



New connection on: : 15-08-2017 : 20:48:12 - Last disconnection on: : 11-08-2017 : 20:52:02

V4.0.0.43847(LP,U,linux) (Rev:41675 2016-01-15 13:33:59 +0100#(D201706)) (RPM D201706)

Welcome to EPOQUE Rebuild under the Production Environment

Disconnection from EPOQUE on: 15-08-2017 20:48:34 *DISCONNECT(1005)*

Session saved. *INFO(1006)*



New connection on: : 15-08-2017 : 20:48:42 - Last disconnection on: : 15-08-2017 : 20:48:34

V4.0.0.43847(LP,U,linux) (Rev:41675 2016-01-15 13:33:59 +0100#(D201706)) (RPM D201706)

Welcome to EPOQUE Rebuild under the Production Environment

[No database/cluster active] ..fiepodoc

 Database: EPODOC

[EPODOC: SS 1] Articulated and furniture and control and bed

Results in EPODOC 1

[SS 2] ..v

[EPODOC: SS 2] articula+ and bed and backrest

Results in EPODOC 104

[SS 3] ..v

[EPODOC: SS 3] articula+ and bed and backrest and L-shaped

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EPODOC: term 'L-SHAPED' not found in index 'BI'. WARNING(1)

[SS 4] articula+ and bed and backrest and shaped

Results in EPODOC 8

[SS 5] ..v

[EPODOC: SS 5] articula+ and bed and backrest

Results in EPODOC 104

[SS 6] ..li ab pn ti



1/104 © EPODOC / EPO

AB - The utility model relates to a technical field of sick **bed** specifically belongs to a massage chair in the medical science articles for use. This massage chair includes: seat, neck massage device, waist massage device, massage device and slip subassembly at one's knees, neck massage device is installed in the middle department in **backrest** top, waist massage device is installed in the **backrest** bottom, the below of seat has accepts massage the chamber of accepting of device at one's knees, the slip subassembly includes slide rail, carriage and pressure bar, slide rail levels in accept the left and right sides in chamber, the both ends of carriage gliding card are respectively located in the slide rail, pressure bar's lower extreme **articulate** in on the carriage. The utility model provides a massage chair, it can be built -in completely in being located under the condition about not using to massage the device at one's knees seat below accept the intracavity, consequently volume and space that massage chair used comfortable convenience just to occupy are little.

PN - [CN205885759U](#) U 20170118

TI - Massage chair

2/104 © EPODOC / EPO

AB - The utility model relates to a physical training device field, more specifically the human upper limb and waist back muscles strength exerciser that says so, including the **bed** body, bandage, **backrest** plate, fly leaf, handle, hinge, cotton pad, base, support and spring, not only can train upper limb strength, the spring is located **backrest** plate's rear, has improved the security, can train back strength moreover. **Backrest** plate **articulates** on the **bed** body, and the bandage is installed on the **bed** body, and the fly leaf passes through hinge connection on **backrest** plate, and the handle is installed on the fly leaf, and cotton the pad is installed in one side of **backrest** plate, and the support mounting is at **backrest** plate's opposite side, and the base has a plurality of fly, and the pedestal mounting is at the lower extreme of the **bed** body, and fly leaf and handle all have two, and the fly leaf passes through spring interconnect to fitting piece

and spring all lie in same one side of **backrest** plate.

PN - [CN205850124U](#) U 20170104

TI - Human upper limb and waist back muscles strength exerciser

3/104 © EPODOC / EPO

AB - The utility model discloses a special back of students' dormitory **bed**, including back plate, sponge layer, base, fixed axle, the plate that gets stuck, triangle -shaped fixed block and support, back plate top is fixed with the sponge layer, sponge layer upper end is the corresponding concave groove with cervical vertebra portion, the back plate passes through fixed axle and base swivelling joint, the both sides of base are fixed with the plate that gets stuck, it installs the triangle -shaped fixed block rather than swing joint in the plate to get stuck, the middle body of triangle -shaped fixed block is connected with the bottom of support, support top back plate bottom is connected, triangle -shaped fixed block and support are **articulated**, the support is **articulated** with the back plate. The utility model provides a dormitory **bed** do not have the problem of back, can easily adjust **backrest** angle, installation sponge layer on the back, and sponge layer upper end be provided with the recess that conforms to with people's cervical vertebra, gives other people more comfortable sensation during the use.

PN - [CN205696788U](#) U 20161123

TI - Special back of students' dormitory **bed**

4/104 © EPODOC / EPO

AB - The utility model discloses a many function combination furniture based on rotational moulding shaping, include: a set of base back rest, sofa **backrest** and SOFA base to and table and a plurality of stool, base back rest, sofa **backrest** and SOFA base hinge connect, there is the L type spout of a set of symmetry base back rest's inboard, and base back rest's removal is realized to confession back -and -forth movement about the gyro wheel of **articulated** department, sofa **backrest** is provided with back magnetism post, and base back rest's top and side are provided with top magnetism positioning groove and side magnetism positioning groove, the table is scalable foldable table, the higher authority of this table and contact of sofa **backrest**'s back facial features and coplane, and the side contacts with SOFA base, and the lower surface contacts with a plurality of stools. The utility model discloses can be through the flexible form of converting into with the upset of push -and -pull, the nimble changeable **bed** that be, the sofa, different composite furniture such as table chair satisfy small family's type resident family demand, just can not cause the injury to child old man.

PN - [CN205432862U](#) U 20160810

TI - Many function combination furniture based on rotational moulding shaping

5/104 © EPODOC / EPO

AB - The utility model provides a car back row seat can fall, includes that seatpad, leg hold in the palm the baffle that keeps out the wind down after, **backrest**, leg support actuating mechanism, the back actuating mechanism baffle actuating mechanism that keeps out the wind down after and, it is supreme **articulated** in proper order by down that seatpad, **backrest** keep out the wind down the baffle after and, and install on the seatpad slide bottom of seatpad, the front end of seatpad slide passes through the leg and asks actuating mechanism to connect the leg support, the rear side of **backrest**

passes through back actuating mechanism and is connected with the seatpad slide, after keep out the wind the down **articulated backrest** of front end of baffle, the rear end is **articulated** with the automobile body, baffle actuating mechanism keeps out the wind down after the bottom is connected, this car back row seat can fall drives the automation that actuating mechanism drove each part of seat through the motor and fell and restoreed, can realize falling the back row seat when the trunk is idle, uses as the **bed** of interim rest, and the practicality is strong, is worth wideling popularize.

PN - [CN205417248U](#) U 20160803

TI - Car back row seat can fall

6/104 © EPODOC / EPO

AB - The utility model discloses a **backrest** that can hide, including after -fixing board, upper end and after -fixing board **articulated** before the back board, the outer end with back inboard side **articulated** backup pad, the backup pad on be formed with at least one breach the breach in **articulated** have a spacing deflector, the other end and the after -fixing board of spacing deflector **articulated**. The utility model has the beneficial effect of simple structure, mechanics stability height, preceding back board have hidden effect after packing up, can save space. Simultaneously, the back is pulled out to preceding back board, can form the comfortable back inclination and the reasonable seat face degree of depth, accords with human engineering design principle, preceding back board not only can be saved space when packing up, and the seat support face degree of depth of covering in the time of still can pulling out preceding back board releases, makes the seat support shape of face become sufficient width, has the function of **bed**, but wide application in seat or sofa, especially to the high occasion of space requirement, like narrow and small sitting room or car as a house etc.

PN - [CN205256097U](#) U 20160525

TI - **Backrest** that can hide

7/104 © EPODOC / EPO

AB - The utility model discloses a nursing is with **bed** of accompanying and attending to, including the seat, the seat below is provided with four chair legs, opens flutedly on the chair leg at seat rear, and the seat rear is **articulated** to have a back, has branch at the back reverse side through the round pin hub connection, the branch lower extreme be provided with the damping ball, damping ball card makes back and seat form 135, 150 and 180 jiaos in the recess of seat rear chair leg, the seat below is provided with the slide, is provided with the pulley in the slide, the pulley is connected with with the bench through the connecting rod, it is provided with two chair legs to add the bench below. The utility model discloses it is easy -to -use, simple structure, the seat chair is dual -purpose, can use as the seat, and the **backrest** is adjustable, uses comfortably, can regard as simultaneously the **bed** of accompanying and attending to to use, accomodate the facility, be provided with the ventilation hole on the **bed** board, increase the comfort level that people used, this chair both sides are provided with the handrail, and **articulated** on the handrail have the table, and the function is various, does benefit to the use.

PN - [CN205250944U](#) U 20160525

TI - Nursing is with **bed** of accompanying and attending to

8/104 © EPODOC / EPO

- AB - The utility model discloses a sick **bed** suitable for urological department patient's postoperative, a **bed** body, the left part of the **bed** body **articulates** there is **backrest** plate, the round hole has been set up to the intermediate position of the **bed** body, the below of round hole is equipped with and connects the urine groove, the top of the **bed** body is equipped with the heat -conducting plate, the below of heat -conducting plate is equipped with the water tank, the inner chamber of water tank is equipped with heating device, heating device and power electric connection, the lower extreme and uide bushing fixed connection of the **bed** body, the uide bushing has cup jointed the deflector, be equipped with a damping spring between the deflector and the **bed** body, the bottom of deflector is connected with the guide bar, the bottom of guide bar is equipped with the wheel, and this sick **bed** simple structure can sit and to lie, has solved the patient and has lain on the back for a long time and produce tiredly, makes things convenient for the patient to urinate, and vibrations are avoided to convenient the transfer, reduce patient's pain.
- PN - [CN205083872U](#) U 20160316
- TI - Sick **bed** suitable for urological department patient's postoperative

9/104 © EPODOC / EPO

- AB - The utility model discloses a perpendicular turning device of **backrest** assembly usefulness, including vertical braces, axle **bed** and connecting seat, the axle **bed** fixed mounting be in vertical braces's top, the connecting seat lower extreme **articulates** through the pivot level on the axle **bed**, the frock board is installed to the connecting seat upper end, is lying in the connecting seat below is equipped with an at least vertical telescopic link, each strip the telescopic link lower extreme all **articulates** vertical braces is last, and its upper end all **articulates** on the connecting seat, when when upper and lower concertina movement is to the telescopic link, will drives the connecting seat and be in follow on the axle **bed** the pivot is rotated. The utility model discloses install, be convenient for make back frock ability flip vertical on the dress board, have the height that can reduce the **backrest**, advantages such as convenient operation and improvement assembly efficiency.
- PN - [CN204975974U](#) U 20160120
- TI - Perpendicular turning device of **backrest** assembly usefulness

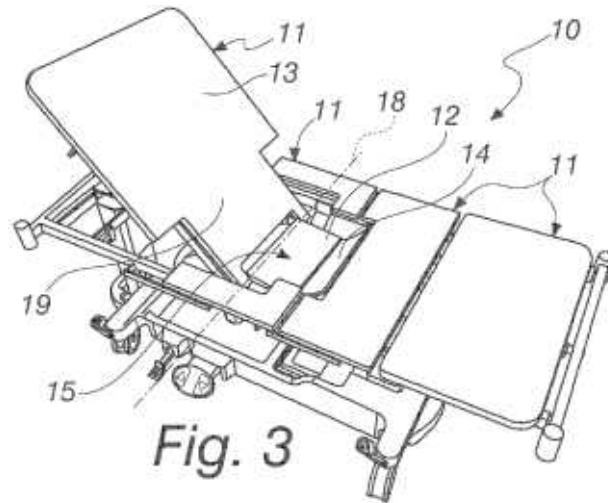
10/104 © EPODOC / EPO

- AB - The utility model discloses a head of a **bed backrest** angle regulation type **bed** body has mainly solved the problem that current head of a **bed** device comfort level can not satisfy the demands. The utility model discloses a head of a **bed** body (2), its characterized in that: be provided with back (2) on head of a **bed** body (2), back (2) top is fixed on head of a **bed** body (2) top, and the back of this back (2) is provided with bracing piece (3), and this bracing piece (3) one end **articulates** the back in back (2). The utility model has the advantages of improve the quality, the simple structure that have a rest.
- PN - [CN204698199U](#) U 20151014
- TI - Head of a **bed backrest** angle regulation type **bed** body

11/104 © EPODOC / EPO

AB

- A **bed** (10) for hospital stays, of the type that can be **articulated** and comprising a plurality of sections (11) which correspond to the regions of the back, buttocks, thighs and legs of the in-patient; one of the sections (11), the one that corresponds to the buttocks region, has at least one portion (12) thereof which is movable and **articulated** to the section (11) of the **backrest** (13) and, when the **backrest** is lifted, is translated, exposing a curved element (14), which extends from the lying surface downwardly, and being inclined on the curved element (14) contributes together with it to form a cradle (15) for the buttocks region.



PN

- [WO2016058949](#) A1 20160421

TI

- **BED** FOR HOSPITAL STAYS

12/104 © EPODOC / EPO

AB

- The utility model relates to a spare seat for angiogram machine, it is applied to medical **bed**, including cushion and back, the cushion is fixed in medical **bed**'s top surface and suits with the surgical instruments position, and the front end of cushion is located the position of patient's buttock impetus one side and heaves, and it is sunken that rear end and the corresponding position of patient's buttock impetus are the profile modeling of patient's buttock, the back is installed in the back tip of cushion, its bottom portion sunken and with the cushion after the position heaved of tip mate **articulatedly**, the back is outwards heaved at bottom and the corresponding position of patient's stomach, the top of back is equipped with the headrest with patient head contact's position, the **backrest** angle regulator is adjusted in real time to the back accessible or adjustment mechanism adjusts its inclination. The utility model has advantages of simple and reasonable structure design, can guarantee patient's quality of performing the operation, prevent that the patient from sliding when the operation, improve patient use comfort and operation success rate.

PN

- [CN204601043U](#) U 20150902

TI

- A spare seat for angiogram machine

13/104 © EPODOC / EPO

AB

- The utility model relates to a folding sofa **bed**, which comprises a base, a **backrest**, a seat cushion and a handrail, wherein the **backrest** is connected with the base; the seat cushion is arranged on the base; the handrail is fixedly connected with two ends of the seat cushion; a baffle plate is arranged on the front side of the base; the front ends of the seat cushion and the handrail are **articulated** with the baffle plate through hinges;

the back side of the baffle plate is fixedly connected with a drawer; the drawer is matched with a guide rail arranged in the base; two folding plates are symmetrically arranged in the drawer; two ends of each folding plate are respectively **articulated** with one end of an inner support leg and one end of an outer support leg; the other end of the inner support leg is **articulated** with the bottom of the drawer; and a gap filling plate is embedded between the two folding plates. According to the folding sofa **bed**, the defects that an ordinary folding sofa **bed** in the prior art is complicated in structure, small in area after being unfolded, and poor in stability, and time and labor are wasted during conversion are overcome; and through the design, the folding sofa **bed** has the advantages of being compact in structure, convenient to use, large in unfolded area, and high in reliability.

PN - [CN204444981U](#) U 20150708

TI - Folding sofa **bed**

14/104 © EPODOC / EPO

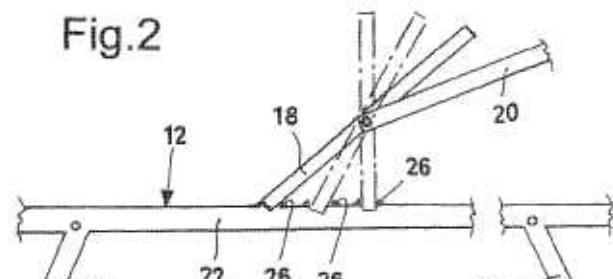
AB - The utility model discloses an executive chair capable of integrating leisure and recreation into a whole. The executive chair mainly comprises a chair seat, a **backrest** and armrests, wherein the **backrest** and an extension plate are both **articulated** with the chair seat so as to realize a folding function; the rear end of the **backrest** and the lower end of the extension plate are respectively **articulated** with a base through slide rod assemblies and connecting rods slide along slide rods under the driving of sliding sleeves so that the levelling of the extension plate and the **backrest** is realized to form a **bed** used for rest, and the connecting rods play roles in supporting and fixing; and the armrest is provided with a support frame used for placing an electronic product, the electronic product, such as a mobile phone and the like, can be conveniently placed during the leisure and the recreation, and the position and angle of the electronic product can be randomly adjusted through the support frame; in order to enhance relative privacy during the rest, a rotating shaft positioned on the **articulated** positioned of a back plate and a seat plate is provided with a light blocking assembly to ensure concealment during the rest, and the light blocking assembly can also be served as the effect of a light dimming plate when the electronic product, such as the mobile phone and the like, is watched; and the base is internally provided with a storage battery so that a power supply can be provided when the electronic product has no electricity. The executive chair disclosed by the utility model has the advantages of simple structure, convenience and comfortability for use and multiple function.

