## 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 <br> (NOTE omitted)

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

## WARNINGS

1. 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
2. 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.


| 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 backrest (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-andratchet 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 \} |
| 1/03261 | \{characterised by elastic means\} |
| 1/03266 | - \{with adjustable elasticity\} |
| 1/03272 | - with coil springs $\}$ |
| 1/03274 | \{of torsion type\} |
| 1/03277 | - \{with bar or leaf springs\} |
| 1/03279 | . . $\{$ of torsion type\} |
| 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) |
| 1/0342 | . . . . \{in combination with movable backrest-seat unit or back-rest \} |
| 1/0345 | . . . . . \{characterised by foot-rests actuated by lazy-tongs $\}$ |

\{characterised by the backrest-seat unit or back-rest slidingly movable in the base frame, e.g. by rollers \}
. . . . 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 $\}$
. . . . . \{characterised by coupled seat and backrest slidingly movable in the base frame, e.g. by rollers \}

- . . . . actuated by linkages, e.g. lazy-tongs mechanisms
. . . the parts including a head-rest
. . . . in combination with a leg-rest or foot-rest
- Hairdressers' or similar chairs \{, e.g. beauty salon chairs $\}$
. . adjustable
. . with auxiliary seats (insertable seats for children A47C 1/11)
. . with head-rests; with paper holders
. . Accessories not otherwise provided for, e.g. seats for children
- Theatre, auditorium, or similar chairs (seats \{detachably mounted on\} stadium benches A47C 1/16)
. having tipping-up seats
. . . tipping-up sideways
. . Separate chairs, connectible together into a row
. . stowable in floor or wall
. . Indicators; Devices for reserving or the like \{(coin-freed apparatus for seats or footstools G07F 17/08) \}
- Beach chairs \{; Chairs for outdoor use, e.g. chairs for relaxation or sun-tanning\}
- . \{Chaise lounges \}
. . \{of legless type\}
- \{Chairs or\} seats detachably mounted on stadium benches (detachably mounted children's chairs A47D 1/10)

Chairs characterised by structural features;
Chairs or stools with rotatable or verticallyadjustable seats ( $\mathrm{A} 47 \mathrm{C} 1 / 00$, A47C 4/00 take precedence)
. Rocking chairs (specially for children A47D 13/10)
. having elastic frames
. . . made of tubular material
. . with seat, or seat and back-rest unit elastically $\{$ or pivotally $\}$ mounted in a rigid \{base\} frame
. . . \{driven by electric motors\}
. . . \{connected only by an elastic member positioned between seat and base frame\}

- . . \{pivotally mounted in the base frame, e.g. swings\}
. . . \{slidingly movable in the base frame, e.g. by rollers $\}$
. . . with central column, e.g. rocking office chairs; Tilting chairs
. . . with curved rocking members between seat and \{base\} frame
. . with curved rocking members resting on the floor
. . Locking members (A47C 3/027 takes precedence)
. Stackable chairs; Nesting chairs
. . \{with tipping-up seats\}
- with shell-shape seat and back-rest unit, e.g. having arm rests
- of asymmetrical shape
- 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
. Chairs or stools with rotatable seat (adjustable in height by rotation A47C 3/24)
- . \{self-returning to the original position\}
- Chairs or stools with vertically-adjustable seats (tables with variable height A47B 9/00)
. . with balancing device, e.g. by spring, by weight
. . with vertical spindle
. . . \{resiliently supported\}
. . with vertical, $\{$ or inclined $\}$ toothed rack; $\{$ with peg-and-notch mechanism \}
- . . \{with rack-and-pinion gearing\}
. . with clamps acting on vertical rods
. . . \{with radially expansible clamping elements telescopically engaged in a tube or the like\}
. . with vertically-acting fluid cylinder
. . with flexible height-adjusting means, e.g. rope, chain
. . with pins coacting with holes \{or bolt-and-nut adjustment \}
. . with means, or adapted, for inclining the legs of the chair or stool for varying height of seat
. . with additional seat or additional legs for varying height of seat
. . Telescopic guides
Foldable, collapsible or dismountable chairs (of tubular metal type A47C 5/10; children's foldable chairs A47D 1/02)
- Dismountable chairs
. . \{connected by slotted joints\}
- . \{connected by bars or wires\}
. . \{having integral back-rest and rear leg\}
. . \{having integral back-rest and front leg\}
- . \{having integral seat and rear leg\}
- . \{Upholstered chairs, e.g. metal, plastic or wooden chairs $\}$
. . Non-upholstered \{chairs, e.g. metal, plastic or\} wooden chairs
. Folding chairs with inflexible seats
. . \{foldable side to side only \}
. . Attachment of upholstery or fabric to frames (in general A47C 31/02)
. . having a frame made of wood or plastics
- . . with legs pivotably connected to seat or underframe
. . . . of adjustable type (A47C 4/14 takes precedence)
. . . . with cross legs
. . . . . of adjustable type
. . having a frame made of metal
. . . with legs pivotably connected to seat or underframe

