

[54] PATIENT GARMENT WITH TEMPERATURE CONTROL
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[51] Int. Cl. A61f 7/00
[58] Field of Search 128/399, 400, 402, 128/379, 362, 68.1, 82.1; 62/259, 261; 165/59; 2/2.1 R, 2.1 A

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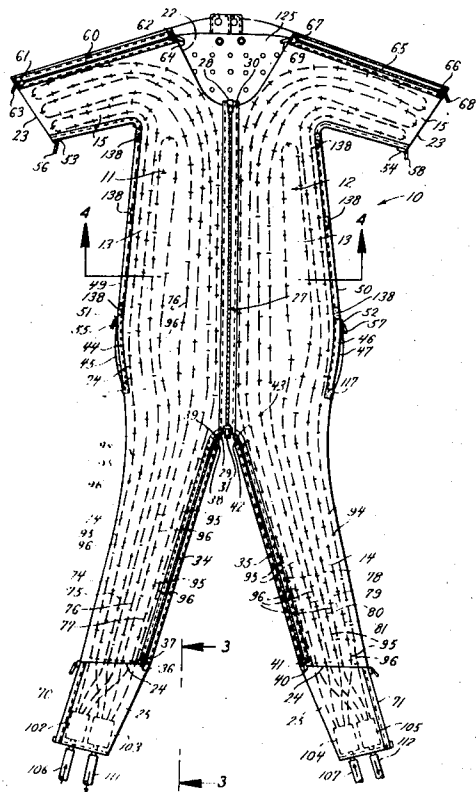
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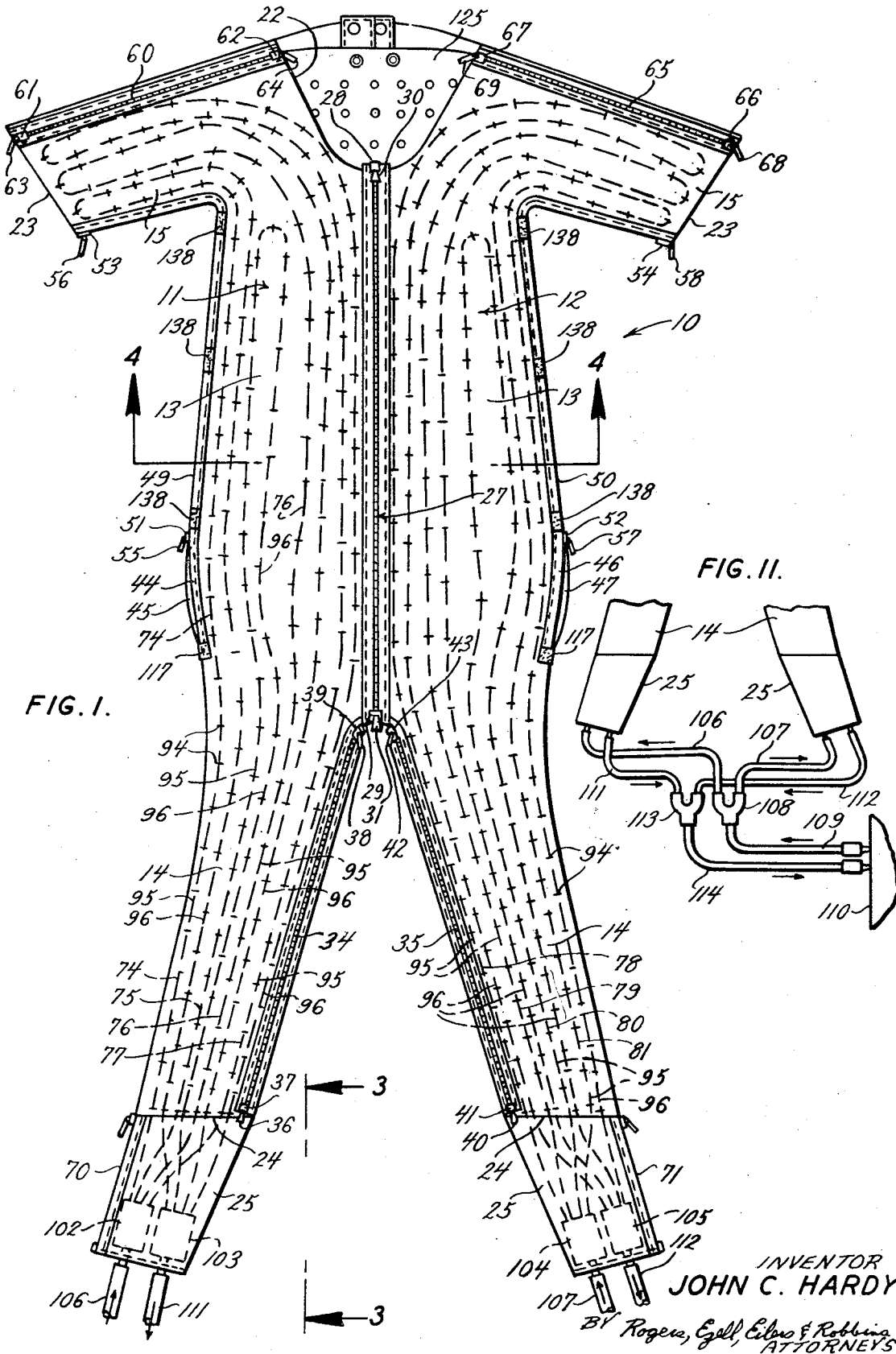
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[57] ABSTRACT

