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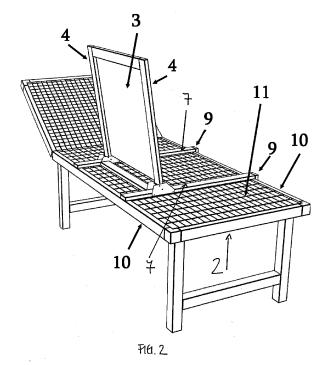
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## (54) Accessory for a sun lounger

(57) The present finding concerns an accessory for sun loungers, having a surface for lying down made from canvas or from other similar materials, of the type comprising means for supporting the back of a person and means for constraining said support means to a flat support, so as to obtain, by combining the accessory to the lounger, a seat, as well as means for supporting the back.

Such a lounger foresees, at the sides, two side members (10) arranged parallel to one another, which support the surface (11) of the aforementioned lounger.

In particular, such an accessory is characterised in that it foresees a backrest (3), supported by a pair of uprights (4), each of the lower ends of the two uprights being hinged to a bar (7), the two bars (7) being parallel to one another and being able to be arranged above the surface of the lounger (2), in a position that is transversal with respect to the longitudinal extension direction of the lounger itself,



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[0001] The present finding concerns an accessory for a sun lounger that has the lying surface made from canvas or from other similar materials, according to the general part of claim 1.

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[0002] It is known that in beaches both sun loungers and deck chairs are used, which are almost always provided by beach resorts. Both these devices are capable of carrying out a very specific function; practically, the sun lounger allows a person to lie down, whereas the deck chair allows a person to stay seated. Therefore it is obvious that they carry out functions that are complementary.

[0003] It is obvious that if a person wishes to sunbathe they will choose a lounger, since they will be able to lay out on it, even in a prone position, such an action being absolutely impossible when using a deck chair. On the other hand, when the person using the lounger desires sitting up, for example to talk with other people or to simply read a newspaper or a book, he must necessarily sit down on one side of the lounger, taking up a position that is very uncomfortable, since the user does not have the possibility of resting his back. This position, in addition to being uncomfortable, is also unnatural and if prolonged it can cause ankylosis of the limbs. In fact, the user is forced to continuously change position in the attempt to relieve the discomfort that such an unnatural position has on his body.

[0004] Vice versa, if the person uses a deck chair, he does not obviously have the possibility of completely lying down in a horizontal position and he can only get a tan the front of his body.

[0005] In order to try to avoid this lack of versatility of the two types of devices which are used on beaches, sun loungers have been devised which have, incorporated and connected to their structure, mobile parts that, if suitably positioned, make it possible for a person to rest their back; however, due to their complexity in terms of construction and operation and to their cost, which are far greater than those of conventional sun loungers, they have not actually been successful and are not found on the market. The most significant documents relating to these special loungers are: DE 2821477, DE 3243911, EP 0415893, EP 1733647, FR 1557189, FR 2683706, WO 8807827 and WO 2008041102.

[0006] Alternatively, devices that are similar to the finding described here can be used, which are not conceived however for the specific use of sun loungers for the beach, and which, similarly to the previous cases, have not achieved success in terms of sales or use, in fact, they are not on the market.

[0007] The most significant documents of the prior art are: US2002/130543, US 2736365, US 2647563, US 2247269, US 2220865 and DE 9212135.

[0008] All these documents substantially describe an accessory that is suitable for being mounted on flat and rigid supports without a back rest, so as to allow a person to sit on them resting their back, which comprises means for supporting the back of a person and means for constraining said supporting means to the support plane. In such a way, by applying said accessory to a rigid plane and constraining the support means to it through the aforementioned constraining means, it is possible to obtain at least one seating space with a seat, as well as means for supporting the back.

[0009] There is, however, a substantial difference between the devices mentioned above and the finding presented here. This difference constitutes, in our opinion, the novelty factor that the finding described in the present document possesses.

[0010] The substantial difference is that the devices described in the documents previously mentioned are not suitable for being used with sun loungers made from canvas or fabric, whereas the finding described here in fact is. Indeed, we shall now consider any object, for example a chair, an armchair or the devices according to the above, which allows a person to stay in a normal sitting position and we shall define with the term "seat" the part of these objects where the legs and the backside of the person sitting down are rested.