. . . of adjustable type (A47C 4/24 takes precedence)<br>. . . with cross legs<br>. . . . . of adjustable type<br>- Folding chairs with flexible coverings for the seat or back elements<br>. $\{$ foldable side to side only $\}$<br>- . \{foldable side to side and front to back, e.g. umbrella type $\}$<br>. . Attachment of upholstery or fabric to frames (in general A47C 31/02)<br>. . having a frame made of wood or plastics<br>. . . with legs pivotably connected to seat or underframe<br>. . . . of adjustable type (A47C 4/38 takes precedence)<br>. . . . with cross legs<br>. . . . . of adjustable type<br>. . having a frame made of metal<br>- . . with legs pivotably connected to seat or underframe<br>. . . . of adjustable type (A47C 4/48 takes precedence)<br>. . . . with cross legs<br>. . . . . of adjustable type<br>- Trunk chairs, i.e. chairs collapsible to \{self contained carrying case, e.g.\} trunk shape (trunk tables A47B 3/10)<br>Inflatable chairs (connection of valves to inflatable elastic bodies B60C 29/00)

## Chairs of special materials

- \{of paper, cardboard or similar pliable material \}
- \{of woven material, e.g. $\}$ basket chairs
- Metal chairs, e.g. tubular (of rocking type A47C 3/023; of non-tubular folding, collapsible, or dismountable type A47C 4/00)
- . \{of tubular non-circular cross-section \}
- . \{of non-tubular cross-section \}
. . Special adaptation of seat upholstery or fabric for attachment to tubular chairs
. . Tubular chairs having sheathed tubes; Adaptation of sheathed tubes thereto
. . Tubular chairs of foldable, collapsible, or dismountable type
- of plastics, with or without reinforcement
. . \{completely made of foam material\}
- characterised by the use of laminated wood

Parts, details, or accessories of chairs or stools (attaching to floor A47B 91/08)
. \{Chair or stool bases (A47C 3/20 takes precedence) $\}$

- . \{for chairs or stools with central column, e.g. office chairs $\}$
. . \{with castors \}
. . \{for uneven surfaces\}
- 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)
- \{Detachable or loose seat cushions \}
. . \{detachably secured to seats, e.g. by ties or hook and loop straps $\}$

7/024
7/025
$7 / 027$

7/028
7/029
. . \{with double seats\}

- . \{Springs not otherwise provided for in A47C 7/22- A47C 7/35\}
- . . \{ with elastomeric springs (A47C 7/282 takes precedence) \}
- . $\{$ with wooden springs, e.g. slated type $\}$
- . \{of non-adjustable shape adapted to a user contour or ergonomic seating positions \}
. . 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)\}
. . . \{by fluid means\}
. . . \{with array of movable supports\}
- . Seats made of wooden, plastics, or metal sheet material; Panel seats
. . having foamed material included in cushioning part (foamed material mattresses A47C 27/14)
. . . \{with a stiff, rigid support \}
. . . with reinforcement \{in the foam layer\}
. . Straps or the like for \{direct user support or for \} carrying upholstery
. . Upholstered seats (A47C 7/18 takes precedence)
. . . with reinforcement $\{$ of the external layer of the upholstery, e.g. vandal resistant\}
. . with tensioned springs, e.g. of flat type
. . . \{with mesh-like supports, e.g. elastomeric membranes\}
. . . \{with metal strips or webs \}
. . . \{with combinations of different types flat type tensioned springs $\}$
. . . with springs meandering in a flat plane
. . . with tensioned cords, e.g. of elastic type, in a flat plane
- . with springs in compression, e.g. coiled
. . . \{Edge stiffeners\}
. . . \{of adjustable resilience \}
. . . \{with means for connecting springs to each other or to seat frame \}
. . 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\}
- Support for the head or the back
. . for the head $\{$ (adjustable coupled to reclining or easy chairs A47C 1/036) \}
. . . \{Detachable or loose head- or neck-supports, e.g. horse-shoe shaped \}
. . . \{Detachable covers for headrests $\}$
. . for the back
. . . \{adjustable in height $\}$
. . . \{with double backrests\}
. . . \{of collapsible type\}
. . . of detachable \{or loose\} type
. . . . \{Supplementary back-rests to be positioned on a back-rest or the like\}
. . . with elastically-mounted \{back-rest or backrest-seat unit in the base\} frame
. . . . \{with adjustable elasticity\}
- . . $\{$ with coil springs $\}$

| $7 / 444$ $7 / 445$ | - . - . $\{$ of torsion type \} - . . $\{$ 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 | - . ${ }^{\text {- }}$ 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 \} |

