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Seat and/or lounge

FIELD OF THE INVENTION

5 The present invention relates to a seat and/or lounge, in particular a sun lounge.

TECHNICAL BACKGROUND

10 Seats and/or lounges, in particular sun lounges for sunbathing, are known. The problem with sunbathing can be that users of a sun lounge often stay on the seat in the sun for too long and burn their skin.

Furthermore, users of sun lounges often expose themselves to the sun to tan the skin. If a user remains in a certain position, the skin may at least be unevenly tanned.

15 This is a state of affairs that needs to be improved.

FR 2 891 123 A1 shows a seat and/or lounge.

20 DE 207 015 C shows a seat and/or lounge.

US 4 544 202 A shows a seat and/or lounge.

SUMMARY OF THE INVENTION

25 The invention is based on a seat and/or lounge with the features of claim 1.

The idea on which the present invention is based is to create a seat and/or lounge, the reclining and/or sitting surface of which can be rotated for a user in a lying or sitting
30 position about an upright vertical axis of the reclining and/or sitting surface.

According to the invention, the seat and/or lounge has at least two actuating elements, wherein the actuating elements are arranged opposite one another relative to a

longitudinal axis of the reclining and/or sitting surface, Thus, the seat and/or lounge
can be operated by a user with both hands. As a result, less force has to be applied to
each individual actuating element.

- 5 According to the invention, the drive is designed as a belt drive. A belt drive is a
particularly robust drive means that can withstand major environmental impacts, such
as water spray or sand contamination.

10 According to the invention, the belt drive has at least three belt pulleys, wherein a first
belt pulley is arranged under the reclining and/or sitting surface and a second and a
third belt pulley are arranged at least partially under the reclining and/or sitting surface.

15 It is particularly advantageous if the first belt pulley is arranged on a central longitudinal
axis of the reclining and/or sitting surface and the second and the third belt pulley are
offset in the longitudinal direction and are arranged to the right or left of the first belt
pulley.

20 This arrangement allows particularly easy accessibility for a user who is lying or sitting
on the reclining and/or sitting surface.

According to the invention, the second and/or the third belt pulley has an actuating
element.

25 It is particularly advantageous if both the second belt pulley and the third belt pulley
respectively have an actuating element. It is expedient if the actuating element of the
second and the third belt pulley are arranged symmetrically to one another with respect
to the longitudinal axis of the seat and/or lounge.

30 It is further expedient if the two actuating elements are driven in opposite directions to
one another. The drive directions of the belt pulleys relate to the perception of a user
lying or sitting on the reclining and/or sitting surface.

Accordingly, it can be provided that the first actuating element can be rotated upwards in the clockwise direction and the second actuating element can be rotated downwards in the clockwise direction.

5 From a mechanical point of view, these drive directions of the actuating element can be implemented particularly easily. Furthermore, users perceive opposite drive directions as particularly ergonomic, provided that a user actuates an actuating element with a right hand in a first direction and actuates the second actuating element with a left hand in a direction opposite to the first direction. In particular, this prevents a user from
10 slipping on the seat and/or lounge in the direction of the longitudinal axis when the drive means are actuated.

Advantageous embodiments and developments result from the further dependent claims and from the description with reference to the figures of the drawing.

15 It goes without saying that the features mentioned above and those yet to be explained below can be used not only in the combination respectively specified, but also in other combinations or on their own without departing from the scope of the present invention.

20 According to a preferred development of the invention, the actuating element is designed as a handwheel. A handwheel can be operated particularly comfortably by a user in a lying or sitting position. In addition, a handwheel can be attached in such a way that it is easily accessible to the user.

25 According to a preferred development of the invention, the support with the reclining and/or sitting surface can be assembled or disassembled without tools. It is particularly advantageous if the support can be plugged into the reclining and/or sitting surface. This ensures that a user can disassemble and transport a seat and/or lounge in a particularly
30 simple manner.

According to a preferred development of the invention, the seat and/or lounge has a cover element which protects the torso part or the drive on an underside of the torso

part from contamination. The cover element can have a recess through which the support can be inserted. Alternatively, it can be provided that the seat and/or lounge can be connected to a cover element. The lifespan of a seat and/or lounge can thus be extended, since it is protected against contamination, for example by sand or salt water.

