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(54) MOTORIZED BED AND METHOD OF FORMING THE MOTORIZED BED

MOTORISIERTES BETT UND VERFAHREN ZUR HERSTELLUNG DES MOTORISIERTEN BETTS

LIT MOTORISÉ ET PROCÉDÉ DE FORMATION DU LIT MOTORISÉ

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Description

Background of the invention

[0001] The invention relates to a motorized bed and a method of forming the motorized bed. Document DE 20 2011 052353 U1 discloses a mattress that can be swivelled by a motor.

Brief description of the invention

[0002] A motorized bed consists of a self-supporting frame structure, supported by which a pivoted slat bottom raised and lowered by a motor is fixed. On the slat bottom, a mattress is placed on top of which a mattress pad is placed. The mattress comprises at least one spring assembly. Advantageously a spring assembly is used, which consists of so-called module springing in which the springing may be selected/changed zone-by-zone along the length of the frame mattress bed. The frame of a frame mattress bed is provided with screw-on legs, for example. The motor or motors adjust the height or tilting position of the movable slat bottom through a mechanism.

[0003] The bed is equipped with an adjustable elastic bottom whose stiffness and consequently elasticity may advantageously be linearly adjusted according to the sleeper and the length of the frame mattress bed. The elastic bottom is advantageously formed of a slat bottom the elasticity of which may be adjusted.

[0004] At least one separate slat is used in connection with the actual bottom slat. The location of the connection points of the separate slat in relation to a second, so-called fixed slat, that is, the actual bottom slat, is adjustable and so the spring leaf type of elasticity of the set of slats may be adjusted. A slat therefore comprises a second slat in connection with it, the fastening position or connection position in relation to the actual bottom slat is adjustable. This adjustment takes place by means of a sleeve member, advantageously two sleeve members, which sleeve member may be freely moved along the length of the slats, the sleeve member thus determining the combined elasticity of the interconnected slats.

[0005] The slats are set to a suitable level of elasticity in relation to each other, and so a stiffer structure, for example, is accomplished at a particular location along the length of the frame mattress bed.

[0006] It is an aim of this application aims to further improve sleep comfort. For elasticity adjustment, the application discloses, in addition to the sleeve members, a covering, that is, a strip or stiffening part to be locked to the slats, which at the same time locks the slats within its scope to each other and further stiffens the structure and slat bottom for their part and at their location.

[0007] It is suggested that a plastic band, felt, fabric or cotton wool be used as the strip or stiffening part, comprising according to the invention on its surface an adhesive glue coating. The other side of the strip according to the invention also comprises a layer of adhesive glue. The strip is pressed against a plurality of slats. In such a case, it locks the slats to each other and stiffens the spot in question in the area of the slats in question. The sleeves may be located under the strip. Since there is a layer of glue on both sides of the strip, one layer of glue attaches the mattress to a desired position in relation to the slats, and the second one keeps the mattress in place.

[0008] The strip may be also be fixed to the slats mechanically, advantageously by rivets or screws. The strip is advantageously of a nonwoven fabric, fabric, plastic, or cotton wool, with the thickness advantageously in the region from 1 mm to 40 mm.

[0009] The shape of the strip is chosen on the basis of a sleeper's pressure profile on the surface of the mattress, so according to a surface pressure chart. The pressure profile is acquired by measuring it on a measuring mattress. The greatest stiffness is placed in the spots where the lowest surface pressure from a person's body falls on the surface of the mattress. The strip is advantageously an inelastic and flexible structural part. When the strip is inelastic, it stiffens the slat bottom at the spots where it detachably connects to the slats. When the strip is flexible, it may be fastened between different slat bottom portions in the slat bottom, where the direction of the slat changes.

[0010] The motorized bed and method according to the invention are characterised by what is disclosed in the independent claims.

Brief description of the figures

[0011] In the following, the invention will be described with reference to preferred embodiments of the invention shown in the accompanying drawings without, however, exclusively restricting it to them.

Figure 1A shows a motorized bed and mattress in a raised position of the slat bottom.

Figure 1B shows a motorized bed with a mattress removed from the top of the slat bottom.

Figure 1C illustrates a raising mechanism of the slat bottom.

Figure 1D shows a motorized bed from an end.

Figure 1E shows a slat bottom of a motorized bed, which comprises an adjustable springing.

Figure 1F shows a cross-section I-I of Figure 1D.

Figure 2A shows a fastening arrangement of two slats to an inner side surface of the body or the frame of the bed. The view is from below the sets of slats.

Figure 2B shows a slat solution, where the mutual support of the slats to each other may be adjusted by moving the sleeve members. The view is also from below, as in 2A.

Figure 2C is a principled view of two slats and the sleeve member.

Figure 3 shows the solution according to the invention in which a detachable strip which locks and stiff-

ens the slats has been placed in connection with the slats.

Figure 4A shows an example not forming part of the invention of the strip separately.

Figure 4B shows an embodiment according to the invention where the strip comprises a layer of adhesive glue on both of its surfaces.

Figure 5 shows an example not forming part of the invention where the strip is fastened to the slats with rivets or screws.

Figure 6A illustrates a strip shaped according to a sleeper's pressure chart.

Figure 6B shows an embodiment of shaping the strip, where the strip has been shaped according to the pressure chart of a specific sleeper, with the sleeper's spine straight when he is sleeping.

Figure 6C shows an embodiment of the shaping of the strip.

Detailed description of the invention

[0012] Figures 1A and 1B show a motorized bed 10 axonometrically. It comprises a body, that is, a frame 12 and on top of which a mattress 11 of the frame, the height and tilting of which are adjustable by means of a motor or motors M1 and M2 and a mechanism 100 by adjusting the position of the slat bottom 13 with the motor M1 and M2, advantageously with an electric motor. On top of the mattress 11 there is a mattress pad P.

[0013] Figures 1A and 1B show an adjustment position of the position adjustment of the slat bottom.

[0014] Figure 1B show a stiffening strip 21 according to the invention on the slat bottom.

[0015] Figure 1C illustrates a moving mechanism 100 of the slat bottom.

[0016] The motor M1 rotates an axle 81, and the motor M2 axle 82, which turn support arms 91 and 92 or the moving mechanism 100. The support arm 91 connects to bottom portions 130a and 130bn of the slat bottom 13. The support arm 92 connects to a bottom portion 130d and bottom portion 130e. The bottom portions 130a and 130b are pivoted to each other. The bottom portion 130d is pivoted to the bottom portion 130c and 130e. The bottom portion 130b is pivoted to the frame 12. The bottom portion 130c is a non-moving portion and fixed to the frame 12. The support arms may be independently moved separately with the motors M1 and M2, which are advantageously electric motors.

[0017] The moving mechanism 100 is supported to the lower part of the frame 12 of the motorized bed 10 with tubular support arms T1 and T2.

[0018] Figure 1D is an end view of the motorized bed 10.

[0019] Figure 1E shows the frame 12 and slat bottom 13 of the motorized bed. The sleeves for adjusting stiffness are placed in an exemplary manner, only, at different positions along the length of a slat. The strip 21 according to the invention is placed on top of the slats.

[0020] Figure 1F shows a cross-section I-I of Figure 1D. The motor M adjusts the height position and tilting of the slat bottom 13 through the mechanism 100.

[0021] The motorized bed 10 comprises a mattress 11, a self-supporting body of the motorized bed, which is a frame-like part comprising side frame parts 12al, 12a2, 12a3, 12a4 and a slat bottom 13 consisting of slats 13a1, 13a2...13bl, 13b2... shown in Figure 1B. The legs 01, 02, 03 and 04 connect to the frame 12 and may be detachably screwed on it.

