

CPC COOPERATIVE PATENT CLASSIFICATION

A47C CHAIRS (seats specially adapted for vehicles [B60N 2/00](#)); SOFAS; BEDS (upholstery in general [B68G](#))

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[A47C 23/053](#)

covered by

[A47C 23/05](#), [A47C 23/0507](#), [A47C 23/0515](#)

Chairs; Stools; Benches

- 1/00** **Chairs adapted for special purposes** (features relating to vertical adjustability [A47C 3/20](#); convertible chairs [A47C 13/00](#); chairs or personal conveyances specially adapted for patients or disabled persons [A61G 5/00](#); operating chairs, dental chairs [A61G 15/00](#))
- 1/02 . Reclining or easy chairs (supports for parts of body [A47C 7/36](#), [A47C 7/50](#), [A47C 7/54](#))
- 1/022 . . having independently-adjustable supporting parts
- 1/023 . . . the parts being horizontally-adjustable seats; {Expandable seats or the like, e.g. seats with horizontally adjustable parts}
- 1/024 . . . the parts, being the back-rest, or the back-rest and seat unit, having adjustable {and lockable} inclination
- 1/0242 {by electric motors}
- 1/0244 {by fluid means}
- 1/0246 {by means of screw-and-nut mechanism}
- 1/0248 {by chains, ropes or belts}
- 1/025 by means of a {rack-and-pinion} or like gearing mechanism
- 1/026 by means of peg-and-notch or {pawl-and-ratchet} mechanism
- 1/0265 {positioned under the arm-rests}
- 1/027 by means of clamps or friction locking members
- 1/028 . . . for changing a straight chair into an easy chair, {e.g. by inverting or tilting seat and back-rest in the base frame or by overturning the whole chair}
- 1/029 by changing the length or the inclination of the legs {(varying the height of a seat by inclining the legs [A47C 3/36](#))}
- 1/03 . . . the parts being arm-rests {(conversion into a bed [A47C 17/12](#))}
- 1/031 . . having coupled adjustable supporting parts
- 1/032 . . . the parts being movably-coupled seat and back-rest ([A47C 1/035](#) takes precedence)
- 1/03205 {having adjustable and lockable inclination}
- 1/03211 {by electric motors}
- 1/03216 {by fluid means}
- 1/03222 {by means of screw-and-nut mechanism}
- 1/03227 {by chains, ropes or belts}
- 1/03233 {by means of a rack-and-pinion or like gearing mechanism}
- 1/03238 {by means of peg-and-notch or pawl-and-ratchet mechanism}
- 1/03244 {positioned under the arm-rests}
- 1/0325 {by means of clamps or friction locking members}

- 1/03255 {with a central column, e.g. rocking office chairs (seat and back-rest not movably coupled [A47C 3/026](#))}
- 1/03261 {characterised by elastic means}
- 1/03266 {with adjustable elasticity}
- 1/03272 {with coil springs}
- 1/03277 {with leaf springs}
- 1/03283 {with fluid springs}
- 1/03288 {with resilient blocks}
- 1/03294 {slidingly movable in the base frame, e.g. by rollers}
- 1/033 the coupling member being a flexible strip
- 1/034 . . . the parts including a leg-rest or foot-rest ([A47C 1/037](#) takes precedence; {supports for the feet or the legs coupled to fixed parts of the chair [A47C 7/50](#); independent foot-rests or leg-rests [A47C 16/02](#))}
- 1/0342 {in combination with movable backrest-seat unit or back-rest}
- 1/0345 {characterised by foot-rests actuated by lazy-tongs}
- 1/0347 {characterised by the backrest-seat unit or back-rest slidingly movable in the base frame, e.g. by rollers}
- 1/035 in combination with movably coupled seat and back-rest, {i.e. the seat and back-rest being movably coupled in such a way that the extension mechanism of the foot-rest is actuated at least by the relative movements of seat and backrest}
- 1/0352 {characterised by coupled seat and back-rest slidingly movable in the base frame, e.g. by rollers}
- 1/0355 actuated by linkages, e.g. lazy-tongs mechanisms
- 1/036 . . . the parts including a head-rest
- 1/037 in combination with a leg-rest or foot-rest
- 1/04 . Hairdressers' or similar chairs, {e.g. beauty salon chairs}
- 1/06 . . adjustable
- 1/08 . . with auxiliary seats (insertable seats for children [A47C 1/11](#))
- 1/10 . . with head-rests; with paper holders
- 1/11 . . Accessories not otherwise provided for, e.g. seats for children
- 1/12 . Theatre, auditorium, or similar chairs (seats {detachably mounted on} stadium benches [A47C 1/16](#))
- 1/121 . . having tipping-up seats
- 1/122 . . . tipping-up sideways
- 1/124 . . Separate chairs, connectible together into a row
- 1/126 . . stowable in floor or wall

