



(11) **EP 1 799 077 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention
of the grant of the patent:

16.04.2014 Bulletin 2014/16

(21) Application number: **05775851.8**

(22) Date of filing: **30.08.2005**

(51) Int Cl.:

A47G 9/02 (2006.01)

(86) International application number:

PCT/AU2005/001304

(87) International publication number:

WO 2006/024079 (09.03.2006 Gazette 2006/10)

(54) **WRAP DEVICE FOR A BED ENSEMBLE**

EINWICKELVORRICHTUNG FÜR EINE BETTANORDNUNG

DISPOSITIF ENVELOPPE POUR UN ENSEMBLE DE LIT

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI
SK TR**

(30) Priority: **30.08.2004 AU 2004904908**
21.12.2004 AU 2004907208

(43) Date of publication of application:
27.06.2007 Bulletin 2007/26

(60) Divisional application:
09154791.9 / 2 062 507

(73) Proprietor: **Intide Pty Ltd.**
Brisbane, Queensland 4000 (AU)

(72) Inventor: **KENNETT, Rosemary Anne,**
Intelpro
Brisbane, Queensland 4000 (AU)

(74) Representative: **Zardi, Marco**
M. Zardi & Co. SA
Via Pioda 6
6900 Lugano (CH)

(56) References cited:
FR-A1- 2 293 898 US-A- 3 999 233
US-A- 4 141 097 US-A- 4 402 098
US-A- 5 271 112 US-A- 5 271 112
US-A- 5 715 553 US-A- 5 749 110
US-A- 5 802 637 US-A1- 2004 016 055

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

Description

TECHNICAL FIELD OF THE INVENTION

[0001] THIS INVENTION relates generally to a wrap device for a bed ensemble. Such a wrap device is known for example from US 5 271 112 A.

BACKGROUND OF THE INVENTION

[0002] Bed ensembles have a base unit with a top surface and a bottom surface, and a compatible mattress resting on the top surface. Some bed ensembles have a set of legs arranged to support the base unit above the floor level, while others are arranged with the bottom surface of the base unit on the floor.

[0003] While the mattress is usually covered with a bed sheet, the base unit is either uncovered or covered by a dust ruffle. The ruffle has a panel configured to cover the top surface and a skirt surrounding the sides and at least one end of the base unit, and generally extending from said panel to about the floor level. To fit the ruffle on the base unit, the mattress must be moved from the base unit so that the panel of the ruffle can be positioned on the top surface of the base unit. The mattress must then be lifted and carefully positioned on the panel.

[0004] Positioning the mattress on the panel invariably causes the ruffle to move and the ruffle would need to be repositioned a number of times before it is in position for its panel to cover the whole top surface of the base unit.

[0005] The mattress is relatively heavy for a single person to lift it and is of a shape and size that it is difficult for a single person to carry the mattress in an appropriate posture for carrying heavy articles. Accordingly, many people sustain injury in attempting to move mattresses from the base units of bed ensembles.

[0006] The covers for the base units of ensemble beds currently available in the market place have dust ruffles that extend to the floor. The problems with these ruffles are various:

1. When making a bed and tucking in the top sheet and/or blanket, the dust ruffle invariably gets caught up in the sheet/blanket and tucked under the top mattress. To avoid this, it is necessary to try to lift the top mattress prior to tucking in the sheet/blanket or holding the dust cover down whilst trying to tuck the sheet/blanket under the mattress. These tasks are difficult and cause frustration when making a bed.
2. Dust ruffles known to the inventor generally have an attached panel arranged to extend over the top surface of the base unit and fit in between the mattress and the base unit. It is necessary to remove the mattress in order fit or remove the dust ruffles. This creates obvious problems not only for the elderly but also for any person of average strength. In addition to the difficulty of removing the mattress,

when replacing the mattress, if it is not lowered carefully into place the dust cover has a tendency to slip out of place. Two or more people are required to move the mattress to minimise the tendency of the dust cover slipping out of place.

3. When an ensemble bed with a base unit supported by wheeled support legs is moved, the wheels invariably get caught in the dust ruffle causing soiling and in some cases, tearing of the fabric.

4. The aesthetic look of the dust ruffles currently in the market are loose or gathered and falling to the floor. In particular, they are not suitable for contemporary homes, boy's rooms and casual homes such as beach houses. In some cases, the bed is so structured that the legs are exposed when the known dust ruffles are fitted.

5. Generally, dust ruffles available on the market place are designed to exactly fit the size of the base unit. This does not allow for any flexibility in relation to fitting more than one bed size in the household, hotel or hospital and the like. A dust ruffle which is too big for a bed tends to drape on the floor where it gets dirty and is trodden on; whereas one which is too small will not reach the floor thereby defeating its purpose as a dust ruffle. In both cases the overall look is unsatisfactory.

6. The dust ruffles known to the inventor trap and hold dust due to the fullness of fabric and length from the base unit. This escalates breathing difficulties suffered by people with allergies to dust or certain illness such as asthmatics. In addition, as the known bed ruffles can not be easily removed from the bed for laundering, people tend to leave them in situ for a considerable long time between laundering. Accordingly, the breathing difficulties become increasingly more serious due to increasing amount of dust trapped by the dust ruffles. There needs to be free flow of air under the bed and easy access under the bed so that cleaning or vacuuming is done regularly. In addition, the bed needs to be moved easily without the wheels caught in the bed ruffle.