5

According to a preferred development of the invention, the seat and/or lounge can be dismantled into several parts. This ensures that the seat is particularly easy to transport. The pack size of the seat and/or lounge is thus limited particularly effectively and the weight of individual parts is reduced.

10

The above embodiments and developments can, if appropriate, be combined with one another as desired. Further possible embodiments, developments and implementations of the invention also include combinations of features of the invention described above or below with reference to the exemplary embodiments, even if said combinations are not explicitly mentioned. In particular, the person skilled in the art will also add individual aspects as improvements or additions to the respective basic form of the present invention.

15

SUMMARY OF THE DRAWING

20

The present invention is explained in more detail below with reference to the exemplary embodiments given in the schematic figures of the drawing. In the figures:

Fig. 1 shows a plan view of a seat according to an embodiment of the invention,

25

Fig. 2 shows a sectional view of a seat according to an embodiment of the invention,

30

The accompanying figures of the drawing are intended to convey a further understanding of the embodiments of the invention. They illustrate embodiments and, in conjunction with the description, serve to explain principles and concepts of the invention. Other embodiments and many of the advantages mentioned result from the drawings. The elements of the drawings are not necessarily shown to scale with respect to one another.

In the figures of the drawing, elements, features and components that are the same, have the same function and have the same effect — unless otherwise stated — are respectively provided with the same reference signs.

- 5 The figures are described below in a coherent and comprehensive manner.

DESCRIPTION OF EXEMPLARY EMBODIMENTS

10 Fig. 1 shows a seat 10 with a reclining surface 12, a hand-operated drive 13 and with a support 22. The reclining surface 12 has a head part 102, a torso part 104 and two foot parts 106, 107.

15 The head part 102 is hidden with the torso part 104 and can be assembled or removed without tools. It can further be provided that the head part 102 can be tilted relative to the torso part 104 by means of a hinge joint. The foot parts 106, 107 are shown in Fig. 1 below the torso part 104. The foot parts 106, 107 are guided respectively in a rail of the torso part 104 and can be easily pulled out by a user, so that the user can adjust the foot parts 106, 107 to a desired length.

20 The drive 13 of the seat 10 comprises a first belt pulley 15, which is arranged centrally under the torso part 104. A second belt pulley 14 and a third belt pulley 16 are arranged at the foot and to the right and left of the first belt pulley 15. The belt pulleys 14, 15 and 16 are connected by a belt 108 and are respectively rotatably attached to the torso part 104. The belt pulleys 14 and 16 can be actuated by means of the handwheels 18, 20. If the
25 handwheels 18, 20 are actuated in opposite directions by a user (viewed from the perspective of a lying user), the reclining surface rotates relative to the vertical central axis of the reclining surface.

30 Fig. 2 shows a seat 10 according to Fig. 1 in a schematic sectional view. According to Fig. 2, the support 22 of the seat 10 comprises a seat stand 110 and a vertical support 112, on which the belt pulley 15 is fastened. A vertical axis of rotation runs through the belt pulley 15, about which the torso part 104 can be rotated by means of the drive 13. The

rotatability of the reclining surface 12 with respect to the belt pulley 15 is ensured by means of a ball bearing 116.

5 The seat stand 110 can be covered with the vertical support 112. The support 112 can be locked in a recess in the seat stand 110 and with respect to the belt pulley 15 by means of a latching means. The belt pulley 15 has a sleeve 114 on its underside. The support can be connected to the belt pulley 15 on the torso part 104 via the sleeve 114. For example, it can be provided that the reclining surface can be screwed to the sleeve 114 by a thread. Alternatively, a plugging and latching mechanism is also possible.

10

Fig. 3 shows a rotatable chair 30 with a backrest 44, a sitting surface 32 and a leg rest 46. The chair 30 also includes a support 42 which has a cross base and a vertical support. The chair 30 can be rotated by a user operating the handwheels 40 and/or 38. Due to the actuation of the handwheels 38, 40, the drive with the gearwheels 34, 35 and 36 is also set in rotation. The handwheels 38 and 40 rotate in the opposite direction of rotation.