[0022] The motorized bed 10 comprises in the mattress 11 a spring assembly 15 formed with modular springs 15a1, 15a2... placed in a bag 16 and selectable zone-by-zone according to the weight/build of a sleeper. The replaceable spring assembly 15 is located within the foam plastic wall structure 17 of the mattress 11. The tick 18 surrounds the frame 15, spring assembly 17, and the foam plastic parts 17 all over. The spring assembly 15 is advantageously a structure which consists of springs 15a1, 15a2... in the bags 16 and which may be chosen zone-by-zone to suit the sleeper's build. Below the spring assembly is the slat bottom 13 the elasticity of which may be adjusted. Below the slat bottom 13 there is a free space D.

[0023] Figure 2A shows the fastening of the bottom part slats 13a1, 13a2... of the frame mattress bed by a fastening structure 20, a so-called plastic sleeve part, to the inner surface 12' of the frame structure of the side frames 12a1, 12a3 of the frame 12. The view is from below towards the slat bottom 13. The bottom 13 consists of slats 13a1, 13a2..; 13bl, 13b2...

[0024] Figures 2B and 2C show a second slat 13bn on the surface of the slat 13an, and the sleeve part/sleeve parts 14 surrounding them. The sleeve part 14 forming the adjustment mechanism may be freely slid as shown by arrows SI to the desired position along the length of the slats 13an, 13bn, whereby the desired elasticity is achieved. The figure represents an example. When the sleeves 14 are on the side of the slat, in relation to its length, the stiffest bundle of slats 13an, 13bn is obtained. When the sleeves 14 are moved towards the centre, there will be more elasticity for the bundle of slats 13an, 13bn. There are advantageously two or more sleeve parts 14 used for fixing the slat 13bn to the slat 13an. There may be a sleeve part 14 and slat 13bn in connection with all the slats 13an or just some of them. This way, different variations are achieved for linearly adjusting the stiffness for the set of slats 13al, 13bl, 13a2, 13b2, 13a3, 13b3... 13an, 13bn. The slats 13a1, 13a2...; 13b1, 13b2... are advantageously of plywood. The sleeve part 14 advantageously comprises a locking tongue 14', which by its own spring force connects the sleeve 14 to a particular position along the length of the slats 13an, 13bn (arrows SI). The sleeve 14 may also be around the slats by a press-on fit, in which case the tongue 14' is not needed. The position of the sleeves 14 determines the combined spring factor, or elasticity, of the bundle of slats. The legs may be detachably attached to the frame 12.

[0025] Figures 3, 4B, 6A, 6B, 6C show the inventive solution to further stiffen a slat bottom.

[0026] Figure 3 shows a strip 21, that is, the stiffening part, fixed to a slat bottom of a frame mattress bed. In the example not forming part of the invention of Figure 4A, the strip 21 is shown separately. The strip 21 is advantageously of felt, plastic, fabric, nonwoven fabric, or cotton wool, or a combination thereof. The basic material of the strip is inelastic. Its thickness d is advantageously in the region from 1 mm to 40 mm. The basic material layer of the strip 21 is denoted by 21a, and the layer of glue on the strip is denoted by 21b. The glue is adhesive glue. The layer 21 is pressed onto the surfaces of the slats. This way, the strip 21 locks the slats to each other and stiffens the slat bottom 13 at the spot in question.

[0027] In the embodiment disclosed in this context, the bottom slats 13a1, 13a2, 13a3,...in the structure are at the top side, and separate second slats 13b1, 13b2, 13b3 attached to them are on the bottom side, and the strip 21 is on the top side of the bottom slats 13a1, 13a2, 13a3,... and locks the desired adjacent bottom slats 13a1, 13a2, 13a3,... to each other. An embodiment is also possible where the strip 21 is on the bottom side of separate second slats 13b1, 13b2, 13b3,... and thereby locks the desired adjacent separate slats 13b1, 13b2, 13b3,... to each other. Likewise, such embodiments are possible where the bottom slats 13a1, 13a2, 13a3,...in the slat structure are on the bottom side, and separate second slats 13b1, 13b2, 13b3, ... attached to them are at the top side. The strip 21 may therefore by either on the top side of the separate slats 13b1, 13b2, 13b3,... or on the bottom side of the bottom slats 13a1, 13a2, 13a3,...

[0028] According to the invention, see Fig. 4B, the strip comprises a layer of adhesive glue 21c on its second surface, too. The surface layer in question fixes the mattress in the desired position in relation to the slats and keeps the mattress there. The layer 21b placed against the surface of the slats fixes the strip 21 to the slats, and the second top layer 21c fixes the mattress to the strip 21, whereby the mattress stays in the desired position in relation to the slats, as explained.

[0029] The adhesive glue substance is such that the locking may be released and then the locking may again be re-applied. In connection with adhesive glue, it is advantageous to use felt as the basic layer, because glue absorbs well into felt and feeds adhesive glue as surface layers for the entire time the strip is in use.

[0030] Felt feeds glue well onto the surface of the basic layer. The strip 21 may thus be removed and re-attached to the slats in the desired position. The strip 21 is cut into form in accordance with the sleeper's surface pressure profile. By means of the strip 21, surface pressures and surface pressure chart are evened out, and an even surface pressure distribution is achieved all over the sleeper's area. Therefore the strip 21 is inelastic and flexible. A straight position of the spine of the sleeper is achieved.

[0031] Figures 4A and 4B present the strip 21, as regards its basic material and basic material layer 21a, of inelastic material and structure, such as nonwoven fabric, cotton wool, fabrics, plastic, or felt. The advantage of felt is that absorbs glue well, advantageously adhesive glue. The strip 21 is attached to the slats with adhesive glue. The strip 21 in the embodiment of Figure 4B comprises layers of adhesive glue 21b and 21c on both its surfaces. In such a case, they are the top layers. An example not forming part of the invention of Figure 5 is also possible, where the strip 21 is fixed to the slats with rivets 22 or screws 23. The thickness d of the strip 21 in all the embodiments is advantageously in the region from 1 mm to 40 mm.

[0032] Figure 6A illustrates the shaping of the strip 21. The strip 21 is cut according to the measured surface pressure chart of each individual sleeper, measured with a measuring mattress. The strip 21 fixes slats to each other in particular at those spots where the sleeper's surface pressure on the mattress is at its minimum. The shape of the strip 21 is cut to have the surface pressure profile of the sleeper's surface pressure chart as even as possible and the sleeper's spine straight. The shape of the strip 21 is in the exemplary shaping of Figure 6A pointy and oval-shaped.

[0033] In Figure 6B, the shape of the strip 21 is pointy at both ends and circularly curved in the middle. Figure 6C shows a mushroom-like shape. The shape of the strip 21 is chosen sleeper-specifically according to the surface pressure chart. The accompanying shapes are presented by way of example.

[0034] A person skilled in the art will find it obvious that, as technology advances, the basic idea of the invention may be implemented in many different ways. The invention and its embodiments are thus not restricted to the above-described examples but may vary within the scope of the claims.