. . . . . \{without active means, e.g. with openings or heat conductors \}
. . . $\{$ for heating $\}$
Stools for specified purposes (with rotatable seats A47C 3/18; with vertically adjustable seats A47C 3/20 $\{$; other seating furniture for specified purposes A47C 15/004\}; footstools A47C 16/02; prayer stools A47C 16/04; platforms or seat-boxes specially adapted for angling A01K 97/22 )

- \{ with exercising means or having special therapeutic or ergonomic effects \}
. . \{with forwardly inclined seat, e.g. with a kneesupport $\}$
- \{High stools, e.g. bar stools (children's high chairs A47D 1/00)
- Office stools \{not provided for in main groups A47C 1/00, A47C 3/00 or A47C 7/00 \}; Workshop stools
. . \{movably mounted on a working-table or the like (for hairdressers A47C 1/08) \}
- . \{Stools for standing or leaning against, e.g. in a semi-standing or half-seated position\}
- . $\{$ Stools for work at ground level $\}$
- Milking stools
- Wall stools \{; Stools hingedly mounted against the wall\}
- Music stools
- Camp, travelling, or sports stools (walking sticks or umbrellas convertible into seats, hunting sticks A45B 5/00)
- . having several foldable or detachable legs converging in one point $\}$

Benches not otherwise provided for (school forms A47B 39/00)

- \{having multiple separate seats\}
- Church benches; Confessionals

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

- requiring conversion between the step and seat functions

Convertible chairs, stools or benches (step-stools requiring conversion between the step and seat functions A47C 12/02)

- \{Modular seating (chairs connectible into a row A47C 1/124) \}

Other seating furniture (school forms A47B 39/00)

- \{Corner seating furniture, e.g. corner sofas (changing corner couches into double bed A47C 17/36)
- \{Seating furniture for specified purposes not covered by main groups A47C 1/00 or A47C 9/00
. . \{Floating seats (floatable vessel furniture for lifesaving B63C 9/30) \}
- . \{for sexual intercourse \}

| $\mathbf{1 6 / 0 0}$ | \{Stand-alone\} rests or supports for feet, legs, arms, <br> back or head (associated with chairs A47C 7/00; |
| :--- | :--- |
|  | associated with beds or sofas $\underline{\text { A47C 20/00 }}$ ) |
| $16 / 005$ | - \{Back-rests \} |
| $16 / 02$ | . Footstools; Foot-rests; Leeg-rests |
| $16 / 025$ | - . \{adjustable, swivelling, rocking \} |
| $16 / 04$ | - Prayer-stools; Kneeling stools; Kneeling supports |
|  | (hassocks or pouffes $\underline{\text { A47C 3/16 })}$ |

## Sofas; Beds

## NOTE

In groups $\underline{A} 47 \mathrm{C} 17 / 00$ - $\underline{\text { A } 47 \mathrm{C}} 27 / 00$, 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)

17/207

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 nonrotatable 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
. . thereby uncovering one or more auxiliary
parts previously hidden (A47C 17/22 takes precedence)