[0011] In the case of a chair, this part generally consists of a plane, whereas, in the case of the mentioned devices and in the finding considered here, it consists of the canvas of the lounger itself, which is, in any case, delimited by the constructive elements of the prior art.

[0012] The length of the side of the "seat", which goes from the backside of the person sitting down to their knees, is almost constant so as to adapt to the average dimensions of the human body.

[0013] Consequently, the length of the "seat" is a value that is almost constant for all chairs, armchairs and the like and the range from 35 to 55 cm can be considered reasonable.

[0014] The majority of beach sun loungers with a plane in canvas or fabric, have an average width of 70 cm, such a value being greatly longer than the average length of the seat of a chair.

[0015] All the devices described in the documents described previously make it possible to obtain a seating space with a correct seat length, or rather the typical length of a normal chair.

[0016] However, when using any one of these devices, with a sun lounger that has an average width that is greater than that of the seat of a normal chair, there is a serious drawback.

[0017] The drawback consists of the fact that the ends of the support bars of these devices, where the backrest is fixed, rest directly right in the middle of the canvas of the lounger, due to the fact that their length is that of a normal chair and therefore, as seen previously, it is substantially shorter than the average width of the sun loungers considered here.

[0018] In conclusion, when a person uses one of these devices, these ends exert a considerable pressure on the surface of the lounger, made from canvas, fabric or

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other deformable material.

**[0019]** This pressure is certainly harmful due to the fact that the ends, consisting of rigid material, damage the surface that is, on the other hand, made up of less resistant and deformable material, like for example cloth, canvas, fabric and the like.

**[0020]** The main purpose of the present finding is that of making an accessory to be used together with a sun lounger with a surface in canvas, which makes it possible to obtain one or more seating spaces and that is capable of not damaging the canvas surface of the lounger, that is simple from a constructive point of view and therefore intrinsically cost-effective, as well as extremely easy to use.

**[0021]** The purpose of avoiding the problem of damaging the canvas of the lounger is achieved ensuring that the finding described here is made in such a way as to always have a length of the constraining bars that is equal to the width of the lounger on which it must be used. In this way no end is directly in contact with the surface of the lounger, ensuring, in fact, that there is no pressure that could damage the canvas of the sun lounger.

**[0022]** Such a characteristic is obtained by adopting support bars that have the same length as the width of the lounger and by positioning the points of junction with the backrest, not at one end of such bars, like what occurs in the already mentioned findings, but in an intermediate point. In such a way two results are obtained: the first one is that of preventing ends from resting directly on the canvas surface of the sun lounger thus preventing it from being damaged, the second one is that of obtaining a seat having the correct length.

**[0023]** These and other characteristics of the finding shall now be described in detail, with reference to a particular embodiment thereof, given as an example and not for limiting purposes, with the help of the attached drawing tables, where:

- fig. 1 represents an overall axonometric view of the device according to the finding;
- figs. 2, 3 and 4 represent the accessory according to the finding, arranged on a sun lounger, in the position of use, in an intermediate position and in a lowered position, respectively.
- fig. 5 represents a side view of the accessory according to the finding in one of the possible positions of the backrest with respect to the edge of the lounger;
- figs. 6 and 7 represent the finding in a situation of use, in a perspective view and a side view, respectively:
- figs. 8 and 9 represent the same situations as figs.
   6 and 7 with the difference that, instead of the device according to the finding, there is a device of the known type;
- figs. 10 and 11 represent the same situations as figs.
   8 and 9, in resting conditions.

**[0024]** As visible in particular in figs. 6 and 7, the accessory 1 according to the finding is suitable for being applied to a sun lounger 2. In particular (fig.1) this accessory comprises a backrest 3, supported by a pair of uprights 4, that are arranged laterally. The material with which the backrest is made advantageously consists of a plastic canvas of the type similar to that with which the surface of the lounger is made, even though it is possible to make the backrest with a different type of material.

[0025] Each of the lower ends 5 of the two uprights 4 is hinged to a pair of brackets 6, arranged in a parallel manner surrounding said ends like a sandwich. The brackets are in turn fixed in a fixedly attached manner to the bars 7, which are positioned in turn above the surface of the lounger, in a position that is transversal with respect to the longitudinal extension direction of the lounger itself. At one end said bars are connected to one another through a cross-piece 8 whereas, at the other end, both bars have an element 9 that is hook-shaped, which is suitable for hooking onto one of the side members 10 (fig. 2) present in the lounger, which support the surface 11 of the sun lounger.