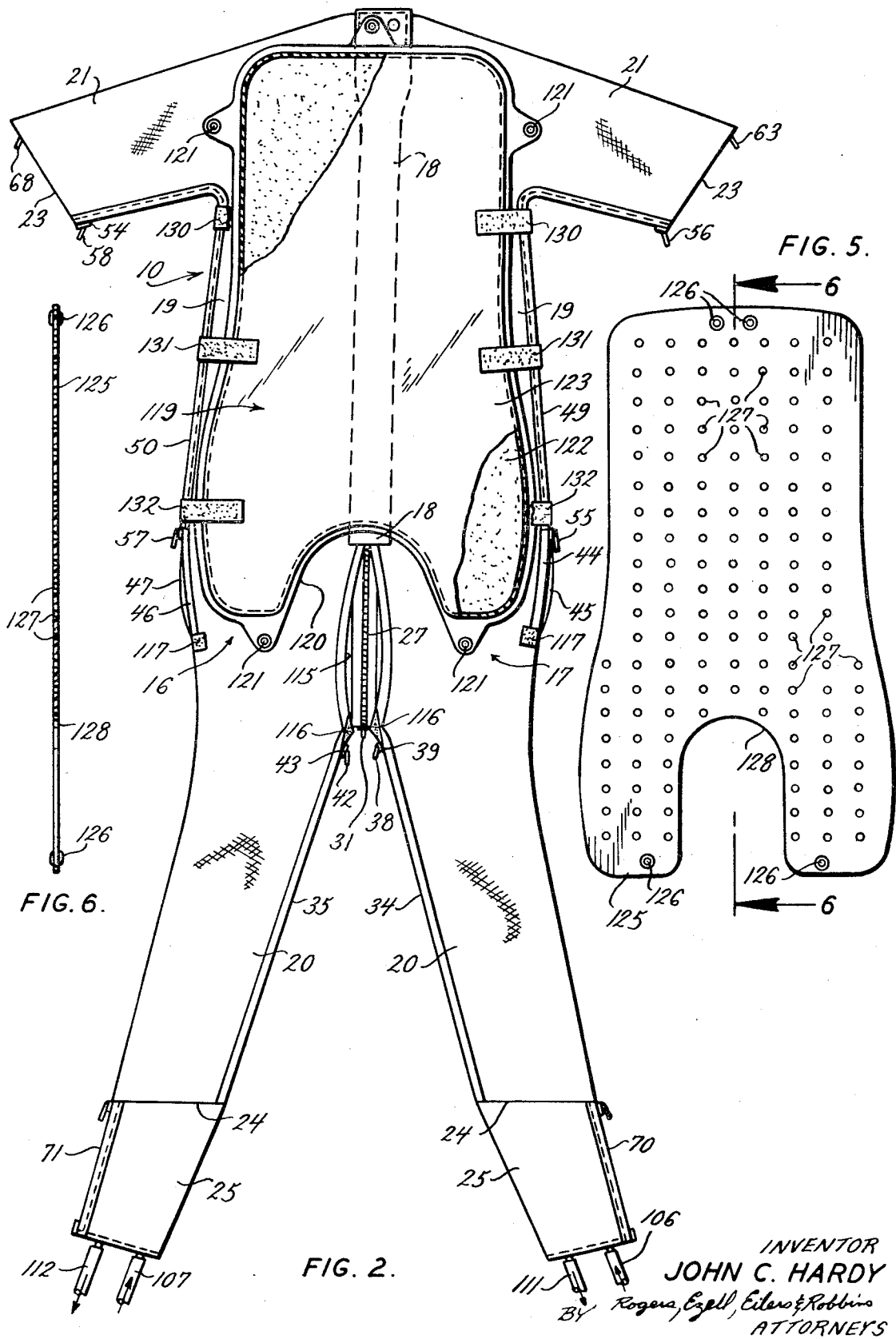
A hospital patient garment of lateral stretch fabric for conforming to different body shapes. Small-diameter tubes attached to the garment for conveying heating or cooling fluids circulated by a hyperthermia machine. The tubes lie longitudinally of the garment to uniformly blanket the entire surface area of the garment while permitting lateral expansion of the fabric when the garment is worn by relatively obese persons. Strategically located zippers for easy donning and doffing of the garment and for providing selective access to different areas of the body, such as for operations. Special adjustment straps spaced along the torso zippers for holding the garment in place on the body of an exceptionally obese person with the torso zippers unzipped. A resilient pad snaps to the back of the garment for improving comfort by yielding to the impressions of the fluid conveying tubes. Flaps at the back of the garment can be releasably held folded away from the lower torso area with the leg zippers partially unzipped to free the garment from interference with the use of a bed pan.