PN - [CN204048810U](#) U 20141231

TI - Executive chair capable of integrating leisure and recreation into whole

15/104 © EPODOC / EPO

AB - The present invention describes a sunbathing **bed** (10) of the type comprising a bearing structure (12) which sustains a support plane (14), which is configured for supporting at least the waist and the lower limbs of a user, a **backrest** (16) which is foldable



with respect to the bearing structure (12), configured to support at least the head and the chest of the user, and a sunshade roof (18), configured to provide a surface for protection against the ultraviolet rays for at least the face of the user. The sunshade roof (18) is operatively connected to the **backrest** (16) through one or more **articulated** arms (20), so as to be able to perform a rototranslation motion with respect to such a **backrest** (16).



PN - [WO2015071825](#) A1 20150521
 TI - SUNBATHING **BED**

16/104 © EPODOC / EPO

AB - (A)
 The invention relates to the field of articles of everyday use, and particularly relates to a multifunctional deck chair. The multifunctional deck chair comprises a **backrest**, a base and a pedal, wherein the **backrest** and the pedal are respectively connected with the base through **articulation** pieces, the **articulation** pieces are capable of enabling the **backrest** and the pedal to respectively rotate to any angle relative to the base and be fixed, the **backrest** is provided with an angle regulating member by which the **backrest** can be folded for -90 to +90 degrees and then fixed, and cross rods which can be used for airing clothes are arranged at the upper part of the **backrest**. The **backrest** can rotate for 90-180 degrees relative to the base; the pedal can rotate for 90-270 degrees relative to the base. The multifunctional deck chair can be used as a deck chair, a draw-bar box and a placement **bed**, can be used for airing the clothes; on one hand, more convenience is brought for the travel; on the other hand, due to the design, materials are saved, the structure is strong, and the application prospect is extremely wide.

PN - [CN104161409](#) A 20141126
 TI - (A)
 Multifunctional deck chair

17/104 © EPODOC / EPO

AB - The utility model relates to a folding sofa **bed** in the field of furniture manufacturing. The folding sofa **bed** comprises a base, a seat frame, a **backrest** frame and a **backrest** frame II, wherein the seat frame is arranged in the base; the lower side of the **backrest** frame is connected with the seat frame by a gemel; the higher side of the **backrest** frame is connected with the **backrest** frame II by a gemel II; the other side of the **backrest** frame II is **articulated** with an N-shaped bedside frame by a connecting rod I and a connecting rod II; a locating plate is arranged besides the seat frame; the locating plate is **articulated** with the **backrest** frame by a connecting rod III; the gemel II is also connected with a U-shaped foot; the **backrest** frame II and the N-shaped bedside frame

are also respectively provided with a manual lever and a manual lever II which are respectively buckled and connected with the U-shaped foot and the **backrest** frame II; the surfaces of the seat frame, the **backrest** frame and the **backrest** frame II are respectively provided with a base plate; the seat frame, the **backrest** frame and the **backrest** frame II are in hinge joint; the base, the seat frame, the **backrest** frame and the **backrest** frame II are also connected by the locating plate, the connecting rod I, the connecting rod II, the connecting rod III, the manual lever and the manual lever II, so that a tensioning structure can be formed. The folding sofa **bed** is convenient to use and hard to damage.

PN - [CN203302693U](#) U 20131127
 TI - Folding sofa **bed**

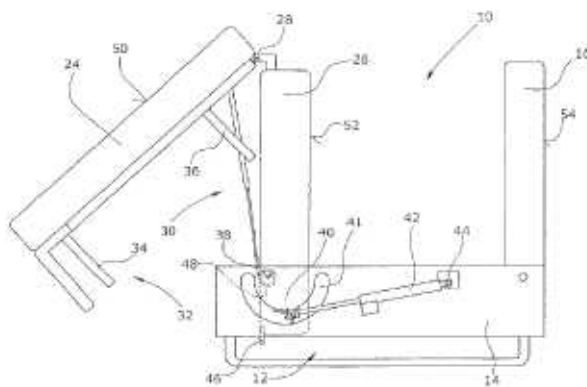
18/104 © EPODOC / EPO

AB - The utility model discloses a sofa **bed** for a motor home, and aims at designing a sofa **bed** for the motor home, which is reasonable in structure and convenient to use. The technical scheme is as follows: the sofa **bed** for the motor home comprises a sofa seat and a sofa **backrest**, wherein the sofa **backrest** is **articulated** with the sofa seat; a micro motor drives an **articulated** shaft; the lower part of the sofa seat is fixedly connected with a slide block; a slide rail matched with the slide block is arranged, and the slide rail is arranged at the bottom of a sofa; the slide block is driven by hydraulic devices; the hydraulic devices are respectively electrically connected with a center control device; the end part of the slide rail is provided with a limit switch. The sofa **bed** disclosed by the utility model is reasonable in structure, can conveniently become the sofa **bed** from the sofa, is conveniently used for a motor home user, enhances the comfortability of the motor home and is wide in application range.

PN - [CN203255028U](#) U 20131030
 TI - Sofa **bed** for motor home

19/104 © EPODOC / EPO

AB - (A1)
 The sleep- or seating furniture (10) has a body (12) with a **backrest** portion (16) and two armrests (14), where an expansion element prestressed in the sealing position is arranged between a pivot axis and a cushion portion (24) for supporting a folding movement in the conversion from the seating position in the sleep position. Another expansion element is arranged at the body and is eccentrically engaged to an **articulation** axis at another cushion portion. The pivot axis has deviating movement



supporting element.

PN - [DE102012205063](#) A1 20131002

TI - (A1)
Sleep- or seating furniture,
particularly sofa or sofa **bed**,
has body with **backrest** portion
and two armrests, where
expansion element prestressed
in sealing position is arranged
between pivot axis and cushion
portion

20/104 © EPODOC / EPO

AB - The invention discloses a seat type nursing **bed** which can allow a nursed person to get up through overturn of a movable **backrest**; the plane width of an upper panel from the middles of thighs of a human body down is greater than the width of the human body during prostration; the upper panel is divided into two rectangular planes; the first plane **articulated** with a fixed **bed** body can rotate downwards around a first rotary shaft; the second plane **articulated** with the first plane can rotate upwards around a second rotary shaft to form a seat; legs of the nursed person drop according to a habitual sitting posture; and the nursed person relieve the bowels in the sitting posture. The nursed person is more comfortable.

PN - [CN103284852](#) A 20130911

TI - Seat type nursing **bed**

21/104 © EPODOC / EPO

AB - The utility model discloses a foldable **bed**. The foldable **bed** comprises a **bed** body (1) and a **bed** surface, wherein the **bed** body (1) comprises a seat frame (2) and a **backrest** frame (3), the inner end of the seat frame (2) is **articulated** with the inner end of the **backrest** frame (3), and the outer end of the seat frame (2) is provided with a front supporting leg (4) which is downward bent and is in touch with the ground surface; and the two outer side walls of the **backrest** frame (3) are **articulated** with handrail pipes (4), the lower ends of the handrail pipes (4) are provided with rear supporting legs (6) which are in contact with the ground surface, the **backrest** frame (3) is connected with a back blocking pipe (7) for limiting the rotation of the handrail pipes (4), the two extending ends of the back blocking pipe (7) are rotatably connected with two strutting pieces (8), and the outer side walls of the two strutting pieces (8) are glued to the outer side walls of the handrail pipes (4). The foldable **bed** is simple in structure, has strong bearing capacity and occupies a small space after being folded.

PN - [CN203088294U](#) U 20130731

TI - Foldable **bed**

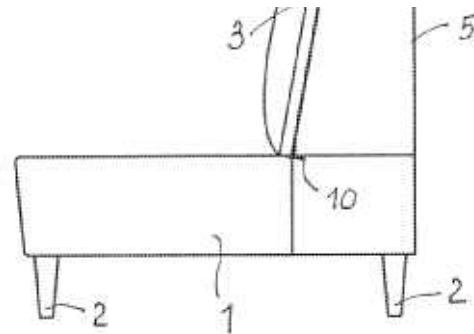
22/104 © EPODOC / EPO

AB - The furniture has a **bed** linen space covered by a **backrest** (3) and two side pieces (6).
The **backrest** is **articulatedly**

FIG. 1



connected with a top cover (4) of the **bed** linen space. The top cover is linked at a rear covering (5) of the **bed** linen space. The top cover is provided with an upward working spring (8) relative to pivoting. The **backrest** is provided with a bracket (10) at both sides at a lower end. The spring is formed as a spring clip, a metal spring and a rubber spring. The **backrest** and the top cover are locked against each other in a stretched position.



- PN - [EP2661988](#) A1 20131113
- TI - Couch or chair which can be transformed into a **bed**

23/104 © EPODOC / EPO

- AB - The utility model relates to a dual-purpose folding office chair. The dual-purpose folding office chair comprises a chair seat frame, a chair back frame, two armrests, a chair leg, a soft seat cushion layer and a **backrest** layer, wherein the chair leg is positioned at the lower end of the chair seat frame; the soft seat cushion layer is connected to the chair seat frame; the **backrest** layer is connected to the chair back frame; the chair seat frame is **articulated** with the chair back frame; the two armrests are formed by one bent pipe body; the pipe body is formed by two bent armrest pipe parts as the armrests and a horizontal pipe part positioned between the two bent armrest pipe parts; the upper end parts of the two bent armrest pipe parts are respectively **articulated** with the left end and the right end of the chair back frame; the lower end of the chair seat frame is provided with a spring locking mechanism used for locking the armrests corresponding to the horizontal pipe part; when the dual-purpose folding office chair is in a folding state, the two bent armrest pipe parts are respectively positioned at the left side and the right side of the chair seat frame, and the horizontal pipe part is clamped by the spring locking mechanism; and when the dual-purpose folding office chair is in a laid state, the armrests downwards rotate to be below the chair back frame. The dual-purpose folding office chair is used as a common office chair when in the folding state at ordinary times and can be laid into a simple **bed** when people need to have a rest, thereby being more convenient to use.

- PN - [CN202504775U](#) U 20121031
- TI - Dual-purpose folding office chair

24/104 © EPODOC / EPO

- AB - The utility model discloses a hand-operated multifunctional nursing **bed** which is characterized in that a **bed** body is arranged on a base, a first support leg and a second support leg are arranged between the base and the **bed** body, a fixed beam is arranged between the first support leg and the second support leg, a hand-operated fixed bracket is fixed at the lower part of one end of the **bed** body, a front movable **bed** frame and a

pedal plate are connected together, and the **bed** body is hinged with the front movable **bed** frame; a **backrest** frame, a backseat frame, a front-seat frame and a shin-pad frame are sequentially hinged together, an **articulated** shaft connecting the backseat frame with the **backrest** frame is arranged on the **bed** body, and the shin-pad frame is slidably arranged on the front movable **bed** frame; the **bed** body is hinged with the second support leg, and the **bed** body is borne on the first support leg; the nursing **bed** is also provided with a hand-operated connecting rod mechanism for changing the position states of the front movable **bed** frame, the **backrest** frame, the backseat frame, the front-seat frame and the shin-pad frame. By using the hand-operated multifunctional nursing **bed** disclosed by the utility model, paralyzed patients, critically-ill patients, mobility-handicapped patients or patients incapable of getting out of **bed** can perform free adjustment within a 90-degree range so as to carry out standing, lying, sitting and walking, rehabilitation training and nursing on a same **bed**.

- PN - [CN202314023U](#) U 20120711
 TI - Hand-operated multifunctional nursing **bed**

25/104 © EPODOC / EPO

- AB - A multifunctional chair belongs to furniture and mainly solves the problems of simplex function and idle bottom space of the traditional chair. The multifunctional chair comprises a **backrest**, a chair surface and chair legs and is characterized in that the **backrest** is **articulated** with the chair surface; the back surface of the **backrest** is **articulated** with the auxiliary chair legs; the auxiliary chair legs are connected with the **backrest** through hinges; a box body with an opening at one side is arranged below the chair surface; and the bottom ends of the chair legs at the front part of the chair surface are provided with universal wheels. The **backrest** is lowered to be used as a **bed**, so that the idle space can be reasonably and effectively utilized, the waste of the space is reduced; meanwhile, the practical functions of the chair, the **bed** and a bookcase can be integrated, and the chair brings convenience to people.

- PN - [CN201977263U](#) U 20110921
 TI - Multifunctional chair

26/104 © EPODOC / EPO

- AB - The utility model relates to a sickbed stepless limit **backrest** lifting device which comprises a lever **articulated** on a **bed** frame; one end of the lever is **articulated** on a **backrest**, and the other end of the lever is **articulated** with a long tube; the long tube is provided with a nut fixing ring which is internally fixed with a nut; an inner sleeve of the nut is provided with a screw rod; and the tail end of the screw rod is connected with a rocker. The sickbed lifting device is simple in structure and leads the screw rod to be protected, so that the service life of the lifting device is prolonged.

- PN - [CN201861868U](#) U 20110615
 TI - Sickbed stepless limit **backrest** lifting device

27/104 © EPODOC / EPO

- AB - An automatic system for shifting a patient between a **bed** and a wheel chair is characterized by consisting of a sickbed, the wheel chair and an electric control system, wherein the sickbed comprises a bedstead, a **bed** board, a **bed** surface conveying belt

mechanism and a first **bed** board lifting mechanism; the **bed** board comprises at least two **bed** boards at the head and the tail of the **bed**; the tail end of the **bed** board at the tail of the **bed** is **articulated** relative to the bedstead; the first **bed** board lifting mechanism drives the **bed** board at the tail of the **bed** to turn up towards the tail side of the **bed**; the wheel chair mainly comprises a wheel chair underframe, a trundle, a squat board, a **backrest**, a leg supporter and a leg supporter lifting mechanism; the **backrest** can be detachably connected relative to the wheel chair underframe; the upper end of the leg supporter is **articulated** with the wheel chair underframe; the leg supporter lifting mechanism drives the leg supporter to rotate; the tail end of the sickbed and the lateral end of the **backrest** of the wheel chair are correspondingly provided with connective breaking structures; and an electrical control system controls the **bed** surface conveying belt mechanism, the first **bed** board lifting mechanism and the leg supporter lifting mechanism to coordinate in movement. The automatic system can be used for automatically moving bedridden patients to the wheel chair. The whole process only needs manipulation without manual participation.

PN - [CN201642698U](#) U 20101124

TI - Automatic system for shifting patient between **bed** and wheel chair/toilet chair

28/104 © EPODOC / EPO

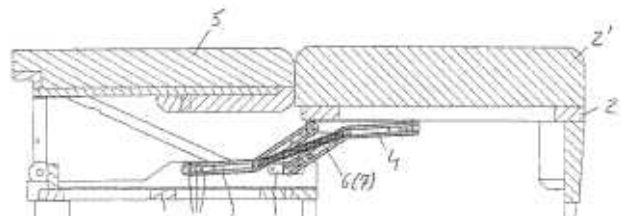
AB - The utility model discloses an intelligent nursing **bed** with movable guardrails, aiming at providing an intelligent nursing **bed** which can well protect the wounded and the sick. The intelligent nursing **bed** comprises a chassis, wherein the chassis is provided with a supporting set; the supporting set is connected with a push-rod motor and then is movably connected with a **bed** frame; the **bed** frame is provided with a **bed** panel, the bottom of which is provided with the push-rod motor; the push-rod motor is connected with the **bed** frame; the left side and the right side of the **bed** panel at the **backrest** part and the **bed** panel at the leg part are respectively provided with a pair of guardrails; the guardrails are **articulated** with the **bed** panel and are provided with a locking switch; and a buffer spring is connected between the guardrails and the **bed** panel. After the guardrails are vertical and are locked by the locking switch, the intelligent nursing **bed** can guarantee the safety of the wounded and sick when sleeping, and can lead the guardrails to downwards swing to the lowest point under the action of self gravity after unlocking the locking switch, thus being convenient for the wounded and sick to get on and off **bed**; and the intelligent nursing **bed** can lead the guardrails to be slowly downward swung due to the buffer spring, thus preventing the guardrails to be rigidly collided with the **bed** panel. The intelligent nursing **bed** is applicable to places which need the intelligent nursing **bed**.

PN - [CN201642648U](#) U 20101124

TI - Intelligent nursing **bed** with movable guardrails

29/104 © EPODOC / EPO

AB - An item of seating furniture which can be converted into a **bed** comprises a seat cushion frame (2), on which a seat cushion (2') is situated, which is pivotably mounted on a furniture



framework (1) or the like by means of parallelogram links (3, 4) so as to be able to pivot between a seating position and a lying position, and a **backrest** (5), which is preferably pivotably mounted. The parallelogram links (3, 4) are provided with at least two holes (9) so that they can be selectively **articulated** on the furniture framework (1) or the like. A universal use of the fitting is thereby achieved.