[0026] As visible in fig.2, when the two uprights 4 are in a lifted position a seating space is formed on the lounger, with the backrest made up of the surface 3 and with the seat made up of a portion of the surface of the lounger itself. Vice versa, when the user no longer needs the accessory according to the finding, he only needs to fold the two uprights 4 and the surface 3 supported by them (see figs. 3 and 4) downwards, until this structure is substantially placed in contact with the surface of the lounger. Of course, when the user no longer intends to use the accessory, he will simply take off the hook-shaped structures 9 from the side members 10 of the lounger, thus being able to free the lounger from the accessory according to the finding. Means for locking the uprights 4 in the lifted position according to fig.2 are also foreseen, so as to allow such a position (sitting position) to become stable when the device is actually used. Such means can be made up of projections present at the inner surface of the two pairs of brackets 6, which interfere with the surface of the uprights when they are in the lifted position of fig. 2. We shall now analyse, with the aid of the figures, the substantial differences between the device according to the finding and the devices of the known type.

[0027] From figure 6 and, partially from figure 7, it can be clearly understood how by using the device according to the finding, there is no point of contact between the ends 12 of the support structure, made up of the bars 7 and the canvas 11 that constitutes the surface of the lounger. *Vice versa*, by observing known types of structures (see figures 8, 9, 10 and 11), it is possible to understand how the ends 13 (visible in figures 10 and 11 and hidden by the deformed canvas in figures 8 and 9), which are seats for the joints of the support structure of the backrest (in particular the side bars) and of the constraint means, constitute points of contact with the canvas surface of the sun lounger, which can thus undergo

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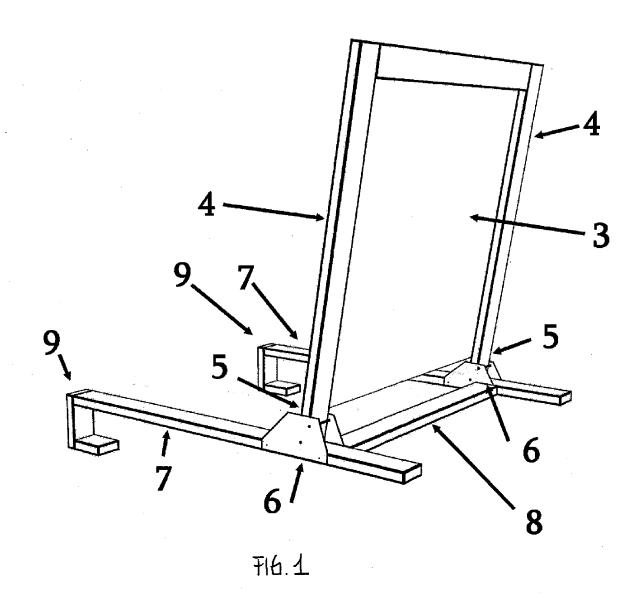
deformation and become damaged. It is also worth considering that, in the case of know types of devices, there is also a rubbing between the rear ends 13 (see figs. 8, 9, 10 and 11) and the surface of the canvas 11, i.e. over time, this can lead to damage of some portions of the canvas, and it can also cause it to break. Such a fact leads to the practical necessity of having to replace or mend the surface of the lounger and this makes the use of this accessory for sun loungers impractical.