7. As the known dust ruffles require a lot of fabric, the costs of manufacturing are relatively high. As a result, the retail cost of the product is high.

[0007] United States patent number 5,749,110 to Gamble et al. proposed a box spring wrap and dust ruffle system which has a wrap (10) in the form of a strip of rectangular material serving as the loops of a hook-and-loop fastener combination and a dust ruffle (30) with hook fasteners (32) for attaching it to the wrap (10). As shown in Figure 1 in the Gamble et al. patent, before installation on a box spring (20) the wrap (10) is simply a strip of rectangular material with a length (L) and a width (W). Two draw strings (12a and 12b) are each enclosed in a small pocket at the longitudinal hems of the wrap. The draw strings have their ends extended from the strip of material. One of the ends form a loop and the other end

is free for tying onto the loop end. The length of the wrap is longer than the length of two sides and foot end of the box spring, and its width is wider than the height of the box spring. For installation on the box spring, the wrap must be positioned and held against the sides and the foot end. While held in this position, the ends of the strip of material are placed onto the head end of the box spring and secured thereat by tying the draw strings. As the width of the strip of material is wider than the height of the box spring, the draw strings are respectively secured at the top and bottom surface of the box spring.

[0008] The system as described in Gamble et al. patent requires one person to maintain the strip material held against the sides and foot end and another person to pull the draw strings so that the ends of the strip material are placed against the head end while tying the strings. If the head end of the box spring is next to a wall, the box spring must be moved so that there is sufficient space for a person to move next to the head end to tie the draw strings. Likewise, there must be space between the head end and the wall for untying the draw strings when the wrap is to be removed from the box spring. The mattress on the box spring must also be removed while installing the wrap so that the top draw string would secure it neatly on the top surface of the box spring.

OBJECT OF THE PRESENT INVENTION

[0009] An object of the present invention is to alleviate or to reduce to a certain level one or more of the above prior art disadvantages.

OUTLINE OF THE PRESENT INVENTION

[0010] In one aspect therefore the present invention resides in a wrap device as claimed in claim 1.

[0011] Preferred features of the invention are set out in the dependent claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] In order that the present invention can be more readily understood and be put into practical effect reference will now be made to the accompanying drawings which illustrate non-limiting embodiments of the present invention and wherein:-

Figure 1 is a top perspective view of a first embodiment of a wrap device according to the present invention;

Figure 2 is a bottom view of the wrap device shown in Figure 1;

Figure 3 is a schematic drawing showing the wrap device shown in Figure 1 in a position to be fitted to a bed ensemble;

Figure 4 is a schematic drawing showing the wrap device shown in Figure 1 being slipped over the mattress of the bed ensemble;

Figure 5 is a schematic drawing showing the wrap device shown in Figure 1 fitted to the base unit of the bed ensemble and retained thereat;

Figure 6 shows the wrap device shown in Figure 5 with the mattress of the bed ensemble removed;

Figure 7 is a perspective view of a second embodiment of the wrap device according to the present invention, with the device fitted to the base unit of a bed ensemble;

Figure 8 is a perspective view of an illustrative example of a wrap device which does not form part of the present invention;

Figure 9 is a perspective view of an illustrative example of another wrap device which does not form part of the present invention; and

Figure 10 is a perspective view of an illustrative example of still another wrap device, which does not form part of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0013] Referring initially to Figures 1 and 2, there is shown a first embodiment of a wrap device 10 according to the present invention. The wrap device 10 has a wrap member which in this case is a panel of fabric 12. The wrap panel 12 has an upper flange 14 and a lower flange 16. The device 10 has a retaining arrangement 30. In this embodiment, the retaining arrangement 30 has an elastic band 18 fixed to the upper flange 14 and another elastic band 20 fixed to the lower flange 16. When unfolded as shown, the panel 12 defines a through opening 17.

[0014] As shown in Figure 3, the wrap device 10 is to be fitted to a bed ensemble 100 having a base unit 102 and a mattress 104. The base unit 102 has opposed sides 106 and 108, a head end 110, and a foot end 112. The base unit 102 also has a top surface 114 and a bottom surface 116 spanning its sides and the ends. A set of support legs 118 arranged to support the base unit 102 above the floor level. Each support leg 118 has a castor wheel or roller 119 to enable the bed ensemble 100 to be easily moved along the floor surface.

[0015] The panel 12 is configured to wrap around the sides and the ends of the base unit 102. The retaining arrangement 30 is for retaining the wrap panel 12 about the base unit 102. In use, the wrap device 10 is unfolded to reveal the opening 17 which is configured so that the wrap device 10 can be slipped over the mattress 104 on the base unit 102.