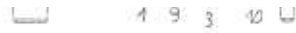


FIG 2

- PN - [WO2012027760](#) A1 20120308
- TI - ITEM OF SEATING FURNITURE WHICH CAN BE CONVERTED INTO A **BED**

30/104 © EPODOC / EPO

- AB - The utility model relates to a folding sofa **bed**, comprising a sitting plate and a sofa seat having a **backrest**, wherein a lower part of the sitting plate is provided with a lower cavity for accommodating a retractable folding **bed** plate assembly; the retractable folding **bed** plate assembly has relatively folded and separated upper and lower brackets and an upper **bed** plate which is integrally and fixedly connected with the upper bracket and level to the setting plate when unfolded; a tail end of the upper **bed** is **articulated** with a reversible and foldable extension **bed** plate; the tail end of the extension **bed** plate is **articulated** with a rod member which is used as a support leg when unfolded; this product has simple structure, rational layout, small occupied space and convenient use.

- PN - [CN201468625U](#) U 20100519
- TI - Folding sofa **bed**

31/104 © EPODOC / EPO

- AB - The utility model discloses a mattress. The mattress comprises a **bed** body which are divided into two parts, wherein the joints of the two parts are connected through an **articulated** mechanism; one of the two parts is formed by an upper-layer **bed** body and a lower-layer **bed** body; the upper-layer **bed** body is supported by a lever structure which pushes the upper-layer **bed** body to rotate around the **articulated** mechanism to form a **backrest**; the lever structure includes a lever middle shaft, a middle shaft force plate for limiting the axis position of the middle shaft, at least two groups of upper torsion bars radially arranged around the lever middle shaft, a lower torsion bar which is radially arranged around the lever middle shaft and provided with an included angle with the upper torsion bars, and a drive mechanism for driving the free swing end of the lower torsion bar into rotation; and the driving mechanism includes a threaded screw rod, a universal nut which is sleeved on the threaded screw rod and provided with threads matched with the threaded screw rod on the inner side wall thereof, and a motor for driving the threaded screw rod into rotation. The mattress provided by the

utility model has the advantages of convenient use, comfort and elegant appearance.

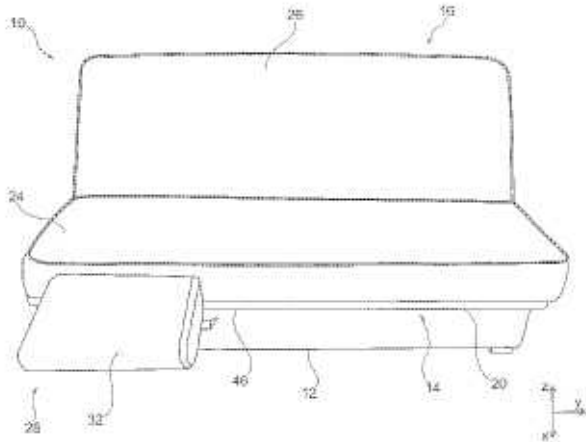
PN - [CN201418581Y](#) Y 20100310

TI - Mattress

32/104 © EPODOC / EPO

AB - (A1)

The couch (10) has a base panel (14) **articulated** on a storage drawer (12). A **backrest** panel (16) is **articulated** on the storage drawer and the base panel. The base and **backrest** panels are moved between a bench seat configuration and a **bed** configuration. A footrest (28) is **articulated** on the base panel to reach a deployed position in which the footrest is extended in prolongation of the base panel, and a retracted position in the storage drawer. The base panel includes a frame (20) and a bar mounted transversely inside the frame.



PN - [FR2945192](#) A1 20101112

TI - (A1)

Sofa **bed** type studio couch, has footrest **articulated** on base panel to reach deployed position in which footrest is extended in prolongation of base panel and retracted position, where base panel is **articulated** on storage drawer

33/104 © EPODOC / EPO

AB

- This invention discloses a new-type **bed** desk, belonging to the manufacturing technical field of the **bed** desks. This invention includes a bracket and a desktop. The desktop is fixed to the bracket, wherein the bracket is provided with positioning holes having different heights. One side of the desktop is connected with a long shaft. Two ends of the long shaft pass through the positioning hole on the bracket, and the connecting position of the long shaft and the bracket is **articulated** with a spring. One end of the spring is wound and fixed to the bracket after passing through a small hole on the bracket, and the other end is fixed to the desktop via a small hole of the desktop. The long shaft is fixed to the back of the desktop via a screw and a connecting sheet. The desktop is provided with a **backrest**, whose four angles are fixed to the desktop via a tape. This invention can be fixed to the bracket at the **bed** head, with advantages of

simple structure, convenient manufacturing and use, low cost and so no.

PN - [CN101455485](#) A 20090617

TI - Novel desk for **bed**

34/104 © EPODOC / EPO

AB - The utility model discloses a multifunctional intelligent nursing **bed**, comprising at least a movable **bed** surface body which is **articulated** at the middle part on an upper plane of a **bed** body and can rotate longitudinally, and the back of the movable **bed** surface body is rotatably connected with at least one control cylinder that can control the movable **bed** surface body to get turned upside down and is rotatably connected with the bottom side of the **bed** body; a pipeline of the control cylinder is connected with a magnetic valve in a sealing way, and the magnetic valve can be communicated with an external power source and is installed and fixed at the bottom side of the **bed** body; one end of a movable connecting rod of the control cylinder is rotatably connected with the back of a **backrest** body, and the other end is rotatably connected on a cylinder fixing base positioned at the bottom side of the **bed** body; the control cylinder is provided with a descending air inlet pipe orifice and an ascending air inlet pipe orifice which are respectively communicated with a corresponding air port phase pipeline of the magnetic valve in a sealing way; the magnetic valve is arranged and fixed at the bottom side of the **bed** body. The nursing **bed** adopts the magnetic valve to control the movable **bed** surface body to be stopped at any position; the compressible property of the gas ensures the appropriate elasticity of the movable **bed** surface body; two travel switches in place can be safely used.

PN - [CN201127691Y](#) Y 20081008

TI - Multifunctional intelligent nursing **bed**

35/104 © EPODOC / EPO

AB - The invention relates to a **bed** which can be changed into an armchair through a movable part. The **bed** comprises a foldable **bed** plate 1 and a fixing **bed** plate which are mutually **articulated**,. A seat platform 3 is arranged under the foldable **bed** plate. A chair with a **backrest** with adjustable angle and arms 5 is formed by the foldable plate 1 and the seat platform 3 which are opened and positioned through an angle adjustment structure. Compared with the current **bed** and seat of similar functions, the **bed** of the invention has simple structure and less movable parts, and the formed armchair is closer to the comfort property of ordinary armchairs. In addition, a foldable table plate 6 can be arranged in front of the seat, and a double-layer **bed** can be formed after reversely overlapped upwards and downwards. A footboard 8 of an upper layer **bed** is communicated with ground by virtue of a platform 13 with baffles 14 at two sides and a step 11. Compared with the existing ordinary double-layer **bed**, the double-layer **bed** of the invention has higher space utilization rate and comfort property.

PN - [CN101233981](#) A 20080806

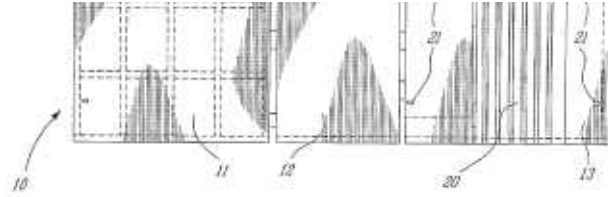
TI - Doss capable of being changed into chair

36/104 © EPODOC / EPO

AB - (A1 B2)
An **articulated bed** convertible to



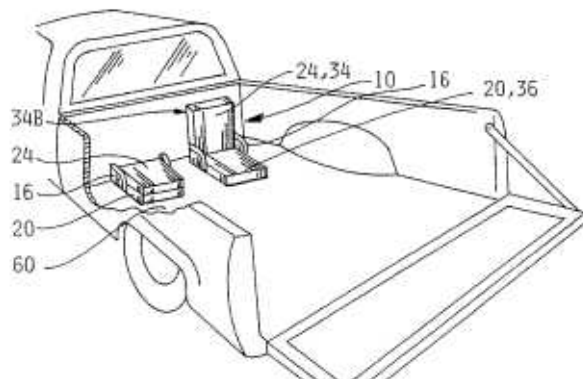
a chair position is described. The **bed** comprises a mattress formed by a **backrest** section, a seat rest section and a leg rest section. The mattress **backrest** section and seat rest section are secured to a support frame. **Articulating** linkages are secured to the frame to **articulate** the sections. The support frame is elevated from a floor surface by a frame assembly having legs or casters to engage with a floor surface. The leg rest section of the mattress is secured to a retractable support frame. The mattress has at least a compressible section formed of compressible material. Compressible interconnecting members compress the compressible material to shorten the length of the compressible section. The compressible material is restrained as it is compressed and decompressed when the support frames are displaced from a horizontal position to an **articulated** chair position.



- PN - [US2004250349](#) A1 20041216
 TI - (A1 B2)
 Mattress leg rest section for an **articulatable bed** convertible to a chair position

37/104 © EPODOC / EPO

- AB - A seat assembly (10) that is particularly designed to be installed on the truck **bed** (60) of a pick-up type truck. The assembly (10) includes a first and second side plate (16) that allows the attachment of a seat (20) and an **articulated backrest** (24). The **backrest** is designed to be locked in either an upright, sitting position or to be lowered

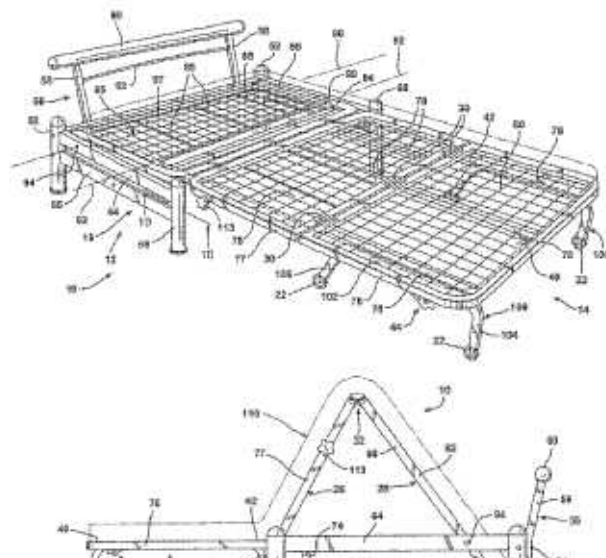


against the upper surface of the seat (20) when the assembly (10) is not in use. To install the seat assembly (10) to the truck **bed** (60), a set of four, flush-mounted seat coupling plates (14) are attached to the truck **bed**. A corresponding set of L-brackets (18) are attached to the first and second side surfaces (20C, 20D) of the seat (20). The brackets (18) have a nut bore (18C) through which is inserted a threaded bolt (18E). The bolt attaches to the coupling plate (14) to securely attach the seat assembly (10) to the truck **bed** (60). The seat assembly (10) also includes a seat belt assembly (30) that restrains a sitter, an animal safety harness (32) that attaches to the seat belt assembly (30) and an optional **backrest** cushion (34), a seat cushion (36), a headrest assembly (38), and an **articulated** armrest assembly (40).

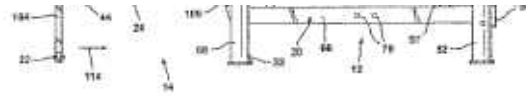
- PN - [US5501501](#) A 19960326
 TI - Truck-**bed** detachable seat assembly

38/104 © EPODOC / EPO

- AB - An article of furniture is provided which can be transformed easily from a **bed** to a futon or a chaise lounge. The article of furniture is formed of a stationary, generally U-shaped upright support having a head frame with opposing ends from which side frames extend in mutual parallel alignment. A base frame assembly is mounted upon wheels or other roller elements and is comprised of a plurality or **articulated** frames, including a seat bench frame located remote from the head



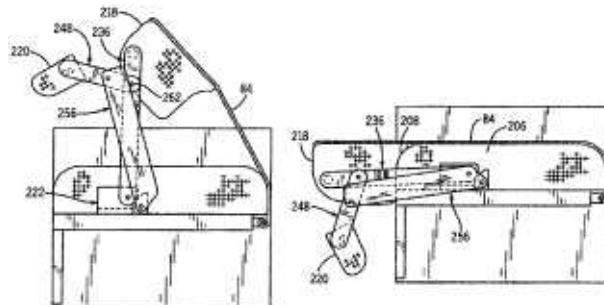
frame of the stationary support, and at least an intermediate seat back frame hinged to the bench frame. Preferably, a proximal back frame is also provided which includes within its structure a **backrest** that may be raised or lowered when the unit is used as a chaise lounge. The article of furniture is provided with rollers on each side of the stationary support near the distal extremities thereof. Cam latches are provided on opposing sides of the seat frame in longitudinal alignment with the rollers. The cam latches include concave downwardly facing seating recesses and cam surfaces that are inclined longitudinally and upwardly therefrom, toward the head frame. When the article is to be utilized as a futon, the seat bench frame is moved to engage the cam latches with the rollers so that the cam surfaces of the cam latches ride up the rollers and the seating recesses lodge on the rollers in releaseable latching engagement therewith when moved into registration with the rollers.



PN - [US6668395](#) B1 20031230
 TI - Roll-in futon **bed**

39/104 © EPODOC / EPO

AB - A convertible article of furniture includes a primary cushion member supported by a support structure, and a **backrest** assembly which is movable relative to the primary cushion member between an upstanding rearward position and a lowered forward position. The **backrest** assembly has a sectional **articulated**



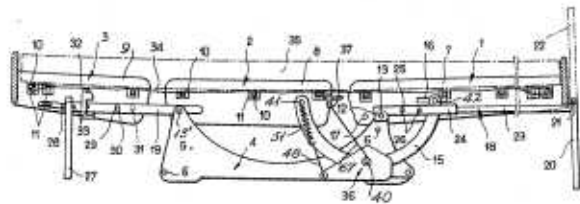
construction, including an inner **backrest** member and an outer **backrest** member. When the **backrest** assembly is in the upstanding rearward position, the outer **backrest** member extends upwardly from the inner **backrest** member to support the upper back area of a user seated upon the primary cushion member. When the **backrest** assembly is moved to its lowered forward position, the outer **backrest** member is moved downwardly and inwardly relative to the inner **backrest** member, to an unobtrusive stored position. A linkage or arm arrangement is interposed between the support structure of the convertible **bed** and the inner and outer **backrest** members, for providing movement of the **backrest** assembly relative to the primary cushion between the upstanding rearward position and the lowered forward position.

PN - [US6622321](#) B1 20030923

TI - Convertible **bed** with a sectional **articulated** back

40/104 © EPODOC / EPO

AB - Disclosed is an adjustable **bed** or chair apparatus having a **backrest**, seat, and legrest or kneerest, each of which is angularly adjustable relative to a support frame; and the legrest and **backrest** are lengthwise adjustable for respectively different leg and torso lengths. A curved lever is pivotally attached to the support frame, **backrest**, and seat such that an occupant of the apparatus can angularly adjust the seat and **backrest** relative to

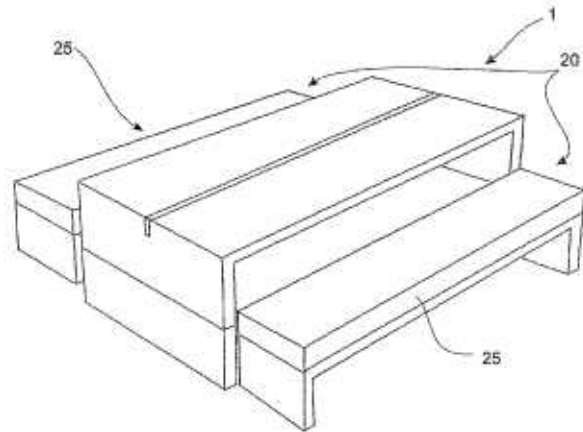


the support frame by means of a hand lever. Locking of the angular positions of the **backrest** and seat is facilitated by a strap, spring, and cam arrangement.

- PN - [US4406027](#) A 19830927
- TI - **Articulated** framework for **bed**, relaxation seat or armchair

41/104 © EPODOC / EPO

- AB - A suite of reconfigurable furniture is disclosed. The suite includes at least a first item (1) that has a four-sided top panel and two vertical side structures that support the top panel. The side structures are **articulated** so that a lower portion (3, 4) of the side may be either extended or retracted to vary the height of the first item. The first item may be used to form a table, part of a base or **bed**, a couch arm and **backrest**, or part of a low table. The suite also includes a second item (20) that can be used in conjunction with the first to provide a bench, part of a **bed** base, part of a seating surface, or part of a low table.