15

Although the present invention has been fully described above on the basis of preferred exemplary embodiments, it is not restricted to these but can be modified in a variety of ways within the scope of the claims.

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List of reference numerals

	10	Seat
	12	Reclining surface
5	13	Drive
	14	Belt pulley
	15	Belt pulley
	16	Belt pulley
	18	Handwheel
10	20	Handwheel
	22	Support
	102	Head part
	104	Torso part
	106	Foot part
15	107	Foot part
	108	Belt
	110	Seat stand
	112	Support
	114	Sleeve
20	116	Ball bearing
	30	Chair
	32	Sitting surface
	33	Drive
25	34	Gear wheel
	35	Gear wheel
	36	Gear wheel
	38	Handwheel
	40	Handwheel
30	42	Support
	44	Backrest
	46	Leg rest

Patentkrav

- 1.** Ligge- og/eller siddemøbel (10) med en bærer (22), et hånddrevet drev (13; 33), der har mindst et aktiveringsorgan (18; 20), og en ligge- og/eller
5 siddeoverflade (12), hvor ligge- og/eller siddeoverfladen kan drejes i forhold til bæreren ved hjælp af aktiveringsorganet, **kendetegnet ved, at** der er tilvejebragt mindst to aktiveringsorganer, hvor aktiveringsorganerne er indrettet modsat hinanden i forhold til en længdeakse af ligge- og/eller siddeoverfladen, hvor drevet er udformet som et remdrev, hvor remdrevet har mindst tre
10 remskiver (14, 15, 16), hvor en første remskive (15) er indrettet under ligge- og/eller siddeoverfladen, og en anden og tredje remskive (14, 16) er indrettet mindst delvist under ligge- og/eller siddeoverfladen, hvor den anden og/eller den tredje remskive har et aktiveringsorgan, hvor de to aktiveringsorganer kan drives med uret eller mod uret, hvor især de to aktiveringsorganer kan drives i en
15 rotationsretning modsat hinanden.
- 2.** Ligge- og/eller siddemøbel ifølge krav 1, hvor aktiveringsorganet er udformet som et håndhjul.
- 20 **3.** Ligge- og/eller siddemøbel ifølge et af de foregående krav, hvor bæreren med ligge- og/eller siddeoverfladen kan monteres eller demonteres uden værktøj og kan især fastgøres.
- 4.** Ligge- og/eller siddemøbel ifølge et af de foregående krav, hvor ligge- og/eller
25 siddemøblet kan skilles ad i flere dele.
- 5.** Ligge- og/eller siddemøbel ifølge et af de foregående krav, hvor der er tilvejebragt et afdækningselement på en underside af ligge- og/eller siddeoverfladen, hvilket er indrettet til beskytte drevet mod tilsmudsning.