[0016] To fit the wrap device 10 onto the base unit 102, the device 10 is simply positioned so that the mattress 104 is in the opening 17. The wrap panel 12 is then slipped over the mattress 104 as shown in Figure 4 and then manoeuvred to move in a downward direction until the panel 12 is around the sides and ends of the base unit 102, and the elastic bands 18 and 20 of the retaining arrangement 30 engage respective top surface 114 and bottom surface 116 as shown in Figure 5. Thereby, the wrap device 10 is retained about the base unit 102. In

Figure 6, the mattress 104 is removed in order to reveal the elastic band 18 at the upper flange 14 of the wrap panel 12. As shown, the elastic band 18 is extended and in engagement with the top surface 114 of the base unit 102. The elastic band 20 at the lower flange 16 is also

[0017] The embodiment of the wrap device 10 shown in Figure 7 has a wrap panel 12 with end edges 22 and 24 which can be spaced from each other or overlapping depending on the size of the bed ensemble 100. Adjustment means 26 are provided at the end edges 22 and 24 for adjusting tension of the bed wrap device 10 to ensure a snug fit on the base unit 102. The adjustment means may be in the form of ties or Velcro strips. Figure 7 shows two sets of Velcro strips 27 and 28 employed as the adjustment means 26.

[0018] Thus, the wrap device 10 can be fitted to the base unit 102 with the mattress 104 in situ on the base unit 102. This device 10 fits snugly to the sides and the ends of the base unit 102 and thus avoids the disadvantages associated with known dust ruffles.

[0019] The wrap device 10 shown in Figure 8 has a retaining arrangement 30 in the form of ties 32 at respective corners of the upper flange 14. The lower flange 16 may hang to the floor or be fixed under the base unit 102 with one or other of the various fixing devices. Pockets 21 (one only shown) for holding items such as a remote controller, books, and reading glasses are formed on the panel 12.

[0020] In Figure 9, the retaining arrangement 30 includes snap fasteners 34 at respective corners of the upper edge flange 14. The retaining arrangement 30 of the wrap device 10 shown in Figure 10 has a draw string 36 threaded through a casing 38 formed at the upper flange 14. The draw string 36 is tied at one or more points 40 to retain the wrap device 10 on the base unit 102.

Claims

1. A wrap device (10) for a bed ensemble (100) having a base unit (102) with a top surface (114), a bottom surface (116), opposed sides (106,108) and opposed ends (110,112), and a compatible mattress (104) configured to rest on the top surface, the device comprising a wrap member (12) formed with an opening (17) which is configured for slipping the wrap member over the mattress and then to be positioned to wrap about the opposed sides and at least one of said opposed ends, the wrap member being formed of a panel of fabric made of a natural fibre and having an upper flange (14) and a lower flange (16), and an retaining arrangement (30) having an upper retaining member (18) and a lower retaining member (20) arranged at or fixed to respective said upper and

lower flanges to retain both of said upper flange and lower flange in engagement respectively with the top surface and the bottom surface of the base unit to thereby retaining the wrap member about the base unit,

whereby said upper retaining member having an elastic element fixed to said upper flange, and said lower retaining member having an elastic element fixed to said lower flange,

wherein the respective elastic elements at said upper and lower flanges extend through a casing (38) formed on each of said upper and lower flanges.

2. The device according to claim 1 wherein the wrap member is formed by connected or removably connected sections that are dimensioned to wrap respective sides and at least one end of the base unit.
3. The device according to any one of claims 1 to 2 wherein the wrap member having one or more pockets (21) fixed thereto, the pocket or pockets being configured to hold certain items.
4. The device according to claim 3 wherein the items including any one or more of the followings: books, toys, a remote control for a television set, a torch, slippers, reading glasses and other personal items.
5. The device according to any one of claims 1 to 4 wherein one of said opposed ends is arranged as a head end (110), and the other as a foot end (112), an adjustment arrangement (26) is provided at one or each of said head end and foot end for selectively tightening or loosening the wrap member about the base unit.
6. The device according to claim 5 wherein the adjustment arrangement includes one or more ties, or one or more paired Velcro strips (27,28).
7. The device according to any one of claims 1 to 6 wherein the wrap member is padded or quilted or arranged to coordinate with bed linen.

Patentansprüche

1. Eine Umhüllungseinrichtung (10) für ein Bett-Ensemble (100) umfassend eine Basiseinheit (102) mit einer Oberseite (114), Unterseite (116), gegenüberliegenden Seiten (106, 108) und gegenüberliegenden Enden (110, 112), und einer kompatiblen Matratze (104), die so ausgebildet ist, dass sie auf der Oberseite liegt, wobei die Einrichtung ein Umhüllungselement (12) umfasst, gebildet mit einer Öffnung (17), die ausgebildet ist, um das Umhüllungselement über die Matratze zu ziehen und dann so positioniert zu werden, dass sie die gegenüberlie-

