



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
16.05.2007 Bulletin 2007/20

(51) Int Cl.:
A47K 3/00 (2006.01)

(21) Application number: **06023001.8**

(22) Date of filing: **06.11.2006**

(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
Designated Extension States:
AL BA HR MK YU

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(30) Priority: **10.11.2005 US 272296**

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(54) **Cover for use with bathing tub**

(57) A bathtub cover includes a flexible sheet defining a body opening for receiving a torso of a user of the bathtub. The sheet is suspended horizontally over an entrance opening of the bathtub by a suspension system which may include a support assembly which extends over the entrance opening, a securing mechanism for securing the sheet to ledges of the bathtub or a combination of the two. One suspension system includes a

plurality of rods spanning the entrance opening from side to side. Additional rods may extend on opposite sides of the body opening to support portions of the sheet adjacent thereto. Suction cups may be disposed opposite the body opening to secure the sheet adjacent a water spout, which may fill the bathtub via a water-fill opening in the sheet. Alternately, elongated strips of suction cups extending the length of the sheet may suspend the sheet over the bathtub.

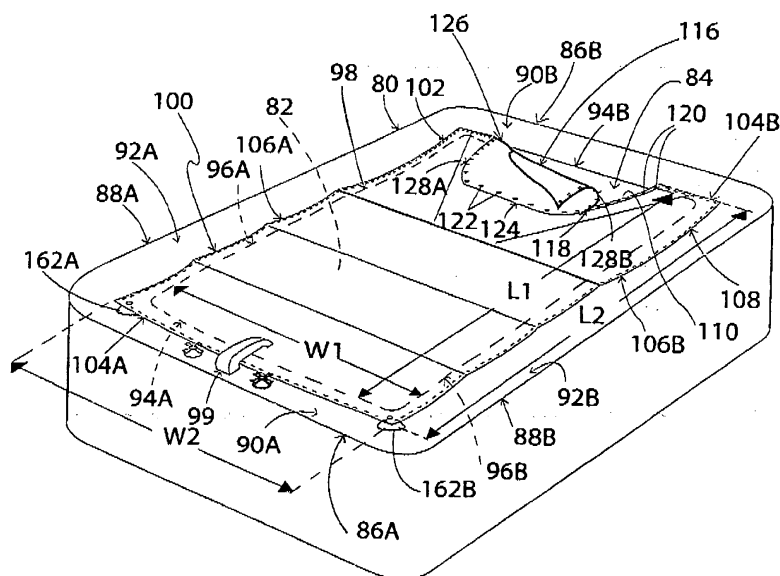


FIG. 1

Description**BACKGROUND OF THE INVENTION****1. TECHNICAL FIELD**

[0001] The invention relates generally to a bathtub cover which helps prevent heat loss from water within the bathtub. More particularly, the invention relates to such a bathtub cover having an opening formed therein so that the torso or other portion of the body of the user of the bathtub may extend above the cover when in use. Specifically, the invention relates to such a cover having a suspension system for suspending the cover over the bathtub.

2. BACKGROUND INFORMATION

[0002] It is well known that heated water within a bathtub loses heat relatively rapidly due in part to the large upper surface area of the body of water in the bathtub. Thus, it would be helpful to have a bathtub cover which substantially covers the bathtub to help retain the heat and which is easily usable.

[0003] As disclosed in US Design Patent D485,605, bathtub covers are known in the art which have a water fill opening and are attachable to the bathtub via several suction cups. However, there is room for improvement with regard to the suspension system for suspending the cover over the bathtub. In addition, there is a need in the art for a bathtub cover having an opening to accommodate the torso or other portion of the user's body when the cover is in use with the bathtub. The present invention provides these and other benefits.

BRIEF SUMMARY OF THE INVENTION

[0004] The present invention provides a bathtub cover for use with a bathtub having a water-receiving cavity with an entrance opening, the cover comprising a flexible sheet defining a body opening adapted to receive a portion of a body of a user of the bathtub; and a suspension system for suspending the sheet in a generally horizontal orientation so that the sheet is adapted to cover the entrance opening of the bathtub.

[0005] The present invention also provides a bathtub cover for use with a bathtub having a water-receiving cavity with an entrance opening, the cover comprising a flexible sheet having a portion which is movable to define a body opening adapted to receive a portion of a body of a user of the bathtub; and a suspension system for suspending the sheet in a generally horizontal orientation so that the sheet is adapted to cover the entrance opening of the bathtub.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS**[0006]**

Fig. 1 is a perspective view of a first embodiment of the bathtub cover of the present invention in use with a bathtub showing the top of the cover.

Fig. 2 is a perspective view showing the bottom of the bathtub cover of the first embodiment.

Fig. 3 is a fragmentary perspective view of a portion of Fig. 2 showing a rod of the suspension system which is removably insertable into an elongated pocket of the cover.

Fig. 4 is similar to Fig. 2 and shows a second embodiment of the bathtub cover of the present invention.

Fig. 5 is an enlarged view of the encircled portion of Fig. 4.

Fig. 6 is similar to Fig. 4 and shows a third embodiment of the bathtub cover of the present invention.

Fig. 7 is an enlarged perspective view of the encircled portion of Fig. 6.

[0007] Similar numbers refer to similar parts throughout the specification.

DETAILED DESCRIPTION OF THE INVENTION

[0008] A first embodiment of the bathtub cover of the present invention is indicated generally at 100 in Figs. 1-2; a second embodiment is indicated generally at 200 in Fig. 4; and a third embodiment is indicated generally at 300 in Fig. 6.