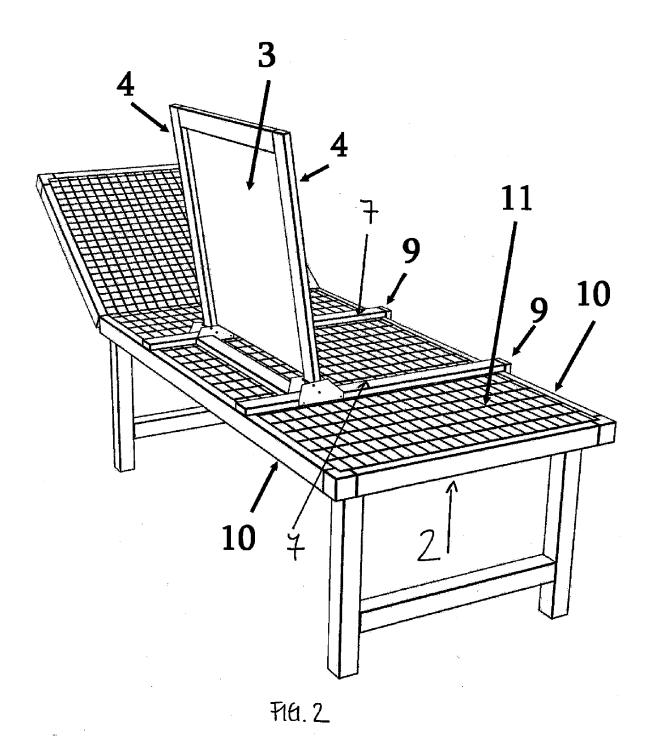
**[0028]** Vice versa, the device according to the finding does not have this serious functional drawback since there is no contact between the ends of the support structures of the backrest and the surface of the lounger. Moreover, the device according to the finding is extremely simple from the constructive and functional point of view, therefore, it is indeed possible to confirm that the purposes previously highlighted have been fully achieved.