- genden Seiten und mindestens eine der gegenüberliegenden Enden umhüllt, wobei das Umhüllungselement aus einer Stoffbahn aus Naturfaser gebildet wird, umfassend einen oberen Flansch (14) und einen unteren Flansch (16), sowie eine Halteanordnung (30) mit einem oberen Halteelement (18) und einem unteren Halteelement (20), an den jeweiligen oberen und unteren Flanschen angeordnet oder befestigt, um den jeweiligen Halt der oberen und unteren Flanschen an der Oberseite und Unterseite der Basiseinheit aufrechtzuerhalten, um somit die Umhüllung der Basiseinheit durch die Umhüllungseinheit aufrechtzuerhalten, wobei das obere Halteelement ein elastisches Element aufweist, welches am oberen Flansch befestigt ist und das untere Halteelement ein elastisches Element aufweist, welches am unteren Flansch befestigt ist, wobei sich die jeweiligen elastischen Elemente an den oberen und unteren Flanschen durch eine auf den jeweiligen oberen und unteren Flanschen gebildete Verkleidung (38) erstrecken.
2. Die Einrichtung gemäß Anspruch 1, wobei das Umhüllungselement durch verbundene oder abnehmbar verbundene Abschnitte gebildet wird, die dimensioniert sind, um die jeweiligen Seiten und zumindest ein Ende der Basiseinheit zu umhüllen.
3. Die Einrichtung gemäß einem der Ansprüche 1 bis 2, wobei an dem Umhüllungselement eine oder mehrere Taschen (21) befestigt sind, welche ausgebildet sind, bestimmte Gegenstände zu enthalten.
4. Die Einrichtung gemäß Anspruch 3, wobei die Gegenstände eine oder mehrere der folgenden umfassen: Bücher, Spielzeug, eine Fernbedienung für einen Fernseher, eine Taschenlampe, Hausschuhe, eine Lesebrille und andere persönliche Gegenstände.
5. Die Einrichtung gemäß einem der Ansprüche 1 bis 4, wobei eines der gegenüberliegenden Enden als Kopfende (110) und das andere als Fußende (112) angeordnet ist, wobei eine Anpassungsvorrichtung (26) am Kopfende oder Fußende oder an beiden vorgesehen ist, um das die Basiseinheit umhüllende Umhüllungselement zu straffen oder zu lockern.
6. Die Einrichtung gemäß Anspruch 5, wobei die Anpassungsvorrichtung eine oder mehrere Bänder oder einen oder mehrere gepaarte Klettverschlüsse (27, 28) umfasst.
7. Die Einrichtung gemäß einem der Ansprüche 1 bis 6, wobei das Umhüllungselement gepolstert oder gesteppt oder auf die Bettwäsche abgestimmt ist.

Revendications

- Dispositif enveloppe (10) pour un ensemble de lit (100) doté d'une partie base (102) comportant une surface supérieure (114), une surface inférieure (116), des côtés opposés (106, 108) et des extrémités opposées (110, 112), et d'un matelas compatible (104) configuré pour reposer sur la surface supérieure, ledit dispositif comprenant un élément enveloppe (12) formé d'une ouverture (17) qui est configurée pour enfiler l'élément enveloppe au-dessus du matelas et pour être ensuite positionnée afin de s'envelopper autour des côtés opposés et d'au moins l'une desdites extrémités opposées, l'élément enveloppe étant formé d'un panneau de tissu constitué de fibre naturelle et possédant un rebord supérieur (14) et un rebord inférieur (16), et d'un moyen de retenue (30) comportant un élément de retenue supérieur (18) et un élément de retenue inférieur (20) disposés sur lesdits rebords inférieur et supérieur respectifs ou fixés à ceux-ci pour retenir aussi bien ledit rebord supérieur que ledit rebord inférieur engagés respectivement avec la surface supérieure et la surface inférieure de la partie base pour ainsi retenir l'élément enveloppe autour de la partie base au moyen de quoi ledit élément de retenue supérieur est doté d'un élément élastique fixé au dit rebord supérieur, et ledit élément de retenue inférieur est doté d'un élément élastique fixé au dit rebord inférieur, lesdits éléments élastiques respectifs au niveau desdits rebords inférieur et supérieur s'étendant à travers un caisson (38) formé sur chacun desdits rebords inférieur et supérieur.
- Dispositif selon la revendication 1 dans lequel l'élément enveloppe est formé de sections raccordées de façon amovible ou raccordées qui sont dimensionnées pour envelopper les côtés respectifs et au moins une extrémité de la partie base.
- Dispositif selon l'une quelconque des revendications 1 ou 2 dans lequel l'élément enveloppe est doté d'une ou plusieurs poches (21) qui sont fixées à celui-ci, ladite ou lesdites poches étant configurées pour contenir certains articles.
- Dispositif selon la revendication 3 dans lequel lesdits articles incluent un ou plusieurs des éléments suivants : des livres, des jouets, une télécommande de poste de télévision, une torche, des pantoufles, des lunettes de lecture et d'autres articles personnels.
- Dispositif selon l'une quelconque des revendications 1 à 4 dans lequel l'une desdites extrémités opposées est agencée comme une extrémité de tête (110) et l'autre comme une extrémité de pied (112), un moyen d'ajustement (26) étant pourvu à l'une ou à

chacune desdites extrémité de tête et extrémité de pied pour resserrer ou desserrer de façon sélective l'élément enveloppe autour de la partie base.