- 1/13 . . Indicators; Devices for reserving or the like
{(coin-free apparatus for seats or footstools
[G07F 17/08](#))}
- 1/14 . Beach chairs; {Chairs for outdoor use, e.g. chairs
for relaxation or sun-tanning}
- 1/143 . . {Chaise longues}
- 1/146 . . {of legless type}
- 1/16 . {Chairs or} seats detachably mounted on stadium
benches (detachably mounted children's chairs
[A47D 1/10](#))
- 3/00 Chairs characterised by structural features;
Chairs or stools with rotatable or vertically-
adjustable seats ([A47C 1/00](#), [A47C 4/00](#) take
precedence)**
 - 3/02 . Rocking chairs (specially for children [A47D 13/10](#))
 - 3/021 . . having elastic frames
 - 3/023 . . . made of tubular material
 - 3/025 . . with seat, or seat and back-rest unit elastically {or
pivotally} mounted in a rigid {base} frame
 - 3/0252 . . . {connected only by an elastic member
positioned between seat and base frame}
 - 3/0255 . . . {pivotally mounted in the base frame, e.g.
swings}
 - 3/0257 . . . {slidingly movable in the base frame, e.g. by
rollers}
 - 3/026 . . . with central column, e.g. rocking office chairs;
Tilting chairs
 - 3/027 . . . with curved rocking members between seat and
{base} frame
 - 3/029 . . with curved rocking members resting on the floor
 - 3/03 . . Locking members ([A47C 3/027](#) takes precedence)
 - 3/04 . Stackable chairs; Nesting chairs
 - 3/045 . . {with tipping-up seats}
 - 3/12 . with shell-shape seat and back-rest unit, e.g. having
arm rests
 - 3/14 . of asymmetrical shape
 - 3/16 . of legless type, e.g. with seat directly resting on
the floor ([A47C 3/14](#) takes precedence; detachably
mounted on stadium benches [A47C 1/16](#); children's
chairs mounted on back-rest of chair [A47D 1/10](#),
{legless beach chairs [A47C 1/146](#); inflatable chairs
[A47C 4/54](#)}); Hassocks; Pouffes
 - 3/18 . Chairs or stools with rotatable seat (adjustable in
height by rotation [A47C 3/24](#))
 - 3/185 . . {self-returning to the original position}
 - 3/20 . Chairs or stools with vertically-adjustable seats
(tables with variable height [A47B 9/00](#); {locking of
telescopic systems in general [F16B 7/10](#)})
 - 3/22 . . with balancing device, e.g. by spring, by weight
 - 3/24 . . with vertical spindle
 - 3/245 . . . {resiliently supported}
 - 3/26 . . with vertical, {or inclined} toothed rack; {with
peg-and-notch mechanism}
 - 3/265 . . . {with rack-and-pinion gearing}
 - 3/28 . . with clamps acting on vertical rods
 - 3/285 . . . {with radially expansible clamping elements
telescopically engaged in a tube or the like}
 - 3/30 . . with vertically-acting fluid cylinder
 - 3/32 . . with flexible height-adjusting means, e.g. rope,
chain
 - 3/34 . . with pins coacting with holes {or bolt-and-nut
adjustment}
- 3/36 . . with means, or adapted, for inclining the legs of
the chair or stool for varying height of seat
- 3/38 . . with additional seat or additional legs for varying
height of seat
- 3/40 . . Telescopic guides
- 4/00 Foldable, collapsible or dismountable chairs (of
tubular metal type [A47C 5/10](#); children's foldable
chairs [A47D 1/02](#))**
 - 4/02 . Dismountable chairs
 - 4/021 . . {connected by slotted joints}
 - 4/022 . . {connected by bars or wires}
 - 4/024 . . {having integral back-rest and rear leg}
 - 4/025 . . {having integral back-rest and front leg}
 - 4/027 . . {having integral seat and rear leg}
 - 4/028 . . {Upholstered chairs, e.g. metal, plastic or wooden
chairs}
 - 4/03 . . Non-upholstered {chairs, e.g. metal, plastic or}
wooden chairs
 - 4/04 . Folding chairs with inflexible seats
 - 4/045 . . {foldable side to side only}
 - 4/06 . . Attachment of upholstery or fabric to frames (in
general [A47C 31/02](#))
 - 4/08 . . having a frame made of wood or plastics
 - 4/10 . . . with legs pivotably connected to seat or
underframe
 - 4/12 of adjustable type ([A47C 4/14](#) takes
precedence)
 - 4/14 with cross legs
 - 4/16 of adjustable type
 - 4/18 . . having a frame made of metal
 - 4/20 . . . with legs pivotably connected to seat or
underframe
 - 4/22 of adjustable type ([A47C 4/24](#) takes
precedence)
 - 4/24 with cross legs
 - 4/26 of adjustable type
 - 4/28 . Folding chairs with flexible coverings for the seat or
back elements
 - 4/283 . . {foldable side to side only}
 - 4/286 . . {foldable side to side and front to back, e.g.
umbrella type}
 - 4/30 . . Attachment of upholstery or fabric to frames (in
general [A47C 31/02](#))
 - 4/32 . . having a frame made of wood or plastics
 - 4/34 . . . with legs pivotably connected to seat or
underframe
 - 4/36 of adjustable type ([A47C 4/38](#) takes
precedence)
 - 4/38 with cross legs
 - 4/40 of adjustable type
 - 4/42 . . having a frame made of metal
 - 4/44 . . . with legs pivotably connected to seat or
underframe
 - 4/46 of adjustable type ([A47C 4/48](#) takes
precedence)
 - 4/48 with cross legs
 - 4/50 of adjustable type
 - 4/52 . Trunk chairs, i.e. chairs collapsible to {self
contained carrying case, e.g.} trunk shape (trunk
tables [A47B 3/10](#))
 - 4/54 . inflatable chairs (connection of valves to inflatable
elastic bodies [B60C 29/00](#))