[0009] With reference to Fig. 1, bathtub cover 100 is shown in use with a bathtub 80. Bathtub 80 defines a cavity 82 having an entrance opening 84 which is bounded by a ledge or a plurality of ledges with entrance opening 84 disposed therebetween. Bathtub 80 has first and second opposed ends 86A and 86B. Bathtub 80 also has first and second opposed sides 88A and 88B each extending between first and second ends 86A and 86B. The plurality of ledges noted above include first and second end ledges 90A and 90B and first and second opposed side ledges 92A and 92B each of which extends from first end ledge 90A to second end ledge 90B. Ledges 90 and 92 are disposed at the top of bathtub 80. End ledges 90A and 90B respectively have first and second inner edges 94A and 94B which bound entrance opening 84. First and second side ledges 92A and 92B respectively have first and second inner edges 96A and 96B which bound entrance opening 84. Thus, inner edges 94A, 94B, 96A and 96B define a substantially rectangular outer perimeter 98 of entrance opening 84 which is also an inner perimeter of ledges 90 and 92. Inner edges 94A and 94B of ledges 90A and 90B define therebetween a length L1 of entrance opening 84. Inner edges 96A and 96B of ledges 92A and 92B define therebetween a width

W1 of entrance opening 84. Bathtub 80 further includes a water spout 99 disposed adjacent first end 86A thereof for filling cavity 82 of bathtub 80 with water.

[0010] Cover 100 includes a sheet 102 of flexible material which is configured to be suspended over entrance opening 84 of bathtub cavity 82 when in use. In the operational position of sheet 102 shown in Fig. 1, sheet 102 is substantially flat and substantially horizontal although there is some variation from this configuration due to the flexible nature of the material causing some drooping of sheet 102. Sheet 102 is made of a material which is foldable or rollable to facilitate the stowing of cover 100. Sheet 102 is typically a water impermeable material most typically formed of a cloth and/or plastic material or including a plastic material. Sheet 102 may be a single layer or include a plurality of layers one of which is preferably a thermal insulating material.

[0011] Sheet 102 has first and second opposed ends 104A and 104B defining therebetween a length L2 of sheet 102 and cover 100. Length L2 of sheet 102 is longer than length L1 of entrance opening 84 so that end portions adjacent ends 104A and 104B respectively overlap portions of ledges 90A and 90B. Sheet 102 also has first and second opposed sides 106A and 106B each extending from end 104A to end 104B and defining therebetween a width W2 which is longer than width W1 of entrance opening 84 whereby portions of sheet 102 adjacent sides 106A and 106B respectively overlap portions of ledges 92A and 92B. Ends 104A and 104B and sides 106A and 106B thus define a substantially rectangular outer perimeter 108 which is larger than the substantially rectangular outer perimeter 98 of entrance opening 84. Sheet 102 may be other than rectangular as may be entrance opening 84. The outer perimeter of sheet 102 and outer perimeter of entrance opening 84 typically are of the same or a similar shape except that the shape defined by the outer perimeter of sheet 102 is larger.

[0012] In accordance with a feature of the invention, sheet 102 defines a body opening 110 distal first end 104A and water spout 99. Body opening 110 is configured for a user of bathtub 80 to be seated in cavity 82 of bathtub 80 with the torso or some portion of the user's body extending through body opening 110. More particularly, body opening 110 is disposed adjacent end 104B of sheet 102 and extends inwardly from end 104B such that opening 110 is in communication with end 104B of outer perimeter 108 of sheet 102. Thus, body opening 110 opens outwardly in a direction away from first end 104A of sheet 102 and away from water spout 99 to expose inner edge 94B, a portion of second end ledge 90B adjacent edge 94B and a portion of entrance opening 84 adjacent inner edge 94B. It will be understood that bathtub 80 is a typical bathtub wherein the water spout 99 is disposed adjacent first end 86A but that other bathtubs may have a water spout disposed at different locations, for instance, along side ledge 92A or adjacent the intersection of side ledge 92A and ledge 90A. Even when the water spout is located in such positions, body opening 110 will generally be dis-

tal the water spout and typically open in a direction away from the water spout.

[0013] With reference to Fig. 2, sheet 102 has an interior edge 112 which is centrally located between first and second sides 106A and 106B and disposed inwardly of second end 104B of sheet 102. Interior edge 112 is substantially parallel to second end 104B and bounds an innermost side of body opening 110. Interior edge 112 extends in an axial direction of sheet 102 defined between first and second sides 106A and 106B of sheet 102. Sheet 102 further includes a pair of opposed lateral interior edges 114A and 114B each of which extends transversely from interior edge 112 via an arcuate transition and each of which bounds body opening 110 laterally. Lateral interior edges 114A and 114B extend in a generally longitudinal direction of sheet 102 extending between ends 104A and 104B thereof. More particularly, interior edges 114A and 114B taper or angle outwardly from interior edge 112 to second end 104B of sheet 102. Interior edges 112 and 114 thus define a generally U-shaped boundary of body opening 110.

[0014] Referring again to Fig. 1, sheet 102 includes a flap 116 of flexible material which is typically formed of the same material as the rest of sheet 102. Flap 116 has substantially the same shape as that defined by interior edges 112 and 114 except that flap 116 is somewhat larger in order to overlap sheet 102 along interior edges 112 and 114. Cover 100 includes a fastening mechanism 118 for fastening flap 116 to the rest of sheet 102 along interior edges 112 and 114. Fastening mechanism 118 includes a plurality of first fastener portions 120 which are mounted on sheet 102 along interior edges 112 and 114 and a plurality of second fastener portions 122 which are mounted on flap 116. More particularly, flap 116 includes an inner edge 124, an outer edge 126 which is opposed to and substantially parallel to inner edge 124, and a pair of lateral edges 128A and 128B each extending from respective ends of inner edge 124 and tapering outwardly therefrom to respective ends of outer edge 126. Second fastener portions 122 are disposed along inner edge 124 and lateral edges 128A and 128B of flap 116. First and second fastener portions 120 and 122 may be the respective halves of snaps whereby flap 116 is removably connected to the rest of sheet 102 to close or cover body opening 110 when attached for exposed body opening 110 when removed. Such snaps may be formed of plastic materials, metals which are resistant to oxidation in wet environments or any other suitable material. In addition, fastening mechanism 118 may include any mechanism known in the art which is suitable, for example, velcro strips and so forth.

[0015] It is further noted that flap 116 need not be removable, but may simply be movable from a closed position which covers opening 110 to an open position where body opening 110 is uncovered or substantially uncovered. For instance, this may be easily accomplished by flap 116 by unfastening the fastener portions 120 and 122 disposed along lateral edges 128A and

128B of flap 116 and lateral interior edges 114A and 114B adjacent body opening 110 while the fastener portions 120 and 122 along inner edge 124 of flap 116 and interior edge 112 of cover 102 remain fastened.