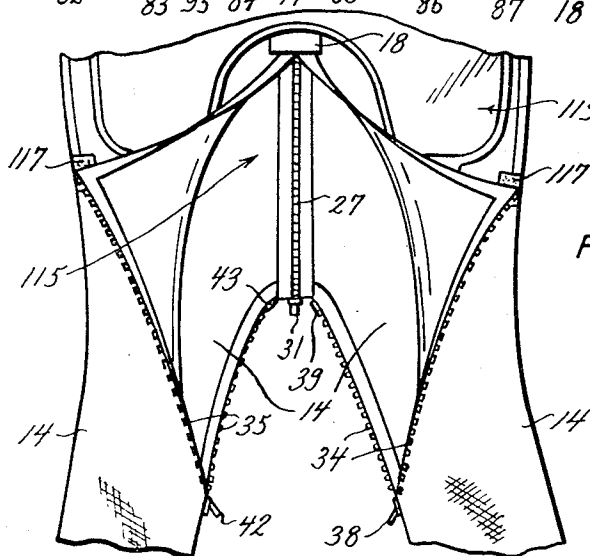
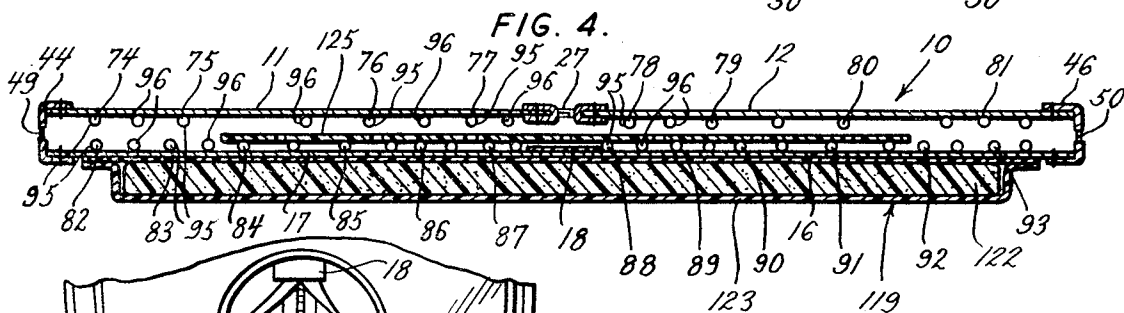
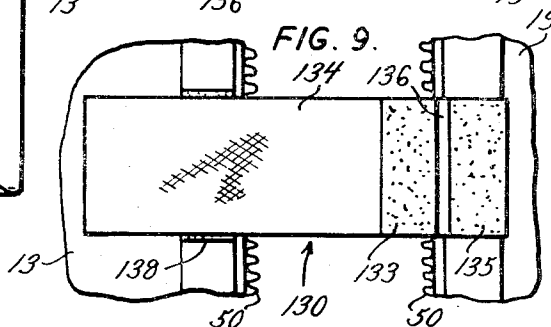
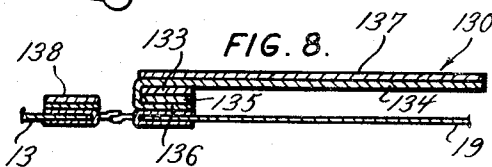
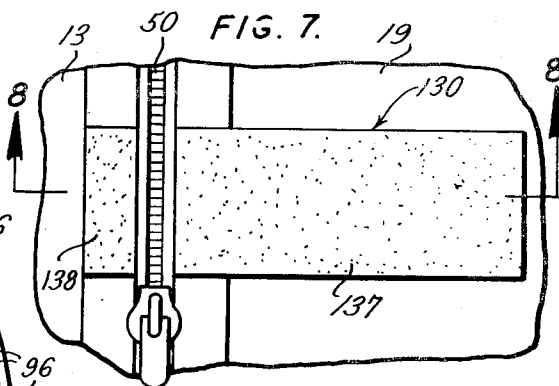
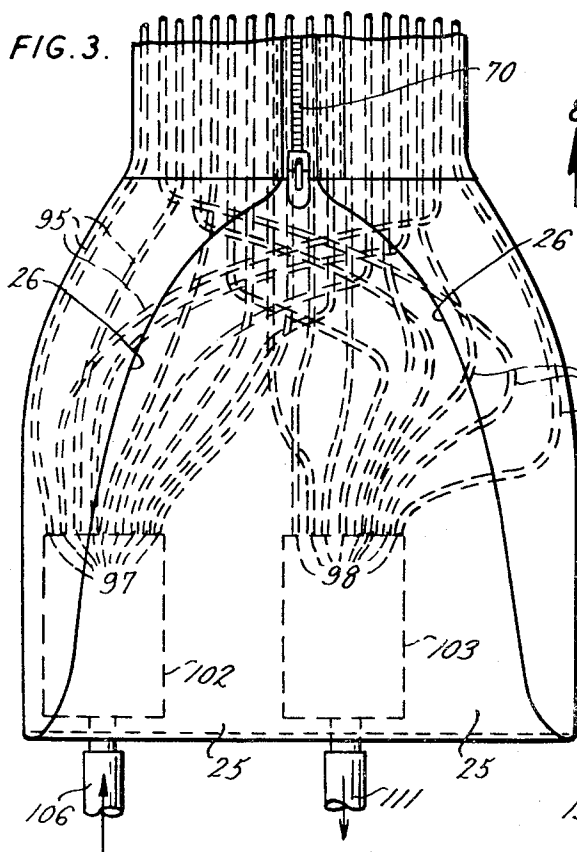
8 Claims, 11 Drawing Figures