5/00 Chairs of special materials

- 5/005 . {of paper, cardboard or similar pliable material}
- 5/02 . {of woven material, e.g.} basket chairs
- 5/04 . Metal chairs, e.g. tubular (of rocking type [A47C 3/023](#); of non-tubular folding, collapsible, or dismountable type [A47C 4/00](#))
- 5/043 . . {of tubular non-circular cross-section}
- 5/046 . . {of non-tubular cross-section}
- 5/06 . . Special adaptation of seat upholstery or fabric for attachment to tubular chairs
- 5/08 . . Tubular chairs having sheathed tubes; Adaptation of sheathed tubes thereto
- 5/10 . . Tubular chairs of foldable, collapsible, or dismountable type
- 5/12 . of plastics, with or without reinforcement
- 5/125 . . {completely made of foam material}
- 5/14 . characterised by the use of laminated wood

7/00 Parts, details, or accessories of chairs or stools (attaching to floor [A47B 9/08](#))

- 7/002 . {Chair or stool bases ([A47C 3/20](#) takes precedence)}
- 7/004 . . {for chairs or stools with central column, e.g. office chairs}
- 7/006 . . {with castors}
- 7/008 . . {for uneven surfaces}
- 7/02 . Seat parts (adaptation of seats to mounting in tubular chairs [A47C 5/06](#); such parts not restricted to chairs [A47C 23/00](#); removable upholstered units or cushions [A47C 27/00](#))
- 7/021 . . {Detachable or loose seat cushions}
- 7/022 . . {especially profiled for adaptation to body contour}
- 7/024 . . {with double seats}
- 7/025 . . {Springs not otherwise provided for in [A47C 7/22](#) - [A47C 7/35](#)}
- 7/027 . . . {with elastomeric springs ([A47C 7/282](#) takes precedence)}
- 7/028 . . . {with wooden springs, e.g. slated type}
- 7/14 . . of adjustable shape; elastically mounted
- 7/16 . . Seats made of wooden, plastics, or metal sheet material; Panel seats
- 7/18 . . having foamed material included in cushioning part (foamed material mattresses [A47C 27/14](#))
- 7/185 . . . {with a stiff, rigid support}
- 7/20 . . . with reinforcement {in the foam layer}
- 7/22 . . Straps or the like for {direct user support or for} carrying upholstery
- 7/24 . . Upholstered seats ([A47C 7/18](#) takes precedence)
- 7/26 . . . with reinforcement {of the external layer of the upholstery, e.g. vandal resistant}
- 7/28 . . with tensioned springs, e.g. of flat type
- 7/282 . . . {with mesh-like supports, e.g. elastomeric membranes}
- 7/285 . . . {with metal strips or webs}
- 7/287 . . . {with combinations of different types flat type tensioned springs}
- 7/30 . . . with springs meandering in a flat plane
- 7/32 . . . with tensioned cords, e.g. of elastic type, in a flat plane
- 7/34 . . with springs in compression, e.g. coiled
- 7/342 . . . {Edge stiffeners}
- 7/345 . . . {of adjustable resilience}