- PN - [NZ536093](#) A 20070531
- TI - Multifunctional furniture

42/104 © EPODOC / EPO

- AB - (A)
- The **bed** has a seat(12) and back-rest(11) hinged together. These move at an angle which can be altered, on a frame(10). The **bed** comprises an arcuate cradle(14) and a U-shaped carriage(15) which moves on it. The **backrest** and the seat are linked(17, 19, 20) to the frame and carriage which can be locked on the cradle(14). A jack(16) balances the back-rest and seat, together with an adjustable flexible connection(26) inserted between the carriage and lock(24).

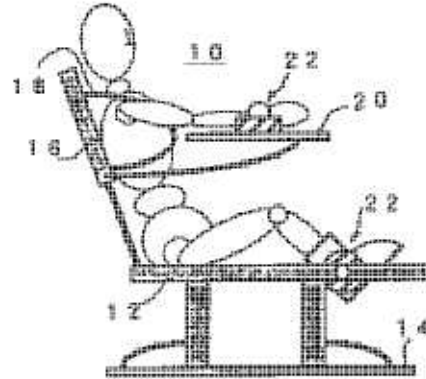
- PN - [KR830002530](#) A 19831112
- TI - (A)
- ARTICULATEDBED**

43/104 © EPODOC / EPO

- AB - (A)

PROBLEM TO BE SOLVED: To facilitate evaluation of exercise muscle power by functions in a two-**articulation** link mechanism by preparing a hexagonal output distribution chart upon making most effort in directions toward a plurality of prescribed points on system tip ends in equal distance, estimating the output of one muscle among six muscles relating to forming the hexagon, and then calculating outputs of other five muscles.

SOLUTION: This measurement system 10 is equipped with a seat part 12 on which a subject sit in a condition extending a lower limb and a **backrest** 10 extending slantingly rearward in a prescribed angle from one end of the seat part. The subject sitting on the seat part 10 is fixed by a belt 18.... An upper limb of the subject is laid on a sensor attaching **bed** 20 and a sensor part 22 including a pressure sensor is attached on the joint of wrist of the system tip end of the upper limb. A similar sensor part 22 is attached on the foot joint part of the lower limb system tip end. A diagram of the two-joint link mechanism is prepared at first and the maximum output at the link mechanism system tip end and the direction are measured to prepare a output distribution diagram. Next, effective muscle power values by functions are calculated utilizing properties or nature of the output distribution diagram.



PN - [JP2000210272](#) A 20000802

TI - (A)

METHOD AND SYSTEM FOR
EVALUATION OF MUSCLE POWER

44/104 © EPODOC / EPO

AB

- (B1)

A frame of an armchair or divan convertible into a **bed** comprises a fixed base 1 and a movable structure comprising **articulated** elements 11-15 hinged together in series, as well as a structure 2 sliding on wheels 2a, 2b and extractable from inside the base 1. A first **articulated** element 11 which forms, in the closed position, the seat support is pivotably mounted on the front part of said sliding structure 2 and the last **articulated** element 15 which forms, during closing, the **backrest** support is pivotably mounted on the rear part of said base 1. The three intermediate elements 12-14 assume, during closing a U-shaped configuration able to keep the central part of the mattress 10 folded inside the base. Lever mechanisms and **articulated** systems are provided for performing, upon extraction of the structure 2 from the fixed base 1, the extending movements of the frame with said **articulated** elements aligned together in the horizontal position.

<IMAGE>

PN

- [ITMI950682](#) A1 19961007

TI

- (B1)

FRAME OF AN ARMCHAIR OR DIVAN CONVERTIBLE INTO A **BED**, WITH FRONT PART SLIDING ON WHEELS

45/104 © EPODOC / EPO

AB

- (B)

Frame for a divan **bed** or armchair/**bed** or the like, consisting of at least three elements 11, 12, 14, the first 11 of which and the second 12 of which are connected together in an **articulated** manner 13 so as to form, in the divan position, the **backrest** thereof, while the third element 14 is connected in an **articulated** manner 15 to the said second element 12 so as to form, in the divan position, the seat thereof, said elements 11, 12, 14 being made to co-operate by means of a fixed structure 16 of the furniture and having a suitable cushion or fixed mattress arranged on top of them, the connection between said fixed structure 16 and the frame 10 consisting of a pivoting lever 22 fixed at the end with the possibility of rotating 20, 21, 23, 24 on one side with respect to the said first element 11 and on the other side with respect to said fixed structure 16, said element 11 also being provided at the end with sliding and guide means 25, 26 co-operating with co-ordinated means provided on the fixed structure 16. <IMAGE>

PN

- [IT1242667](#) B 19940517

TI

- (B)

Frame for a divan **bed**

46/104 © EPODOC / EPO

AB

- 1,233,521. Adjustable **bed**. JOH. STIEGELMEYER & CO. G.m.b.H. 8 Jan., 1969 [7 June, 1968; 14 Nov., 1968], No. 1194/69. Heading A4J. An adjustable **bed** which may have a hingedly mounted **backrest** 3 is provided with a cylinder and piston unit 6a, 6 disposed on a chassis 8 at each end of the **bed**; the cylinder and piston units being **articulatedly** connected to the **bed** frame and chassis. The chassis may include a pair of transverse support members 9 and 9a between which a longitudinal member 8 is connected. The head-end of the **bed** preferably has two cylinder and piston units which are spaced apart, the foot-end of the **bed** being provided with one unit which is connected to one

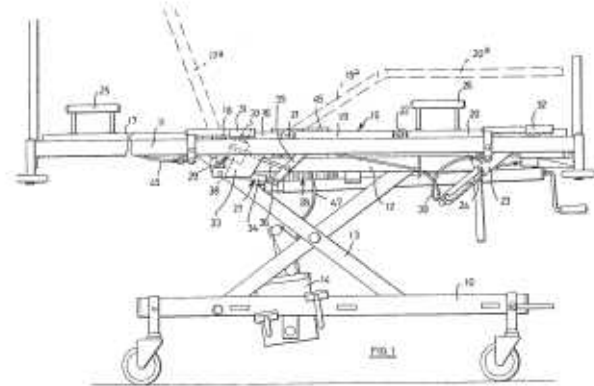
end of the transverse member 8, the other end of which is connected to the mid-point of transverse member 9.

PN - [GB1233521](#) A 19710526

47/104 © EPODOC / EPO

AB - (A)

A hospital **bed**, couch or a reclining chair comprises a frame (11) supporting a mattress platform (15) comprising four **articulated** sections of which one (17) forms a **backrest**, one (16) is fixed and two (19, 20) together form a knee break, the **backrest** and the knee break being movable independently of one another between lowered positions and raised positions. The knee break and the **backrest** have associated therewith counter-balance means (27, 28) urging them to the raised positions and brakes such as 29 operative to lock the sections in the lowered and desired raised positions. The counter-balance means comprise a gas spring (34) for the knee break and a combined gas and coiled compression spring for the **backrest**. The brakes are releasable by handles (32, 31) on the frame to permit movement of the knee break and the **backrest**. <IMAGE>

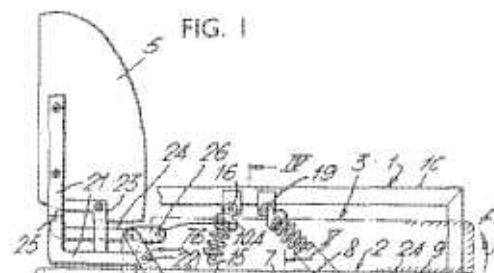


PN - [GB2095547](#) A 19821006

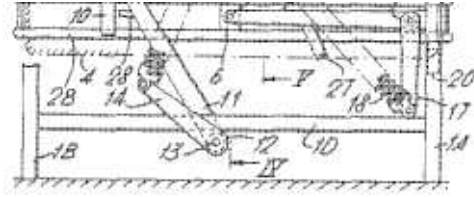
TI - (A B)
Beds

48/104 © EPODOC / EPO

AB - 1308500 **Bed** settees BEKAERT S A
4 Nov 1970 [5 Nov 1969]
52489/70 Heading A4J A **bed**
settee having a mattress 4
located beneath the seat
cushions 3 is formed at both
ends with a four part linkage
comprising a moveable frame 2



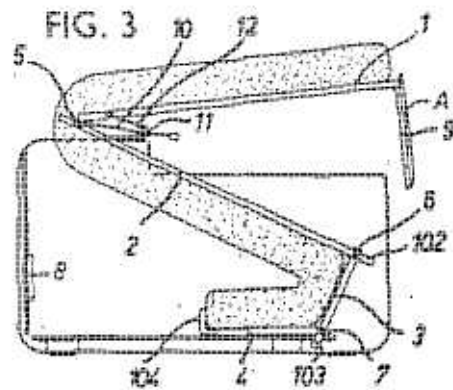
which supports the mattress and cushions, a fixed supporting frame 1A-1C, a lever 8 pivotally connected to the moveable frame at 7 and the fixed frame at 9 and a lever 11 pivotally connected to the moveable frame at 76 and to the fixed frame at 12, the linkage being such that on conversion the moveable frame is inverted. The upper part of the lever 11 together with the back support arm 21 and the moveable frame 2 forms part of a second linkage which enables the **backrest** 5 to be folded under the **bed** during conversion. In a second embodiment, Figs. 6-12 (not shown), the settee is converted to a double **bed**, the mattress supporting frame being formed from three **articulated** sections (40A, 40C, 40D) which together with a head-board section (40B) fold to form a closed framework beneath the seat in which a mattress is stored.



PN - [GB1308500](#) A 19730221
 TI - CONVERTIBLE FURNITURE

49/104 © EPODOC / EPO

AB - 1,194,420. **Bed**-settees. I.P.E. IMBOTTITURE PRODOTTI ESPANSI S.p.A. 7 Nov., 1967 [8 Nov., 1966], No. 50534/67. Heading A4J. In a **bed**-sittee, a foldable mattress frame 1, 2, 3, 4 is pivoted to a chair carcass at the **articulation** 6 of sections 2 and 3, so that section 4 slides along the base wall (P) of the carcass, as the frame is moved into or out of the chair position. Extensions 102 and 103 support the sections 3 and 4, in the horizontal **bed** position, and leg 10 supports pivot 5. Fixed legs 9 carry plate A which moves into a

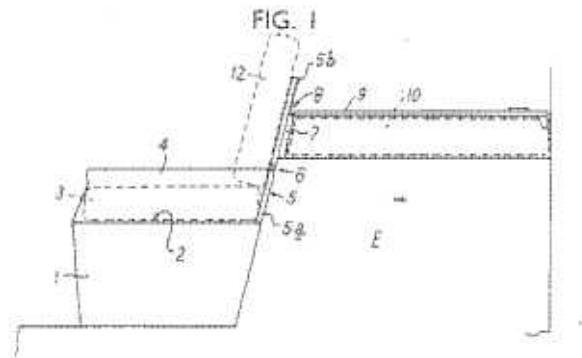


folded position at the front of the carcase. Arm rests (B, Figs. 1 and 2, not shown) may be removable or may fold outwardly. A hollow loose **backrest** (C, Figs. 1 and 5, not shown) contains a pillow (G) and may be inverted to form a head-board. A loose seat cushion (D) may be provided. The mattress (M) may be of foam rubber and may be secured to the mattress frame.

- PN - [GB1194420](#) A 19700610
 TI - Improvements in and relating to Convertible Furniture

50/104 © EPODOC / EPO

- AB - 1461418 Vehicle seat/**bed** conversion RICHARD HOLDSWORTH CONVERSIONS Ltd 3 May 1974 19467/74 Heading A4J [Also in Division B7] A seat to **bed** conversion, adapted for use in a vehicle wherein a housing E protrudes into the interior space, comprises a bench seat whose **backrest** is **articulated**, the movable upper portion 5b being provided with a hingedly secured flap 9 which over-lies the housing E when the arrangement is used as a seat. To convert the arrangement to a **bed** Fig. 3 (not shown) the upper **backrest** portion 5b and the flap 9 are folded forwardly to form a horizontal extension of the top of the housing E, the free end of the flap 9 being supported (e.g. by legs or an article of furniture). Conveniently the **backrest** portion 5b is supported in its upright position by the housing E and in its horizontal position by armrests 4. Cushion 10 may normally lie between flap 9 and the housing, and may be used in conjunction



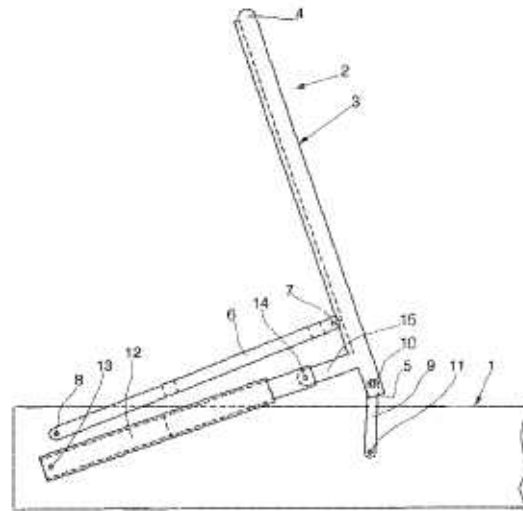
with removable cushions 2 and 12 as a mattress.

- PN - [GB1461418](#) A 19770113
TI - SEAT-TO-BED CONVERSION FOR MOTOR VEHICLES

51/104 © EPODOC / EPO

AB - (A1)

The **backrest** (2) is connected to each side of the **bed** frame (1) by a first **articulated** lever (6), linked to the rest between its two ends (4, 5), and a second shorter lever (9) pivoted to the **bed** frame and lower end of the rest. The lengths of the two levers and the positions of their pivots (7, 8, 10, 11) are such that the second lever (9) passes from an inclined position with its top towards the foot end of the **bed** to a vertical position as the **backrest** is raised by an actuator (12).



PN - [FR2770397](#) A1 19990507

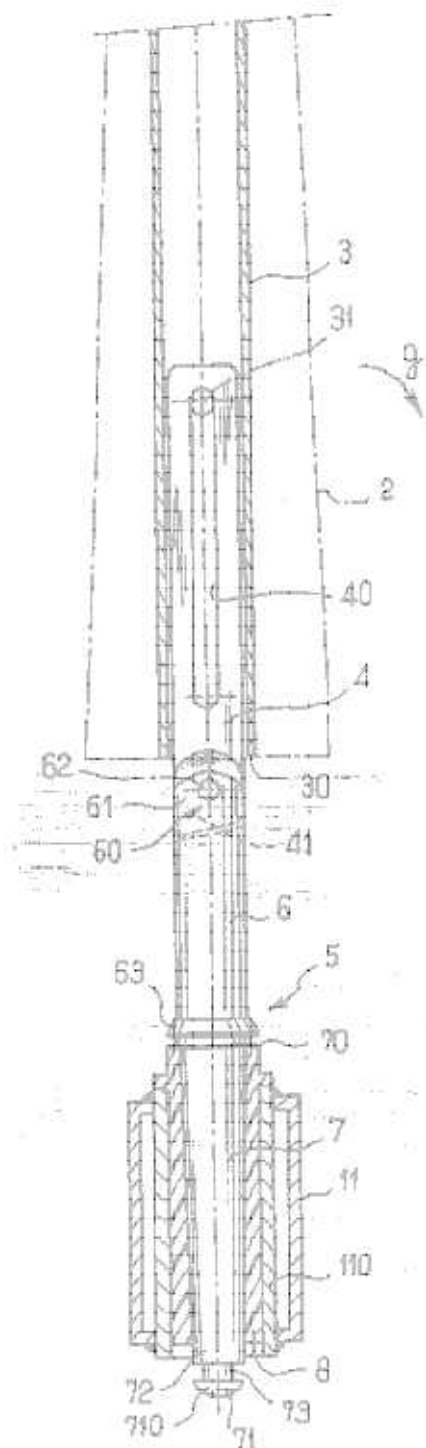
TI - (A1)
Liftable **backrest**

52/104 © EPODOC / EPO

AB

- (A1)

The **backrest** (2) has a sleeve (3) joined to it. A vertical rod (6), joined to the **bed**, engages in the sleeve to hold the **backrest** in its vertical position. A plate (4), **articulated** on an horizontal axle (62) on the upper part (60) of the rod, allows the **backrest** to pivot into its horizontal position. When the **backrest** is vertical the sleeve rests on a conical shoulder (63) on the rod. The **backrest** is raised to pull the rod out of the sleeve and to uncover the **articulation** of the plate.