6. Dispositif selon la revendication 5 dans lequel le moyen d'ajustement inclut une ou plusieurs attaches, ou une ou plusieurs bandes Velcro appariées (27, 28). 5
7. Dispositif selon l'une quelconque des revendications 1 à 6 dans lequel élément enveloppe est ouaté, matelassé ou agencé pour se coordonner avec le linge de lit. 10

15

20

25

30

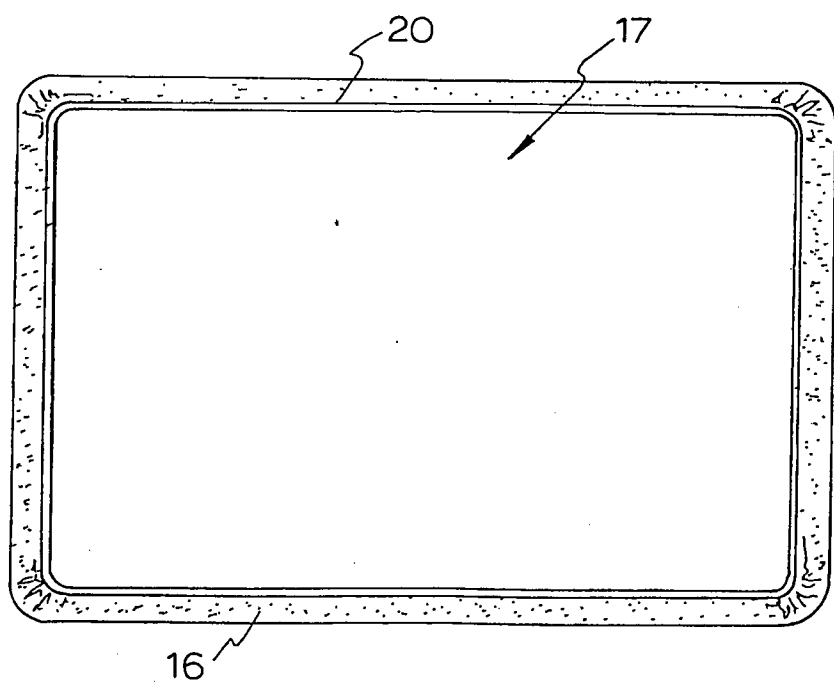
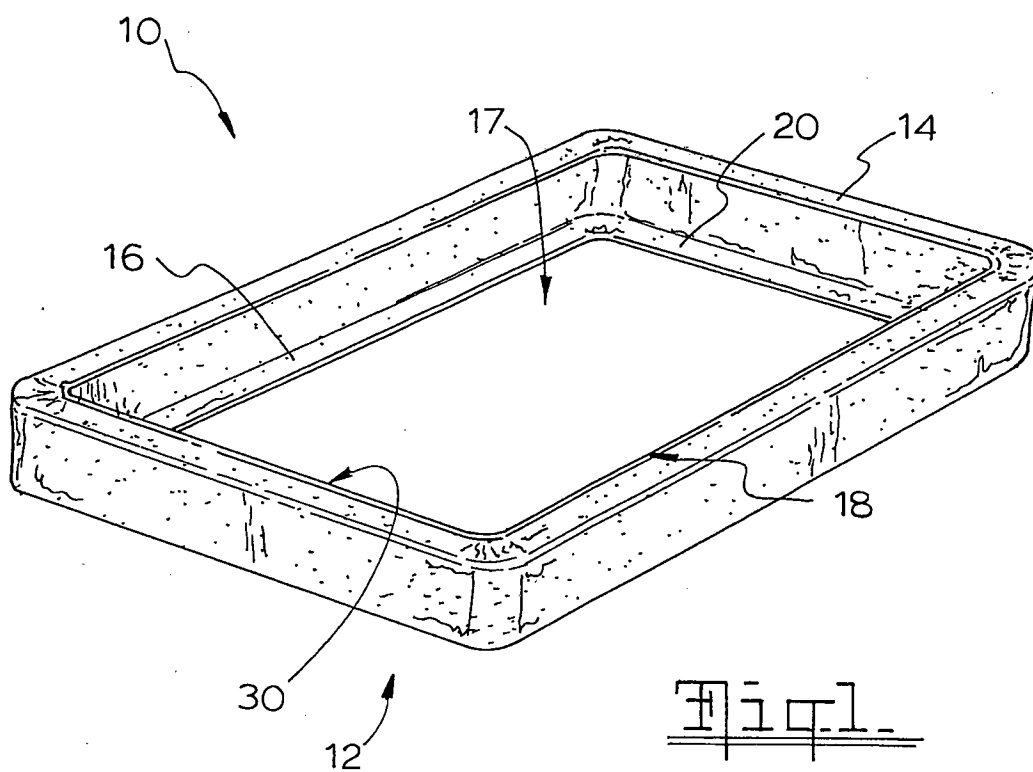
35