- 7/347 . . . {with means for connecting springs to each other or to seat frame}
- 7/35 . . Combinations of different types of springs; Adjustable springs; Attachment of springs to other springs or to {the base} frame; {Springs for seat parts not provided for in other groups of this subclass}
- 7/36 . Support for the head or the back
- 7/38 . . for the head {(adjustable coupled to reclining or easy chairs [A47C 1/036](#); for operating or dental chairs [A61G 15/00](#); for car seats [B60N 2/48](#))}
- 7/383 . . . {Detachable or loose head- or neck-supports, e.g. horse-shoe shaped (detachable head rests for cars [B60N 2/4879](#))}
- 7/386 . . . {Detachable covers for headrests}
- 7/40 . . for the back
- 7/402 . . . {adjustable in height}
- 7/405 . . . {with double backrests}
- 7/407 . . . {of collapsible type}
- 7/42 . . . of detachable {or loose} type {(detachable or loose back supports associated with beds [A47C 20/027](#))}
- 7/425 {Supplementary back-rests to be positioned on a back-rest or the like}
- 7/44 . . . with elastically-mounted {back-rest or backrest-seat unit in the base} frame
- 7/441 {with adjustable elasticity}
- 7/443 {with coil springs}
- 7/445 {with leaf springs}
- 7/446 {with fluid springs}
- 7/448 {with resilient blocks}
- 7/46 . . . with special, e.g. adjustable, {lumbar region support} profile; "Ackerblom" profile chairs
- 7/462 {adjustable by mechanical means}
- 7/465 {by pulling an elastic cable}
- 7/467 {adjustable by fluid means}
- 7/48 . . . of freely-rotatable type
- 7/50 . Supports for the feet or the legs {coupled to fixed parts of the chair} (coupled to other adjustable parts {of the chair} [A47C 1/034](#), [A47C 1/037](#); {stand-alone rests or supports for the feet or the legs, e.g.} footstools [A47C 16/02](#))
- 7/503 . . {with double foot-rests or leg-rests}
- 7/506 . . {of adjustable type}
- 7/52 . . of detachable type
- 7/54 . Supports for the arms
- 7/543 . . {movable to inoperative position}
- 7/546 . . {of detachable type}
- 7/56 . Parts or details of tipping-up chairs, e.g. of theatre chairs
- 7/563 . . {provided with a back-rest moving with the seat}
- 7/566 . . {Resiliently mounted seat or back-rest}
- 7/58 . . Hinges, e.g. for mounting chairs in a curved row (hinges for wings in general [E05D](#))
- 7/60 . . Use of locks or ledges for limiting the seat movement {(coin-freed apparatus for seats or footstools [G07F 17/08](#))}
- 7/62 . Accessories for chairs
- 7/64 . . Hat or coat holders
- 7/66 . . Means to protect against weather
- 7/68 . . Arm-rest tables; {or back-rest tables (suspended or hinged panels forming a table [A47B 5/00](#)); Cup holders}

- 7/70 . . . of foldable {or detachable} type
- 7/72 . . Adaptations for incorporating lamps, radio sets, bars, telephones, ventilation, heating or cooling arrangements or the like
- 7/725 . . . {for illumination, e.g. lamps}
- 7/74 . . . for ventilation, heating or cooling {(actuated by rocking the chair [A47C 3/02](#))}
- 7/742 {for ventilating or cooling ([A47C 31/116](#) takes precedence)}
- 7/744 {with active means, e.g. by using air blowers or liquid pumps}
- 7/746 {without active means, e.g. with openings or heat conductors}
- 7/748 {for heating}
- 9/00 Stools for specified purposes** (with rotatable seats [A47C 3/18](#); with vertically adjustable seats [A47C 3/20](#); footstools [A47C 16/02](#); prayer stools [A47C 16/04](#); platforms or seat-boxes specially adapted for angling [A01K 97/22](#) {other seating furniture for specified purposes [A47C 15/004](#)})
- 9/002 . {with exercising means or having special therapeutic or ergonomic effects}
- 9/005 . . {with forwardly inclined seat, e.g. with a knee-support}
- 9/007 . {High stools, e.g. bar stools (children's high chairs [A47D 1/00](#))}
- 9/02 . Office stools {not provided for in main groups [A47C 1/00](#), [A47C 3/00](#) or [A47C 7/00](#)}; Workshop stools