[0016] Alternately, flap 116 may simply be an integral extension of the rest of sheet 102 which is foldable along the interior edge defining body opening 110 and fastenable along the lateral interior edges defined by the opening 110. Alternately, sheet 102 may include a material in the area spanned by flap 116 which is gathered or bunched to allow the material to move inwardly from end 104B of sheet 102 and from ledge 90B of bathtub 80 in order to create a body opening similar to body opening 110. Alternately, the material in this area may also be elasticized or otherwise configured to stretch inwardly from ledge 90B in order to form a body opening similar to body opening 110. In either of these alternate embodiments, the material would move between open and closed positions to open and close body opening 110.

[0017] With reference to Fig. 2, cover 100 further includes a suspension system for suspending sheet 102 above or substantially above entrance opening 84 of bathtub 80. The suspension system includes a support assembly 130 comprising a plurality of sleeves or elongated pockets 132A-F each defining a channel or elongated interior chamber 134 (Fig. 3) for slidably receiving a support member typically in the form of a tube or rod 136 wherein the slidable movement is indicated at Arrows A in Figs. 2 and 3.

[0018] Each of pockets 132A, B and C have first and second opposed ends 138 and 140 defining therebetween a length which is the same as or substantially the same as width W2 of sheet 102. More particularly, each first end 138 is disposed at or adjacent side 106A of sheet 102 and each second end 140 is disposed at or adjacent second side 106B of sheet 102. Similarly, the rods 136 (Fig. 3) which are used with pockets 132A, B and C each have a first end 142 and a second opposed end 144 defining therebetween a length L3 which is the same as or substantially the same as width W2 of cover 102. Typically, second ends 140 of each respective pocket 132A, B and C is closed while each first end 138 of said pockets is open so that respective rods 136 may slide into the interior chamber 134 of a respective pocket 132 and be positioned by second end 140 which acts as a stop for rods 136. Each open end 138 allows for removability of rods 136 to facilitate washing of sheet 102, replacement of rods 136, storing and shipping of cover 100, and so forth.

[0019] Each of rods 132A, B and C is substantially parallel to first end 104A of sheet 102 and is thus configured to receive a rod 136 having the shortest length L3 required to span entrance opening 84 of tub 80 with ends 142 and 144 of rod 136 respectively seated atop ledges 92A and 92B of bathtub 80 (Fig. 1). Pockets 132A, B and C are thus axially extending and longitudinally spaced from one another along the length of sheet 102. Although the exact positions of the pockets 132A, B and C may

vary substantially, Figs. 1 and 2 show a preferred embodiment in which pocket 132A is spaced from first end 104A by a distance which is substantially equal to the distance between pocket 132A and 132B, which is also substantially equal to the distance between pocket 132B and 132C. Thus, pockets 132A, B and C along with first end 104A define first, second and third panels 146A, 146B and 146C which are substantially rectangular and substantially the same size. More particularly, panel 146A of sheet 102 is disposed between end 104A and pocket 132A, second panel 146B is disposed between pockets 132A and 132B, and third panel 146C is disposed between pockets 132B and 132C.

[0020] Sheet 102 further includes first and second lateral panels 148A and 148B and central end panel 150 each of which is partially defined by pockets 132D and 132E. Pockets 132D and 132E are spaced from one another and each of said pockets extends transversely from adjacent pocket 132C to second end 104B of sheet 102. More particularly, pockets 132D and 132E have respective first ends 152A and 152B and respective second opposed ends 154A and 154B. Similar to pockets 132A, B and C, pockets 132D and E have first ends 152 which are closed and second ends 154 which are open for removably slidably receiving support members similar to rod 136 (Fig. 3). Each of ends 152A and 152B of pockets 132D and E are disposed adjacent pocket 132C and are spaced from one another. Pockets 132D and E angle outwardly from one another from respective ends 152A and 152B toward respective ends 154A and 154B, the latter of which are disposed inwardly of but adjacent sides 106B and 106A of sheet 102.

[0021] Thus, each of panels 148A and 148B of sheet 102 are substantially triangular in shape. More particularly, panel 148A is bounded by pocket 132E, a portion of pocket 132C which extends from adjacent first end 152B of pocket 132E to first side 106A of sheet 102, a portion of first side 106A extending from first end 138 of pocket 132C to the intersection of side 106A and end 104B of sheet 102, and a portion of end 104B extending from its intersection with side 106A to second end 154B of pocket 132E. Panel 148B is substantially a mirror image of panel 148A and is bounded by an analogous structure on the opposite side of sheet 102. Panel 150 defines body opening 110 and may thus be termed a body opening panel of sheet 102.

[0022] With reference to Fig. 3, first end 138 of pocket 132A is enlarged to show the basic structure of pockets 132 in general. An elongated strip 156 of material is connected to sheet 102 to form interior chamber 134 between strip 156 and a portion of sheet 102. Fig. 3 also shows that sheet 102 includes first and second layers 158A and 158B which are connected to one another. Sheet 102 may be a single layer or a plurality of layers, preferably at least one of which is formed of a thermally insulating material. Each strip 156 of material is typically sewn to sheet 102 although other methods of attachment may be used. Each pocket 132 may be formed in any suitable

manner in the art. For example, sheet 102 may comprise a plurality of layers with an interior chamber such as channel 134 formed between a pair of adjacent layers thereof. In addition, while strip 156 is preferably a continuous one-piece strip of material, a plurality of pieces of material may be used to form channel 134. In addition, channel 134 is typically a continuous passage which extends from first side 106A to second side 106B of sheet 102. However, channel 134 may be broken up into several shorter passages which are aligned with one another to receive rod 136. Various options will be evident to one skilled in the art to form pockets or to otherwise connect rods 136 to sheet 102.