Claims

1. A motorized bed (10) comprising a self-supporting frame and, in connection with it, a slat bottom (13) on top of which a mattress may be adapted, and a motor (M1, M2) for moving the slat bottom (13), the slat bottom (13) comprising a plurality of first slats (13a1, 13a2, ...) and at least one second slat (13b1, 13b2, ...), wherein the second slat (13b1, 13b2, ...) is attached to one of the first slats (13a1, 13a2, ...) by means of a sleeve member (14), wherein by changing the position of the sleeve member (14) along the length of the interconnected first and second slats (13a1, 13a2, ...; 13b1, 13b2, ...) the combined elasticity of the interconnected first and second slats (13a1, 13a2, ...; 13b1, 13b2, ...) is adjusted,

   wherein the motorized bed (10) further comprises a strip (21), that is, a stiffening part which is detachably attached to a surface of the first or second slats (13a1, 13a2, ...; 13b1, 13b2, ...),

wherein the strip (21) locks the first or second slats (13a1, 13a2, ...; 13b1, 13b2, ...) to each other and adds to the stiffness of the slat bottom (13) at the spot in question,
characterised in that the strip (21) comprises a first surface on one side and a second surface on the other side, wherein both surfaces of the strip (21) comprise a layer of adhesive glue (21b, 21c), the first surface of the strip (21) comes against the surface of the first or second slats (13a1, 13a2, ...; 13b1, 13b2, ...) and the second surface of the strip (21) is configured to lock the mattress into a specific position on the first or second slats (13al, 13a2, ...; 13bl, 13b2, ...).

2. A motorized bed (10) as claimed in claim 1, **characterised in that**
the strip (21) is an inelastic and flexible structure, and its thickness (d) is advantageously in the region from 1 mm to 40 mm.

3. A motorized bed (10) as claimed in claim 1 or 2, **characterised in that**
a basic material (21a) of the strip (21) is fabric, felt, plastic, or cotton wool, and that the strip (21) is of inelastic material.

4. A motorized bed (10) as claimed in any one of the preceding claims, **characterised in that** there is a mechanical fastener, such as a rivet (22) or screw (23), with which the strip (21) is fixed to a slat.

5. A motorized bed (10) as claimed in any one of the preceding claims, **characterised in that**
the shape of the strip (21) is determined on the basis of a measured sleeper's surface pressure chart.

6. A method of forming the motorized bed of claim 1, the method comprising:

providing the self-supporting frame, the slat bottom (13) in connection with it, on top of which a mattress may be adapted, and the motor (M1, M2) to move the slat bottom (13),
attaching the second slat (13b1, 13b2,...) to the first slat (13a1, 13a2,...) of the slat bottom (13) by means of the sleeve member (14), wherein by changing the position of the sleeve member (14) along the length of the interconnected first and second slats (13a1, 13a2, ...; 13b1, 13b2, ...) the combined elasticity of the interconnected first and second slats (13a1, 13a2, ...; 13b1, 13b2, ...) is adjusted,
attaching detachably the strip (21) on top of the first or second slats (13a1, 13a2, ...; 13b1, 13b2, ...) to lock the first or second slats (13a1, 13a2, ...; 13b1, 13b2, ...) to each other and to add to the stiffness of the slat bottom (13) at the spot in question.

7. A method as claimed in claim 6 in which method a sleeper's surface pressure chart is measured and the shape of the strip (21) is determined on the basis of the measured surface pressure chart.

Patentansprüche

1. Motorisiertes Bett (10), das einen selbsttragenden Rahmen und, in Verbindung damit, einen Lattenrost (13), auf dem eine Matratze angepasst werden kann, sowie einen Motor (M1, M2) zum Bewegen des Lattenrosts (13) umfasst, wobei der Lattenrost (13) eine Vielzahl von ersten Latten (13a1, 13a2, ...) und mindestens eine zweite Latte (13b1, 13b2, ...) umfasst, wobei die zweite Latte (13b1, 13b2, ...) mit einem Hülsenelement (14) an einer der ersten Latten (13a1, 13a2, ...) befestigt ist, wobei durch Ändern der Position des Hülsenelements (14) entlang der Länge der verbundenen ersten und zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) die kombinierte Elastizität der verbundenen ersten und zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) eingestellt wird,

wobei das motorisierte Bett (10) ferner einen Streifen (21), d. h. ein Versteifungsteil, umfasst, der lösbar an einer Fläche der ersten oder der zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) befestigt ist,
wobei der Streifen (21) die ersten oder die zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) miteinander verriegelt und die Steifigkeit des Lattenrosts (13) an der betreffenden Stelle erhöht,
dadurch gekennzeichnet, dass der Streifen (21) auf einer Seite eine erste Fläche und auf der anderen Seite eine zweite Fläche umfasst, wobei beide Flächen des Streifens (21) eine Schicht Haftklebstoff (21b, 21c) umfassen, die erste Fläche des Streifens (21) auf der Fläche der ersten oder der zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) aufliegt und die zweite Fläche des Streifens (21) dazu ausgelegt ist, die Matratze in einer spezifischen Position auf den ersten oder den zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) zu verriegeln.

2. Motorisiertes Bett (10) nach Anspruch 1, **dadurch gekennzeichnet, dass**
der Streifen (21) eine unelastische und flexible Struktur ist und die Dicke (d) vorteilhafterweise im Bereich von 1 mm bis 40 mm liegt.

3. Motorisiertes Bett (10) nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass**
ein Grundmaterial (21a) des Streifens (21) Stoff, Filz, Kunststoff oder Baumwolle ist und dass der Streifen

(21) aus einem unelastischen Material besteht.

4. Motorisiertes Bett (10) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** es ein mechanisches Befestigungselement gibt, wie etwa einen Niet (22) oder eine Schraube (23), mit dem bzw. der der Streifen (21) an einer Latte angebracht ist.

5. Motorisiertes Bett (10) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Form des Streifens (21) auf Basis eines gemessenen Flächendruckdiagramms eines Schläfers bestimmt wird.

6. Verfahren zum Bilden des motorisierten Betts von Anspruch 1, wobei das Verfahren Folgendes umfasst:

Bereitstellen des selbsttragenden Rahmens, des Lattenrosts (13) in Verbindung damit, auf dem eine Matratze angepasst werden kann, sowie des Motors (M1, M2) zum Bewegen des Lattenrosts (13),
Befestigen der zweiten Latte (13b1, 13b2, ...) mit dem Hülsenelement (14) an der ersten Latte (13a1, 13a2, ...) des Lattenrosts (13), wobei durch Ändern der Position des Hülsenelements (14) entlang der Länge der verbundenen ersten und zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) die kombinierte Elastizität der verbundenen ersten und zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) eingestellt wird,
lösbares Befestigen des Streifens (21) auf den ersten oder den zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...), um die ersten oder die zweiten Latten (13a1, 13a2, ...; 13b1, 13b2, ...) miteinander zu verriegeln und die Steifigkeit des Lattenrosts (13) an der betreffenden Stelle zu erhöhen.

7. Verfahren nach Anspruch 6, wobei bei dem Verfahren ein Flächendruckdiagramm eines Schläfers gemessen und die Form des Streifens (21) auf Basis des gemessenen Flächendruckdiagramms bestimmt wird.