PN

- [FR2725600](#) A1 19960419

TI

- (A1)

Backrest of **bed** held vertically or horizontally

53/104 © EPODOC / EPO

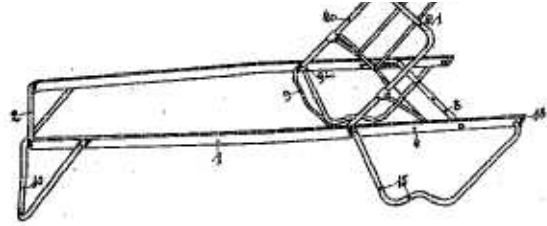
AB

- (A1)

Stackable relaxation **bed**,



according to the invention, covered in fabric, which can form a couch and recliner, including a **bed** frame, two front feet assembled on the ground and inclined and two double vertical underframes on the head side, the feet of which are also inclined. A **backrest** is **articulated** on this frame, it is extended by a headrest which forms an opening and manoeuvres between the ends of the frame cleared at this point. By resting the forehead, facing down to the floor, it is thus possible to relax without strain on the neck, the arms being free to move between the frame and the head rest in order to reach the ground, to write, and to turn pages being read, etc. Produced from tubular aluminium profiled sections, this item of furniture is lightweight and, nevertheless, robust and rigid. The essential advantage of this invention lies in the reduced-size stacking of these couches, which is limited to the height of the profile of the frame, all its inclined feet being nested when superimposed.

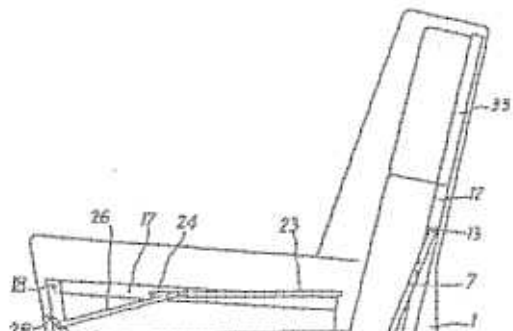


<IMAGE>

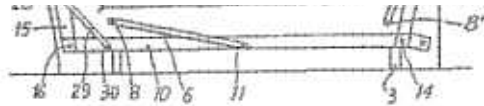
- PN - [FR2666730](#) A1 19920320
- TI - (A1)
- Stackable relaxation couch

54/104 © EPODOC / EPO

- AB - (A1)
- The mechanism comprises four underframe elements 12, 10, 15 and 17 **articulated** to each other. In the folded back position, the head element 12 projects considerably above the folded foot element 17 forming a seat, to constitute at least partially, with the mattress which it



supports, the **backrest** of the seat. The head element 12 receives a longitudinal extension 33 which extends the bedding and the surface of the **backrest**. The invention makes it possible to produce convertible pieces of furniture using a mattress of a substantial thickness, thus ensuring proper comfort when lying down. <IMAGE>

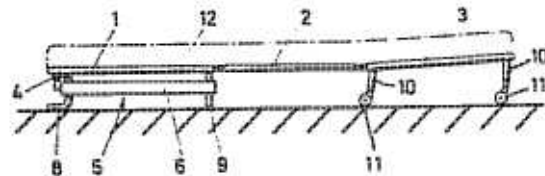


PN - [FR2599609](#) A1 19871211

TI - (A1)
Mechanism for sofa **bed**

55/104 © EPODOC / EPO

AB - (A3)
This invention relates to an armchair which can be converted into a **bed** and vice-versa, consisting of a fixed frame and of three underframe elements **articulated** to one another and supporting a mattress, one end element 1 being **articulated** to the abovementioned fixed frame 5 to constitute, with the intermediate underframe element 2 in the folded-back position, a **backrest** and, with a second end element 3 **articulated** to the intermediate element, a seat, characterised in that the fixed frame 5 is open so as to make it possible to extract, from the latter and along a horizontal path, the second end element 3 which can be moved on castors 11. <IMAGE>



PN - [FR2581528](#) A3 19861114

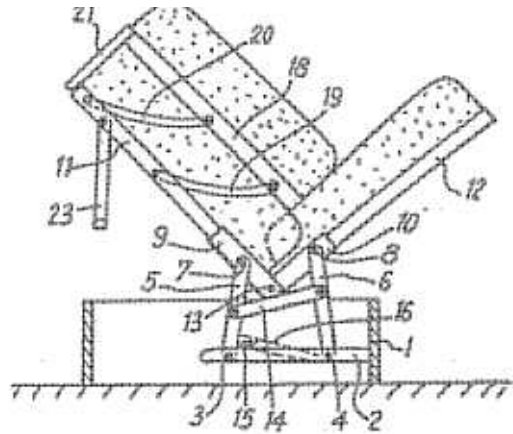
TI - (A3)
Armchair which can be converted into a **bed** and vice-versa

56/104 © EPODOC / EPO

AB - (A1)

The convertible sofa comprises a **backrest** frame 12 and a first seat frame 11, which are **articulated** to each other by means of flanges 10, 9 and connected to a base 1 by means of a set of rods 5, 6, 14. A second seat frame 18 is connected to the first seat frame by means of a set of double parallel connecting rods 19, 20 and has a vertical foot 21 towards the front. In the chair position, the second seat frame 18 is superposed on the first seat frame 11 while, in the **bed** position, it is in the extension of the first seat frame 11. This convertible sofa makes it possible to lie perpendicular to the axis of the seat and can therefore have a reduced width.

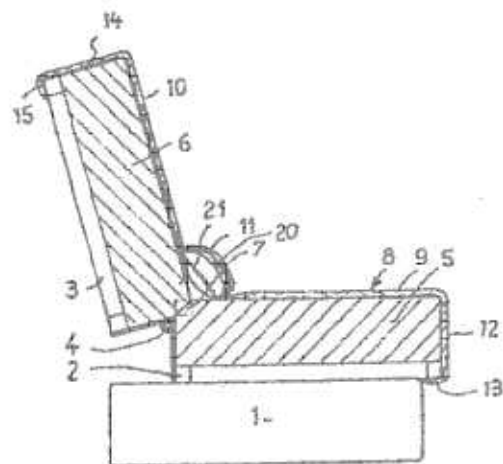
<IMAGE>



PN - [FR2591457](#) A1 19870619
 TI - (A1)
 Convertible sofa of the bench (seat) type

57/104 © EPODOC / EPO

AB - Padded part for a convertible seat, in particular for a bench (sofa) which can be converted into a **bed**, comprising a seat part 2, 5 to which is linked a **backrest** 3, 6 by means of a longitudinal **articulation** 4, the said padded part comprising a cover formed by a part 9 for covering the seat part and a part 11 for covering the **backrest** linked to one another by a part for covering the **articulation** zone of the **backrest** on the seat part, characterised in that the said part 11 for covering the **articulation** zone is moreover provided with a semirigid plate 20 padded with underlying elastic means 21 intended to

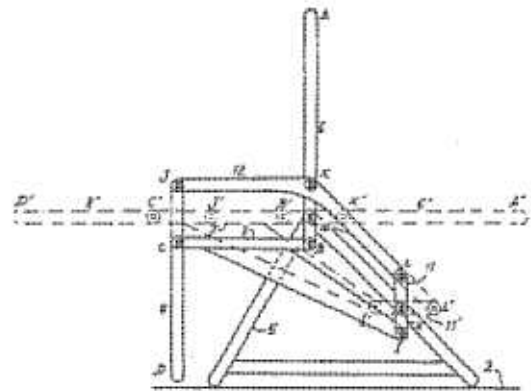


turn the said part for covering the **articulation** zone into a lower-back rest in the folded position of the bench (sofa). <IMAGE>

- PN - [FR2589703](#) A1 19870515
- TI - Padded part for a convertible seat, in particular for a bench (sofa) which can be converted into a **bed**

58/104 © EPODOC / EPO

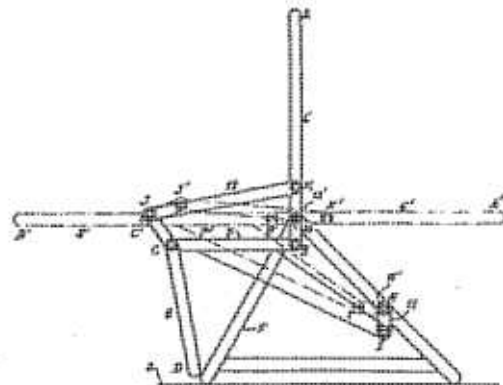
- AB - In the **articulated** furniture item for relaxation described in the Patent Application No. 85 12486 of 19 August 1985, the rod linking the **backrest** and the base can be omitted, and this linkage can be implemented by means of the armrests, without having any member projecting above the furniture for relaxation in its horizontal **bed** position. The solution consists in maintaining the horizontal armrests by means of a device of the parallelogram type (B, C, J, K). <IMAGE>



- PN - [FR2587186](#) A2 19870320
- TI - Process for making **articulated** furniture item for relaxation, and furniture obtained by this process

59/104 © EPODOC / EPO

- AB - In the **articulated** reclining chair described in the patent application no. 8512486 of 19th August 1985, the connecting rod 16, providing the connection between the **backrest** 6 and the legrest 8, can be removed, by ensuring this connection by means of the armrests 12; this being possible even in the case where the **backrest** 6 and the legrest 8 are capable of an angular displacement equal to

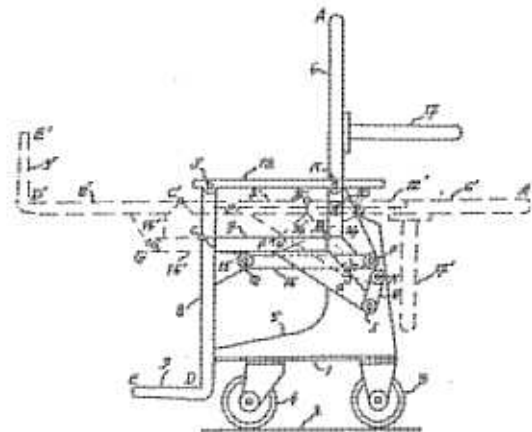


or greater than 90 DEG . It must then be accepted that the armrests 12 project above the reclining chair in its horizontal **bed** position. <IMAGE>

- PN - [FR2586541](#) A2 19870306
- TI - Method and **articulated** reclining chair according to this method

60/104 © EPODOC / EPO

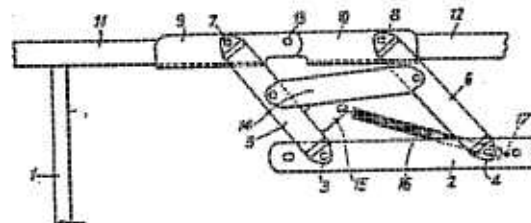
- AB - (A1)
- The invention relates to the reclining chair industry. Reclining chair comprising a frame 5, a **backrest** 6, a seat 7 and a legrest 8 which are joined together. Means are provided so that lowering of the **backrest** 6 causes the seat 7 and the legrest 8 to rise. The reclining chair may thus be used at will in the arm chair position or in the **bed** position, or in any other intermediate position; the user always being essentially in balance. <IMAGE>



- PN - [FR2586180](#) A1 19870220
- TI - (A1)
- Method for making an **articulated** reclining chair and chair obtained by the method

61/104 © EPODOC / EPO

- AB - (A1)
- The mechanism comprises, on each side of a vertical central plane of symmetry, two flanges 9, 10 **articulated** to each other about an axle 13 forming a hinge. These flanges 9, 10 respectively support the seat frame 11 and the **backrest** frame 12 and are **articulated** at the upper end of the main connecting rods 5, 6, the lower ends of which are **articulated** to a fixed support plate 2. An

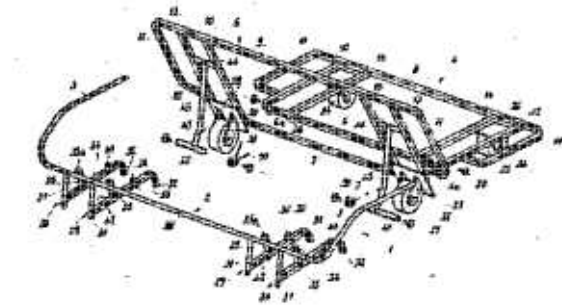


intermediate connecting rod 14 connects together the main connecting rods 5, 6, and a balancing spring 16 is placed between a projection 15 of the connecting rod 5 and the plate 2. The invention is usable in particular for making train seat-beds having a non-projecting mechanism. <IMAGE>

- PN - [FR2585227](#) A1 19870130
- TI - (A1)
- Articulated** mechanism, which can be dismantled, for making a piece of furniture which can be converted from a seat to a **bed**

62/104 © EPODOC / EPO

- AB - (A1)
- This sofa- **bed** is of the type for sleeping in the longitudinal direction, whose structure is formed by a support frame 2 and by two essentially identical frames 4, 5, **articulated** to each other, the one extending in an essentially horizontal direction to form the seat of the chair (sofa) and the other extending in an essentially vertical position to form the **backrest** of the chair (sofa). According to the invention, the frame 4 of the seat and the frame of the **backrest** are **articulated** at 20 to each other independently of the support frame 2 of the sofa and the frame of the **backrest** of the sofa is **articulated** to the support frame 2 by means of an **articulation** arm 45 forming a tie-rod and **articulated** by each of its ends respectively to the frame of the **backrest** and to the support frame. Each frame 4, 5 is fitted with a pair of wheels, respectively 24, 21, serving as its first resting point on the ground,



a second resting point being formed by the support frame 2, and, when the sofa is in its sleeping position, by the wheels 21 of the frame 5 for the frame 4.

<IMAGE>

PN - [FR2575377](#) A1 19860704

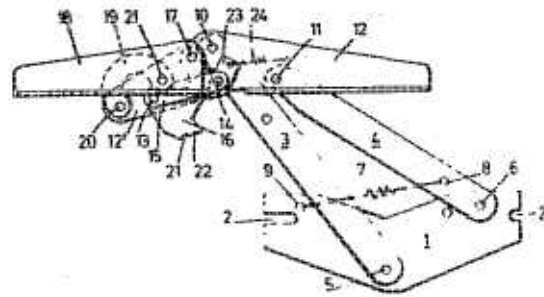
TI - (A1)

Sofa-**bed**

63/104 © EPODOC / EPO

AB - (A3)

The present invention relates to an **articulation** mechanism for two folding chair or sofa **bed** elements, comprising an angle bracket fastened to the element forming a chair, an angle bracket fastened to the element forming a **backrest**, a part intended to be fastened to the seat of the chair or the sofa **bed**. The mechanism according to the invention is characterised in that the abovementioned part 1 intended to be fastened to the seat of the chair or of the sofa **bed** carries, mounted pivotally, two levers 3 and 4 whose opposite ends are mounted pivotally at 10 and 11 on the angle bracket 12 fastened to the element forming a **backrest**, so that in the "**bed**" use position, the **articulation** points 10 and 11 of the said levers 3 and 4 on the abovementioned angle bracket 12 are not located higher than the level of the mattresses or the padding elements equipping the underframe forming a chair and the underframe forming a **backrest**.<IMAGE>



PN - [FR2547183](#) A3 19841214

TI - (A3)

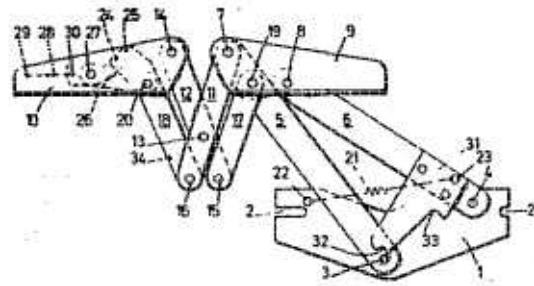
Articulation mechanism for two folding chair or sofa **bed** elements

64/104 © EPODOC / EPO

AB

- (A3)

The present invention relates to an **articulation** mechanism for a sofa **bed** or a chair in which an element forming a chair is **articulated** to an element forming a **backrest**. The mechanism according to the invention comprises an angle bracket 9 intended to support the **backrest** element, itself **articulated** by two levers 5 and 6 to a plate 1 intended to be fastened to a seat of the chair or of the sofa **bed**, which is linked to an angle bracket 10 intended to support the chair element, by means of two levers 11 and 12 forming scissors, so that, when the abovementioned angle brackets 9 and 10 are aligned, that is to say when the **articulation** mechanism corresponds to the " **bed** " position, the **articulation** points of the various levers on the said angle brackets 9 and 10 are located below the upper level of the padding elements of the sofa **bed** or of the chair. <IMAGE>



PN

- [FR2547182](#) A3 19841214

TI

- (A3)

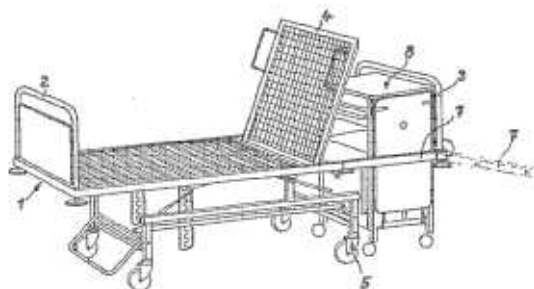
Articulation mechanism for sofa **bed** or chair