- Sofas, couches, settees, or the like, without movable parts
- \{Seating furniture, e.g.\} sofas, couches, settees, or the like, with movable parts $\{$ changeable to beds $\}$; Chair beds
. . \{Seating furniture having loose or by fabric hinge connected cushions changeable to beds \}
. . changeable to beds by tilting or extending the arm-rests
. . $\{$ Seating furniture having non-movable backrest $\}$ changeable $\{$ to beds $\}$ by increasing the available \{seat\} part, e.g. by drawing \{seat cushion \} forward
- . $\{$ with multiple seat cushions \}
- . . $\{$ by lifting or tilting \}
. . . $\{$ with a single seat cushion $\}$
. . . . $\{$ by lifting or tilting \}
- changeable to beds by removing parts only
- . $\{$ Seating furniture $\}$ changeable to beds by tilting or pivoting the back-rest
. . . \{with back-rest made of multiple movable cushions $\}$
. . . . with seat cushion consisting of \{multiple\} superposed parts, at least one lower \{hidden\} part being used to form part of the $\{$ bed $\}$ surface
. . . . . $\{$ by sliding forward $\}$
. . . . . $\{$ by lifting or tilting \}
- . . the surface, when used for lying down $\{$ in a bed position \}, consisting of one side of the \{seating furniture\} seat frame and the backrest frame
- . \{Seating furniture having non-movable back-rest changeable to beds $\}$ with means for uncovering a previously hidden mattress or similar bed part
-• . \{ with hidden separate full size mattress frame unfolded out of the base frame\}
. . . the lying down $\{$ bed $\}$ surface partly consisting of one side of the seat
. . . with only one movable part being tiltable about a horizontal axis
. . . . tiltable to an overturned position
. . . . having means to lift the tilting axis
. . . two or more parts being rotatable about a vertical axis
. . Changing a single bed into a double bed by extending, pivoting, or tilting a previously hidden second mattress or other bed part
- Joining seats, chairs, or couches to form beds
. . Changing corner couches into a double bed
- . Changing sofas or the like into beds by means of furniture other than seats or chairs
. Wall beds
- . having balancing members, e.g. weights, springs
- . having supporting legs with fixed position on the floor, e.g. attached thereto
. . . having means on the supporting legs facilitating the removal of the bed from its place
. . characterised by a rigid mattress-supporting member
. . characterised by two or more relatively-movable \{mattress-support \} parts
. . characterised by their shape, e.g. multiple-wall beds
- Cabinet beds; Table beds, or like beds; Wardrobe beds
. . in which the cabinet or the like is tilted with the bed
- . pivotable on both horizontal and vertical axis
. . with extensible mattress support
. . the cabinet being essentially changed in shape in sleeping position of the bed
. . Table beds; Billiard table beds, or like beds \{(convertible tables A47B 85/06) \}
- 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)
- . \{dismountable $\}$
. . having specially-adapted body-carrying surfaces
. . only the legs being foldable
. . the bed frame being foldable about a horizontal axis
. . . $\{$ with detachable legs $\}$
. . . having cross legs (A47C 17/82 takes precedence)
. . the bed being foldable about a vertical axis
- . having extensible, e.g. telescopic parts
. . held in shape by stressed cords

| $17 / 80$ |
| :--- |
| $17 / 82$ |
| $17 / 84$ |
| $17 / 86$ |
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| 19 |

. . adapted to be used in or connected to vehicles
. . . \{Direct mattress support frames, Cross-bars\}

- . . . \{with means for preventing frame from sagging $\}$
. . \{for joining separate bedsteads\}
. Extensible bedsteads, e.g. with adjustment of length width, height (for children's beds A47D 7/00)
. . \{with entire frame height or inclination adjustments \}
- Folding bedsteads (travelling or camp beds A47C 17/64)
. . \{foldable head to foot only \}
. . \{foldable side to side only\}
. . \{foldable side to side and head to foot, e.g. umbrella type\}
. . \{only legs being foldable\}
. . of the lazy-tongs type
. Multi-stage bedsteads; \{e.g. bunk beds\}(multiplewall beds A47C 17/50; suspended beds A47C 17/84); Bedsteads stackable to multi-stage bedsteads
- . \{Stacking or nesting bedsteads\}
- . \{convertible, e.g. from single bed or sofa\}
. . \{Mezzanine beds $\}$
. Combinations of bedsteads with other furniture or with accessories, e.g. with bedside cabinets (bed-tables A47B 23/00 \{; bedside cabinets A47B 79/00 \})

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)
of detachable \{or loose\} type (A47C 20/04,
A47C 20/08 take precedence $\{$; for chairs
A47C 7/00; pillows A47G 9/10\})
. . \{Foot or leg supports\}
. . . \{for preventing the user from slipping down\}
. . \{Arm supports\}
. . \{Supports specially adapted for pregnant women\}
. . \{Supports for lying in a prone position (A47C 20/025 takes precedence) $\}$

- . \{Back supports, e.g. for sitting in bed\}
. . . \{ with a table attached thereto \}
- with adjustable inclination (A47C 20/08 takes precedence)