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PATIENT GARMENT WITH TEMPERATURE CONTROL

BRIEF DESCRIPTION OF THE INVENTION

This hospital patient garment is made of open-mesh stretch fabric with plastic tubes attached to it. While the specific construction is not critical, the garment described herein has two front panels and two back panels with sleeves extending to the elbows and legs extending to the ankles. Zippers provide access to the front and sides of the torso, to the legs, to the arms, and to the shoulders of the patient. Access is reversed if the garment is worn backward. Two-way zippers and double sliders enable the entire front and legs of the garment to be opened or any individual part thereof to be opened for access. Zippers also extend along the outer sides and under arms of the garment and zippers extend over the shoulders to the neck of the garment. These are also two-way and double slider zippers that permit full opening and also permit access along the zipper.

All the panels of the garment are made of stretch fabric. Several tubes are fastened to the inner side of the stretch fabric. Each tube consists of two passes, one of which delivers and the other of which returns fluid maintained at a desired temperature for controlling the body temperature. The tubes are substantially evenly spaced and extend generally longitudinally. This permits flexibility of lateral size of the garment to fit and conform to various body sizes. For unusually obese persons, the side zippers may be unzipped and spread apart. Spaced along these side zippers are straps that can overlie the resulting gap. These straps are releasably held in the overlying positions by fasteners which are sold under the trademark VELCRO. There are flaps at the back of the garment that are held in closed condition by the leg zippers. When the leg zippers are partially unzipped, the flaps can be folded back to create an opening that frees the garment from interference with the patient's use of a bed pan. Fasteners, which are sold under the trademark VELCRO, releasably hold the flaps in their folded-back condition.

The tubes terminate below the ankles and are connected to manifolds that lead to a conventional hyperthermia machine. The manifolds and tube ends are located in a pouch sewed to the lower edge of each leg of the garment.

This garment conforms to the body of the patient with the fluid-conveying tubes in direct contact with almost all areas of the body. As such, it is superior to water circulating blankets or pads which are not in intimate contact with the body and that produce hot or cold spots.

A plastic encased resilient pad snaps to the outside of the back of the garment. A plastic sheet having breathe openings snaps to the inner surface of the back of the garment. When the patient is lying in bed against the back of the garment, the resilient pad receives the tubular impressions and greatly improves the comfort of wearing the garment. The inner liner distributes the load of the tubes while permitting breathing. Both the plastic encased pad and the inner liner are non-moisture absorbent and can be readily sterilized.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front view of the garment;
FIG. 2 is a rear view of the garment with portions shown in section, but with the tubes not shown;

FIG. 3 is an enlarged view of the garment along the line 3—3 of FIG. 1;

FIG. 4 is an enlarged view in section along the line 4—4 of FIG. 1;

FIG. 5 is a plan view of the inner liner panel;

FIG. 6 is a view in section along the line 6—6 of FIG. 5;

FIG. 7 is an enlarged fragmentary side elevation view of a portion of the left side of the garment showing the zipper closed and showing a size adjustment strap in inoperative position;

FIG. 8 is a view in section along the line 8—8 of FIG. 7;

FIG. 9 is an enlarged fragmentary side elevation view similar to that of FIG. 7, but showing the zipper opened and the size adjustment strap in operative position;

FIG. 10 is a fragmentary rear elevation view of the lower torso portion of the garment with the access flaps folded back;

FIG. 11 is a schematic view of the tube connections to a conventional hyperthermia machine.

DETAILED DESCRIPTION OF THE INVENTION

This garment 10 has two front panels 11 and 12 each of which has a torso portion 13, a leg portion 14, and a portion 15 covering the arm to the elbow. The garment also has two back panels 16 and 17 joined together by a flat seam 18. Each of the back panels 16 and 17 has a torso portion 19, a leg portion 20 and a portion 21 covering the arm to the elbow. When these panels 11, 12, 16 and 17 are sewed together, a neck opening 22 at the top, arm openings 23 at the outer edges of the sleeves, and leg openings 24 at the lower edges of the legs are formed. A bag 25 is sewed to the lower edge 24 of each leg in such a way that the sides 26 of the bags permit the bags to be pushed aside when the patient's feet and ankles extend through the lower leg openings 24 (See FIG. 3). The garment is made of stretch fabric so that it will conform to the wearer's body, fully covering the torso and legs to the ankles and covering the arms to the elbows.