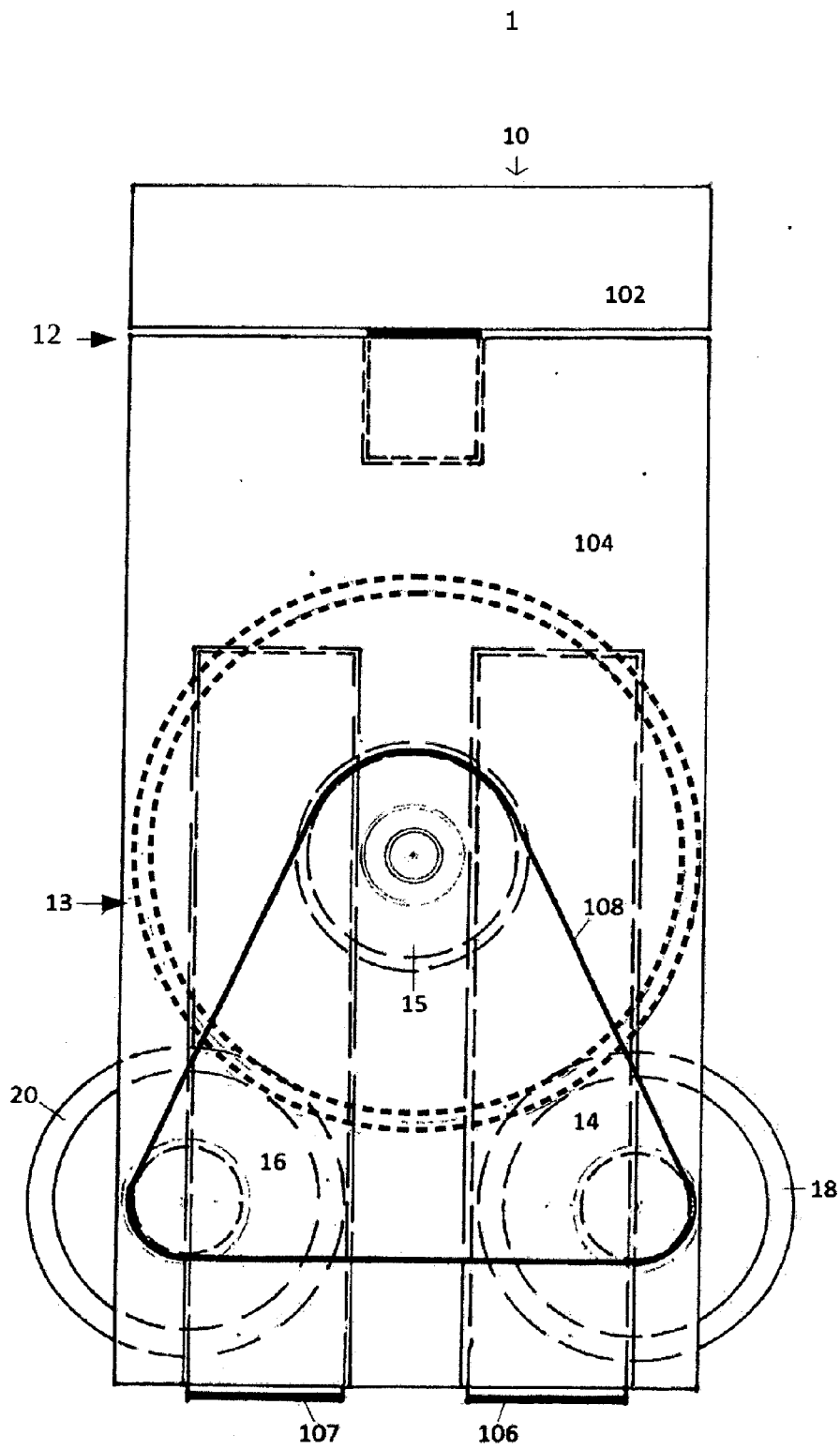


Fig. 1

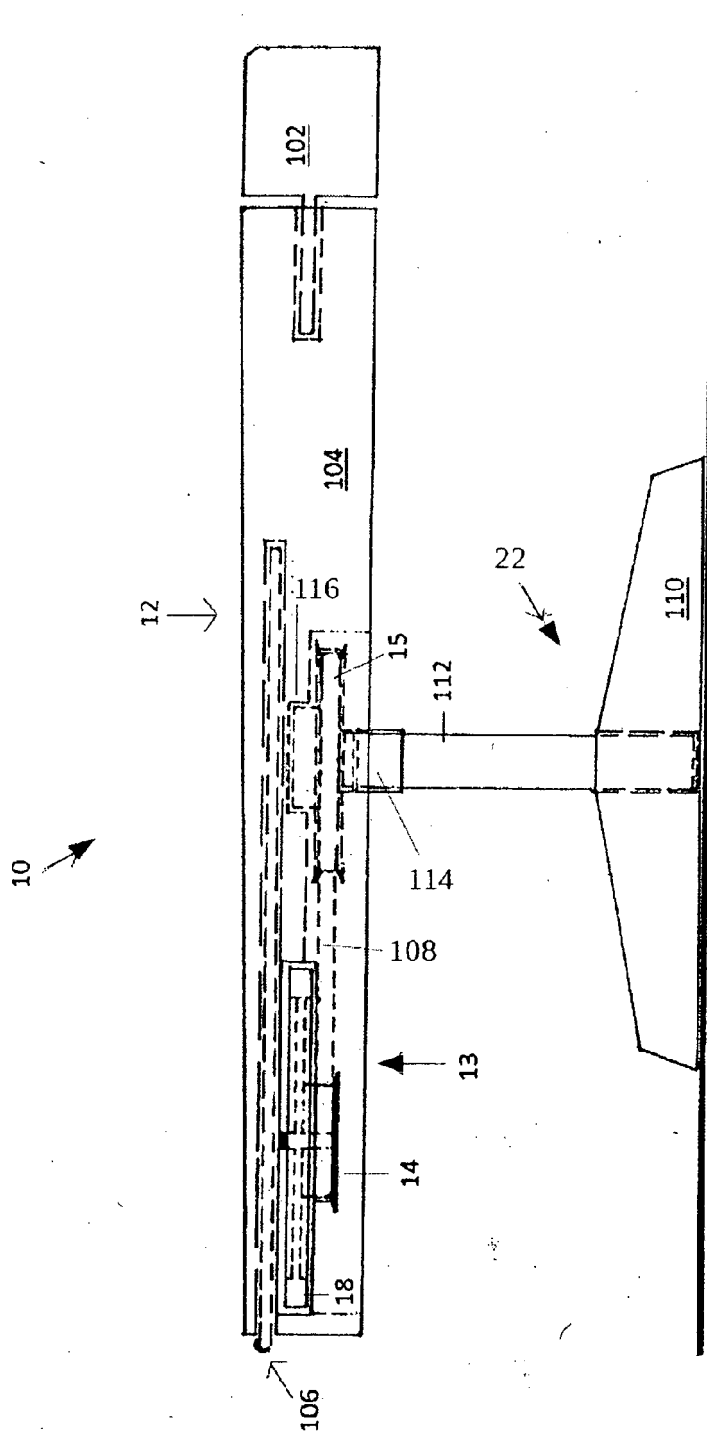