- 9/022 . . {movably mounted on a working-table or the like (for hairdressers [A47C 1/08](#))}
- 9/025 . . {Stools for standing or leaning against, e.g. in a semi-standing or half-seated position}
- 9/027 . . {Stools for work at ground level}
- 9/04 . Milking stools
- 9/06 . Wall stools; {Stools hingedly mounted against the wall}
- 9/08 . Music stools
- 9/10 . Camp, travelling, or sports stools (walking sticks or umbrellas convertible into seats, hunting sticks [A45B 5/00](#))
- 9/105 . . {having several foldable or detachable legs converging in one point}
- 11/00 Benches not otherwise provided for** (school forms [A47B 39/00](#))
- 11/005 . {having multiple separate seats}
- 11/02 . Church benches; Confessionals
- 12/00 Step-stools**
- NOTE**
- Folding or collapsing actions, of interest apart from any conversion between the step and seat functions, are classified in group [A47C 4/00](#)
- 12/02 . requiring conversion between the step and seat functions
- 13/00 Convertible chairs, stools or benches** (step-stools requiring conversion between the step and seat functions [A47C 12/02](#))
- 13/005 . {Modular seating (chairs connectible into a row [A47C 1/124](#))}
- 15/00 Other seating furniture** (school forms [A47B 39/00](#))
- 15/002 . {Corner seating furniture, e.g. corner sofas (changing corner couches into double bed [A47C 17/36](#))}
- 15/004 . {Seating furniture for specified purposes not covered by main groups [A47C 1/00](#) or [A47C 9/00](#)}
- 15/006 . . {Floating seats (floatable vessel furniture for life-saving [B63C 9/30](#))}
- 15/008 . . {for sexual intercourse}
- 16/00 {Stand-alone} rests or supports for feet, legs, arms, back or head** (associated with chairs [A47C 7/00](#); associated with beds or sofas [A47C 20/00](#))
- 16/005 . {Back-rests}
- 16/02 . Footstools; Foot-rests; Leg-rests
- 16/025 . . {adjustable, swivelling, rocking}
- 16/04 . Prayer-stools; Kneeling stools; Kneeling supports (hassocks or pouffes [A47C 3/16](#))
- Sofas; Beds**
- NOTE**
- In groups [A47C 17/00](#) - [A47C 27/00](#), the following terms or expressions are used with the meaning indicated:
- "bedstead" is used only for the frame of a bed;
 - "bed" includes bedsteads combined with spring mattresses, stuffed mattresses, or similar means to enable the lying of persons thereon;
 - "spring mattresses" do not include any stuffed material;
 - "stuffed mattresses" may include metal springs.
- 17/00 Sofas; Couches; Beds** (bedsteads [A47C 19/00](#); spring mattresses [A47C 23/00](#); divan bases [A47C 23/00](#); stuffed mattresses [A47C 27/00](#); beds with special provisions for nursing [A61G 7/00](#))
- 17/02 . Sofas, couches, settees, or the like, without movable parts
- 17/04 . {Seating furniture, e.g.} sofas, couches, settees, or the like, with movable parts {changeable to beds}; Chair beds
- 17/045 . . {Seating furniture having loose or by fabric hinge connected cushions changeable to beds}
- 17/12 . . changeable to beds by tilting or extending the arm-rests
- 17/13 . . {Seating furniture having non-movable backrest} changeable {to beds} by increasing the available {seat} part, e.g. by drawing {seat cushion} forward
- 17/132 . . . {with multiple seat cushions}
- 17/134 {by lifting or tilting}
- 17/136 . . . {with a single seat cushion}
- 17/138 {by lifting or tilting}
- 17/14 . . changeable to beds by removing parts only
- 17/16 . . {Seating furniture} changeable to beds by tilting or pivoting the back-rest
- 17/161 . . . {with back-rest made of multiple movable cushions}
- 17/162 . . . {with adjustable back-rest}
- 17/163 . . . {and a foot-rest}
- 17/165 . . . with forward tiltable back-rest, e.g. back cushion
- 17/1655 {forming top surface of the bed with non-rotatable seat cushion}
- 17/17 . . . with coupled movement of back-rest and seat
- 17/175 with tilting or lifting seat-back-rest pivot
- 17/1753 {by sliding, e.g. by rollers}