20/041
. . \{by electric motors \}

- . \{by means of screw-and-nut mechanism\}
- . \{by means of peg-and-notch or pawl-and-ratchet mechanism $\}$
. . . \{urged into an operative or non-operative position at an end of stretch\}
- . \{by means of a rack-and-pinion or like gearing mechanism\}
. . \{by friction locking means \}
. . \{by fluid means \}
. . the adjustable part immobilising foldable legs
- with means for adjusting two or more rests simultaneously
. . using rods
. . . using telescopic rods
- . using plate and catch
- . using toothed parts, e.g. racks
. . using friction gearing
Attachments for beds, e.g. sheet holders, bedcover 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
. \{Lighting, radio, telephone or the like connected to the bedstead $\}$
- \{Oscillating, balancing or vibrating mechanisms connected to the bedstead (for children's beds A47D 9/02)
- \{Holders for loose bed elements, e.g. $\}$ sheet holders; bed cover holders
. . \{Sheet holders; Bed cover holders\}
. . . \{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)
. . \{Pillow holders; Mattress holders\}
- . \{Holders for facilitating making the bed\}
- Devices for ventilating, cooling or heating
. . \{for ventilating or cooling (A47C 21/028 and A47C 27/007 take precedence) \}
- . . \{ with active means, e.g. by using air blowers or liquid pumps $\}$
. . . \{without active means, e.g. with openings or heat conductors\}
. . \{for heating \}
- Mattress underlays $\{($ mattress tickings or covers A47C 27/002) \}
- Devices for prevention against falling-out, e.g. detachable sidewalls (for children's beds A47D 7/00)


## Spring mattresses with rigid frame or forming part of the bedstead, e.g. box springs; Divan bases; Slatted bed bases

- \{ with separate resilient support elements, e.g. elastomeric springs arranged in a two-dimensional matrix pattern $\}$
- \{foldable or dismountable \}
- \{Edge stiffeners (for chair seats A47C 7/342; for stuffed mattresses A47C 27/06) \}
- using leaf springs, e.g. metal strips (wooden springs A47C 23/06)
- using springs in compression, e.g. coiled

| 3/043 | ng 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 $\}$ |

. \{permeable to liquid or air in a special way (A47C 27/006 takes precedence)\}

- . \{protecting against wear or damage $\}$
- with spring inlays (A47C 27/20 takes precedence)
. . 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
. . . \{Attachment of spring inlays to outer layers \}
. . . \{Use of stiffening sheets, lattices or grids in, on, or under, spring inlays\}
. . with \{padding material, e.g.\} foamed material, in top, bottom, or side layers
. . . \{with only one layer of foamed material $\}$
. . . \{with different layers of foamed material \}
. . Spring inlays
. . . \{of adjustable resiliency \}
. . . \{of different resiliencies \}
. . . $\{$ wrapped or otherwise protected $\}$
. . . . \{Pocketed springs \}
. . . \{of special shape \}
. . . \{Edge stiffeners\}
. . . $\{$ of plane meandering type $\}$
. . . \{made from a single wire\}
. . . Attaching, or interconnecting of, springs in spring inlays
- Fluid mattresses \{or cushions \} (connecting valves to inflatable elastic bodies B60C 29/00)
. . \{of pneumatic type\}
. . . \{with non-manual inflation, e.g. with electric pumps $\}$
- . . \{with pressure control, e.g. with pressure sensors $\}$
. . . \{self inflating
- . \{of liquid type, e.g. filled with water or gel \}
- . \{with fluid-like particles, e.g. filled with beads \}
- . \{with means for connecting opposite sides, e.g. internal ties or strips \}
- . \{incorporating elastic bodies, e.g. foam\}
. . with two or more independently-fillable chambers
. with fibrous inlays, e.g. made of wool, of cotton
. . \{with different inlays\}
. . \{with special fibres, such as acrylic thread, coconut, horsehair\}
. . \{with feathers, down or similar inlays \}
. . \{with projections, depressions or cavities $\}$
. . \{with reinforcement sheets, grids or the like\}
. . \{with inflatable elements \}
- with foamed material inlays
. . \{with projections, depressions or cavities\}
. . . \{inside the mattress or cushion\}
. . . \{on the outside surface of the mattress or cushion \}
. . \{of different resilience\}
. . consisting of two or more layers (A47C 27/16 takes precedence)
. . reinforced with sheet-like $\{$ or rigid $\}$ elements, e.g. profiled
. . in combination with inflatable bodies
- . with springs moulded in, or situated in \{cavities or \} openings in foamed material
. 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
29/006
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)

31/08

- 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 $\underline{\text { A 47C 7/386; }}$ 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 \}