A zipper 27 extends vertically along the center of the front of the torso, separating the torso portions 13 of the front panels 11 and 12. The zipper 27 has an upper slider start element 28 at the neck line 22 and a lower slider start element 29 at the groin. An upper slider 30 opens the zipper 27 when moved in a downward direction and closes the zipper 27 when moved in an upward direction. A lower slider 31 opens the zipper 27 when moved in an upward direction and closes the zipper 27 when moved in a downward direction. The upper slider start element 28 acts as a double slider separating tab such that when both the sliders 30 and 31 are moved all the way up to the top of the slider start element 28, the upper end of the zipper 27 at the neck line 22 can be fully opened so that the two torso panels 13 can be completely separated along the entire length of the zipper 27. When the slider 30 moves fully downward to the slider start element 29 the zipper 27 is opened to its lower end but it cannot be separated at the start element 29. Thus, the slider start element 29 is not a separator tab, but functions as a slider stop.

Zippers 34 and 35 respectively extend vertically along the inner sides of the right and left legs. The zippers 34 and 35 thus are located between the leg panel portions 14 and 20 of each leg. The zipper 34 has a lower slider 36 that moves upwardly from a zipper start

element 37 in an opening direction and downwardly in a closing direction and has an upper slider 38 that moves downwardly from a start element 39 in an opening direction and upwardly in a closing direction. The zipper 35 has a similar lower slider 40 and a start element 41 and an upper slider 42 and start element 43. The zippers 34 and 35 extend from the point of the zipper start element 29 on the zipper 27 downwardly to the openings 24 of the legs. Therefore, the entire front of the garment can be opened from the neck to the groin and continuing down the insides of the two legs to the leg openings 24.

At the sides of the garment, cloth bindings 44 form a slit 45 on the right side and cloth bindings 46 from a slit 47 on the left side. These cloth bindings 44 and 46 continue upwardly as the bindings on opposite sides of two side torso zippers 49 and 50. The two side torso zippers 49 and 50 respectively have lower zipper start elements 51 and 52 located at about the centers of the hips and they extend upwardly along the right and left sides of the torso and outwardly along the undersides of the right and left arms to the sleeve openings 23. The zipper 49 has an upper zipper start element 53 at the right sleeve opening 23. The zipper 50 has an upper zipper start element 54 at the sleeve opening 23. The zipper 49 has two sliders 55 and 56. The slider 55 opens the zipper 49 (and separates the start element 51) when moved toward the start element 53 and closes the zipper when moved away from the start element 53. The slider 56 opens the zipper 49 when moved away from the start element 53 and closes the zipper when moved toward the start element 53. When both the sliders 55 and 56 are moved all the way to the start element 53, the end of the zipper 49 at the start element 53 can be fully opened.

The zipper 50 also has two sliders 57 and 58. The slider 57 moves in an opening direction (and separates the start element 52) when moved toward the start element 54 and closes the zipper when moved away from the start element 54. The slider 58 opens the zipper when moved away from the start element 54 and closes the zipper when moved toward the start element 54. When both the sliders 57 and 58 are moved all the way to the start element 54, that end of the zipper 50 can be fully opened.

A zipper 60 extends from a start element 61 at the right sleeve opening 23 longitudinally over the outer side of the arm and over the top of the shoulder to another start element 62 at the neck opening 22. The zipper 60 has two sliders 63 and 64. The lower slider 63 closes the zipper 60 when moved toward the zipper start element 61 and opens the zipper when moved away from the start element 61. When the slider 63 is moved all the way to the start element 62, the zipper 60 can be fully opened at the arm opening 23. The slider 64 opens the zipper 60 when moved away from the start element 62 and closes the zipper when moved toward the start element 62. When the sliders 63 and 64 are moved all the way to the start element 62, the zipper 60 can be fully opened at the neck opening 22.

A similar zipper 65 extends from a start element 66 at the arm opening 23 over longitudinally along the outer side of the left sleeve 15 and over the left shoulder to a start element 67 located at the neck opening 22. The zipper 65 has two sliders 68 and 69. The slider 68 opens the zipper 65 when moved in a direction away from the start element 66 and closes the zipper when

moved toward the start element 66. The zipper can be fully opened at the left sleeve opening 23 when the slider 68 is moved all the way to the start element 67. The slider 69 opens the zipper when moved away from the start element 67 and closes the zipper when moved in a direction towards the element 67. When the sliders 68 and 69 are moved all the way to the start element 67, the zipper 65 can be fully opened at the neck opening 22.

Zippers 70 and 71, extend vertically on the outer sides of the bags 25. These zippers provide access to the interiors of the bags 25.

20 flexible plastic tubes 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, and 93, each about one-eighth to five thirty-second inch in outside diameter, are fastened to the inner surface of the garment 10 by any suitable means such as stitches 94 spaced about 3 inches along each tube, 74 - 93, or by a heat and pressure seal process such as disclosed in the co-pending application of the present applicant entitled METHOD OF JOINING TUBES TO FABRICS Ser. No. 114,599, filed in the United States Patent Office on Feb. 11, 1971 and assigned to the assignee of the present invention. Each tube 74 - 93 has two passes 95 and 96. One pass 95 delivers liquid from an inlet end 97 and the other pass 96 returns the liquid to an outlet end 98. The ends 97 and 98 are below the bottom openings 24. (Only some of the ends 97 and 98 are illustrated in FIG. 3). Of the 20 tubes 74 - 93, four tubes 74, 75, 76 and 77, each with two passes 95 and 96, are located on the right front panel 11 and four tubes 78, 79, 80 and 81, are located on the left front panel 12. As shown in FIG. 4, six tubes 82, 83, 84, 85, 86 and 87 are located on the right rear panel 17, and six tubes 88, 89, 90, 91, 92 and 93 are located on the left rear panel 16. The passes 95 and 96 are approximately evenly spaced on each panel. To achieve this even spacing, some of the tubes, such as the tubes 74 and 80, extend only along the front panels, whereas other tubes extend over both the front panels and the arms. Although the tubes 82 - 93 are not illustrated in FIG. 2, they, likewise, are substantially evenly spaced.