- 17/1756 {by pivoted linkages}
- 17/18 . . . and tilting or pivoting the arm-rest
- 17/20 . . . thereby uncovering one or more auxiliary parts previously hidden ([A47C 17/22 takes precedence](#))
- 17/207 with seat cushion consisting of {multiple} superposed parts, at least one lower {hidden} part being used to form part of the {bed} surface
- 17/2073 {by sliding forward}
- 17/2076 {by lifting or tilting}
- 17/213 the surface, when used for lying down {in a bed position}, consisting of one side of the {seating furniture} seat frame and the back-rest frame
- 17/22 . . {Seating furniture having non-movable back-rest changeable to beds} with means for uncovering a previously hidden mattress or similar bed part
- 17/225 . . . {with hidden separate full size mattress frame unfolded out of the base frame}
- 17/23 . . . the lying down {bed} surface partly consisting of one side of the seat
- 17/24 . . . with only one movable part being tiltable about a horizontal axis
- 17/26 tiltable to an overturned position
- 17/28 having means to lift the tilting axis
- 17/30 . . . two or more parts being rotatable about a vertical axis
- 17/32 . . Changing a single bed into a double bed by extending, pivoting, or tilting a previously hidden second mattress or other bed part
- 17/34 . . Joining seats, chairs, or couches to form beds
- 17/36 . . . Changing corner couches into a double bed
- 17/37 . . Changing sofas or the like into beds by means of furniture other than seats or chairs
- 17/38 . . Wall beds
- 17/40 . . having balancing members, e.g. weights, springs
- 17/42 . . having supporting legs with fixed position on the floor, e.g. attached thereto
- 17/44 . . . having means on the supporting legs facilitating the removal of the bed from its place
- 17/46 . . characterised by a rigid mattress-supporting member
- 17/48 . . characterised by two or more relatively-movable {mattress-support} parts
- 17/50 . . characterised by their shape, e.g. multiple-wall beds
- 17/52 . . Cabinet beds; Table beds, or like beds; Wardrobe beds
- 17/54 . . in which the cabinet or the like is tilted with the bed
- 17/56 . . pivotable on both horizontal and vertical axis
- 17/58 . . with extensible mattress support
- 17/60 . . the cabinet being essentially changed in shape in sleeping position of the bed
- 17/62 . . Table beds; Billard table beds, or like beds {convertible tables [A47B 85/06](#)}
- 17/64 . . Travelling or camp beds (adjusting members for rests [A47C 20/00](#); travelling or camp sacks or packs convertible into beds or mattresses [A45F 4/06](#); stretchers [A61G 1/00](#))
- 17/645 . . {dismountable}
- 17/66 . . having specially-adapted body-carrying surfaces
- 17/68 . . only the legs being foldable
- 17/70 . . the bed frame being foldable about a horizontal axis
- 17/705 . . . {with detachable legs}
- 17/72 . . . having cross legs ([A47C 17/82 takes precedence](#))
- 17/74 . . the bed being foldable about a vertical axis
- 17/76 . . having extensible, e.g. telescopic parts
- 17/78 . . held in shape by stressed cords
- 17/80 . . adapted to be used in or connected to vehicles
- 17/82 . . Trunk beds; Travelling-case or like beds
- 17/84 . . Suspended beds, e.g. suspended from ceiling ([hammocks \[A45F 3/22\]\(#\)](#))
- 17/86 . . Parts or details for beds, sofas or couches only not fully covered in a single one of the sub-groups [A47C 17/02](#), [A47C 17/04](#), [A47C 17/38](#), [A47C 17/52](#), [A47C 17/64](#), or [A47C 17/84](#); {Drawers in or under beds}
- 19/00 Bedsteads (spring mattresses with rigid frame or forming part of the bedstead [A47C 23/00](#); bed jointing members or fittings for bedsteads [F16B](#))**
- 19/005 . . {dismountable}
- 19/02 . . Parts or details of bedsteads not fully covered in a single one of the following sub-groups, e.g. bed rails, post rails
- 19/021 . . {Bedstead frames}
- 19/022 . . . {Head or foot boards}
- 19/024 . . . {Legs}
- 19/025 . . . {Direct mattress support frames, Cross-bars}
- 19/027 {with means for preventing frame from sagging}
- 19/028 . . {for joining separate bedsteads}
- 19/04 . . Extensible bedsteads, e.g. with adjustment of length, width, height ([for children's beds \[A47D 7/00\]\(#\)](#))
- 19/045 . . {with entire frame height or inclination adjustments}
- 19/12 . . Folding bedsteads ([travelling or camp beds \[A47C 17/64\]\(#\)](#))
- 19/122 . . {foldable head to foot only}
- 19/124 . . {foldable side to side only}
- 19/126 . . {foldable side to side and head to foot, e.g. umbrella type}
- 19/128 . . {only legs being foldable}
- 19/14 . . of the lazy-tongs type
- 19/20 . . Multi-stage bedsteads; {e.g. bunk beds} ([multiple-wall beds \[A47C 17/50\]\(#\)](#); [suspended beds \[A47C 17/84\]\(#\)](#)); Bedsteads stackable to multi-stage bedsteads
- 19/202 . . {Stacking or nesting bedsteads}
- 19/205 . . {convertible, e.g. from single bed or sofa}
- 19/207 . . {Mezzanine beds}
- 19/22 . . Combinations of bedsteads with other furniture or with accessories, e.g. with bedside cabinets ([bed-tables \[A47B 23/00\]\(#\)](#); [bedside cabinets \[A47B 79/00\]\(#\)](#))
- 20/00 Head -, foot -, or like rests for beds, sofas or the like (book rests or bed tables [A47B 23/00](#); bed-rests specially adapted for nursing [A61G 7/065](#))**
- 20/02 . . of detachable {or loose} type ([A47C 20/04](#), [A47C 20/08 take precedence](#); {for chairs [A47C 7/00](#); pillows [A47G 9/10](#)})
- 20/021 . . {Foot or leg supports}
- 20/022 . . . {for preventing the user from slipping down}