[0023] The suspension system for suspending sheet 102 over the cavity of the bathtub may further include a securing mechanism for releasably securing a portion of sheet 102 to bathtub 80. More particularly, securing mechanism 160 includes a pair of suction cups 162A and B disposed adjacent first end 104A of sheet 102 with suction cup 162A adjacent the intersection of first end 104A and first side 106A and second suction cup 162B disposed adjacent the intersection of first end 104A and second side 106B. While securing mechanism 160 is not required in order to suspend sheet 102 above bathtub 80, mechanism 160 is beneficial in that it will secure sheet 102 adjacent first end 104A so that users of cover 100 may pull sheet 102 and support assembly 130 toward themselves without displacing end 104A from its position above or adjacent first end ledge 90A of bathtub 80. While suction cups are preferred for use with the smooth surfaces of a bathtub and the like, any other suitable mechanism for securing sheet 102 adjacent end 104A may be used.

[0024] The operation of cover 100 is now described. Typically cover 100 will initially be packaged either with all of the rods 136 removed from their respective pockets or with the rods removed from pockets 132D and 132E so that cover 100 may be folded or rolled into a relatively compact unit with all of the poles disposed in substantially parallel fashion. Once all of the rods are inserted into their respective pockets 132, the user will then typically at least partially unfold or unroll the cover to an operational position for use with bathtub 80. The cover will then be suspended over entrance opening 84 with suction cups 162 secured to first end ledge 90A or adjacent thereto. The rods 136 disposed in pockets 132A, B and C will be laid across entrance opening 84 with respective first ends 138 atop first side ledge 92A and the respective second ends 140 atop second side ledge 92B of bathtub 80. The respective ends of pockets 132A, B and C will thus also be respectively disposed atop ledges 92A and 92B. Similarly, the second ends 154A and B of pockets 132D and E along with the respective rods inserted therein will be disposed atop second end ledge 90B of bathtub 80 or respectively atop side ledges 92A and 92B depending on the positions of pockets 132D and E on sheet 102.

[0025] Cover 100 may be suspended on tub 80 either prior to or after filling the tub with water via water spout

99. If the cover is positioned on bathtub 80 first, cover 100 adjacent first end 104A may be folded back in order to allow water from spout 99 to fill bathtub 80. Because cover 100 is slidable along side ledges 92A and 92B, the user is able to slidably move cover 100 back and forth as desired to facilitate getting into and out of the tub. At some point, the user folds back or removes flap 116 in order to provide access to opening 110 so that the torso or other portion of the user's body may extend upwardly through opening 110 while seated in cavity 82 of bathtub 80. It is noted that rods 136 may be formed with sufficient strength simply to suspend sheet 102 over bathtub 80. However, rods may be formed which have sufficient strength for supporting the arms of the user atop cover 100 when in use.

[0026] With reference to Fig. 4, bathtub cover 200 is now described. Cover 200 is similar to cover 100 except that the support assembly of the suspension system is somewhat different than support assembly 130 of cover 100. Cover 200 includes a suspension system comprising a support assembly 230 while retaining the securing mechanism 160 as described with regard to cover 100. Support assembly 230 is similar to assembly 130 in that the rods of assembly 230 are positioned in substantially the same manner to establish panels such as panels 146, 148 and 150 as described with cover 100. That is, the panels formed by support assembly 230 are substantially identical in shape and size to those formed by support assembly 130 of cover 100.

[0027] Support assembly 230 utilizes a different system of pockets for securing various rods thereto. More particularly, support assembly 230 includes three pairs of pockets each including a first pocket 232A and a second pocket 232B with each of pockets 232A disposed along first side 106A of sheet 102 and each of second pockets 232B disposed along second side 106B of sheet 102. Pockets 232A are spaced from one another along side 106A and pockets 232B are spaced from one another along side 106B with respective pockets 232B being in opposed relation to the respective first pockets 232A. In contrast with pockets 132 of cover 100, each of pockets 232A and 232B extend inwardly from the respective sides 106A and 106B only a relatively short distance so that the entire respective pocket is adjacent its respective side of sheet 102. Each first pocket 232A defines an interior chamber 234A which faces or opens away from first side 106A and toward side 106B of sheet 102. Similarly, each second pocket 232B defines an interior chamber 234B which faces or opens away from side 106B and toward side 106A of sheet 102. Thus, each associated pair of pockets 232A and B define respective interior chambers 234A and B which face or open toward one another and are aligned with one another for respectively receiving first and second ends 142 and 144 of a respective rod 136.

[0028] Support assembly 230 further includes first and second end pockets 236A and B disposed adjacent second end 104B of sheet 102 with first end pocket 236A

disposed between first side 106A of sheet 102 and opening 110 and second pocket 236B disposed between second side 106B of sheet 102 and opening 110. Pockets 236A and 236B are thus disposed on opposite sides of opening 110 with a portion of opening 110 situated directly between pockets 236A and 236B. Pockets 236A and 236B are typically disposed respectively adjacent first and second sides 106A and 106B of sheet 102 although this may vary. Pockets 236A and 236B respectively define interior chambers 238A and 238B each of which faces away from second end 104B and toward first end 104A of sheet 102.

[0029] Support assembly 230 further includes first and second elongated support members 240A and 240B which are typically in the form of tubes or rods. Rods 240A and B have respective first ends 242A and 242B and respective second opposed ends 244A and 244B. First ends 242A and B are received respectively in interior chambers 238A and 238B of pockets 236A and 236B. Second ends 244A and 244B are disposed adjacent rod 136C, which is the rod 136 closest to second end 104B of sheet 102. More particularly, support assembly 230 includes a pair of connectors 246A and 246B each of which are mounted on said rod 136 and define respective openings for respectively receiving ends 244A and 244B of rods 240A and 240B. Second ends 244A and B of rods 240A and 240B are removable from connectors 246A and 246B as shown by Arrows B in Fig. 4.

[0030] The removal of rods 240A and 240B from connectors 246A and 246B may equate to complete disconnection therebetween. However, one option is to use tubes having elastic cords disposed therein such as used with camping tents so that the support members 240A and 240B are still connected to support member 136C by the elastic cords. Similarly, support member 136C may be divided into three sections with connectors 246A and 246B providing the separation points thereof such that the various sections are also connected by such elastic cords. Support members 136A and 136B may also utilize this concept in order to provide smaller packaging for shipping and retailing purposes. Alternately, the various support members may simply include two or more pieces which may be connected without the use of such an internal elastic cord.