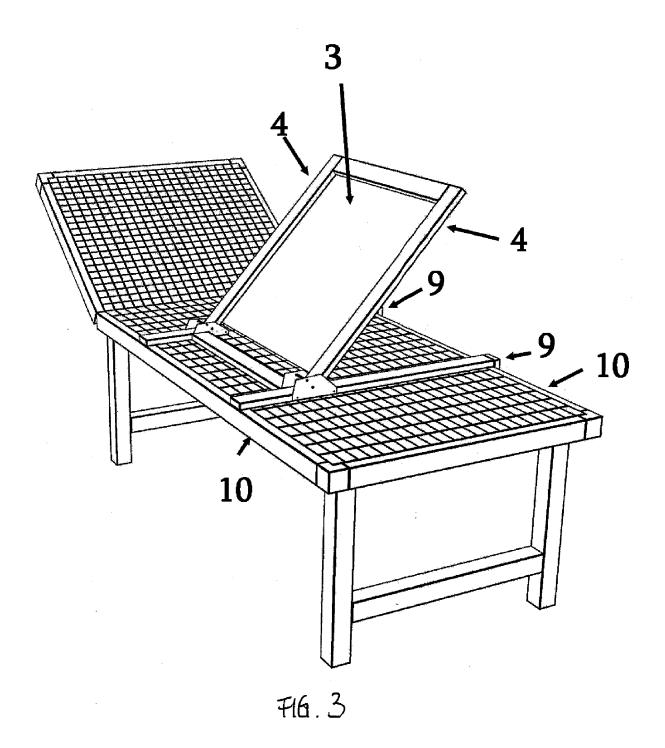
Claims

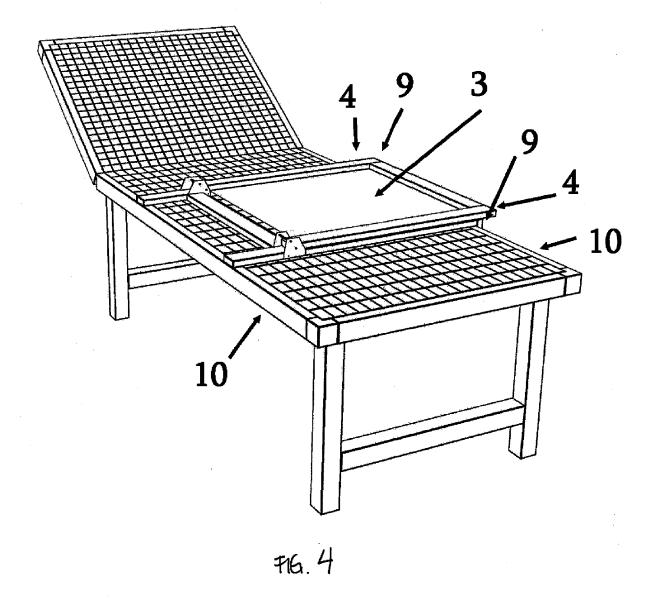
- 1. ACCESSORY FOR A SUN LOUNGER, having the surface for lying down made from canvas or from other similar material, of the type comprising means for supporting the back of a person and constraint means for constraining said support means to a flat support, so as to obtain, by combining the accessory to the lounger, a seat, as well as means for supporting the back, said accessory being characterised in that it foresees a backrest (3), supported by a pair of uprights (4), arranged laterally, each of the lower ends (5) of the two uprights being hinged to a bar (7), the two bars (7) being parallel to one another and being able to be arranged above the surface of the lounger (2), in a position that is transversal with respect to the longitudinal extension direction of the lounger itself, the two bars being connected to one another by means of a cross-piece (8), both the bars having a hook-shaped element (9), suitable for hooking onto one of the side members (10) present in the lounger, which support the surface (11) of the sun lounger, being foreseen means for locking the uprights (4) in a lifted position so as to allow the stable positioning in such a position (sitting position) when the device is effectively used, being foreseen that the length of the bars (7) is such that the ends thereof, without the hook-shaped structures (9), once the accessory has been arranged above the lounger correctly, rest exactly on the side member (10) opposite that at which there is the hooking between the bars (7) and the opposite side member (10).
- 2. ACCESSORY, according to claim 1, characterised in that it foresees that the lower ends (5) of the two uprights (4) are hinged to a pair of brackets (6), arranged parallel to one another, which surround said ends like a sandwich, said brackets being in turn fixed in a fixedly attached manner to the bars (7).

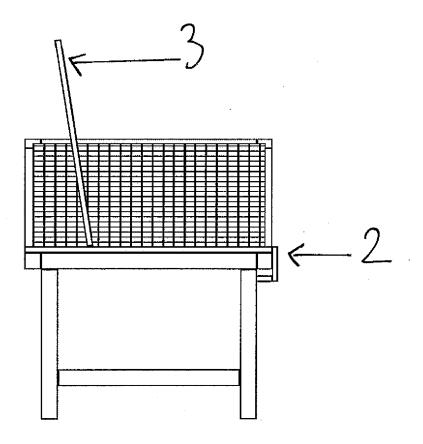
- 3. ACCESSORY, according to claim 2, characterised in that it foresees projections on the inner surface of the two pairs of brackets (6), which are subject to interfering with the surface of the uprights (4) when they are in the lifted position, thus determining the stable positioning in the lifted condition of the uprights onto the bars (7).
- 4. ACCESSORY, according to claim 1, characterised in that the backrest (3) is made from the same material that constitutes the surface of the lounger to which the accessory is applied.