- 20/023 . . {Arm supports}
- 20/025 . . {Supports specially adapted for pregnant women}
- 20/026 . . {Supports for lying in a prone position
([A47C 20/025](#) takes precedence)}
- 20/027 . . {Back supports, e.g. for sitting in bed}
- 20/028 . . . {with a table attached thereto}
- 20/04 . . with adjustable inclination ([A47C 20/08](#) takes precedence)
- 20/041 . . {by electric motors}
- 20/042 . . {by means of screw-and-nut mechanism}
- 20/043 . . {by means of peg-and-notch or pawl-and-ratchet mechanism}
- 20/045 . . . {urged into an operative or non-operative position at an end of stretch}
- 20/046 . . {by means of a rack-and-pinion or like gearing mechanism}
- 20/047 . . {by friction locking means}
- 20/048 . . {by fluid means}
- 20/06 . . the adjustable part immobilising foldable legs
- 20/08 . . with means for adjusting two or more rests simultaneously
- 20/10 . . using rods
- 20/12 . . . using telescopic rods
- 20/14 . . using plate and catch
- 20/16 . . using toothed parts, e.g. racks
- 20/18 . . using friction gearing
- 21/00** **Attachments for beds, e.g. sheet holders, bed-cover holders (bed tables supported on the bedstead [A47B 23/02](#); for children's beds {[A47D 7/00](#)}, [A47D 15/00](#)); Ventilating, cooling or heating means in connection with bedsteads or mattresses**
- 21/003 . {Lighting, radio, telephone or the like connected to the bedstead}
- 21/006 . {Oscillating, balancing or vibrating mechanisms connected to the bedstead (for children's beds [A47D 9/02](#))}
- 21/02 . {Holders for loose bed elements, e.g.} sheet holders; bed cover holders
- 21/022 . . {Sheet holders; Bed cover holders}
- 21/024 . . . {for holding bed covers above the body of the user (bed-clothes supports to alleviate the weight of the bed-clothes on the patient [A61G 7/0501](#))}
- 21/026 . . {Pillow holders; Mattress holders}
- 21/028 . . {Holders for facilitating making the bed}
- 21/04 . Devices for ventilating, cooling or heating
- 21/042 . . {for ventilating or cooling ([A47C 21/028](#) and [A47C 27/007](#) take precedence)}
- 21/044 . . . {with active means, e.g. by using air blowers or liquid pumps}
- 21/046 . . . {without active means, e.g. with openings or heat conductors}
- 21/048 . . {for heating}
- 21/06 . Mattress underlays {(mattress tickings or covers [A47C 27/002](#))}
- 21/08 . Devices for prevention against falling-out, e.g. detachable sidewalls (for children's beds [A47D 7/00](#))
- 23/00** **Spring mattresses with rigid frame or forming part of the bedstead, e.g. box springs; Divan bases; Slatted bed bases**
- 23/002 . . {with separate resilient support elements, e.g. elastomeric springs arranged in a two-dimensional matrix pattern}
- 23/005 . . {foldable or dismountable}
- 23/007 . . {Edge stiffeners (for chair seats [A47C 7/342](#); for stuffed mattresses [A47C 27/06](#))}
- 23/02 . . using leaf springs, e.g. metal strips (wooden springs [A47C 23/06](#))
- 23/04 . . using springs in compression, e.g. coiled
- 23/043 . . . using wound springs
- 23/0431 {supporting a flat board or strip}
- 23/0433 {of different resilience}
- 23/0435 {of adjustable resilience}
- 23/0436 {made from a single wire}
- 23/0438 {of special shape}
- 23/047 . . incorporating inflatable elements
- 23/05 . . Frames therefor; Connecting the springs to the frame; {Interconnection of springs, e.g. in spring units}
- 23/0507 {using tensioned spiral springs}
- 23/0515 {using clamps or similar connecting means}
- 23/0522 {using metal wires}
- 23/055 . . . using cords; using textile or rubber bands
- 23/057 . . . Hangers or supports for fastening spring units to frame
- 23/06 . . using wooden springs, e.g. of slat type; {Slatted bed bases}
- 23/061 . . . {Slat structures}
- 23/062 . . . {Slat supports}
- 23/063 {by elastic means, e.g. coil springs}
- 23/064 {by elastomeric springs}
- 23/065 {by fluid means}
- 23/066 {by chains, ropes or belts}
- 23/067 {adjustable, e.g. in height or elasticity}
- 23/068 {with additional supports between the ends of the slats}
- 23/12 . . using tensioned springs, e.g. flat type ([A47C 23/02](#) takes precedence)
- 23/125 . . . {using vertically mounted tension springs}
- 23/14 . . forming nets; combined with nets
- 23/145 . . . with horizontal interlocking wound springs; Attachment thereof to the frame
- 23/15 . . . with braided or crossed flat springs or cords; with horizontal wound springs ([A47C 23/145](#) takes precedence)
- 23/155 . . . with combinations of flat springs or link chains with wound spring
- 23/16 . . of plane meandering type
- 23/18 . . of resilient webbing
- 23/20 . . of resilient sheet form
- 23/22 . . of tensioned rubber cords or like cords
- 23/24 . . using tensioned textile or other non-resilient strips
- 23/26 . . Frames therefor; Connecting the springs to the frame
- 23/28 . . Tensioning devices therefor
- 23/30 . . using combinations of springs covered by more than one of the groups [A47C 23/04](#), [A47C 23/06](#) and [A47C 23/12](#); Frames therefor
- 23/32 . . Combinations of nets with springs in compression; Frames therefor
- 23/34 . . with provisions for giving extra support for the head or the legs