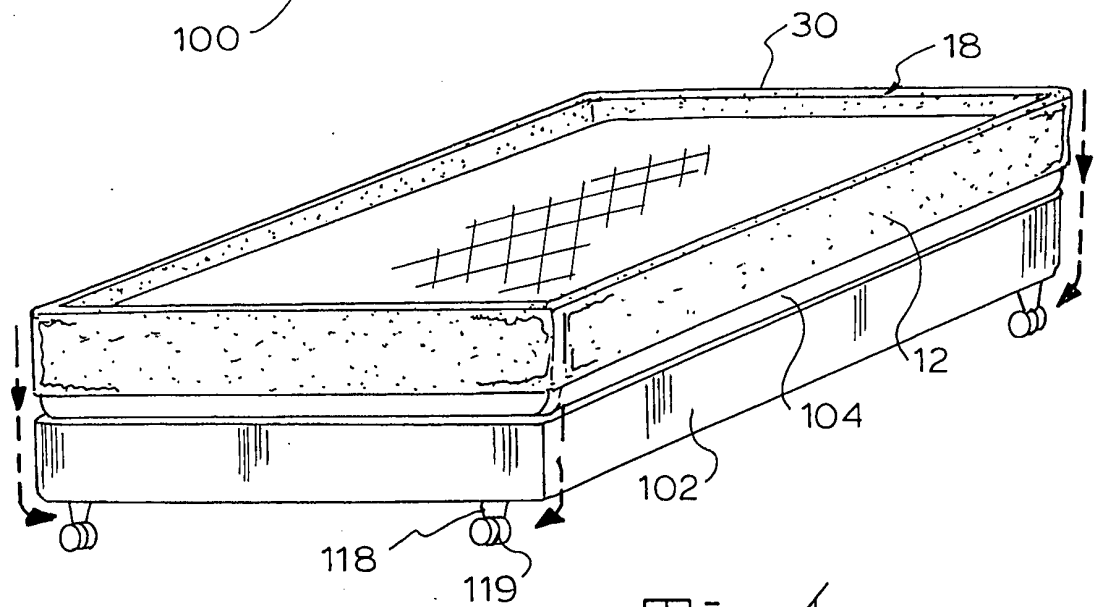
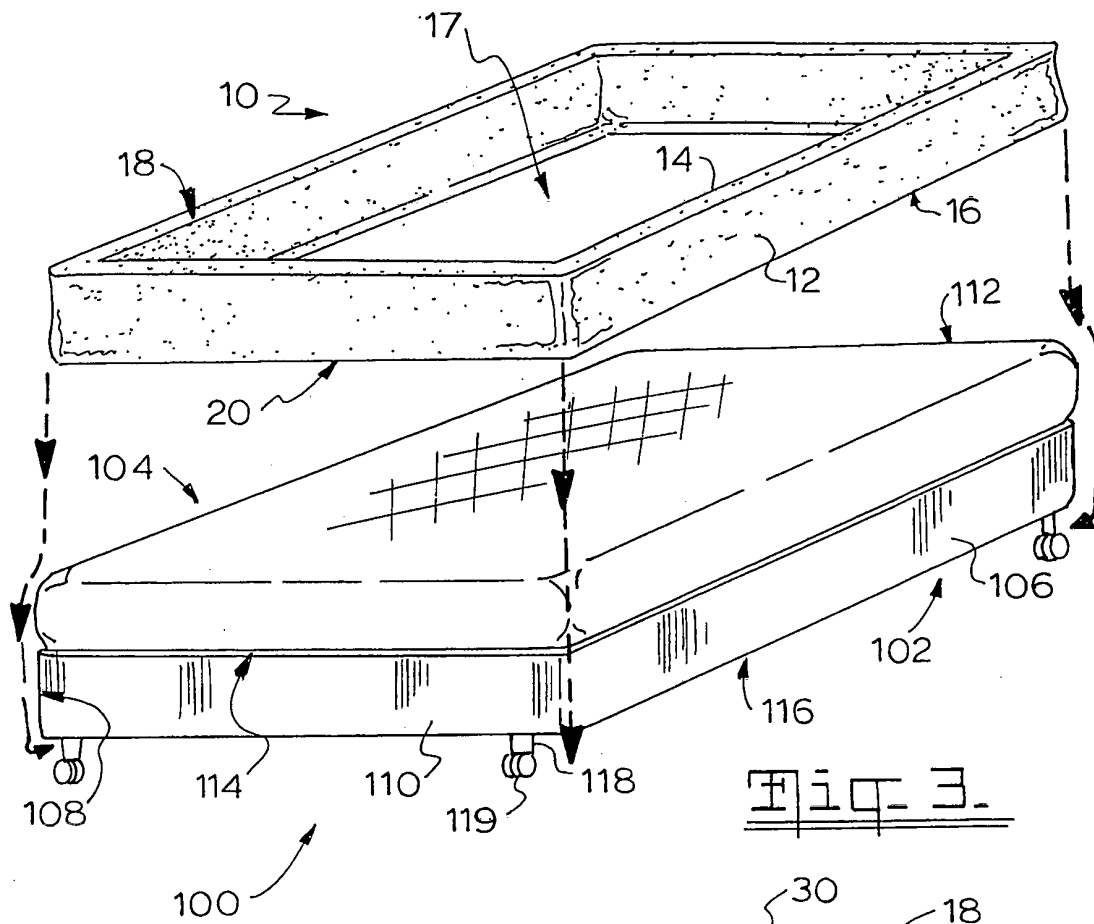
40