Revendications

1. Lit motorisé (10) comprenant un cadre autoporteur et, conjointement avec ce dernier, un sommier à lattes (13) sur le dessus duquel, un matelas peut être adapté, et un moteur (M1, M2) pour déplacer le sommier à lattes (13), le sommier à lattes (13) comprenant une pluralité de premières lattes (13a1, 13a2, ...) et au moins une seconde latte (13b1, 13b2, ...), dans lequel la seconde latte (13b1, 13b2, ...) est fixée à l'une des premières lattes (13a1, 13a2, ...) au moyen d'un élément de manchon (14), dans lequel en changeant la position de l'élément de manchon (14) le long de la longueur des premières et seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) interconnectées, l'élasticité combinée des premières et seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) interconnectées, est ajustée,

dans lequel le lit motorisé (10) comprend en outre une bande (21), c'est-à-dire une partie de renforcement, qui est fixée de manière détachable à une surface des premières ou seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...),
dans lequel la bande (21) bloque les premières ou seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) entre elles et vient s'ajouter au renforcement du sommier à lattes (13) à l'endroit en question,
caractérisé en ce que la bande (21) comprenant une première surface d'un côté et une seconde surface de l'autre côté, dans lequel :
les deux surfaces de la bande (21) comprennent une couche de colle adhésive (21b, 21c), la première surface de la bande (21) vient contre la surface des premières ou seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) et la seconde surface de la bande (21) est configurée pour bloquer le matelas dans une position spécifique sur les premières ou seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) .

2. Lit motorisé (10) selon la revendication 1, **caractérisé en ce que** :
la bande (21) est une structure non élastique et flexible, et son épaisseur (d) est avantageusement dans la région allant de 1 mm à 40 mm.

3. Lit motorisé (10) selon la revendication 1 ou 2, **caractérisé en ce que** :
un matériau de base (21a) de la bande (21) est du tissu, du feutre, du plastique ou de la laine de coton, et **en ce que** la bande (21) est réalisée avec un matériau non élastique.

4. Lit motorisé (10) selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'**il y a une fixation mécanique telle qu'un rivet (22) ou une vis (23), avec laquelle la bande (21) est fixée à une latte.

5. Lit motorisé (10) selon l'une quelconque des revendications précédentes, **caractérisé en ce que** :
la forme de la bande (21) est déterminée sur la base d'un graphique de pression de surface de dormeur mesuré.

6. Procédé pour former le lit motorisé selon la reven-

dication 1, le procédé comprenant les étapes suivantes :

prévoir le cadre autoporteur, le sommier à lattes (13) conjointement avec ce dernier, sur la partie supérieure duquel, un matelas peut être adapté, et le moteur (M1, M2) pour déplacer le sommier à lattes (13),
fixer la seconde latte (13b1, 13b2, ...) à la première latte (13a1, 13a2, ...) du sommier à lattes (13) au moyen de l'élément de manchon (14), dans lequel, en changeant la position de l'élément de manchon (14) le long de la longueur des premières et seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) interconnectées, l'élasticité combinée des premières et seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) interconnectées, est ajustée,
fixer, de manière détachable, la bande (21) sur la partie supérieure des premières ou seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) pour bloquer les premières ou seconde lattes (13a1, 13a2, ... ; 13b1, 13b2, ...) entre elles et venir s'ajouter au renforcement du sommier à lattes (13) à l'endroit en question.

7. Procédé selon la revendication 6, dans lequel procédé, un graphique de pression de surface du dormeur est mesuré et la forme de la bande (21) est déterminée sur la base du graphique de pression de surface mesuré.