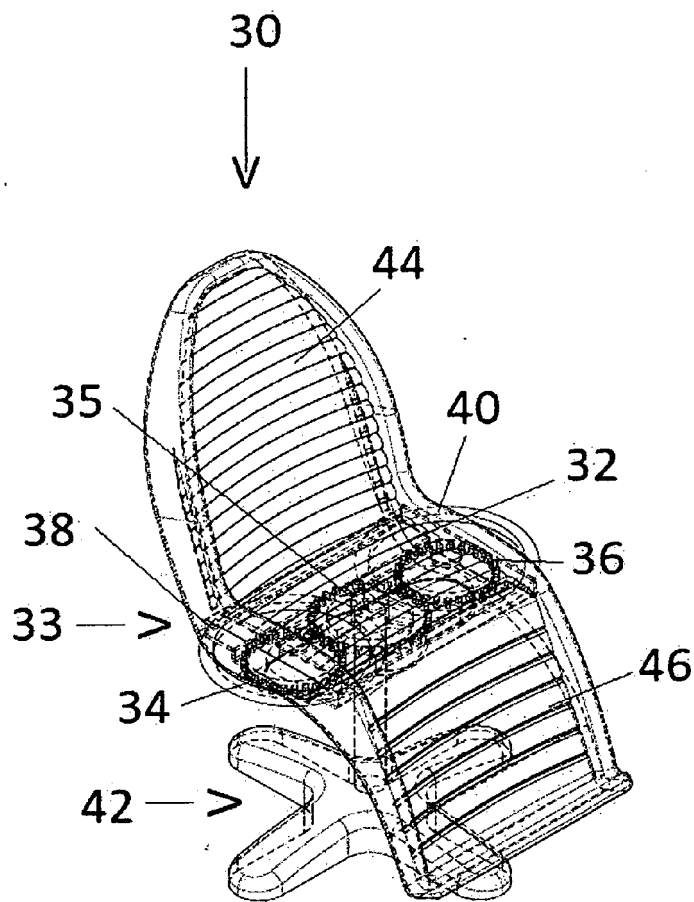


Fig. 2



Figur 3