2/806	. . movable or adjustable	2002/971	. . . . {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}
2/809	. . . vertically slidable	2/976	. . {massaging systems}
2/812	. . . . characterised by their locking devices	2002/981	. . {Warning systems, e.g. the seat or seat parts vibrates to warn the passenger when facing a danger}
2/815	. . . . . Release mechanisms, e.g. buttons	2/986	. . {Side-rests (B60N 2/2872 , B60N 2/885 take precedence)}
2/818	. . . . . with stepwise positioning	2/99	. . . {adjustable}
2/821	. . . . . with continuous positioning	2/995	. . {Lower-leg-rests, e.g. calf-rests}
2/824	. . . . . using springs	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)
2/826	. . . . . using rubber-type material	3/001	. . {of tables or trays}
2/829	. . . . characterised by their adjusting mechanisms, e.g. electric motors	3/002	. . {of trays}
2/832	. . . . movable to an inoperative or stowed position	3/004	. . . {of foldable trays mounted on the back-rest}
2/835	. . . . . specially adapted for rear seats	3/005	. . . {mounted on the steering wheel}
2/838	. . . Tilttable	3/007	. . . {mounted on the window sill}
2/841	. . . . characterised by their locking devices	3/008	. {of beds}
2/844	. . . . . Release mechanisms, e.g. buttons	3/02	. of hand grips or straps
2/847	. . . . . with stepwise positioning	3/023	. . {movable}
2/85	. . . . . with continuous positioning	3/026	. . {characterised by the fixing means (B60N 3/023 takes precedence)}
2/853	. . . . characterised by their adjusting mechanisms, e.g. electric motors	3/04	. of floor mats {or carpets}
2/856	. . . . movable to an inoperative or stowed position	3/042	. . {of carpets (B60N 3/046 , B60N 3/048 take precedence)}
2/859	. . . . . specially adapted for rear seats	3/044	. . {of removable mats (B60N 3/046 , B60N 3/048 take precedence)}
2/862	. . . . with means for maintaining a desired position when the seat-back is adjusted, e.g. parallelogram mechanisms		
2/865	. . . providing a fore-and-aft movement with respect to the occupant's head		
2/868	. . . providing a lateral movement parallel to the occupant's shoulder line		
2/874	. . . movable to an inoperative or stowed position (B60N 2/832 , B60N 2/856 take precedence)		
2/876	. . . . specially adapted for rear seats (B60N 2/835 , B60N 2/859 take precedence)		
2/879	. . with additional features not related to head-rest positioning, e.g. heating or cooling devices or loudspeakers		
2/882	. . detachable		
2/885	. . provided with side-rests		
2/888	. . with arrangements for protecting against abnormal g-forces, e.g. by displacement of the head-rest		
2/891	. . with the head-rest being comma-shaped in side view		
2/894	. . with rods solidly attached to the back-rest		
2/897	. . with sleeves located in the back-rest for guiding the rods of the head-rest		
2002/899	. . {characterised by structural or mechanical details not otherwise provided for}		

- 3/046 . . {characterised by the fixing means}
- 3/048 . . {characterised by their structure}
- 3/06 . . of footrests
- 3/063 . . {with adjustment systems}
- 3/066 . . {with protection systems against abnormal g-forces}
- 3/08 . . of receptacles for refuse, e.g. ash-trays
- 3/083 . . {Ash-trays}
- 3/086 . . . {with refuse evacuation means}
- 3/10 . . of receptacles for food or beverages, e.g. refrigerated
- 3/101 . . {fixed}
- 3/102 . . {storable or foldable in a non-use position}
- 3/103 . . {detachable}
- 3/104 . . {with refrigerating or warming systems}
- 3/105 . . {for receptacles of different size or shape}
- 3/106 . . . {with adjustable clamping mechanisms}
- 3/107 . . . {with different elements of fixed geometry}
- 3/108 . . . {with resilient holding elements}
- 3/12 . . of receptacles for cigarettes or the like
- 3/14 . . of electrically-heated lighters
- 3/16 . . of cooking or boiling devices
- 3/18 . . of drinking-water {or other beverage} dispensing devices

5/00 Arrangements or devices on vehicles for entrance or exit control of passengers, e.g. turnstiles

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

Indexing scheme associated with groups B60N 2/00 - B60N 99/00 relating to general mechanical or structural details

2205/00 General mechanical or structural details

- 2205/20 . . Measures for elimination or compensation of play or backlash
- 2205/30 . . Seat or seat parts characterised by comprising plural parts or pieces
- 2205/35 . . . Seat, bench or back-rests being split laterally in two or more parts
- 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
- 2205/50 . . Interlocking shaft arrangements transmitting movement between hinge mechanisms on both sides of a seat

Indexing scheme associated with groups B60N 2/00 - B60N 99/00, relating to aspects of seats specially adapted for vehicles or vehicle passenger accommodation not otherwise provided for

2210/00 Sensor types, e.g. for passenger detection systems or for controlling seats

WARNING

Groups [B60N 2210/00](#) - [B60N 2210/50](#) are incomplete pending reclassification of documents from group [B60N 2/002](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2210/10 . . Field detection presence sensors
- 2210/12 . . . Capacitive; Electric field
- 2210/14 . . . Inductive; Magnetic field
- 2210/16 . . . Electromagnetic waves

- 2210/18 . . . Infrared
- 2210/20 . . . Radar
- 2210/22 . . . Optical; Photoelectric; Lidar [Light Detection and Ranging]
- 2210/24 Cameras
- 2210/26 . . Ultrasonic, e.g. sonar
- 2210/30 . . Temperature sensors
- 2210/40 . . Force or pressure sensors
- 2210/42 . . Strain gauges
- 2210/44 . . using fluids
- 2210/46 . . Electric switches
- 2210/48 . . Piezoelectric
- 2210/50 . . Inertial sensors

2220/00 Computerised treatment of data for controlling of seats

WARNING

Groups [B60N 2220/00](#) - [B60N 2220/30](#) are incomplete pending reclassification of documents from group [B60N 2/002](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2220/10 . . using a database
- 2220/20 . . using a deterministic algorithm
- 2220/30 . . using a neural network

2230/00 Communication or electronic aspects

WARNING

Groups [B60N 2230/00](#) - [B60N 2230/30](#) are incomplete pending reclassification of documents from group [B60N 2/002](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 2230/10 . . Wired data transmission
- 2230/20 . . Wireless data transmission
- 2230/30 . . Signal processing of sensor data