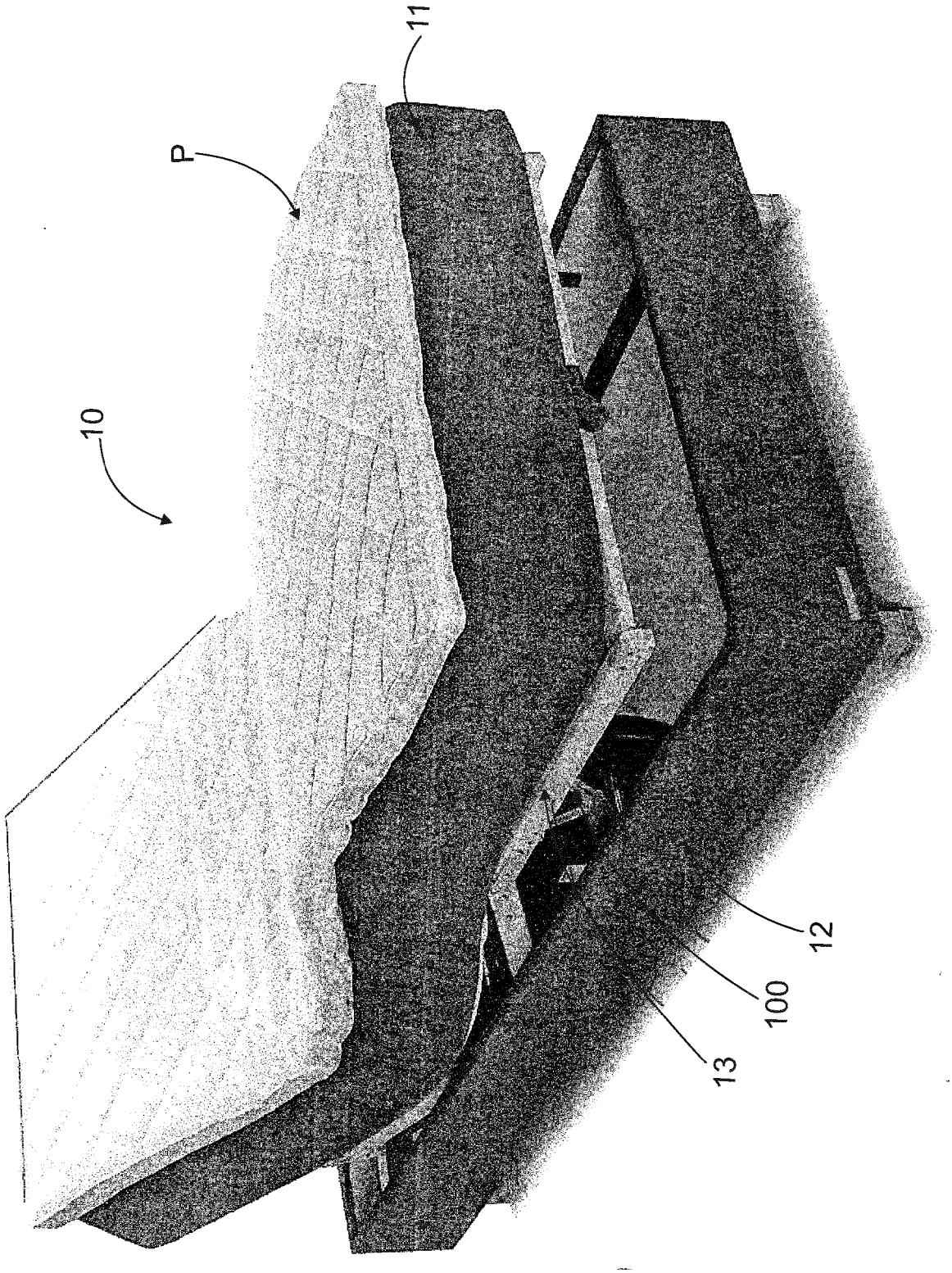


FIG 1A

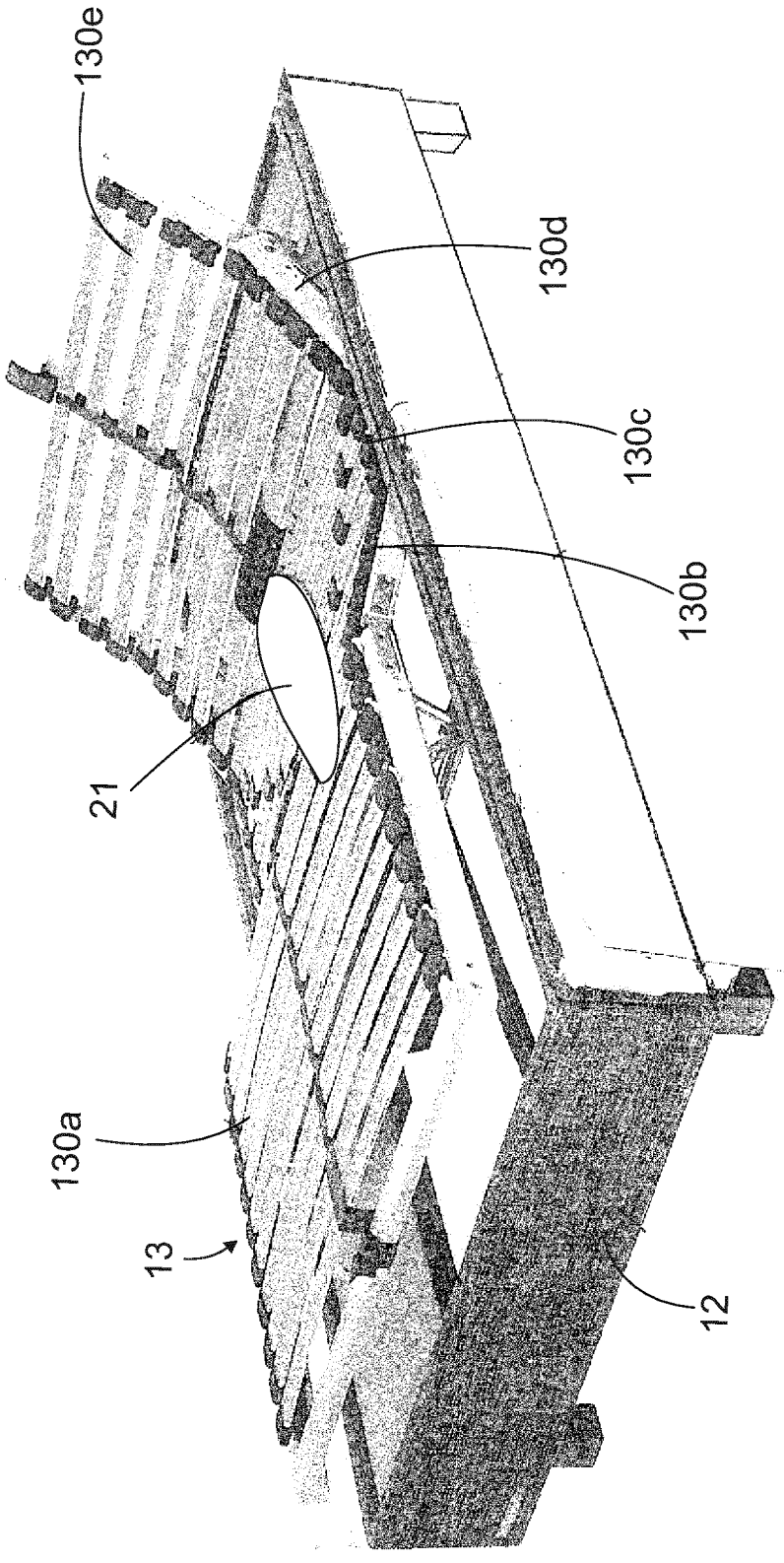


FIG 1B

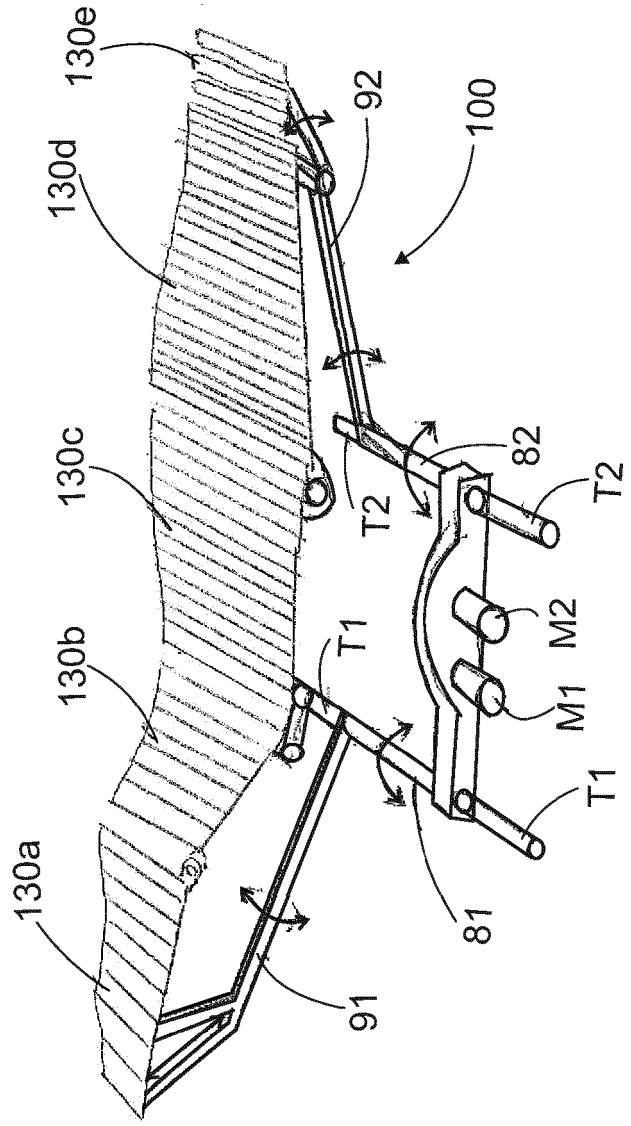


FIG 1C

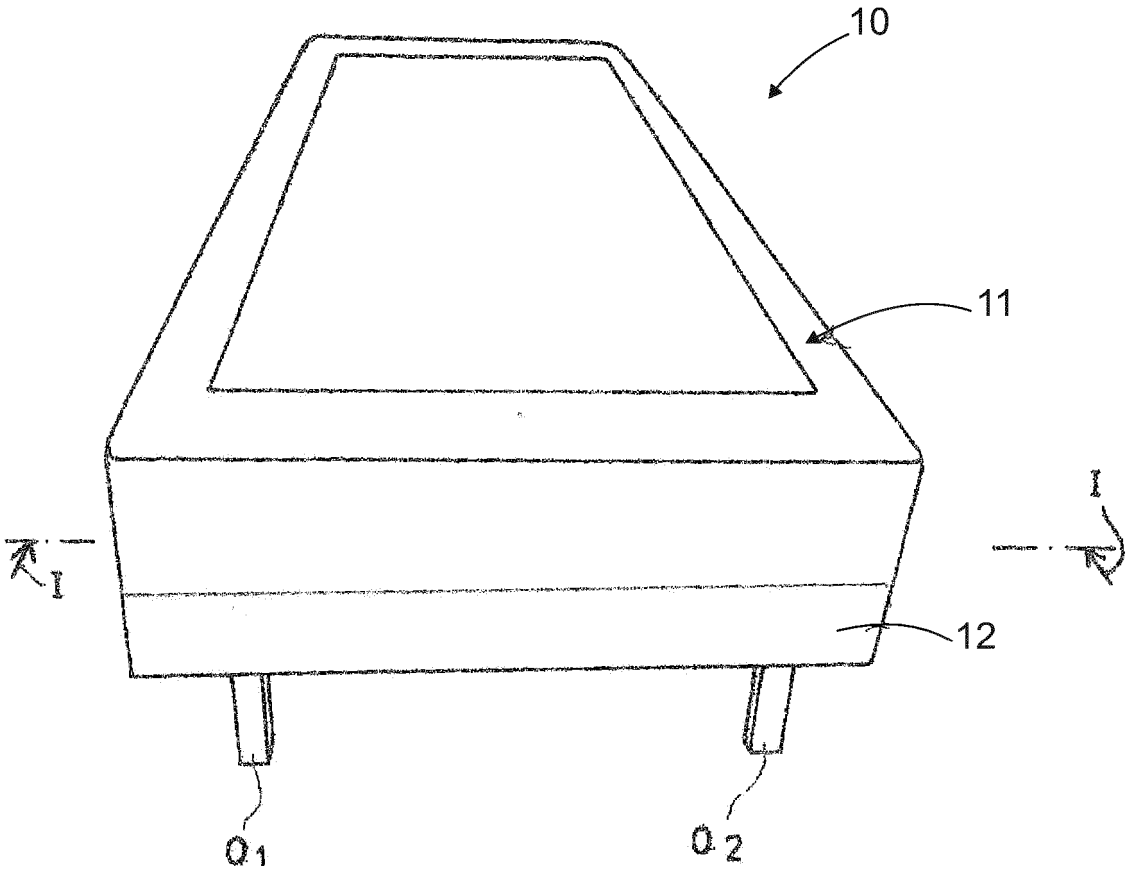


FIG 1D

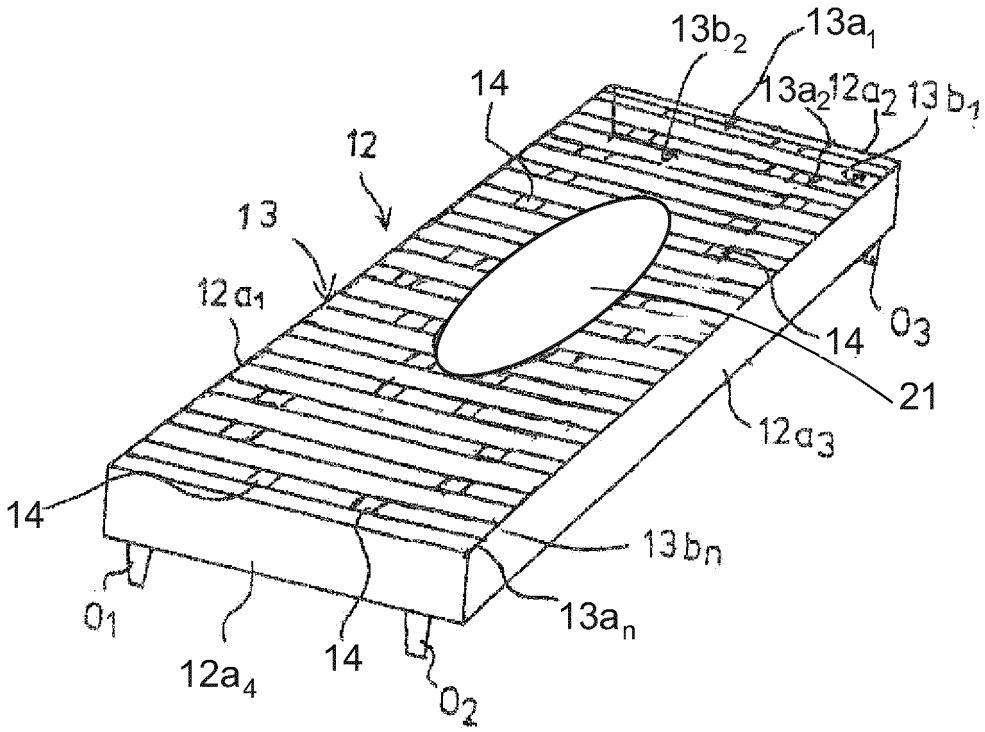

13b2
13a1
14
13a2
12a2