All of the inlet ends 97 of the tubes 74 - 93 that are located in the right leg terminate and open into a manifold 102. All of the outlet ends 98 of the tubes 74 - 93 located in the right leg terminate in manifold 103. All of the inlet ends 97 located in the left leg terminate and open into a manifold 104. All of the outlet ends 98 located in the left leg terminate and open into a manifold 105. The inlet manifolds 102 and 104 have single tubes 106 and 107, respectively, leading to a plastic T fitting 108 that has a single tube 109 leading from a conventional hyperthermia machine 110. The outlet manifolds 103 and 105 have single tubes 111 and 112, respectively, leading to a plastic T fitting 113 that has a single tube 114 leading to the inlet to the hyperthermia machine 110. The tubes 106, 107, 109, 111, 112 and 114 are much larger in diameter than the tubes 74 - 93.

At the back side of the garment 10, a hemmed opening 115 provides access to the crotch area of the patient for instrumentation and bed pan service. Two hook pads 116 which are sold under the trademark VELCRO are sewed to the garment adjacent the opening 115 and adjacent the upper leg zipper sliders 38 and 42. At the sides of the garment, below the bindings 44 and 46, two pile pads 117 which are sold under the trademark VELCRO are sewed to the garment. As il-

lustrated in FIG. 10, when the zipper sliders 38 and 42 are partially unzipped, the lower torso flaps on either side of the opening 115 can be folded back with the hook pads 116 pressed into engagement with the pile pads 117. This frees the garment from interfering with the patient's use of a bed pan.

A resilient pad assembly 119, having a lower central recess 120 is releasably fastened by snaps 121 to the outer back surface of the garment 10. The resilient pad assembly 119 comprises a foam sheet 122 encased within a sealed plastic container 123. Since the pad assembly 119 extends over virtually the entire back of the torso portion of the garment, it yields to the protrusions of the tubes 82 through 93 when the patient is lying with the pad between himself and a hospital bed.

A plastic sheet 125 having the same general shape as the pad assembly 119 is releasably fastened by snaps 126 to the inner surface of the rear side of the garment 10. The plastic sheet 125 has a large number of small breather holes 127 through it. The plastic sheet distributes the loads created by the tubes 82 through 93 when the patient is lying on his back. The plastic sheet 125 has a lower central recess 128 in it.

As shown in FIGS. 1 and 2, and in detail in FIGS. 7, 8, and 9, the garment 10 has special size-adjustment elements for use when the garment is worn by an unusually obese person. Some straps 130, 131, and 132 are sewed to the binding adjacent the rearward side of each side zipper 49 and 50. Each strap has a pile pad 133 which is sold under the trademark VELCRO sewed to its underside 134 and a hook pad 135 which is sold under the trademark VELCRO sewed to its base 136 (See FIG. 8), the base 136 being the part of the strap sewed to the garment. A pile pad 137 which is sold under the trademark VELCRO is sewed to and covers the entire face of each strap 130, 131, and 132. A hook pad 138 which is sold under the trademark VELCRO is sewed to the binding adjacent the forward side of each zipper 49 and 50, opposite each strap 130, 131, and 132. When the garment 10 is worn by a normal sized person, the straps are folded back as illustrated in FIGS. 2 and 7, with the hook and pile pads 135 and 133 releasably holding them folded back. When the garment is worn by a person who is unusually obese, it may be necessary to leave the side zippers 49 and 50 unzipped. In such a case, as shown in FIG. 9, the straps are manually released from the hook and pile pads 135 and 133 and are extended across the gaps of the unzipped zippers 49 and 50. When the pile pads 137 are pressed against the hook pads 138, the straps 130, 131 and 132 adjustably hold the garment close to the body of the obese wearer.

This garment is made by fastening the tubes to each panel 11, 12, 16 and 17 and thereafter sewing the panels together to complete the garment. The garment is used in hospitals for maintaining a constant body temperature at a desired degree of heating or cooling. This is accomplished by circulating temperature-controlled water from the hyperthermia machine 110. The water flows through the tube 109 into the T 108 and thence through the two branches 106 and 107 to the manifolds 102 and 104. From the manifolds 102 and 104, the temperature-controlled liquid flows upwardly through all of the inlet flow passes 95 of the tubes 74 through 93. From there the liquid flows back through the liquid return passes 96 of all the tubes 74 through 93 to the outlet manifolds 103 and 105, then flowing through the

tubes 111 and 112 to the T 113 and through the tube 114 back to the hyperthermia machine 110. Therefore, temperature-controlled liquid is delivered through alternately spaced passes 95 and returned through alternately spaced passes 96 to maintain overall uniform temperature control.