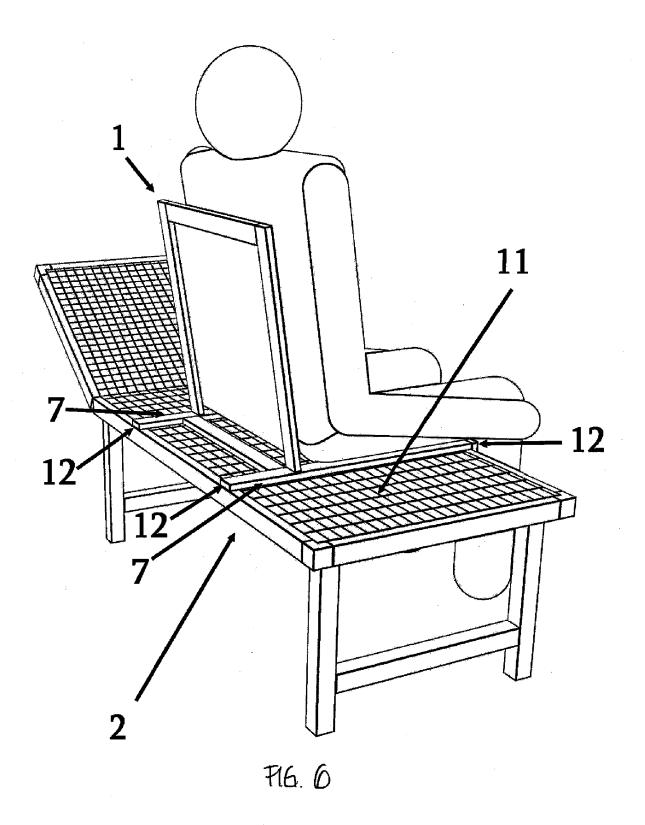


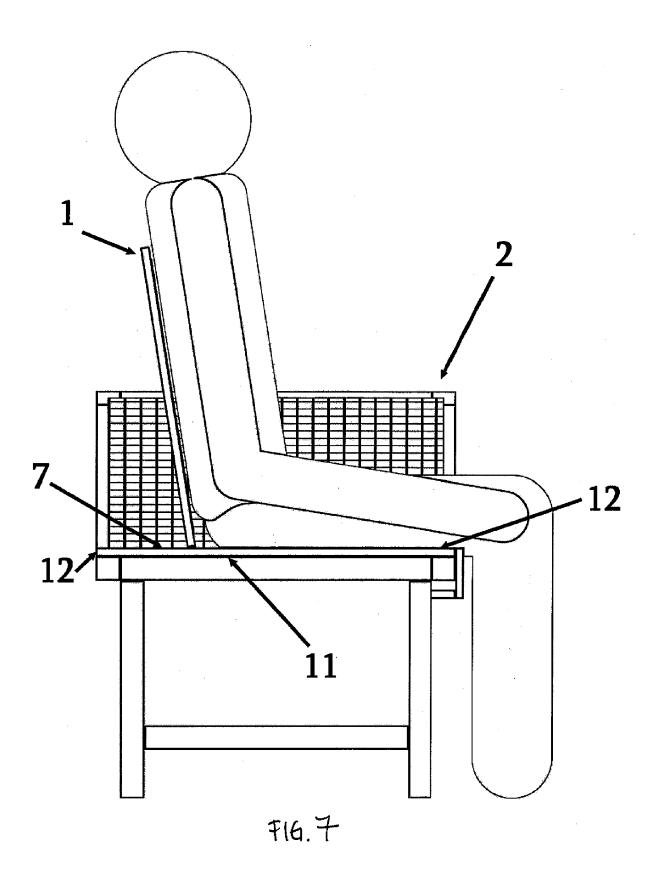


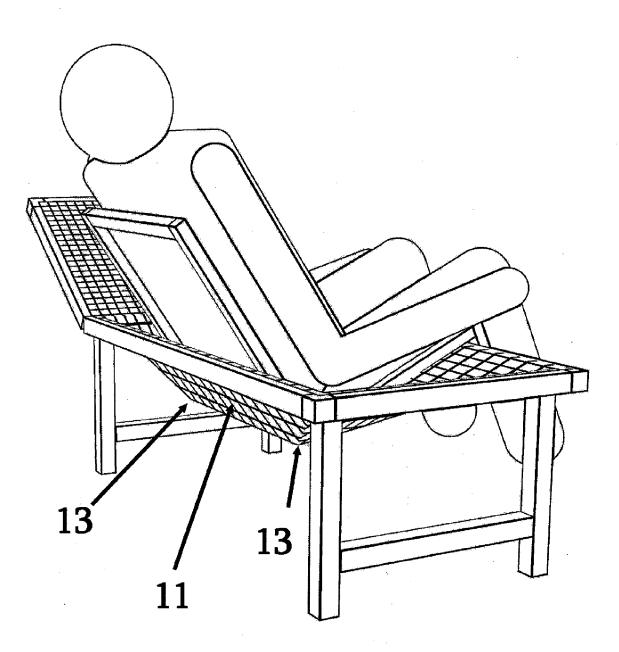




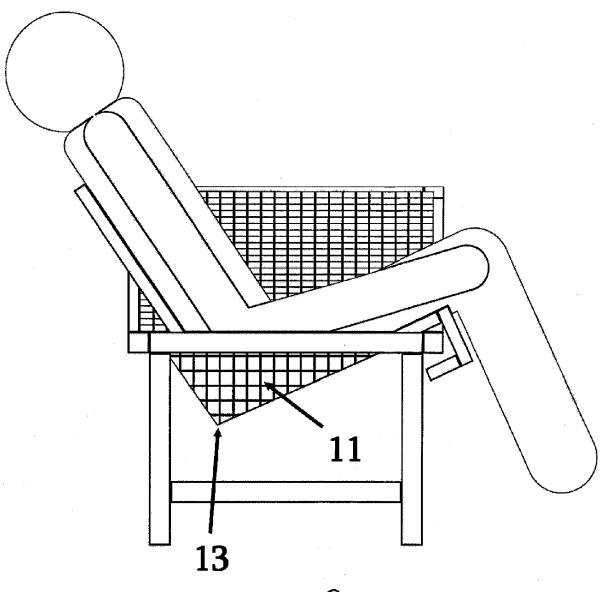
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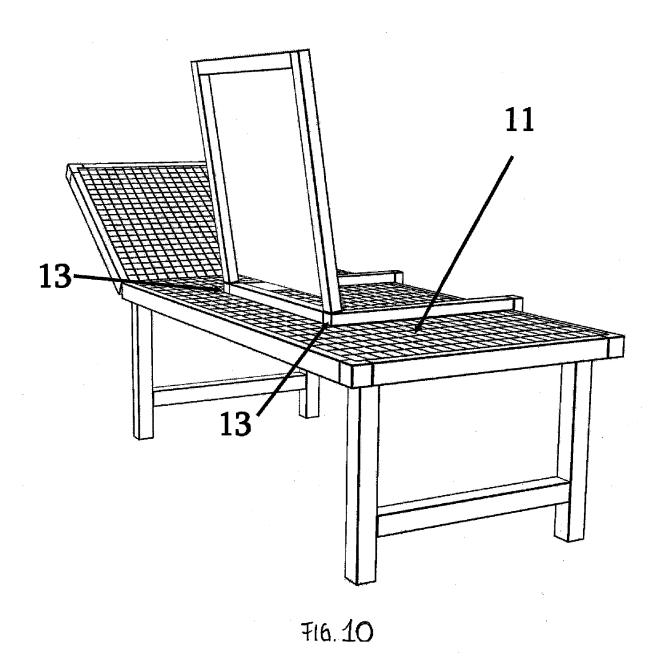


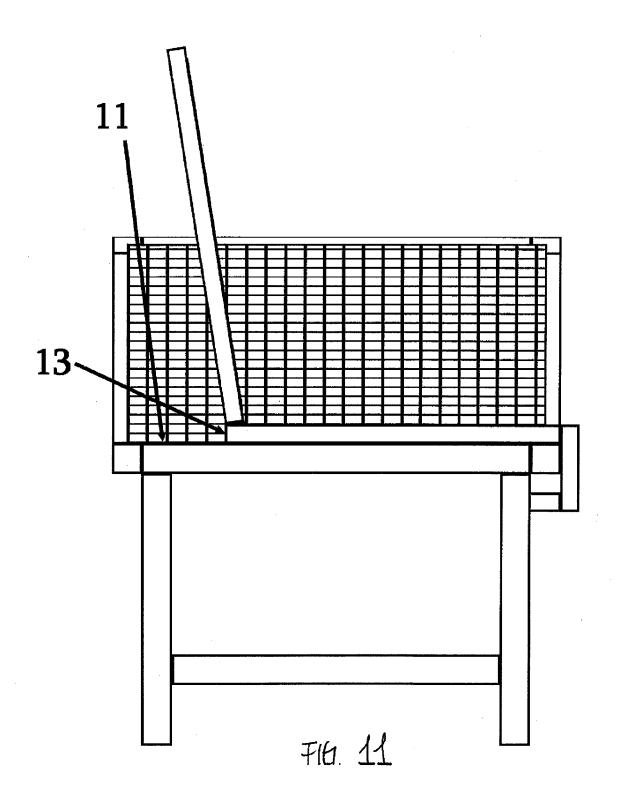


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## **EUROPEAN SEARCH REPORT**

Application Number EP 13 15 8901

	DOCUMENTS CONSIDE	RED TO BE RELEVANT		
ategory	Citation of document with inc of relevant passaç		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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	The present search report has be			
	Place of search  Munich	Date of completion of the search 17 April 2013		ammer, Frank
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another iment of the same category inclogical background written disclosure mediate document	T : theory or prin E : earlier patent after the filing er D : document cit L : document cit	Inciple underlying the interpretation to the comment, but published the comment of the comment o	nvention shed on, or

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## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 13 15 8901

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

17-04-2013

	d in search report		date		member(s)	date
US	2647563	Α	04-08-1953	NONE		
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### REFERENCES CITED IN THE DESCRIPTION

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