13b1
12
13
12a1
14
O3
21
12a3
14
13bn
13an
O1
12a4
14
O2

FIG 1E

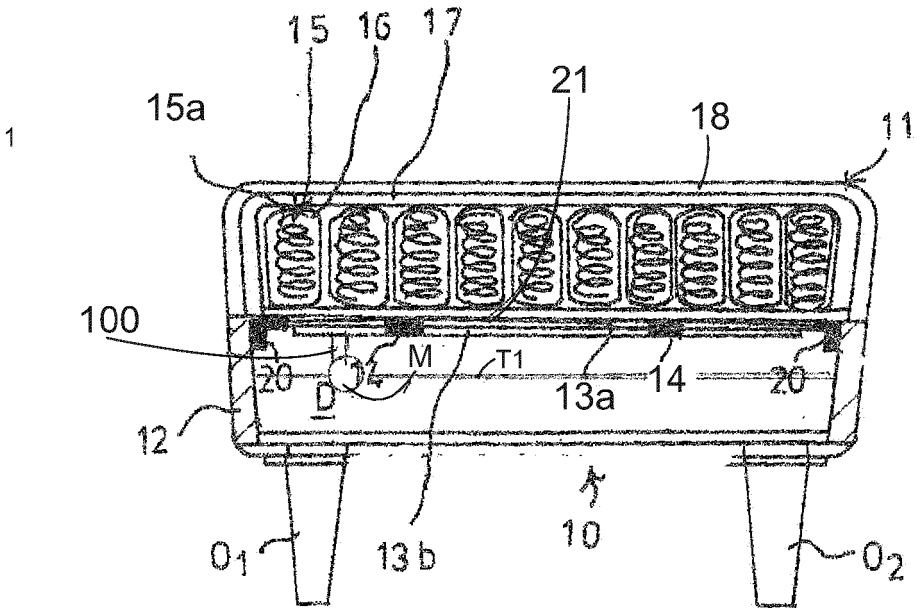


FIG 1F

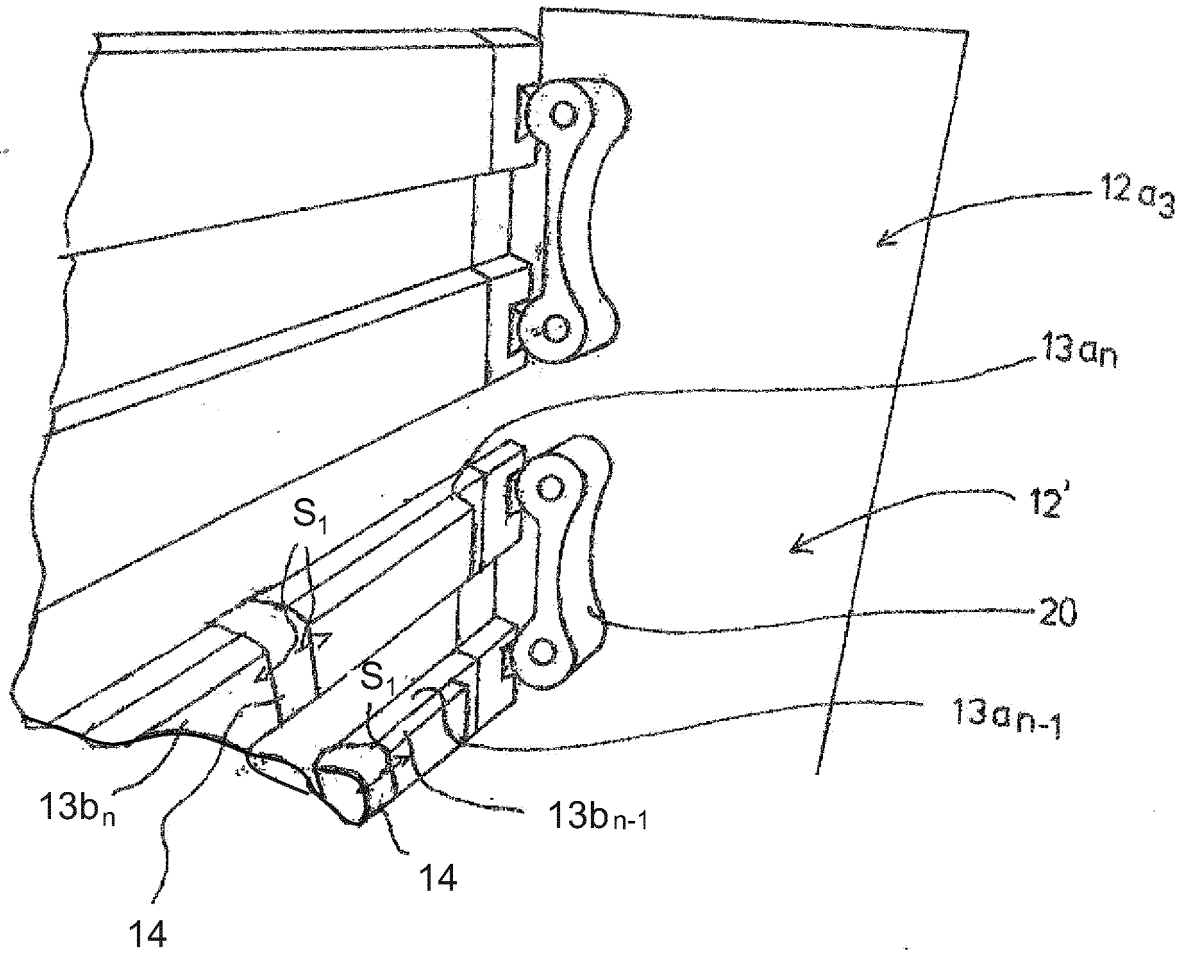


FIG 2A

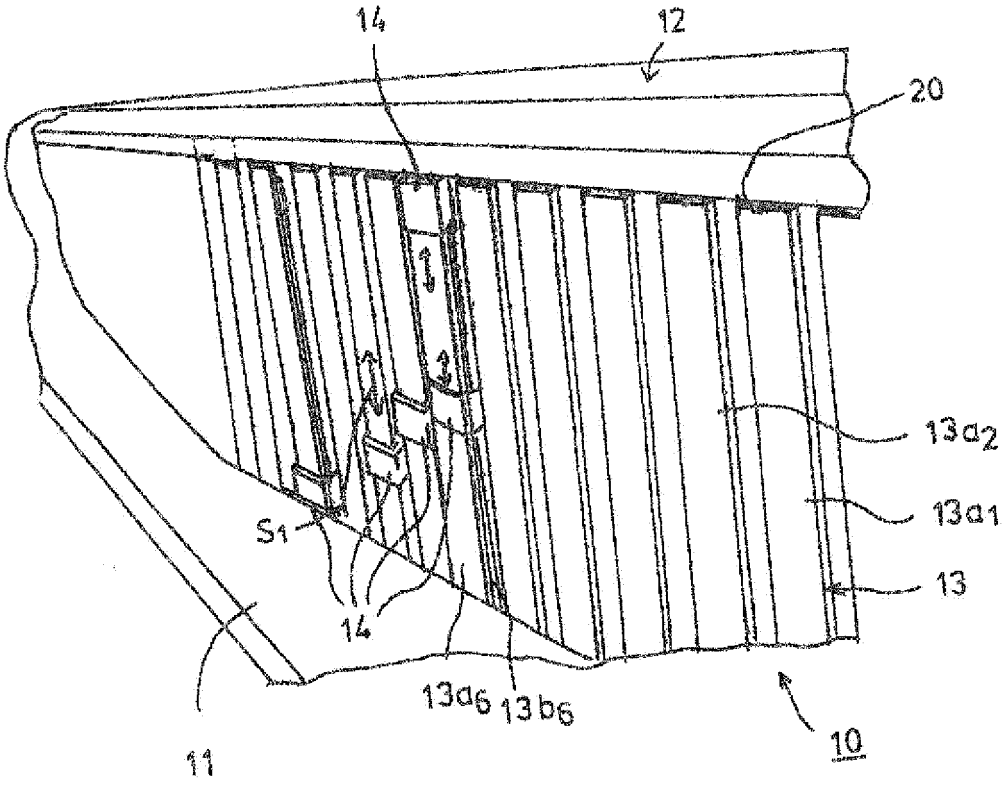


FIG 2B

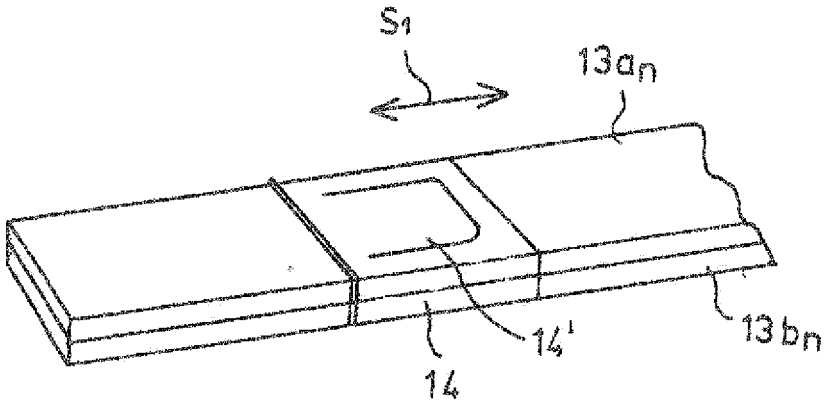


FIG 2C