[0031] With reference to Fig. 5, support member 136 is shown adjacent a pocket 232A to indicate the insertable and removable nature of support member 136 as indicated at Arrow C into and out of interior chamber 234A of pocket 232A. This insertable end removable feature is true of all of the support members and their respective pockets 232 and 236. Each pocket 232 and 236 is formed with a strip 248 of material attached to sheet 102, typically being sewn thereto. However, any suitable mechanism for connecting strip 248 to sheet 102 may be used and other options for forming pocket 232 or 236 may be used as well.

[0032] The operation of cover 200 is essentially the same as that as described with cover 100. However,

there are some variations with regard to the connection between support assembly 230 and sheet 102. In short, the rods 136 are inserted into respective pockets 232A and 232B and support members 240A and 240B are inserted into connectors 246A and 246B and pockets 236A and 236B respectively to connect support assembly 230 to sheet 102. It is noted that the various support members 136 and 240 are sufficiently stiff to support sheet 102. However, support members 136 in particular are sufficiently flexible to allow insertion thereof into respective pockets 232A and 232B. The use of cover 200 with bathtub 80 is otherwise the same as described with cover 100.

[0033] With reference to Fig. 6, bathtub cover 300 is now described. Cover 300 is similar to covers 100 and 200 except that cover 300 includes a sheet 302 which defines a water-fill opening 304 and which is suspended over entrance opening 84 of bathtub 80 utilizing a different suspension system. Generally, the suspension system of cover 300 eliminates the use of a support assembly like assemblies 130 and 230 and utilizes a different securing mechanism 306 instead.

[0034] Sheet 302 defines opening 110 which is openable and closable via flap 116 as described with regard to cover 100. In addition, water-fill opening 304 formed in sheet 302 is disposed adjacent first end 104A of sheet 302 in a location which is disposed below water spout 99 when in use with bathtub 80. Preferably, water-fill opening 304 is openable and closable for respectively filling tub 80 with water and covering opening 304 to retain heat within bathtub 80. Sheet 302 includes a flap 308 to that effect. Fasteners in the form of first fastener portions 310A mounted on flap 308 and 310B mounted on sheet 302 adjacent opening 304 are used to releasably secure flap 308 in a closed position thereof in which flap 308 covers opening 304. Fastener portions 310A and B may be hook-and-loop fasteners, snaps as discussed with regard to the fasteners for flap 116 or any other fastening mechanism which is suitable for the purpose.

[0035] Securing mechanism 306 includes first and second side mounting strips 314A and 314B in opposed relation with one another wherein strip 314A is mounted along the entire length L2 of sheet 302 along first side 106A thereof and mounting strip 314B extends along the entire length L2 of sheet 302 along second side 106B thereof. Each mounting strip 314A and B is secured to sheet 302 by any suitable means known in the art. More particularly, mounting strips 314A and 314B respectively include first and second strips 316A and 316B of material each having a plurality of suction cups 318 mounted thereon. Suction cups 318 are disposed along the entire length of each strip 316 so that there are suction cups 318 generally all along the length of strip 316. Typically, suction cups 318 are spaced from one another by approximately one to three inches. Preferably, each mounting strip 314 is a one-piece integrally formed member such that suction cup 318 and strips 316 of material are formed as an integral one-piece member. Securing mechanism 306 may also include an end mounting strip

320 which is connected to sheet 302 along first end 104A thereof with strip 320 extending substantially the entire width W2 of sheet 302. End mounting strip 320 includes a strip 322 of material like strips 316 with suction cups 318 mounted thereon in the same fashion as described with regard to mounting strips 314. Fig. 7 shows an enlarged view of a portion of mounting strip 314B which is representative of mounting strips 314 and 320. Fig. 7 shows strip 316B of material is sewn onto sheet 302 although as previously noted any suitable fastening mechanism may be used.

[0036] The use of cover 300 is similar to that of covers 100 and 200 in the general sense of covering the tub 180. However, there are various distinctions. Because there is no support assembly utilizing rods which may be removable, there is no need for insertion thereof into pockets as with covers 100 and 200. In addition, the elimination of such a support assembly simplifies the folding and/or rolling of cover 300 into a stowing position.

[0037] In short, side mounting strips 314A and 314B are secured via suction cups 318 respectively to side ledges 92A and 92B of bathtub 80 and end mounting strip 320 is likewise secured to first end ledge 90A of bathtub 80. Securing mechanism 306 thus provides the suspension of sheet 302 over entrance opening 84 of bathtub 80. This will position opening 110 and flap 116 as previously described with covers 100 and 200. In addition, opening 304 will be disposed below water spout 99 in order to fill bathtub 80 when flap 308 is in an open position. Once the bathtub is filled to a desired level, the water is cut off and flap 308 is secured via fasteners 310A and B to cover opening 304 for retaining heat of the water within the bathtub. Alternately, if opening 304 happens not to be disposed in a proper position for use with water spout 99, or if cover 302 is covered without opening 304, bathtub 80 may be filled with water either prior to securing cover 300 to bathtub 80, after partially securing it thereto or after securing it to bathtub 80 by pulling back a portion of cover 300 adjacent end 104A or wherever the water spout is located in order to provide an opening for filling the tub.

[0038] Because cover 300 utilizes suction cups for securing it to bathtub 80, it does not possess the slidable qualities associated with covers 100 and 200. Thus, the user of cover 300 may find it convenient to leave some portion of side mounting strip 314A adjacent end 104B of sheet 302 unsecured prior to getting into the bathtub or may release them from their securement to ledge 928 prior to getting in to the bathtub. The use of mounting strips such as strips 314 and 320 ensure that even with the failure of connection between some suction cups 318 and a respective ledge of bathtub 80, that a sufficient number of suction cups 318 will remain secured to the ledges to provide the suspension of cover 300 over entrance opening 84 of bathtub 80.