65/104 © EPODOC / EPO

AB

- (A1)

The hospital **bed** is fitted with a stowage space for accommodation of a bedside table (8) which lies in the region of the mattress frame (1) to which a foot part (2) and a head part (3) are fixed. The lying surface is provided with a **backrest** (4) which is pivotable

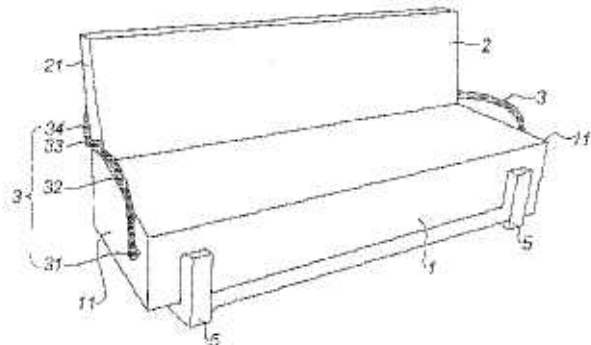


about a lower, horizontal axis. The stowage space is provided between the **backrest** (4) and the head part (3), and it is accessible via an opening in a longitudinal bar of the mattress frame which can be sealed via the bar part (7). The bar part (7) is **articulated** on the mattress frame via a hinge having a vertical axis of rotation, so that the bar part (7) can be pivoted into the position shown by dash-dotted lines. After transport of the bedside table into the stowage space the bar part (7) is brought into the closed position shown by full lines. <IMAGE>

PN - [FR2363320](#) A1 19780331

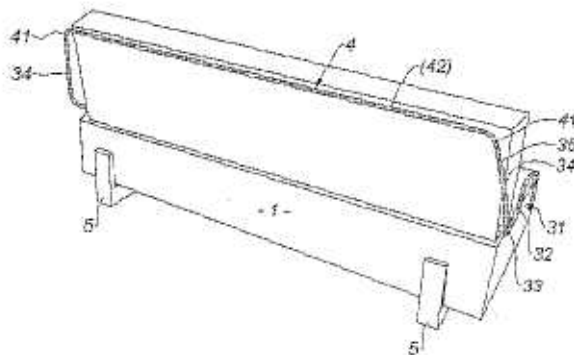
66/104 © EPODOC / EPO

AB - The furniture has a seat (1), and a folding **backrest** (2). The **backrest** is connected to the seat by two arms (3). Each arm is connected through an **articulation** (31) to sides (11) of the seat and through **articulations** (33) to sides (21) of the **backrest**, to hold the **backrest** in sofa position and to tilt the **backrest** in front of the seat to hold it in **bed** position in the seat plan.



PN - [FR2880247](#) A1 20060707

TI - Convertible/transformable bench or sofa furniture for use as rollaway **bed**, has **backrest** connected to seat by arms linked via **articulations** to seat and **backrest** sides to hold **backrest** in sofa position and to tilt it to hold in **bed** position

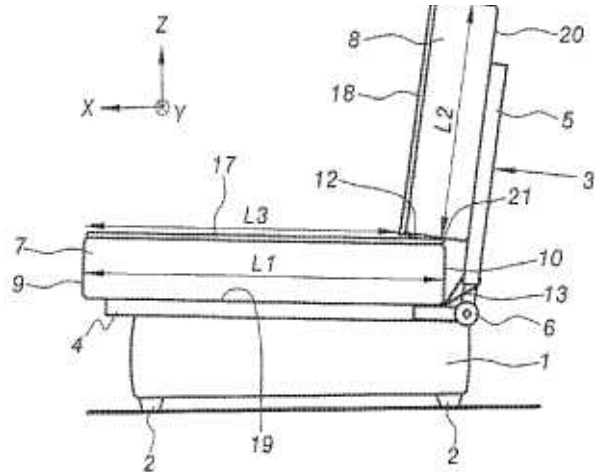


67/104 © EPODOC / EPO

AB - (A2 A3)



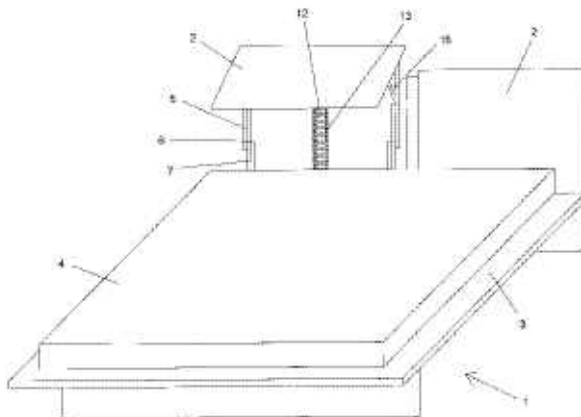
The invention relates to a piece of furniture comprising a base (1) having a **bed** spring fixed thereto. Said **bed** spring comprises a seat frame (4) and a **backrest** frame (5) which are **articulated** to one another so that they can move between a seat position and a **bed** position. According to the invention, the seat cushion (7) and the **backrest** cushion (8) are disposed so as to slide on the seat (4) and **backrest** (5) frames between the seat and **bed** positions. Moreover, the seat cushion (7) comprises a coupling element (13) which connects to the **backrest** frame (5) and which is arranged such that the reciprocal movement of the **backrest** frame (5) and the seat frame (4), which is used to move from the seat position to the **bed** position, causes the reverse transverse sliding of the seat cushion (7) in relation to the seat frame (4).



PN - [WO03090584](#) A2 20031106
 TI - (A2 A3)
 SOFA BED

68/104 © EPODOC / EPO
 AB - (A1)

The **backrest** for a **bed** has a pair of uprights (5) mounted for vertical sliding on the top end of the **bed** frame. The uprights carry a pivoting **backrest** plate (2) at the top of the **bed**, the plate pivoting around a horizontal axis. The uprights are each slidable vertically with respect to a vertical rail (7) fixed to the base of the **bed**.



PN - [FR2841754](#) A1 20040109
 TI - (A1)
Articulated support for **backrest** on **bed** has pair of uprights

slidably mounted on **bed** frame
to support pivoting **backrest**
panel

69/104 © EPODOC / EPO

AB - (A1)

Anterior and posterior drive trains, coupled to an **articulated** structure via connecting rods, are relatively displaceable with respect to a central body. The drive trains convert the **articulated** structure between wheelchair and **bed** modes, by moving in opposing directions relative to the central body. The **articulated** structure consists of a **backrest**, a seat, and a leg rest.

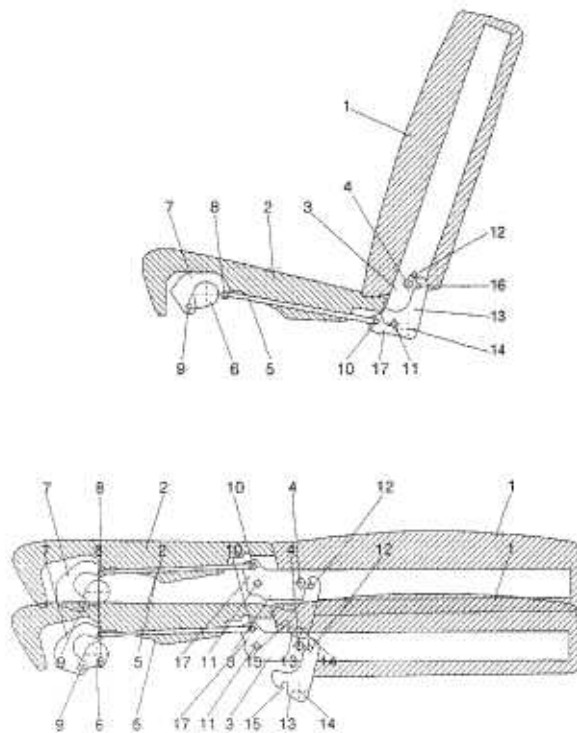
PN - [ES2265247](#) A1 20070201

TI - (A1)

Bed-cum-wheelchair, has relatively displaceable anterior and posterior drive trains connected to **articulated** structure to transform structure between **bed** and wheelchair modes

70/104 © EPODOC / EPO

AB - The invention relates to a seat for a vehicle, comprising a **backrest** (1) structure (3) and a seat cushion (2) structure (5). According to the invention, the **backrest** structure is pushed back and, at the same time, the seat cushion structure (2) is raised slightly in order to transform the seat into a **bed**, whereby the surfaces of both the collapsed **backrest** (1) and the seat cushion (2) are aligned horizontally. The aforementioned **backrest** and seat cushion structures (3, 5) are interconnected by means of a fulcrum pin (10). Moreover, both structures can rotate freely in relation to said pin such that, when the **backrest** structure (3) is pushed backwards, pressure is applied to the seat cushion structure (5) and said structure is raised, owing to the fact that the front part of said seat cushion is connected to the fixed structure of the seat (6) by means of a rod (7) which is **articulated** between the



structure (5) of the seat cushion
(2) and the general fixed
structure (6) of the seat.

PN - [WO03080386](#) A1 20031002

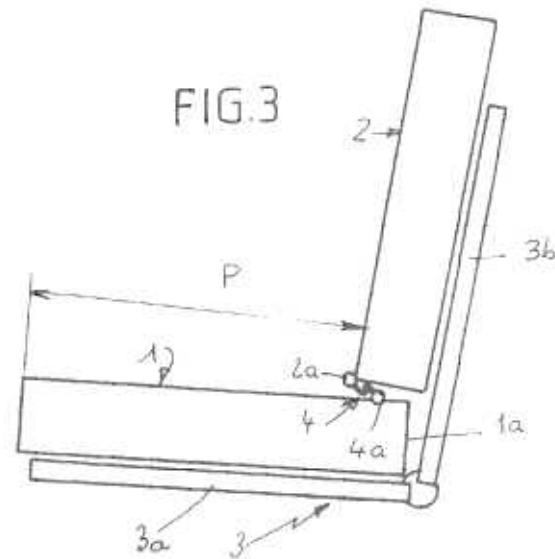
TI - VEHICLE SEAT WHICH CAN BE
TRANSFORMED INTO A BED

71/104 © EPODOC / EPO

AB - This device is noteworthy in that
it comprises means (4) capable
of ensuring the coupling, in
an **articulated** manner, of the two
parts (1) and (2) so that, in the
seat position, the seating part is
automatically held partially
under the **backrest** part, in order
to reduce, in a corresponding
manner, the depth of the said
seating part. <IMAGE>

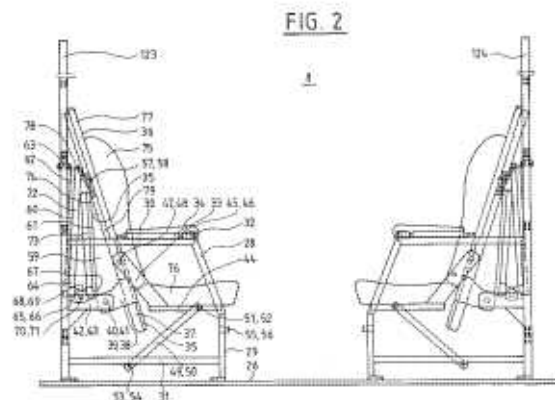
PN - [EP0595731](#) A1 19940504

TI - A pivot for the two parts of a
mattress, particularly for a chair
convertible into a **bed**.



72/104 © EPODOC / EPO

AB - In a touring vehicle, in particular
a touring bus, having a central
gangway through the passenger
compartment which is
subdivided on both sides of the
central gangway by means of
intermediate walls 123, 124 into
a plurality of compartments
each with double seats, arranged
opposite one another, with seat
bench 76 and **backrest** 75, which
seats can be moved out of a
seating position into a lying
position and vice versa, each
double seat having a **backrest**
frame 35 which holds
the **backrest** 75 and a seat frame
44 which holds the seat bench
76 and the **backrest** frame 35
being connected in an **articulated**
fashion to the associated



intermediate wall 123, and, behind the **backrest** frame, a **bed** frame which is arranged so as to be capable of swivelling in the longitudinal direction of the vehicle being provided and the upper beds being supported by supports and being attached to the roof of the bus by means of belts, there is provided, a) for the upper beds 81 to be held in the desired horizontal position by means of lockable spacing bars 33, b) for escape paths 1 to be provided in the region of the side windows and in the region of the roof 27, c) for the intermediate walls 123, 124 to be arranged in the areas of the window struts located between two adjacent windows and d) for the intermediate walls 123, 124 to be of elastic design. <IMAGE>

PN - [EP0518046](#) A1 19921216
 TI - Touring coach.

73/104 © EPODOC / EPO

AB - (A2)
 A vehicle seat (8) comprises a **backrest** (7) which consists of an upper and a lower **backrest** part (14,15). The lower **backrest** part (15) is connected in an **articulated** manner both to a seatpart (9) and to the upper **backrest** part (14). By swinging the lower **backrest** part (15) forwards in the longitudinal direction of the vehicle and the upper **backrest** part (14) backwards in the longitudinal direction, the vehicle seat (8) is converted into part of a **bed**.

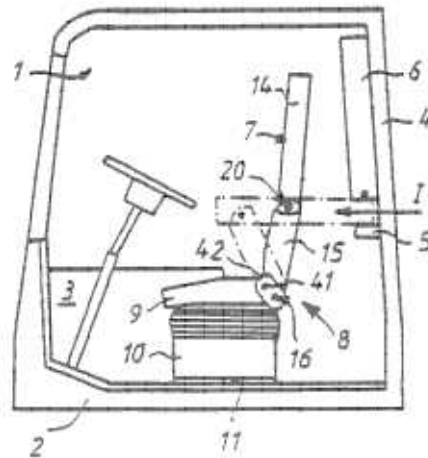


FIG. 1

PN - [EP0388380](#) A2 19900919
 TI - (A2 B1)
Bed arrangement in the rear area of a vehicle compartment.
 - (A3)

BED ARRANGEMENT IN THE REAR AREA OF A VEHICLE COMPARTMENT

74/104 © EPODOC / EPO

AB - (A2)

A long-distance vehicle, in particular long-distance bus, having a central aisle through the passenger compartment and having double seats with a seating bench and **backrest** which are provided on both sides of the centre aisle and can be moved from a seating position into a rest or lying position and vice versa, is constructed in such a way that the passenger compartment is divided up on both sides of the centre aisle by transverse walls into a plurality of compartments each having two double seats arranged opposite one another, that a rest frame for the back rests and a seating frame for the seating bench are provided for each double seat, the rest frame being connected in **articulated** fashion to the associated transverse wall by means of clips and the seating frame being connected to the clips by means of levers, and that a **bed** frame for an upper **bed** is swivellably mounted in the longitudinal direction of the vehicle on the transverse wall behind the rest frame. <IMAGE>

PN - [EP0291894](#) A2 19881123

TI - (A2)

Long-distance vehicle.

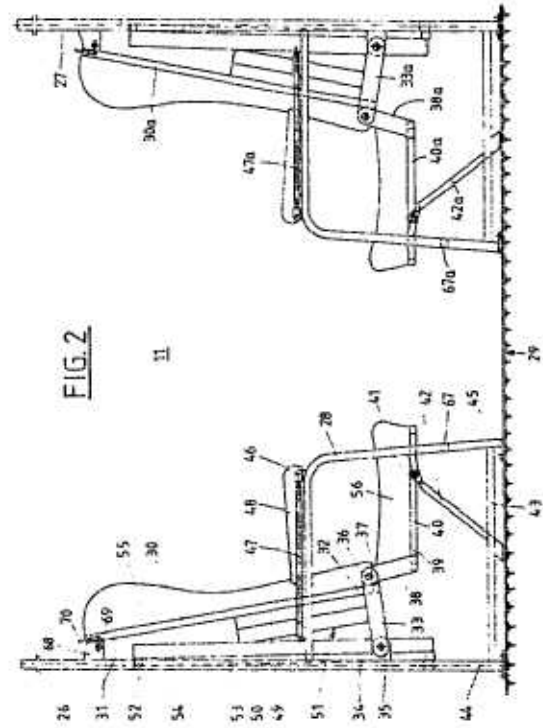
- (A3 B1)

LONG-DISTANCE VEHICLE

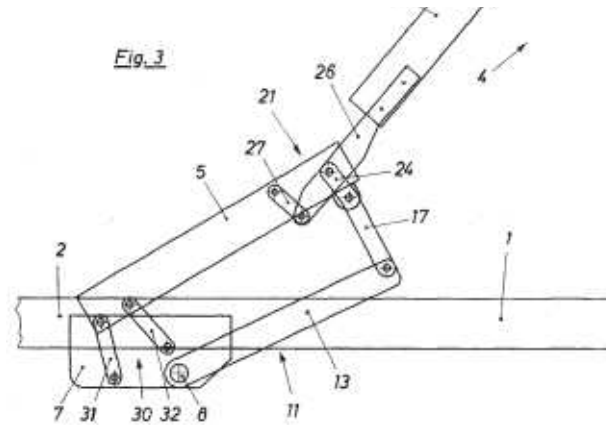
75/104 © EPODOC / EPO

AB - (A1)

The **bed** frame has swiveling



back (5) and head (6) supports. These are mounted on a parallelogram lever system (11), one end of which is attached to a mounting (30) on the frame (1) and the other to the back and head rests.