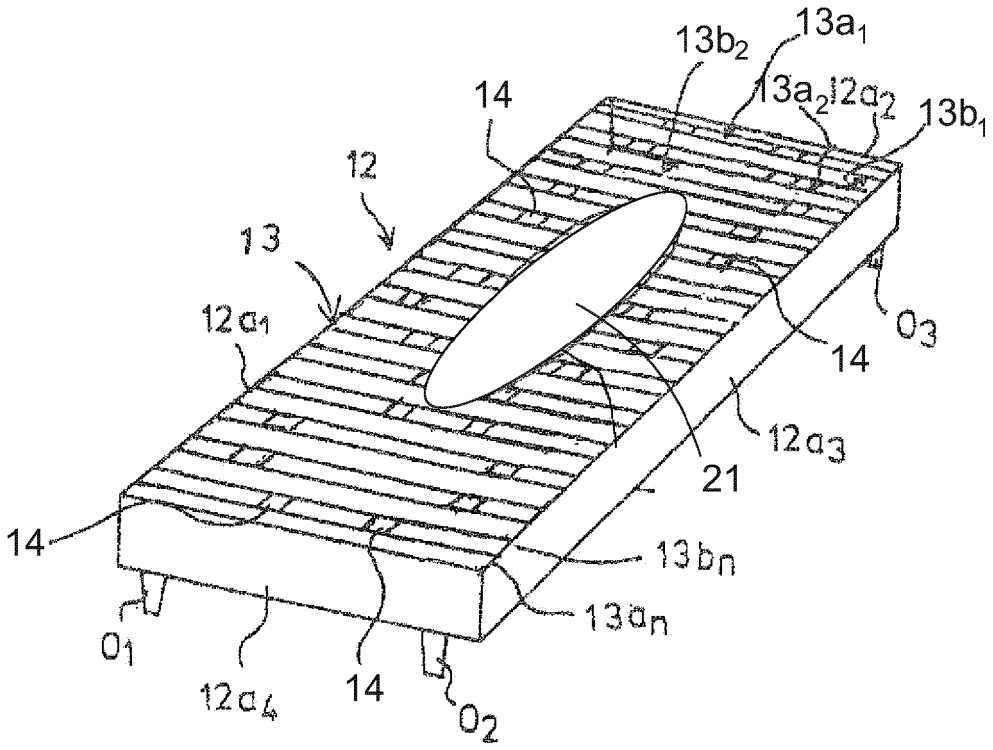

13b2
13a1
13a2
12a2
13b1
14
12
13
12a1
14
O3
12a3
21
14
13bn
13an
O1
12a4
14
O2

FIG 3

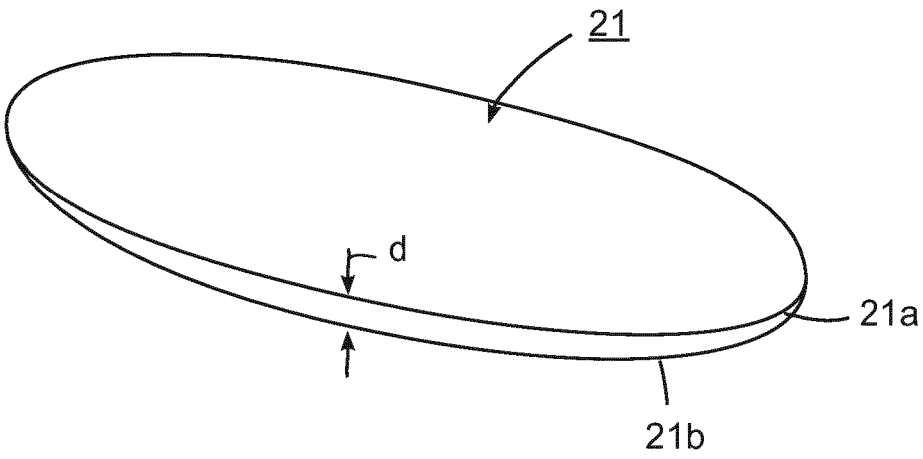


FIG 4A

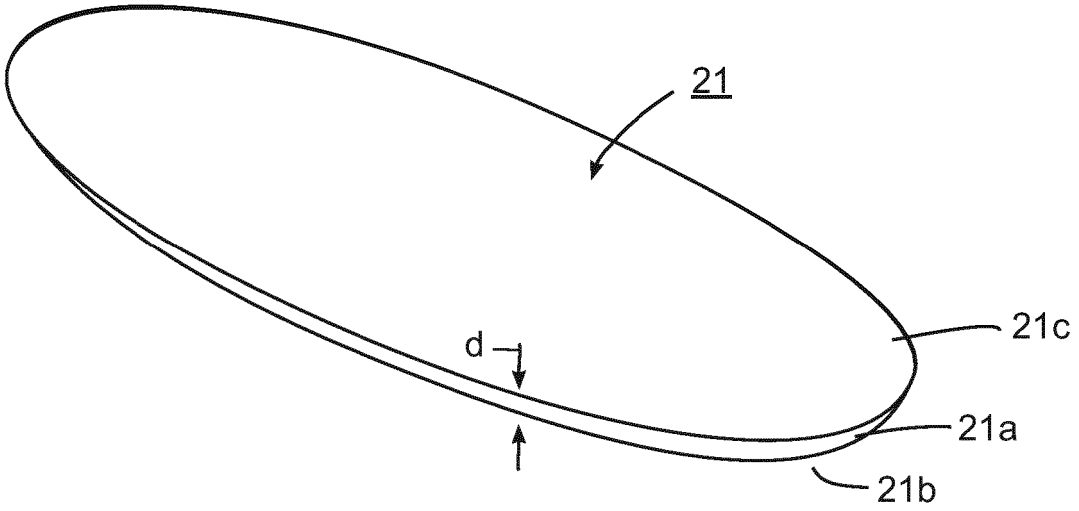


FIG 4B

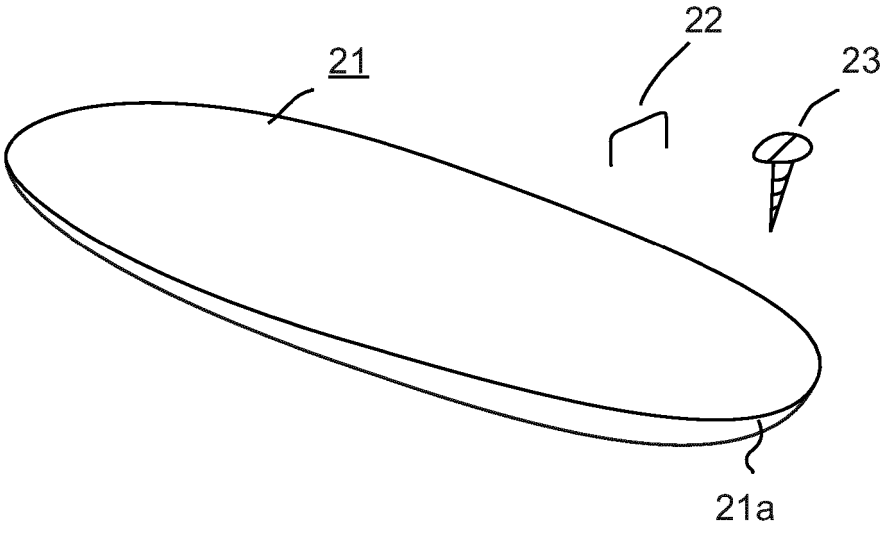