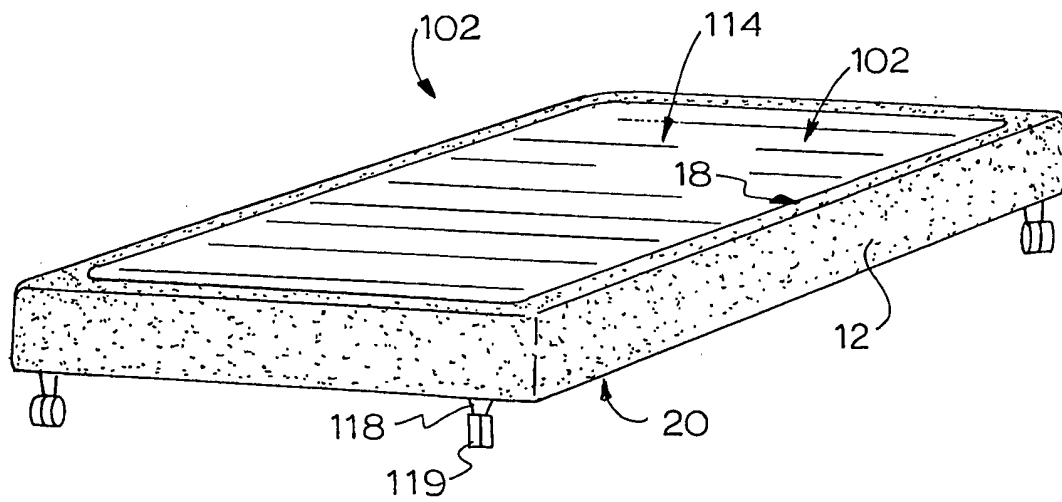
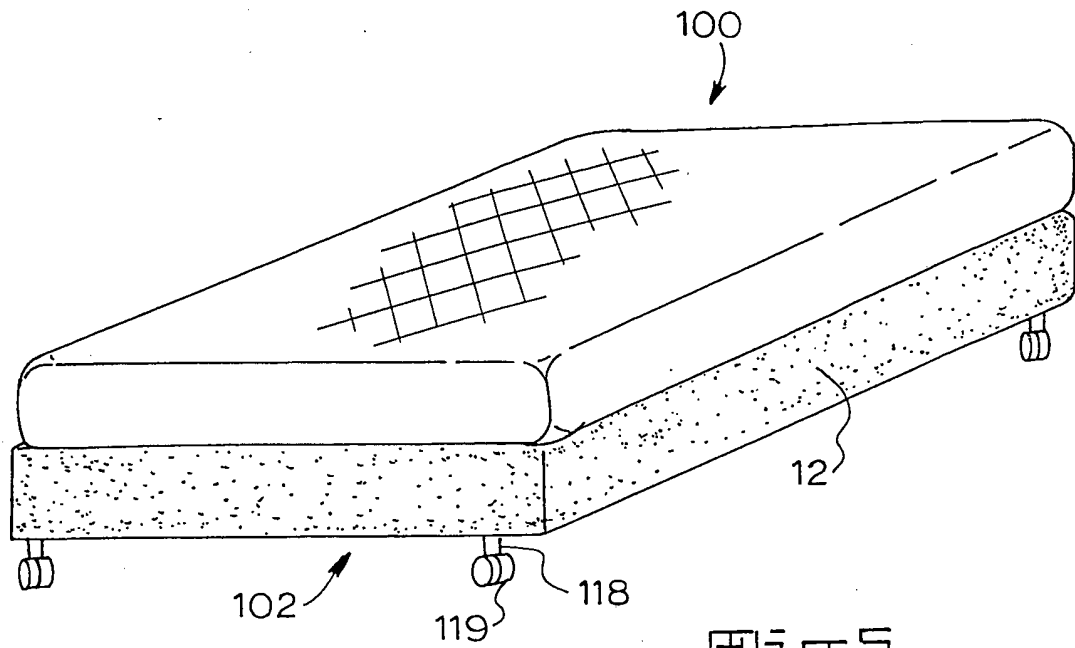
45