[0039] Thus, bathtub covers 100, 200 and 300 provide a cost efficient mechanism which retains heat within the bathtub and which is easily used. Each of the bathtub

covers provides a body opening which conveniently receives the torso or some portion of the user's body while seated in the bathtub. In addition, the covers may provide an optional water-fill opening for filling the tub while the bathtub cover is in its operational position on the bathtub. In addition, each of the covers provides a suitable suspension system which may include only a support assembly such as the support systems utilizing rods or the like or simply securing mechanisms such as the suction cups of mounting strips 314 and 320 or a combination of a support assembly and a securing mechanism. Each of the bathtub covers is configured to fit into a compact unit for storing and shipping.

[0040] In the foregoing description, certain terms have been used for brevity, clearness, and understanding. No unnecessary limitations are to be implied therefrom beyond the requirement of the prior art because such terms are used for descriptive purposes and are intended to be broadly construed.

[0041] Moreover, the description, and illustration of the invention is an example and the invention is not limited to the exact details shown or described.

Claims

1. A bathtub cover for use with a bathtub having a water-receiving cavity with an entrance opening, the cover comprising:
 - a flexible sheet defining a body opening adapted to receive a portion of a body of a user of the bathtub; and
 - a suspension system for suspending the sheet in a generally horizontal orientation so that the sheet is adapted to cover the entrance opening of the bathtub.
2. The cover of claim 1 wherein the sheet has an outer perimeter; and wherein the body opening extends inwardly from the outer perimeter.
3. The cover of claim 1 wherein the sheet has an outer perimeter; wherein the suspension system includes a support assembly which extends from a first location adjacent the outer perimeter inwardly to a point on the sheet distal the outer perimeter to a second location adjacent the outer perimeter and distal the first location whereby the support assembly is adapted to extend over the entrance opening of the bathtub cavity.
4. The cover of claim 3 wherein the sheet has first and second opposed sides along the outer perimeter thereof; and wherein the support assembly includes a portion which extends from adjacent the first side to adjacent the second side.

5. The cover of claim 4 wherein the sheet has an end along the outer perimeter which extends between the first and second sides; and wherein the support assembly includes a portion extending from adjacent at least one of the first and second sides to adjacent the end of the sheet. 5
 6. The cover of claim 4 wherein the support assembly includes at least one elongated first support member which extends from adjacent the first side to adjacent the second side. 10
 7. The cover of claim 6 wherein the at least one elongated first support member includes a plurality of elongated first support members which are spaced from one another. 15
 8. The cover of claim 6 wherein the support assembly includes at least one elongated second support member which extends transversely from adjacent the first support member. 20
 9. The cover of claim 8 wherein the at least one second support member includes a pair of elongated second support members which are spaced from one another with the body opening disposed therebetween. 25
 10. The cover of claim 3 wherein the sheet has an outer perimeter; wherein the suspension system includes a securing mechanism adjacent the outer perimeter of the sheet adapted to secure a portion of the sheet adjacent the outer perimeter thereof to the bathtub; and wherein the body opening is disposed adjacent the outer perimeter of the sheet generally opposite the securing mechanism. 30
35
 11. The cover of claim 1 wherein the suspension system includes a support member at least a portion of which is disposed in at least one pocket formed on the sheet. 40
 12. The cover of claim 11 wherein the support member is elongated; wherein the at least one pocket is elongated; and wherein substantially the entire support member is slidably receivable in the at least one pocket. 45
 13. The cover of claim 11 wherein the support member is elongated between first and second opposed ends; wherein the at least one pocket includes a pair of pockets spaced from one another; and wherein the ends of the support member are disposed respectively in the pair of pockets. 50
 14. The cover of claim 1 wherein the sheet has a pair of opposed sides and a pair of opposed ends each extending between the opposed sides; wherein the ends of the sheet define therebetween a length of 55
- the sheet; wherein the suspension system includes first and second mounting strips each having a plurality of suction cups connected thereto; wherein the mounting strips are respectively mounted along the opposed sides of the sheet; and wherein each mounting strip has a length substantially the same as the length of the sheet.
15. The cover of claim 1 wherein the sheet defines a water-fill opening adapted for receiving water there-through to move water into the cavity of the bathtub
 16. The cover of claim 1 in combination with the bathtub defining the water-receiving cavity having the entrance opening wherein a water spout is disposed adjacent the water-receiving cavity; and wherein the body opening is disposed distal the water spout.
 17. The cover of claim 1 in combination with the bathtub defining the water-receiving cavity having the entrance opening; and wherein the suspension system includes a support assembly a portion of which extends over the entrance opening.
 18. The combination of claim 17 wherein the bathtub includes a plurality of ledges bounding the entrance opening; and wherein the support assembly includes a portion which extends over the entrance opening from atop one of the ledges to atop another of the ledges.
 19. The combination of claim 18 wherein the plurality of ledges includes first and second opposed side ledges; and wherein the support assembly includes a portion which extends over the entrance opening from atop the first ledge to atop the second ledge.
 20. A bathtub cover for use with a bathtub having a water-receiving cavity with an entrance opening, the cover comprising:

a flexible sheet having a portion which is movable to define a body opening adapted to receive a portion of a body of a user of the bathtub; and a suspension system for suspending the sheet in a generally horizontal orientation so that the sheet is adapted to cover the entrance opening of the bathtub.

