

# CPC COOPERATIVE PATENT CLASSIFICATION

## A HUMAN NECESSITIES

### PERSONAL OR DOMESTIC ARTICLES

#### A47 FURNITURE; DOMESTIC ARTICLES OR APPLIANCES; COFFEE MILLS; SPICE MILLS; SUCTION CLEANERS IN GENERAL

(NOTE omitted)

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

##### WARNINGS

- The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:  
[A47C 23/053](#) covered by [A47C 23/05](#), [A47C 23/0507](#), [A47C 23/0515](#)
- In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

##### Chairs; Stools; Benches

<b>1/00</b>	<b>Chairs adapted for special purposes</b> (features relating to vertical adjustability <a href="#">A47C 3/20</a> ; convertible chairs <a href="#">A47C 13/00</a> ; chairs or personal conveyances specially adapted for patients or disabled persons <a href="#">A61G 5/00</a> ; operating chairs, dental chairs <a href="#">A61G 15/00</a> )	1/0307	. . . . {adjustable rectilinearly in horizontal direction}
		1/0308	. . . . {adjustable by rotation}
		1/031	. . having coupled {concurrently} adjustable supporting parts
		1/032	. . . the parts being movably-coupled seat and back-rest ( <a href="#">A47C 1/035</a> takes precedence)
1/02	. Reclining or easy chairs (supports for parts of body <a href="#">A47C 7/36</a> , <a href="#">A47C 7/50</a> , <a href="#">A47C 7/54</a> )	1/03205	. . . . {having adjustable and lockable inclination}
1/022	. . having independently-adjustable supporting parts	1/03211	. . . . {by electric motors}
1/023	. . . the parts being horizontally-adjustable seats {; Expandable seats or the like, e.g. seats with horizontally adjustable parts}	1/03216	. . . . {by fluid means}
		1/03222	. . . . {by means of screw-and-nut mechanism}
		1/03227	. . . . {by chains, ropes or belts}
1/024	. . . the parts, being the back-rest, or the back-rest and seat unit, having adjustable {and lockable} inclination	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}
1/0242	. . . . {by electric motors}	1/03244	. . . . . {positioned under the arm-rests}
1/0244	. . . . {by fluid means}	1/0325	. . . . . {by means of clamps or friction locking members}
1/0246	. . . . {by means of screw-and-nut mechanism}	1/03255	. . . . {with a central column, e.g. rocking office chairs}
1/0248	. . . . {by chains, ropes or belts}	1/03261	. . . . {characterised by elastic means}
1/025	. . . . by means of a {rack-and-pinion} or like gearing mechanism	1/03266	. . . . . {with adjustable elasticity}
1/026	. . . . by means of peg-and-notch or {pawl-and-ratchet} mechanism	1/03272	. . . . . {with coil springs}
1/0265	. . . . . {positioned under the arm-rests}	1/03274	. . . . . {of torsion type}
1/027	. . . . by means of clamps or friction locking members	1/03277	. . . . . {with bar or leaf springs}
		1/03279	. . . . . {of torsion type}
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}	1/03283	. . . . . {with fluid springs}
		1/03288	. . . . . {with resilient blocks}
		1/03294	. . . . {slidingly movable in the base frame, e.g. by rollers}
1/029	. . . . by changing the length or the inclination of the legs {(varying the height of a seat by inclining the legs <a href="#">A47C 3/36</a> )}	1/033	. . . . the coupling member being a flexible strip
		1/034	. . . the parts including a leg-rest or foot-rest ( <a href="#">A47C 1/037</a> takes precedence)
1/03	. . . the parts being arm-rests {(conversion into a bed <a href="#">A47C 17/12</a> )}	1/0342	. . . . {in combination with movable backrest-seat unit or back-rest}
1/0303	. . . . {adjustable rectilinearly in vertical direction}	1/0345	. . . . . {characterised by foot-rests actuated by lazy-tongs}
1/0305	. . . . . {by peg-and-notch or pawl-and-ratchet mechanism}		

- 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-freed 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 lounges}
- 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
- 3/0251 . . . {driven by electric motors}
- 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](#))
- 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 91/08)**
- 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}
- 7/0213 . . . {detachably secured to seats, e.g. by ties or hook and loop straps}
- 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}
- 7/029 . . {of non-adjustable shape adapted to a user contour or ergonomic seating positions}
- 7/14 . . of adjustable shape; elastically mounted {; adaptable to a user contour or ergonomic seating positions ([movably-coupled seat and backrests with elastic adjustment means A47C 1/03261; elastically-mounted back-rests or backrest-seat units in the base frame A47C 7/44](#))}
- 7/142 . . . {by fluid means}
- 7/144 . . . {with array of movable supports}
- 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](#))}
- 7/383 . . . {Detachable or loose head- or neck-supports, e.g. horse-shoe shaped}
- 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
- 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}

- 7/444 . . . . . {of torsion type}
- 7/445 . . . . . {with bar or leaf springs}
- 7/4454 . . . . . {of torsion type}
- 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 reclining or easy 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}
- 7/5062 . . . {rectilinearly}
- 7/5064 . . . . {in vertical direction}
- 7/5066 . . . {by rotation}
- 7/5068 . . . . {actuated by linkages}
- 7/52 . . of detachable type
- 7/54 . Supports for the arms
- 7/541 . . {of adjustable type (adjustable arm-rests of reclining or easy chairs [A47C 1/03](#))}
- 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
- 7/622 . . {Receptacles, e.g. cup holders, storage containers}
- 7/624 . . . {located on side of seat, e.g. on armrest}
- 7/626 . . . {directly under the seat}
- 7/628 . . . . {accessible by displacement of seat}
- 7/64 . . Hat or coat holders
- 7/66 . . Means to protect against weather
- 7/664 . . . {of umbrella type}
- 7/666 . . . {of enclosure type with side panels}
- 7/68 . . Arm-rest tables {; or back-rest tables}
- 7/70 . . . of foldable type
- 7/705 . . . {of detachable type}
- 7/72 . . Adaptations for incorporating lamps, radio sets, bars, telephones, ventilation, heating or cooling arrangements or the like
- 7/723 . . . {with display screens}
- 7/725 . . . {for illumination, e.g. lamps}
- 7/727 . . . {with speakers}
- 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; Billiard 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 subgroups, 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 springs
- 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 Spring, stuffed or fluid mattresses {or cushions} specially adapted for chairs, beds or sofas**
- 27/001 . . {with several cushions, mattresses or the like, to be put together in one cover}
- 27/002 . . {Mattress or cushion tickings or covers (bed linen, blankets or counterpanes [A47G 9/02](#))}
- 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 {or cushions} ([connecting valves to inflatable elastic bodies B60C 29/00](#))
- 27/081 . . . {of pneumatic type}
- 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 . . {of liquid type, e.g. filled with water or gel}
- 27/086 . . {with fluid-like particles, e.g. filled with beads}
- 27/087 . . {with means for connecting opposite sides, e.g. internal ties or strips}
- 27/088 . . {incorporating 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 inlays}
- 27/122 . . {with special fibres, such as acrylic thread, coconut, horsehair}
- 27/124 . . {with feathers, down or similar inlays}
- 27/125 . . {with projections, depressions or cavities}
- 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 or cushion}
- 27/146 . . . {on the outside surface of the mattress or cushion}
- 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}