50

55







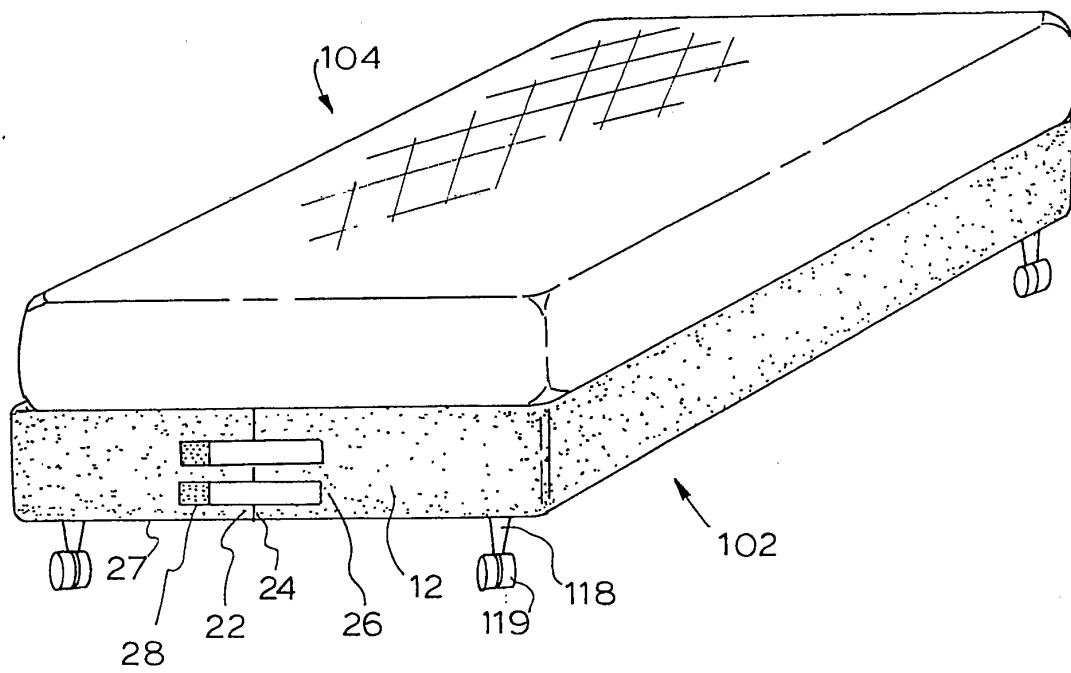


Fig. 7

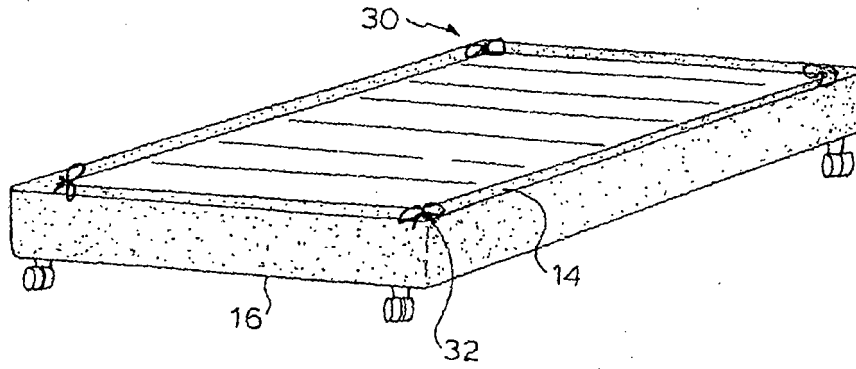


Fig. 8.

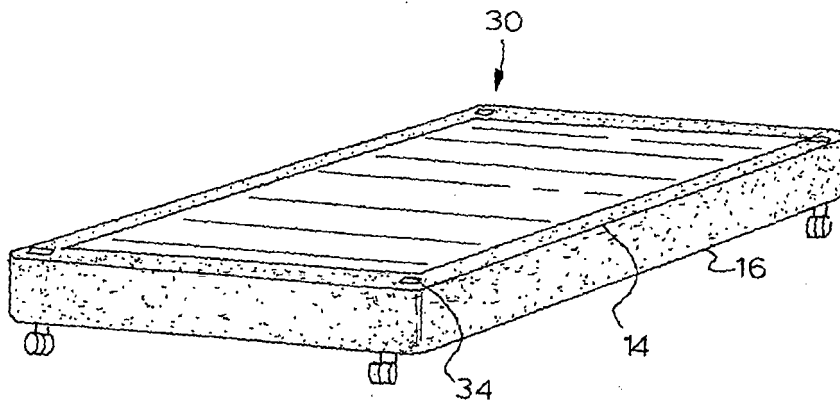


Fig. 9.

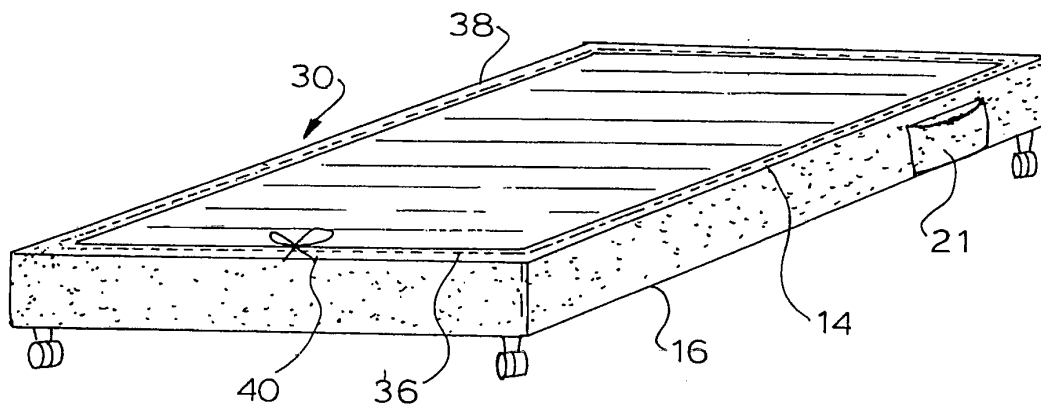


Fig. 10.

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- US 5271112 A [0001]
- US 5749110 A, Gamble [0007]