When the garment is worn, the strategic locations of the zippers 27, 34, 35, 49, 50, 60 and 65 permit almost all portions of the garment to be opened and provide completely flexible access to parts of the body for hospital purposes.

This hospital patient garment incorporates directly in its construction tubes that circulate liquid at controlled temperatures. Since the tubes are distributed over the entire garment, efficient and direct temperature control is applied to the entire body of the patient covered by the garment. Temperature distribution is enhanced by alternating inlet and outlet fluid carrying tubes to further minimize hot or cold spots. Stretch fabric construction of the garment, and the longitudinal orientation of the tubes, provide a snug fit for any patient body sizes and hold the temperature control tubes against the patient's body. The garment can be worn forward or backward, and strategically located zippers permit easy donning and doffing of the garment and provide flexible selected access to different areas of the body for hospital treatment.

In these and other ways, the garment is superior in effectiveness, efficiency, and flexibility to conventional patient body temperature control devices. These conventional devices, which include water circulating blankets and pads, are inefficient in heat transfer and produce warm or cold spots because they do not conform to the patient's body. Sterilization and laundering of conventional devices are difficult or not possible.

Since the garment of this invention is more efficient, temperature-controlled water from a hyperthermia machine can be circulated through a greater number of garments. The garment is machine launderable and sterilizable by gas sterilization, in contrast to the difficulty of laundering or sterilizing a bulky blanket. Also, this garment incorporates a resilient pad on the back of the garment, and when the patient lies with the pad between his body and the bed, the pad yields to the protruding tubes to relieve discomfort to the patient's back.

Various changes and modifications may be made within this invention as will be readily apparent to those skilled in the art. Such changed and modifications are within the scope and teaching of this invention as defined by the claims appended hereto.

What is claimed is:

1. A garment comprising fabric having torso, leg and arm covering portions, a plurality of small-diameter tubes fastened to the inner surface of said fabric in spaced relation to one another and extending generally over the entire inner surfaces of said torso, leg and arm covering portions of said garment, whereby substantial portions of the lengths of said plurality of small-diameter tubes can confront and engage the corresponding portions of the torso, legs and arms of a wearer of said garment, said garment having elongated openings in said torso, leg and arm covering portions thereof which are selectively closable to enable said fabric to hold said substantial portions of the lengths of said plurality of small-diameter tubes in confronting and engaging relation with said corresponding portions

of said torso, legs and arms of said wearer of said garment, said elongated openings being selectively openable to enable said fabric to bodily move said substantial portions of the lengths of said plurality of small-diameter tubes out of said confronting and engaging relation with said corresponding portions of said torso, legs and arms of said wearer of said garment, each tube of said plurality of small-diameter tubes having a supply span for receiving temperature-controlled fluid and a return span for returning said temperature-controlled fluid after said temperature-controlled fluid has been in heat-exchanging relation with said corresponding portions of said torso, legs and arms of said wearer of said garment, at least some of said small-diameter tubes being disposed so said supply spans and said return spans thereof coact to provide U-shaped paths for said temperature-controlled fluid which are alternated with each other to provide uniform temperature distribution over substantially the entire inner surfaces of said torso, leg and arm covering portions of said garment, said plurality of small-diameter tubes extending longitudinally of said torso, leg and arm covering portions of said garment, a bag secured to and extending downwardly beyond one of said leg-covering portions of said garment, small header means connected to said supply spans of said small-diameter tubes and adapted to receive temperature-controlled fluid from a means to circulate temperature-controlled fluid and to supply said temperature-controlled fluid to said supply spans of said small-diameter tubes and thereby enable said small-diameter tubes to circulate said temperature-controlled fluid in heat-exchanging relation with said corresponding portions of said torso, legs and arms of said wearer of said garment, and further small header means connected to said return spans of said small-diameter tubes to receive said temperature-controlled fluid from said return spans of said small-diameter tubes after said temperature-controlled fluid has been in heat-exchanging relation with said corresponding portions of said torso, legs and arms of said wearer of said garment and adapted to return said temperature-controlled fluid to said fluid-circulating means, the first said small header means being located within said bag and thus being immediately adjacent to and being supported by said one leg-covering portion of said garment, said further small header means being located within said bag and thus being immediately adjacent to and being supported by said one leg-covering portion of said garment, said further small header means being adjacent to said first said small header means.

2. A garment comprising fabric having torso, leg and arm covering portions, a plurality of small-diameter tubes fastened to the inner surface of said fabric in spaced relation to one another and extending generally over the entire inner surfaces of said torso, leg and arm covering portions of said garment, said garment having elongated openings in said torso, leg and arm covering portions thereof which are selectively closable to enable said fabric to hold said plurality of small-diameter tubes in confronting relation with corresponding portions of said torso, legs and arms of a wearer of a garment, said elongated openings being selectively openable to enable said fabric to bodily move said plurality of small-diameter tubes away from said confronting relation with said corresponding portions of said torso, legs and arms of said wearer of said garment, each tube of said plurality of small-diameter