- PN - [EP1510152](#) A1 20050302
- TI - (A1 B1)
Mattress base with **articulated backrest** and headrest portions

76/104 © EPODOC / EPO

- AB - The **bed** includes a number of rests, for the back, the hips, the upper- and the lower legs. These fold on bearings. Opposite ends of two struts (34) are pivoted to the **backrest** (11) and to the **bed** frame. A pressure cylinder (4) and piston rod form part of the mechanism. In novel design, a lever system includes a sliding rod moved parallel to the **backrest**, and a carrier (332) is **articulated** about a pivotal axis (33) with the sliding rod. The hip rest (2) construction is telescopic, with two tubes (21, 22) sliding in and out of each other.

- PN - [DE202007003728U](#) U1 20070510
- TI - Adjustable invalid **bed** conforming with body shape, includes rests for back, upper- and lower legs, with telescopic hip rest and cylinder-actuated operating mechanism

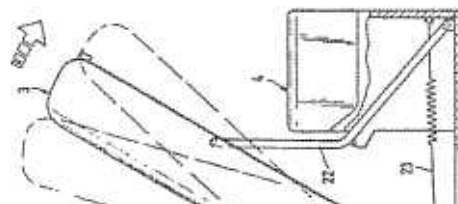
77/104 © EPODOC / EPO

- AB - (A1)
The fitment which connects the seat to the **backrest** for swivel movement is also kinematically coupled to a side arm (11) swivel mounted on the base frame so that during conversion of the seat into a **bed** and vice versa the side arm by means of a kinematic chain mounted between individual structural groups of the fitment is unlocked and folded away sideways or folded up and locked. The swivel lever is extended beyond its fixed rotary point on the **articulated** web (4) and a rotary joint is located at the free end and is connected by a coupling member to the slide member which is displaceable in the area of the side piece of the base frame.

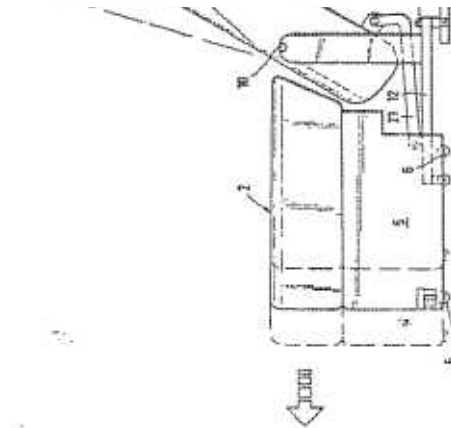
- PN - [DE19640863](#) A1 19980409
- TI - (A1)
Fitment for sofa **bed**

78/104 © EPODOC / EPO

- AB - In the seating furniture, the cushion for the seat (2) is arranged on a carriage (5) which can be pulled forwards and the **backrest** (3) is mounted on a displaceable bearing block (12)



so that it can be tilted about a horizontal axis (10). A stationary head part (4) is provided whose cushion lies on the same level as the cushion for the seat (2). The seat carriage (5) is connected to the **backrest** (3) in an **articulated** manner, and said **backrest** is connected to the head part (4) in an **articulated** manner. As a result, the seat carriage (5) and the bearing block (12) together with the **backrest** (3) undergo a coupled relative movement relative to one another when pulled apart, such that the **backrest** (3) can be pivoted about an axis (10) which lies with spacing from its lower longitudinal edge. This provides the prerequisite for the fact that the **backrest** (3), which constitutes the central part of the cushion intended for bearing the trunk when the furniture is used as a **bed**, can correspondingly be kept in a horizontal or upright position. The division of the lying surface is arranged in such a way that the **backrest** (3) forms the main lying surface which supports the trunk of the body, while the surface interruptions between the **backrest** (3) and the seat (2) and between the **backrest** (3) and the head part (4) come to rest in the region of the backs of the knees and in the region of the head respectively. <IMAGE>



PN - [DE3319044](#) A1 19841129

TI - Seating furniture, such as armchair, sofa or the like

79/104 © EPODOC / EPO

AB - The seat part (1) is connected to the front (2) and rear (3) parts of the back rest by a tubular hoop (11,10) in the manner of an **articulated** triangle (6,7,8) with the seat element (1) being guided by a moving carriage (5) which is supported on the base frame

(4) so that when the seat element is pulled out it automatically extends the front part of the back rest whilst at the same time bringing the rear part via a double joint (7) into the flat **bed** position. The cushions can now remain fixed in position on the seat and two part **backrest** and the entire conversion operation can be carried out in one step. This is further facilitated if rollers are mounted on the guide carriage and side parts of the seat element.

PN - [DE3024233](#) A1 19820121

TI - Convertible chair **bed** with seat and two-part **backrest** - has triangular **articulated** rods automatically moving parts into position without adjusting cushions

80/104 © EPODOC / EPO

AB - The sofa seat (4) is attached to the sofa frame (2) so that it can be raised up about horizontal axes mounted near the back rest of the sofa. The mattress which together with the swivelled-down seat (4) forms the double-sized **bed** is in two parts (13,14) which each have the length and width as the seat (4). One part (13) of the mattress can be swivelled by means of **articulated** members set near the longitudinal side facing the **backrest** (3) out of a framework (11), which can be extended forwards a restricted amount from the sofa frame and which has the support feet, lengthwise next to the lowered sofa seat (4) where it is supported on the framework level with the seat (4). The second mattress part (14) is attached to the first mattress part (13) where on the one hand it rests on the first mattress part (13) and on the other it can be folded lengthwise next to the first mattress part to be level with same.

PN - [DE3000957](#) A1 19810723

TI - Convertible double **bed** settee - has sliding undercarriage and folding system allowing normal seat height with thick mattress sections

81/104 © EPODOC / EPO

AB - The convertible reclining chair **bed** has three sections (2, 3, 4), with each two adjoining sections (2, 3; 2, 4) connected together by two **articulated** joints which are in the form of chain links and are formed by a single or two fish-plates (6). The plates, which form the joint between the centre section and the foot section, are preferably so long that, when folding the two end sections onto the centre section, the end section forming the **backrest** finds room between the other two so that the two end sections are folded parallel to the centre section. The **articulated** chain joints provide a simple but reliable locking mechanism for the back rest section so that the latter can be at various stepped positions, wherein the edge (9) of the back rest (4) facing the centre section (2) is supported against graduated stops (7, 8).

PN - [DE2504976](#) A1 19760819

TI - Convertible reclining chair-**bed** in three sections - has chain links forming **articulated** joints for reliable locking of parts

82/104 © EPODOC / EPO

AB - The hospital **bed** is provided with an actuating member for adjusting the height of the mattress frame and a handle for adjusting the incline of the back rest and these two operative elements are linked to form a common control member with two alternative control movements so that movement into one direction allows the **articulated** rod associated with the mattress frame to change position whilst the back rest remains

immobile. Similarly movement of the common control member in the other direction allows the **articulated** rod associated with the back rest to change position whilst the mattress frame remains fixed, since there is no contact between the control member and the **articulated** rod of the latter.

PN - [DE2411965](#) A1 19750918

TI - Hospital **bed** with height-adjustable mattress frame - has common control member for adjusting **backrest** and mattress

83/104 © EPODOC / EPO

AB - (B2)

steplessly guided by a clamp shackle releasable by a handle and actuating rod, under opposite action of two springs, and with a stop to limit the release motion. The clamp yoke has a circular bend with its midpoint in the **articulation** axis of the **backrest** on the **bed** frame. The shackle is directed in the release position at 90 deg. to the curvature of the yoke and a double stop piece is associated with it under the action of two torsion springs on the clamp shackle. Adjusters controllable both limit the pendular motion of the clamp shackle and limit the stroke of the actuating rod. Operation is facilitated and the stability of securement of the positions is increased.

PN - [DE1816872](#) A1 19700917

TI - (B2)

Backrest adjuster for hospital **bed** - has clamp yoke guided by clamp shackle with double stop piece with two torsion springs

84/104 © EPODOC / EPO

AB - The utility model relates to the health care instrument field, in particular to a domestic hypertherm physio massage armchair. The massage armchair comprises a hypertherm physio massage **backrest**, a chair and a footrest which are **articulated** with each other. Two S-shaped lead rails opposite to each other are arranged on the left and the right side inside the hypertherm physio massage **backrest**; a walking larry can to-and-fro move along the S-shaped lead rails pulled and dragged by an electric motor through a rope, wherein, a hypertherm physio massage cassette mechanism is fixed on the walking larry; the hypertherm physio massage **backrest** and the footrest are respectively connected with the chair through an electric push rod to adjust the angles between the hypertherm physio massage **backrest** as well as the footrest and the chair. The hypertherm physio massage **backrest**, the foot seat and the chair can be stretched to form a hypertherm physio massage **bed**, thereby increasing the flexibility and the practicability of the massage armchair.

PN - [CN201079541Y](#) Y 20080702

TI - Household tepid physical therapy massage chair

85/104 © EPODOC / EPO

AB - The utility model relates to a **bed** which can be transferred into a **backrest** chair through movable parts, consisting of a turnover **bed** board1 and a fixing **bed** board **articulated** with each other. A seat stand 3 is positioned under the turnover **bed** board1. The turnover **bed** board1 which is turned over and positioned by angle modulation mechanism, and the seat stand 3 form a sitting chair with the angle adjustable **backrest** and armrests 5. Compared with present **bed** chair having similar

functions, the utility model has the advantages of simple operation and having few moveable parts, and the conformability of the formed chair is more approached the common **backrest** chair. A table board 6 can be folded in positioned on the front of chair, which can form a two-double **bed** by overlapping the two parts with opposite direction. The footrest 8 of the upper **bed** is communicated with the ground surface with the help of platform 13 with baffles on two sides and ladder 11. The two-double **bed** is of higher space utilization rate and conformability compared with the common two-double **bed**.

- PN - [CN201039857Y](#) Y 20080326
- TI - Doss capable of being changed into chair

86/104 © EPODOC / EPO

AB - The utility model relates to a chair **bed**, which belongs to a furniture manufacturing technology field. The utility model comprises a **backrest**, a chair seat, a handrail bracket and handrails, wherein the handrail bracket and the handrails are located on the two sides of the chair, the lower end of the **backrest** is movably **articulated** with the rear end of the chair seat, the middle portion of the two sides of the **backrest** is movably connected with the rear end of the handrails, and the middle portion of the handrails is connected with the handrail bracket through an angle regulating device. The utility model is characterized in that the angle regulating device comprises a location-limited plate and a guide, the location-limited plate is arranged on the handrail bracket, the guide is arranged on the lower of the middle portion of the handrails, two or more bayonets are arranged on the inner top portion of the guide, a guide groove is arranged on the bottom of the guide, the location-limited plate is arranged in the guide crossing the guide groove, and the top end of the location-limited plate is leaned between the bayonets. A stop is arranged on the top portion of the location-limited plate, the stop is leaned between the bayonets, the width of the stop corresponds to the width of the guide, and the stop and the guide are a clearance fit. The width of the guide groove of the guide corresponds to the thickness of the location-limited plate, and the guide groove and the location-limited plate are the clearance fit. The chair **bed** which uses the structure has the advantages of simple structure, low production cost and stable handrails.

- PN - [CN201029619Y](#) Y 20080305
- TI - Two purposes chair for sitting and lying

87/104 © EPODOC / EPO

AB - (A)
The present invention discloses an intelligent voice nursing **bed**, comprising at least a piece of **backrest** body which is **articulated** at the middle part of a **bed** body upper plane and can rotate lengthways and a singlechip which can dispose a lingual signal into a control signal, wherein, the singlechip inputs a mike which can produce a voice signal; the singlechip outputs a control cylinder which can control to lift the **backrest** body through a first relay and an electromagnetic valve; the singlechip also outputs a remote controller which can control an electrical appliance to operate through a second relay; one end of the movable connecting rod of the control cylinder is rotatably connected with the back of the **backrest**, and the other end is rotatably connected with a cylinder fixing pedestal at the bottom side of the **bed** body; the control cylinder is equipped with

a descending air inlet nozzle and an ascending air inlet nozzle which are respectively in sealed communication with corresponding electromagnetic valve air openings by pipelines; the electromagnetic valve is fixedly installed at the bottom side of the **bed** body. The present invention is safe for using. Gas is used as control dynamic source, which is environmental protective and saves energy. Settled language is arranged in a singlechip programme, which can realize producing a control signal by voice conversion.

PN - [CN101214184](#) A 20080709

TI - (A C)
Intelligent voice nursing **bed**

88/104 © EPODOC / EPO

AB - (A)

The present invention discloses a multifunctional intelligent nursing **bed**, comprising at least a piece of movable **bed** surface body which is **articulated** at the middle part of a **bed** body upper plane and can rotate lengthways, at least a control cylinder which is rotatably connected with the back of the movable **bed** surface body, can control the movable **bed** surface body to overturn up and down and can be rotatably connected with the bottom side of the **bed** body and an electromagnetic valve which is in sealed connection with the pipeline of the control cylinder, can be communicated with an external dynamic source and is fixedly installed at the bottom side of the **bed** body. One end of the movable connecting rod of the control cylinder is rotatably connected with the back of a **backrest** body, and the other end is rotatably connected with a cylinder fixing pedestal at the bottom side of the **bed** body. The control cylinder is equipped with a descending air inlet nozzle and an ascending air inlet nozzle which are respectively in sealed communication with corresponding electromagnetic valve air opening phases. The electromagnetic valve is fixedly installed at the bottom side of the **bed** body. The adopted electromagnetic valve can control the movable **bed** surface body to stop at any position. The compressible characteristic of gas ensures that the proper elasticity of the movable **bed** surface body. Two fit-position stroke switches are safe for using.

- (B)

The present invention discloses a multifunctional intelligent nursing **bed**, comprising at least a piece of movable **bed** surface body which is **articulated** at the middle part of a **bed** body upper plane and can rotate lengthways, at least a control cylinder which is rotatably connected with the back of the movable **bed** surface body, can control the movable **bed** surface body to overturn up and down and can be rotatably connected with the bottom side of the **bed** body and an electromagnetic valve which is in sealed connection with the pipeline of the control cylinder, can be communicated with an external dynamic source and is fixedly installed at the bottom side of the **bed** body. One end of the movable connecting rod of the control cylinder is rotatably connected with the back of a **backrest** body, and the other end is rotatably connected with a cylinder fixing pedestal at the bottom side of the **bed** body. The control cylinder is equipped with a descending air inlet nozzle and an ascending air inlet nozzle which are respectively in sealed communication with corresponding electromagnetic valve air opening phases. The electromagnetic valve is fixedly installed at the bottom side of the **bed** body. The adopted electromagnetic valve can control the movable **bed** surface body to stop at any position. The compressible characteristic of gas ensures that the proper elasticity of the movable **bed** surface body. Two fit-position stroke switches are safe for using.

PN - [CN101214183](#) A 20080709
TI - (A B)
Multifunctional intelligent nursing **bed**

89/104 © EPODOC / EPO

AB - A rehabilitation **bed**, whose bedstead integrates a main bedstead, a movable bedstead and a wheelchair frame, while the movable bedstead is provided with a cross rod frame which is equipped with a movable cross rod, the movable bedstead is provided with a three-dimensional framework, while the movable bedstead is fixed a leg-pressing frame which is arranged at the angle of 45 degrees with a **bed** surface, the cross rod frame and the three-dimensional framework are fixed into one, the lower end of the cross rod frame is equipped with a front wheel, the movable bedstead is equipped with an universal wheel; the wheelchair frame is a three-dimensional framework, while the wheelchair frame is equipped with a wheelchair front wheel, a pedal board and an universal wheel; the wheelchair frame is equipped with a handrail frame with a **backrest**. The front end of the main bedstead is welded with a rectangular installation frame, while on the installation frame, the loose leaves are equipped with a rotation steady with a fixed cross rod; the main bedstead is provided with a movable **bed** board which is **articulated** with the main bedstead, the middle of the lower surface of the main bedstead is provided with a transverse screw rod with a crank handle, while the screw rod is connected with a support rod which is **articulated** with the movable **bed** board. The patients can not only be laid on the rehabilitation **bed**, but the patients can use the utility model for physical exercises.