- 27/00 Stuffed or fluid mattresses specially adapted for chairs, beds or sofas** (arrangements for preventing bed-sores or for supporting patients with burns, e.g. mattresses specially adapted therefor, [A61G 7/057](#); ready-made upholstery pads in general [B68G 5/00](#); making mattresses [B68G 7/00](#))
- 27/001 . . {with several cushions, mattresses or the like, to be put together in one cover}
 - 27/002 . {Mattress tickings or covers (bed cover holders [A47C 21/02](#); mattress hand-straps [A47C 31/08](#); bed linen or counterpanes [A47G 9/0238](#))}
 - 27/003 . . {having edge welts or rolls}
 - 27/005 . . {liquid-impermeable}
 - 27/006 . . . {breathable}
 - 27/007 . . {permeable to liquid or air in a special way ([A47C 27/006](#) takes precedence)}
 - 27/008 . . {protecting against wear or damage}
 - 27/04 . with spring inlays ([A47C 27/20](#) takes precedence)
 - 27/045 . . Attachment of spring inlays to coverings (upholstery attaching means [A47C 31/02](#)); Use of stiffening sheets, lattices or grids {in, on, or} under spring inlays
 - 27/0453 . . . {Attachment of spring inlays to outer layers}
 - 27/0456 . . . {Use of stiffening sheets, lattices or grids in, on, or under, spring inlays}
 - 27/05 . . with {padding material, e.g.} foamed material, in top, bottom, or side layers
 - 27/053 . . . {with only one layer of foamed material}
 - 27/056 . . . {with different layers of foamed material}
 - 27/06 . . Spring inlays
 - 27/061 . . . {of adjustable resiliency}
 - 27/062 . . . {of different resiliencies}
 - 27/063 . . . {wrapped or otherwise protected}
 - 27/064 {Pocketed springs}
 - 27/065 . . . {of special shape}
 - 27/066 . . . {Edge stiffeners}
 - 27/067 . . . {of plane meandering type}
 - 27/068 . . . {made from a single wire}
 - 27/07 . . . Attaching, or interconnecting of, springs in spring inlays
 - 27/08 . {Fluid mattresses, e.g.} pneumatic mattresses, {Liquid mattresses or mattresses with fluid-like particles} (connecting valves to inflatable elastic bodies [B60C 29/00](#))
 - 27/081 . . {Pneumatic mattresses}
 - 27/082 . . . {with non-manual inflation, e.g. with electric pumps}
 - 27/083 . . . {with pressure control, e.g. with pressure sensors}
 - 27/084 . . . {self inflating}
 - 27/085 . . {Liquid mattresses, e.g. filled with water or gel}
 - 27/086 . . {Fluid-like particles mattresses, e.g. filled with beads}
 - 27/087 . . {with means for connecting opposite sides of the mattress, e.g. internal ties or strips}
 - 27/088 . . {Fluid mattresses filled with elastic bodies, e.g. foam}
 - 27/10 . . with two or more independently-fillable chambers
 - 27/12 . with fibrous inlays, e.g. made of wool, of cotton
 - 27/121 . . {with different kinds of inlays in one mattress}
 - 27/122 . . {with special fibres, such as acrylic thread, coconut, horsehair}
 - 27/124 . . {with feathers, down or similar inlays}
 - 27/125 . . {Mattresses having upholstery inlays and a special profile, body support or the like}
 - 27/127 . . . {with reinforcement sheets, grids or the like}
 - 27/128 . . . {with inflatable elements}
 - 27/14 . with foamed material inlays
 - 27/142 . . {with projections, depressions or cavities}
 - 27/144 . . . {inside the mattress}
 - 27/146 . . . {on the outside surface of the mattress}
 - 27/148 . . {of different resilience}
 - 27/15 . . consisting of two or more layers ([A47C 27/16](#) takes precedence)
 - 27/16 . . reinforced with sheet-like {or rigid} elements, e.g. profiled
 - 27/18 . . in combination with inflatable bodies
 - 27/20 . . with springs moulded in, or situated in {cavities or} openings in foamed material
 - 27/22 . with both fibrous and foamed material inlays
 - 29/00 Nets for protection against insects in connection with chairs or beds** (insect nets for animals [A01K 13/00](#); insect nets as travelling equipment [A45F 3/52](#); Bed canopies
 - 29/003 . {Bed canopies}
 - 29/006 . {Mosquito nets}
 - 31/00 Details or accessories for chairs, beds, or the like, not provided for in other groups of this subclass, e.g. upholstery fasteners, mattress protectors, stretching devices for mattress nets**
 - 31/001 . {Fireproof means}
 - 31/002 . {Anti-earthquake means}
 - 31/003 . {Magnets}
 - 31/004 . {Means for protecting against undesired influence, e.g. magnetic radiation or static electricity}
 - 31/005 . {Use of aromatic materials, e.g. herbs}
 - 31/006 . {Use of three-dimensional fabrics}
 - 31/007 . {Anti-mite, anti-allergen or anti-bacterial means}
 - 31/008 . {Use of remote controls}
 - 31/02 . Upholstery attaching means (quilting, quilting means, fastening, fixing or finishing upholstery [B68G 7/00](#))
 - 31/023 . . {connecting upholstery to frames, e.g. by hooks, clips, snap fasteners, clamping means or the like}
 - 31/026 . . {passing through the upholstery, e.g. upholstery nails or buttons}
 - 31/04 . . Clamps for attaching flat elastic strips or flat meandering springs to frames
 - 31/06 . . . for attaching flat meandering springs
 - 31/08 . Mattress hand-straps {, hand-grips or the like}
 - 31/10 . Loose {or removable} furniture covers
 - 31/105 . . {for mattresses}
 - 31/11 . . for chairs {(for headrests only [A47C 7/386](#); removable protective covers for car seats [B60N 2/60](#))}
 - 31/113 . . . {liquid-impermeable}
 - 31/116 . . . {permeable to liquid or air in a special way}
 - 31/12 . Means, e.g. measuring means for adapting chairs, beds or mattresses to the shape or weight of persons (body measuring means for clothing manufacture [A41H 1/00](#))
 - 31/123 . . {for beds or mattresses}
 - 31/126 . . {for chairs}