tubes having a supply span for receiving temperature-controlled fluid and a return span for returning said temperature-controlled fluid after said temperature-controlled fluid has been in heat exchanging relation with said corresponding portions of said torso, legs and arms of said wearer of said garment, small distributor means connected to said supply spans of said small-diameter tubes and adapted to receive temperature-controlled fluid from a fluid-circulating means and to supply said temperature-controlled fluid to said supply spans of said small-diameter tubes and thereby enable said small-diameter tubes to circulate said temperature-controlled fluid in heat exchanging relation with said corresponding portions of said torso, legs and arms of said wearer of said garment, further small distributor means connected to said return spans of said small-diameter tubes to receive said temperature-controlled fluid from said return spans of said small-diameter tubes after said temperature-controlled fluid has been in heat-exchanging relation with said corresponding portions of said torso, legs and arms of said garment and adapted to return said temperature-controlled fluid to said fluid-circulating means, said small-diameter tubes which are fastened to said torso-covering portion underlying the torso of said wearer of said garment whenever said wearer of said garment is lying on his back, and a semirigid sheet which is disposed inwardly of the fabric at the rear of said torso-covering portion and inwardly of said small-diameter tubes which are fastened to said inner surface of said fabric at said rear of said torso-covering portion, said semirigid sheet being readily detachable from said garment for laundering and sterilization convenience, said semirigid sheet distributing the compressive load of said small-diameter tubes, thereby improving the mechanical comfort of said garment.

3. A garment comprising fabric having torso, leg and arm covering portions, said fabric being stretch fabric which is stretchable in a lateral direction to conform to differently-sized bodies of wearers of said garment, a plurality of small-diameter tubes fastened to said fabric in spaced relation to one another and extending generally over the entire surface of said garment, each tube of said plurality of small-diameter tubes having a supply span for receiving temperature-controlled fluid and a return span for returning said temperature-controlled fluid after said temperature-controlled fluid has been in heat-exchanging relation with the wearer of said garment, distributor means connected to said supply spans of said small-diameter tubes and adapted to receive temperature-controlled fluid from a fluid-circulating means and to supply said temperature-controlled fluid to said supply spans of said small-diameter tubes and thereby enable said small-diameter tubes to circulate said temperature-controlled fluid in heat-exchanging relation with said wearer of said garment, further distributor means connected to said return spans of said small-diameter tubes to receive said temperature-controlled fluid from said return spans of said small-diameter tubes after said temperature-controlled fluid has been in heat-exchanging relation with said wearer of said garment and adapted to return said temperature-controlled fluid to said fluid-circulating means, zippers extending along the sides of said torso-covering portion of said garment, said zippers being openable for access to the body of said wearer of said garment and to increase the size of said garment for an obese

wearer, and straps spaced along the length of each zipper, each strap being sewn to said garment adjacent one side of a zipper and being movable in pivotal fashion to span the gap between, and to extend to and beyond, the other side of such zipper, and releasable fastener means for selectively holding said strap to said garment adjacent said other side of said zipper.

4. The garment of claim 3 wherein said releasable fastener means comprises a hook-type fastener and a pad-type fastener which are readily securable to and separable from each other in a non-destructive manner.

5. The garment of claim 3 wherein there are at least three straps spaced vertically along each zipper which is located at the side of said torso-covering portion of said garment.

6. The garment of claim 3 including a zipper extending downwardly along the inner side of each of said leg-covering portions, each zipper being oriented to open from its upper end, a slit in the back of said torso-covering portion of said garment extending upwardly to a point adjacent the waist of said garment and dividing the portions of the fabric adjacent the lower back of said torso-covering portion into two flaps that, when the two leg zippers are at least partially unzipped, can be folded outwardly and away from the rear of said body of said wearer of said garment to create an opening freeing said garment from interference with the use of a bed pan by said wearer of said garment.

7. The garment of claim 3 including a zipper extending downwardly along the inner side of each leg-covering portion, each zipper being oriented to open from its upper end, a slit in the back of said torso-covering portion of said garment extending upwardly to a point adjacent the waist of said garment and dividing

the portions of the fabric adjacent the lower back of said torso-covering portion into two flaps that, when the said two leg zippers are at least partially unzipped, can be folded outwardly and away from the rear of said body of said wearer of said garment to create an opening freeing said garment from interference with the use of a bed pan by said wearer of said garment, and releasable fastener means for selectively holding said two flaps in said outward folded condition and thereby releasably holding said two flaps so they cannot interfere with the use of said bed pan by said wearer of said garment.

8. The garment of claim 3 including a zipper extending downwardly along the inner side of each leg-covering portion, each zipper being oriented to open from its upper end, a slit in the back of said torso-covering portion of said garment extending upwardly to a point adjacent the waist of said garment and dividing the portions of the fabric adjacent the lower back of said torso-covering portion into two flaps that, when the said two leg zippers are at least partially unzipped, can be folded outwardly and away from the rear of said body of said wearer of said garment to create an opening freeing said garment from interference with the use of a bed pan by said wearer of said garment, and releasable fastener means for selectively holding said two flaps in said outward folded condition and for releasably holding said two flaps so they cannot interfere with the use of said bed pan by said wearer of said garment, said releasable fastener means comprising hook-type fasteners and pad-type fasteners which are readily securable to and separable from each other in a non-destructive manner.

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