PN - [CN2875394Y](#) Y 20070307
TI - Health-recovery **bed**

90/104 © EPODOC / EPO

AB - The utility model relates to a chair for leisure and sports use, which comprises a base that is placed on the ground to use as platform for component installation, a cushion to sit on, a **backrest** frame for the **backrest**, a pillow frame for the headrest, a front swing rod, rear swing rod and a connecting lever, wherein lower end of the front swing rod is flexibly **articulated** underneath the front end of the base in such a manner that the lower end of the front swing rod can swing back and forth; middle section of the rear swing rod is flexibly **articulated** above rear end of the base in such a manner that the middle section of the rear swing can swing up and down; front end and rear end of the connecting lever are respectively **articulated** in a flexible manner with upper end of the front swing rod and lower end of the rear swing rod, and the front swing rod and the rear swing rod are maintained in coupling for synchronous swinging; the cushion is provided on the connecting lever; the **backrest** frame is provided on the rear swing rod; the pillow frame is provided on upper end of the rear swing rod; the **backrest** frame is provided with several free-spinning massage wheels and the pillow frame is also provided with several free-spinning massage wheels. The utility model combines the functions of a seat, a **bed**, a massager and body-building, thus is capable to serve a plurality of purposes and has a wide scope of application.

PN - [CN2922616Y](#) Y 20070718
TI - Sport lounge chair

91/104 © EPODOC / EPO

- AB - Disclosed is a lie **bed** with adjustable **backrest** angle, which includes a **backrest** frame and a lie **bed** frame, the **backrest** frame is **articulated** with the front part of the lie **bed** frame, and can adjust the angle upward and downward, the **backrest** frame and lie **bed** are provided with bedspreads, the shape of the side face of the lie **bed** is disposed with arc shaped, waved shaped or similar to S-shaped. The utility model has simple and reasonable structure, and simple manufacture, the shape of side face of the lie **bed** is made into arc shaped, waved shaped or similar to S-shaped according to the principle of human mechanics, and such a shape can provide the users with a more comfortable feeling when they lie down, and also can relax body parts when users are in sleep. Because of the utility model using frame structure, the global stress is good; because the support base and the **backrest** can be folded to the horizontal direction, the lie **bed** can be used as dose when the lie **bed** is lain down to horizontal position; and the material of bedspreads has more selection, so the product is suitable for more users' requirements.
- PN - [CN200987522Y](#) Y 20071212
- TI - Sleeping **bed** with adjustable inclination back

92/104 © EPODOC / EPO

- AB - The utility model discloses a sofa **bed**. The utility model is characterized in that an armrest framework may ascend or descend horizontally along with deflexion of a **backrest** framework, when the **backrest** framework undergoes a backward deflexion to a horizontal position, the armrest framework may descend to a position parallel to the surface of a bench hassock so that users may go onto and down the sofa **bed** with normal gestures, thereby effectively enhancing the use convenience of the dual-functional sofa **bed**. The utility model comprises a stationary framework (10), a **backrest** framework (11), an active framework (30), and two armrest frameworks (12); wherein, the **backrest** framework (11) is rotatably connected with the stationary framework (10); and the two armrest frameworks (12) are respectively fixed at the two sides of the stationary framework (10). The two armrest frameworks (12) are respectively **articulated** with two pieces of swing links (13, 14), the two armrest frameworks (12), the two swing links (13, 14) and the stationary framework (10) form a mechanism in parallelogram, and the **backrest** framework (11) is **articulated** with a swing link (13) positioned at the rear of the stationary framework (10).
- PN - [CN2917425Y](#) Y 20070704
- TI - Two-purpose sofa **bed**

93/104 © EPODOC / EPO

- AB - The utility model discloses a new foldable chair comprising a **backrest** chair face, a seat chair face, a foldable stent, a handrail and a **backrest** chair face angle adjustment mechanism. The utility model is characterized in that a pedal chair face is also included. The pedal chair face is connected with the seat chair face through an **articulation** part. The utility model not only has the function of a foldable chair, but also possesses the function of a **bed**. The **backrest** chair face angle adjustment mechanism is designed as a hidden type therefore can solve the problem of injuring because of exposure. The utility model is also provided with a roller which is convenient for moving. The utility model is suitable to use in recreation places and in

travel.

PN - [CN2631324Y](#) Y 20040811

TI - Folding chair

94/104 © EPODOC / EPO

AB - The utility model discloses an electric adjustment **backrest**, which solves the technical problems by adopting the technical proposal that the utility model includes a **bed** bracket and a **backrest**, which is characterized in that the **backrest** is articulated with the **bed** bracket by a bracket, a transmission component which consists of a motor and a speed reducer is fixedly connected with the **bed** bracket, an output shaft of the speed reducer is fixed connected with a crank which is rotatably connected with the lower end of a connection bar by a ball gemel, the upper end of the connection bar is rotatably connected with the **backrest** by the ball gemel. The utility model fully considers the condition that people adopt a sitting position to rest, extends the use functions of the **bed** head **backrest** part, which can optionally adjust the incline angle of the **backrest** in a bigger range according to the specific needs of people for achieving the comfort degree which satisfies users. The utility model has a contemporary on both the outlook and the use, which can be used as an assembly to be arranged on a multifunctional luxury room.

PN - [CN2638547Y](#) Y 20040908

TI - Electric adjustable device for back

95/104 © EPODOC / EPO

AB - The utility model discloses a convenient rehabilitation **bed**, which comprises a **bed** body (2) and a bedstead (5), one end of the **bed** body (2) is articulated with a **backrest** (1), an elevating gear is arranged between the **backrest** (1) and the bedstead (5), a water closet hole (14) is arranged in the middle of the **bed** body (2), a water closet rack (11) is fixed under the **bed** body (2), a **bed** pan (12) is actively arranged in the water closet rack (11) and is corresponding with the water closet hole(14); an impulse rack (10) is arranged inside the water closet hole (14), an impulse lump (3) is arranged in the impulse rack (10). The **bed** body (2) is provided with a sunken district (18), the sunken district (18) is connected with the water closet hole (14) as a whole, a corresponding active lump (4) is arranged in the sunken district (18), the impulse rack (10) is connected with the **bed** body (2) via a stretch orbit (9), the stretch orbit (9) is extended to the sunken district (18). Adopting the structure, the utility model has the advantages of simple and rational structure, convenient usage and low cost, can avoid the breeding of the bed sore.

PN - [CN2596969Y](#) Y 20040107

TI - Convenient rehabilitation **bed**

96/104 © EPODOC / EPO

AB - A movable chair comprises a shaped frame 1, a beam 2, a **bed** plate locating rod 4, an upright column 7, a **bed** plate 3, a **bed** plate connecting rod 8, a handrail 6, and a **backrest** 5. The beam 2 is arranged between the two shaped frames 1 of the movable chair. One **bed** plate locating rod 4 which is parallel to the beam is arranged on the beam 2. The beam 2 is provided with upright columns 7 which are positioned in the same distance. The spaces between the upright columns 7 are provided with the **bed**

plates 3. The spaces between the upright columns are further provided with backrests 5. A **bed** plate reinforcing rib 11 is arranged at the bottom of the **bed** plate 3. The **bed** plate 3 is **articulated** with the upright column 7 or the shaped frame 1 through the **bed** plate connecting rod 8, a **bed** plate pin roll 10, and a **bed** plate torsional spring 9. A handrail torsional spring 14 is arranged at the bottom of the handrail 6, and the handrail 6 is **articulated** with the upright column 7 or the shaped frame 1 through the handrail pin roll 13 and the handrail torsional spring 12. The utility model has the advantages of that the goods are convenient to be put and taken under the chair and, and the cleaning can be conducted easily by the cleaners.

PN - [CN2596863Y](#) Y 20040107

TI - Movable chair

97/104 © EPODOC / EPO

AB - A **bed** folding back device relates to the folding **bed** back device with an adjustable tilt angle. The utility model consists of a back board (1), a support rod (2) and a regulating rod (3); the left end of the support rod (2) is provided with a stay fork (2-3), the middle part of the support rod (2) is provided with a hole (2-1), the interior of the hole (2-1) is provided with a shaft (2-2), the left middle part of the regulating rod (3) is provided with a jagged edge (3-1), the right end of the support rod (2) is **articulated** with the left surface of the back board (1), the right end of the regulating rod (3) is **articulated** with the left surface of the back board (1), the left end of the regulating rod (2) penetrates the hole (2-1) of the support rod (2), and the shaft (2-2) is locked between the adjacent two teeth of the jagged edge (3-1). The utility model has convenient movement and small occupy space, when not in use, the utility model does not occupy the space on the **bed**, furthermore, the tilt angle of the back board (1) can be regulated easily, people can feel more comfortable, and the utility model has simple structure and low cost.

PN - [CN2544613Y](#) Y 20030416

TI - Folding **backrest** device for **bed**

98/104 © EPODOC / EPO

AB - The utility model discloses a multipurpose electric lifting **bed**, comprising a bedstead and a flexible mattress board arranged on the bedstead. The **backrest** section of the head of the flexible mattress board and the supine section of the middle part of the flexible mattress board section are **articulated** structure. The **backrest** section of the head of the flexible mattress board is driven by an elevating feed mechanism which is arranged under the bedstead. A fixed rotary axis of the elevating feed mechanism is horizontally arranged on both sides of the bedstead which is under the **backrest** section of the head of the flexible mattress board; two ends of the fixed rotary axis are vertically and fixedly connected with a long supporting arm and the other end of the long supporting arm is provided with a pulley which is connected with the **backrest** section of the head of the flexible mattress board and is capable of sliding on the **backrest** section of the head of the flexible mattress; the middle part of the fixed rotary axis is horizontally and fixedly connected with a short supporting arm and the other end of the freely movable joint is connected with an impellent tube; the other end of the impellent tube which stretches towards the bedstead, is provided with fixing nuts and the fixing nuts match with the screw rod which is arranged on the motor output end at the end of the bedstead. The utility model has a simple structure, convenient and

practical use and low manufacturing cost, and is able to control the angles variation of the **backrest** board freely.

PN - [CN2502682Y](#) Y 20020731

TI - Multipurpose electric lifting **bed**

99/104 © EPODOC / EPO

AB - The utility model provides a folding sofa **bed**, comprising a base frame, a front base frame **articulated** with the base frame, and a **backrest** frame. The utility model is characterized in that the **backrest** frame is **articulated** with the base frame through a multi-angle location hinge, and strong blocks are arranged respectively on the two sides of the multi-angle location hinge arranged on the **backrest** frame and the base frame. The utility model has the advantages of comfort, using convenience and multiple functions.

PN - [CN2519628Y](#) Y 20021106

TI - Foldable couch changeable to **bed**

100/104 © EPODOC / EPO

AB - The utility model relates to an adjusting device for the **backrest** rack inclination of sofa **bed**, which comprises a buckling mechanism and an adjusting component. The buckling mechanism is provided with a fixed rod arranged fixedly at an inner side of the foot rest, separate first and second swinging arms whose one end is **articulated** at the fixed rod and can rotate forwards and backwards, and a connecting rod. The adjusting component is **articulated** at the connecting rod of the buckling mechanism, and is provided with an adjusting rod which can swing relatively to the connecting rod, a positioning block which is **articulated** at the adjusting rod and can snap up deeply the positioning slot in a detachable manner, and an extension spring. Compared with the prior art, the utility model has the advantages of changing the sofa **bed** into a sofa chair or a **bed**, but also having function of multistage adjustment so as to make full use of the space.

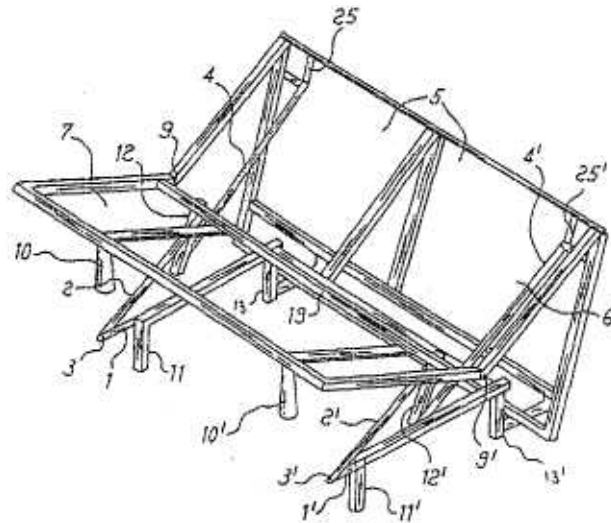
PN - [CN2468378Y](#) Y 20020102

TI - Means for adjusting tilt degree of back of sofa **bed**

101/104 © EPODOC / EPO

AB

- A **backrest** section (6) runs parallel to the rear section (5) when the sofa is fully assembled. The **backrest** section is connected to both the rear and seat sections (5, 7) by **articulated** joints. At least one pair of levers (1) are used to operate two **articulated** joints (9) for converting the sofa into a **bed**. The levers are linked to a fixed structure (11) in the sofa frame by **articulated** joints.



PN

- [CH692236](#) A5 20020415

TI

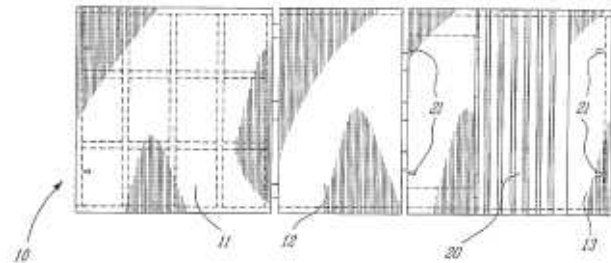
- Sofa=**bed**

102/104

© EPODOC / EPO

AB

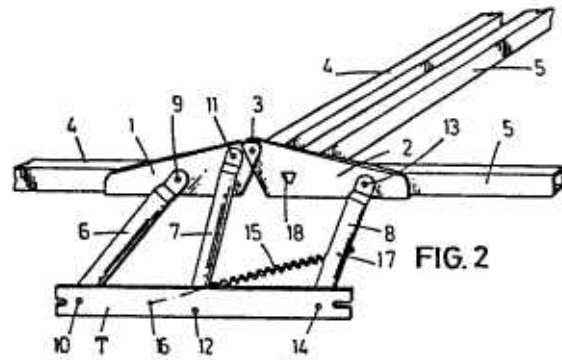
- An **articulated bed** convertible to a chair position is described. The bed comprises a mattress formed by a **backrest** section, a seat rest section and a leg rest section. The mattress **backrest** section and seat rest section are secured to a support frame. **Articulating** linkages are secured to the frame to **articulate** the sections. The support frame is elevated from a floor surface by a frame assembly having legs or casters to engage, with a floor surface. The leg rest section of the mattress is secured to a retractable support frame. The mattress has at least a compressible section formed of compressible material. Compressible interconnecting members compress the compressible material to shorten the length of the compressible section. The compressible material is restrained as it is compressed and decompressed when the support frames are displaced from a horizontal position to an **articulated** chair position.



PN - [CA2431805](#) A1 20041211
 TI - MATTRESS LEG REST SECTION FOR
 AN **ARTICULABLE BED**
 CONVERTIBLE TO A CHAIR
 POSITION

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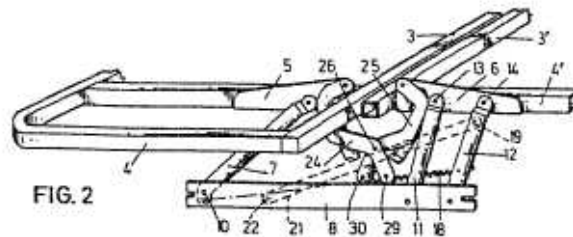
AB - The **articulated** mechanism for a **bed**-settee uses two angle irons (1,2) connected by a pin-joint (3) to mount sub-frames (4,5) for the back-rest and the seat respectively. Three pin-jointed straps (6-8) connect the angle iron to a chassis cross-member (T) and a return spring (15) holds the assembly in the settee configuration. - The spring may extend between the cross member and the forward strap and the angle iron associated with the **backrest** frame may incorporate a stop (18) which defines the position of a central strap when the assembly is in the settee configuration.



PN - [BE900723](#) A1 19850201
 TI - **Articulated** joint for **bed** settee -
 uses three pin-jointed straps and
 return spring to connect two
 inter-**articulated** angle irons to
 traverse

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AB - The **articulated** mechanism controls the relationship of a **backrest** frame (1) and a seat-frame (2) incorporated in a **bed** settee, being capable of adopting stable intermediate positions. Two angle irons (5,6) associated with the respective frames are connected to a support traverse (8) by three pin-jointed straps together with two cranked pin-jointed levers in a scissor mechanism. - The lower end of each lever is tied to the



respective angle irons by additional pin-jointed straps. The curvature of the levers may be sufficient to allow longitudinal frame members (3,3') to intersect the transverse plane common to levers and straps.

- PN - [BE900722](#) A1 19850201
- TI - Internal pivot joint for **bed** settee
 - uses pin jointed straps and pair of curved levers in scissor mechanism to connect frames to traverse

[SS 6]