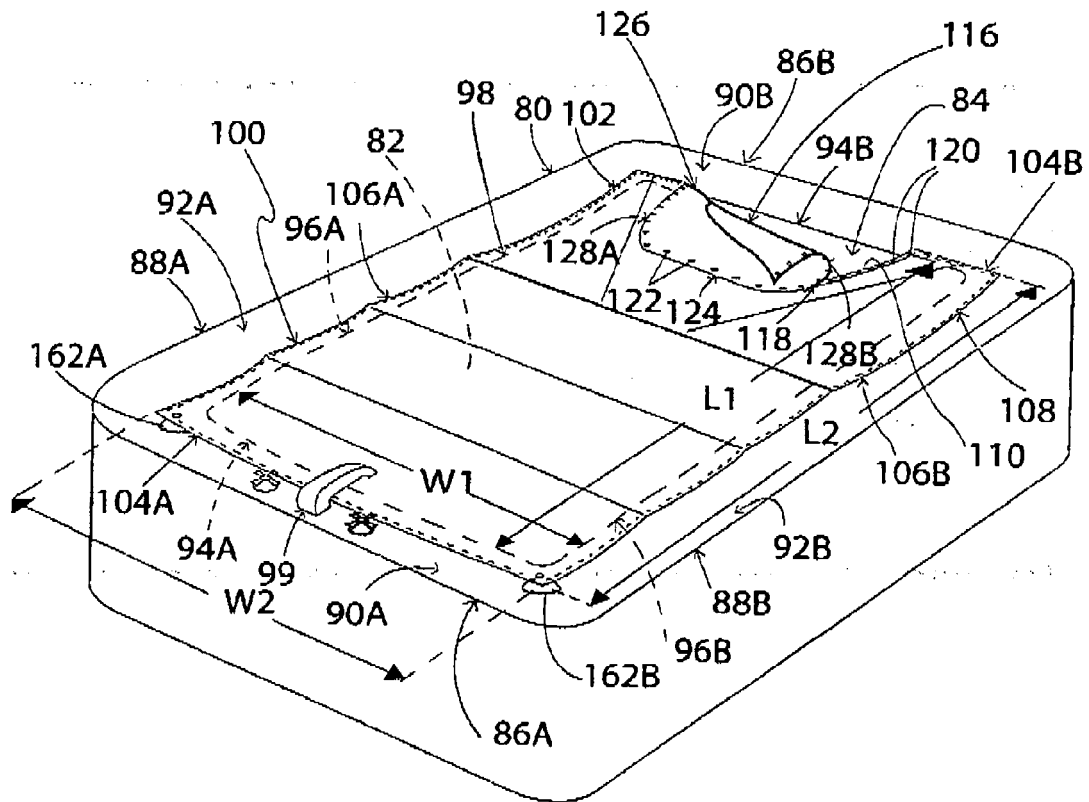


FIG. 1

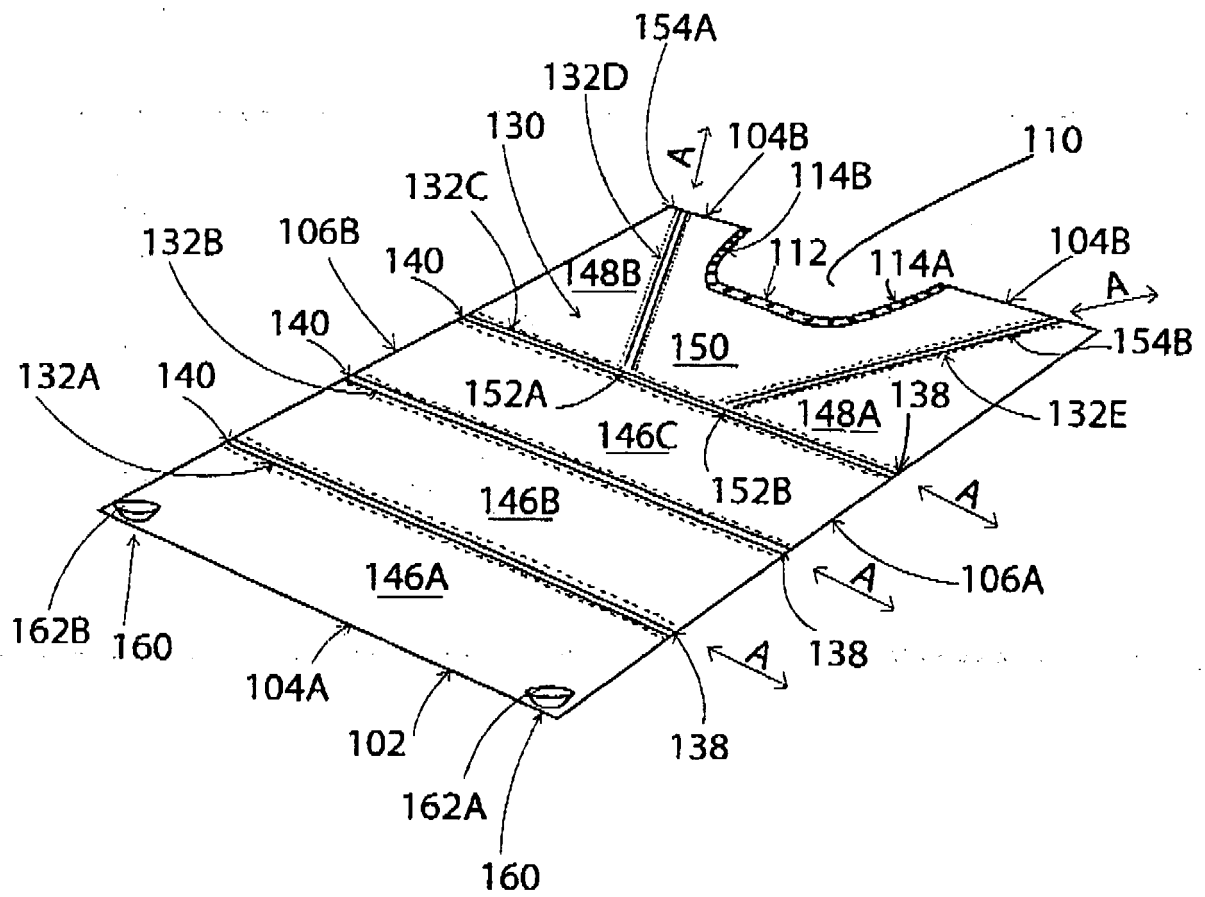
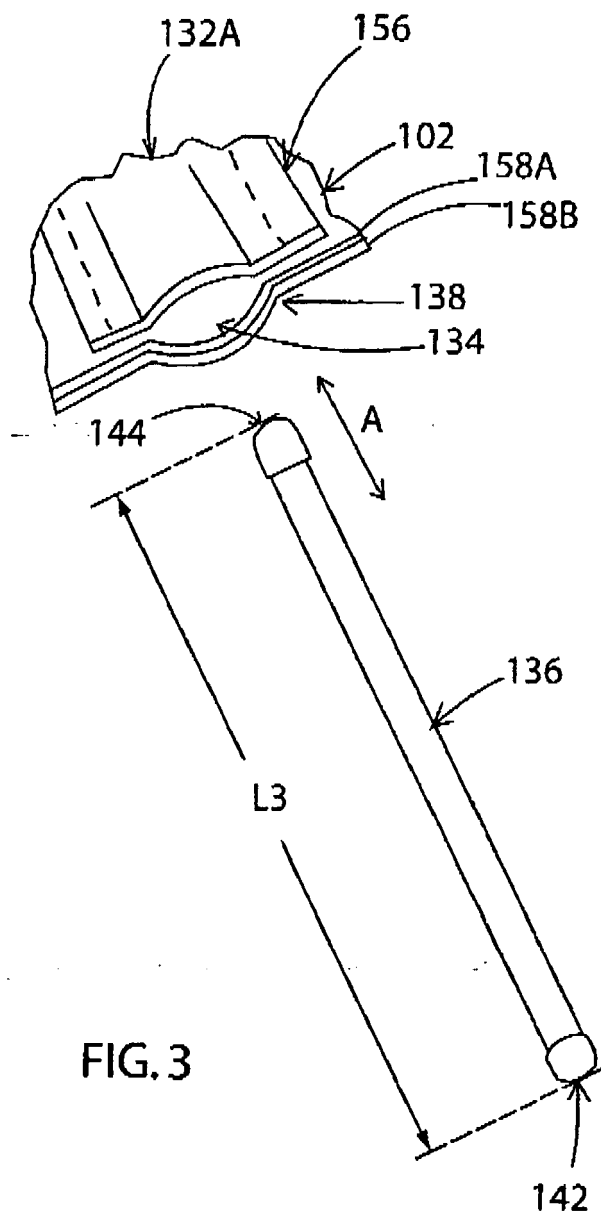