FIG 5

FIG 6A

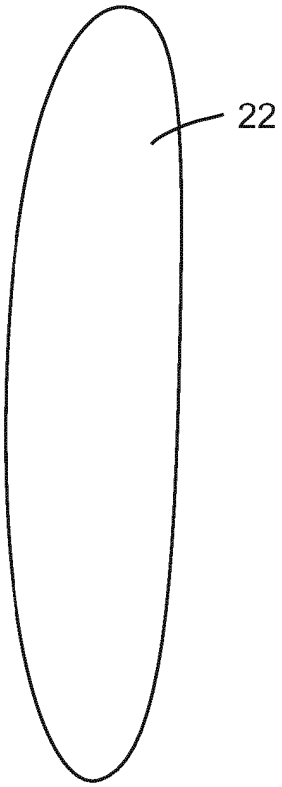


FIG 6B

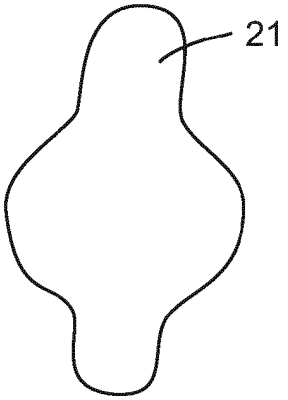
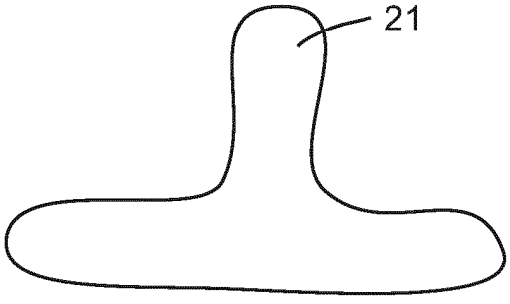


FIG 6C



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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