FIG. 2



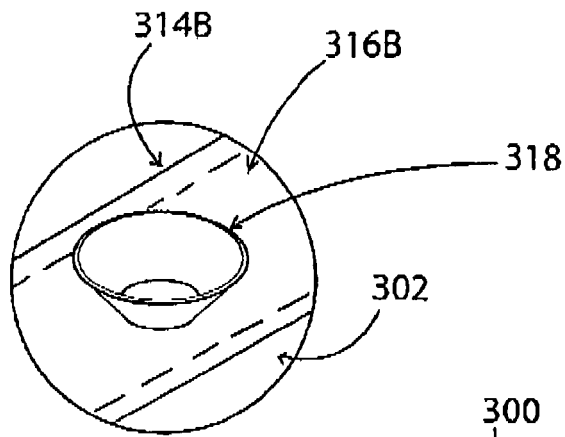


FIG. 7

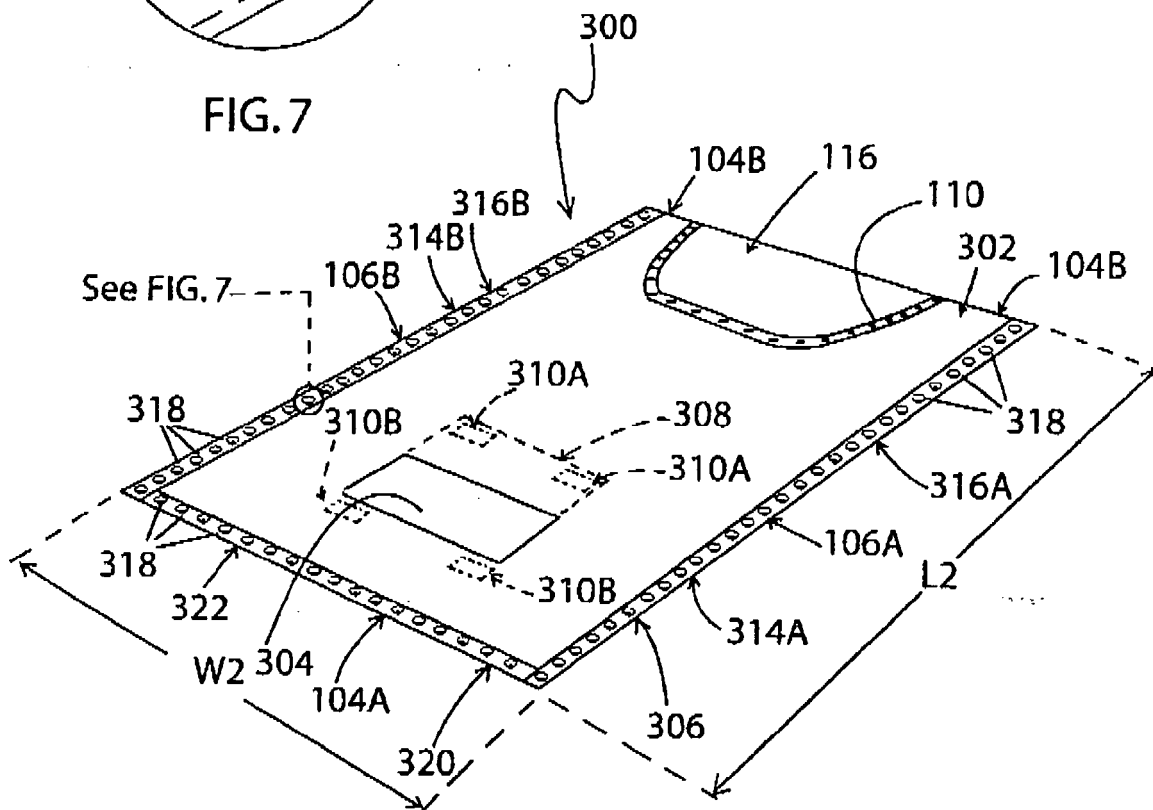


FIG. 6



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 06 02 3001

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 March 2007	Examiner Clasing, Martina
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

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28-03-2007

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