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(54) Garment hanger and air dryer assembly

(57) A garment hanger and air dryer assembly which includes a hanger (20) for hanging clothes, and an air dryer (10), The hanger including a hollow frame (21) having one air inlet (23) at least one air outlet (24) in communication with the air inlet and a coupling tube (22) connected to the air inlet, the air dryer being adapted for coupling to the coupling tube.

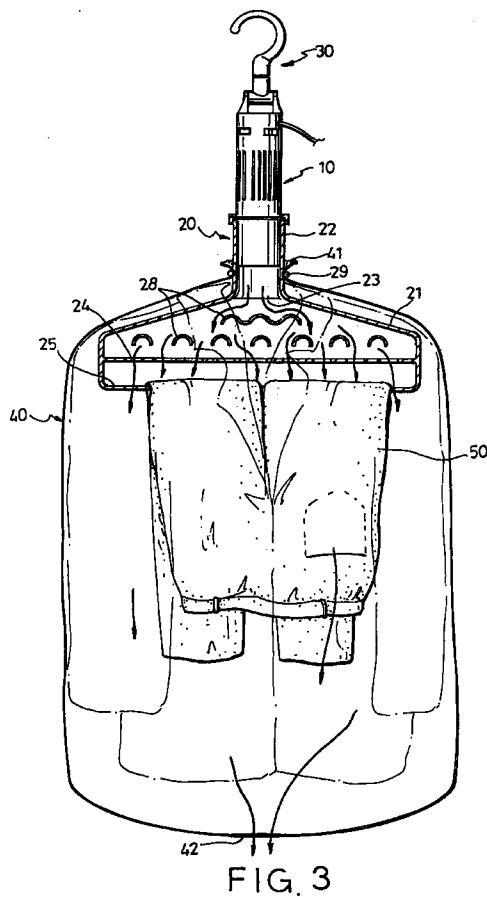


FIG. 3

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Description

BACKGROUND OF THE INVENTION

The present invention relates to a garment hanger and air dryer assembly which combines a hanger and an air dryer into an assembly for drying clothes.

While traveling, one may hung washed clothes, trousers, handkerchiefs, underwear, etc., in the room where one lives, permitting them to be dried by air. However, it is difficult to dry clothes and the like by air within a short period of time more particularly during wet or cold weather. Various apparatus have been developed having functions for drying the hair and clothes. Exemplars are seen in U.S. Pat. No. 4,868,998 entitled "TUMBLE DRYER"; U.S. Pat. No. 5,107,603, entitled "CLOTHES-DRYER HAVING INTEGRATED HOT-AIR ACCESSORIES". However, the former is adapted for drying small personal items such as stockings, handkerchiefs, underwear, etc. The latter is a heavy design, not convenient for carrying.

SUMMARY OF THE INVENTION

It is one object of the present invention to provide a handy electrical dryer for drying clothes and the like which can be conveniently carried with oneself when traveling. It is another object of the present invention to provide a combination apparatus which can be used for hanging clothes, drying the hair as well as clothes. According to the present invention, the garment hanger and air dryer assembly comprises a hanger for hanging clothes, and an air dryer, wherein the hanger comprises a hollow frame having one air inlet, at least one air outlet in communication with the air inlet, and a coupling tube connected to the air inlet; the air dryer is adapted for coupling to the coupling tube. The air dryer can be separately used as a hair dryer for drying the hair. The air dryer can also be attached to the hanger by the coupling tube so that the whole assembly can be used as a garment hanger. When the air dryer is attached to the hanger and operated, hot air is produced to dry wet clothes hung on the hanger. Furthermore, a heat-resisting container for example a plastic suit bag or polybag may be attached to the hanger to form a simple clothes dryer. The heat-resisting container has a top hole adapted for coupling to the coupling tube to receive hot air from the air dryer, and a bottom hole for exhaust of air.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an exploded view of a garment hanger and air dryer assembly according to the present invention;
Fig. 2 is an elevational view of the garment hanger and air dryer assembly shown in Figure 1;
Fig. 3 shows an application example of to the present invention; and

Fig. 4 shows another application example of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figures 1, 2, and 3, a hanger and air dryer assembly in accordance with the present invention is generally comprised of an air dryer 10, and a garment hanger 20. The garment hanger 20 comprises a hollow frame 21 and a coupling tube 22. The hollow frame 21 comprises an air inlet 23 at the top connected to the coupling tube 22, and a plurality of air outlets 24 respectively connected to the air inlet 23. The air dryer 10 is coupled to the coupling tube 22. A swivel hook 30 is coupled to the top end of the air dryer 10 remote from the coupling tube 22, comprised of a hook 31 and a connector 32. The connector 32 has a pivot hole 33 connected between two pivot holes 11 at the top end of the air dryer 10 by a pivot 34. The air dryer 10 has a split coupling flange 12 raised around the periphery. The coupling tube 22 has two inward lugs 221. By inserting the air dryer 10 into the coupling tube 22 permitting the inward lugs 221 to pass through respective splits 120 of the split coupling flange 12 and then turning the air dryer 10 through a certain angle to force the split coupling flange 12 into engagement with the inward lugs 221, the air dryer 10 is coupled to the coupling tube 22. The hollow frame 21 further comprises a crossbar 25 at the bottom for hanging clothes, trousers, stockings, underwear, handkerchiefs, etc., a hanging bar 27 detachably mounted in a side chamber 26 thereof. The hanging bar 27 has a coupling neck 271 adapted for coupling to a coupling hole 251 at the center of the crossbar 25. A plurality of flow guides 28 are respectively mounted inside the hollow frame 21 and disposed between the air inlet 23 and the air outlets 24 to guide hot air from the air dryer 10 to the air outlets 24 evenly.

Referring to Figure 3, a heat-resisting polybag 40 may be coupled to the hanger 20, so that the air dryer 10, the hanger 20, and the heat-resisting polybag 40 form an electrical dryer for drying clothes. The heat-resisting polybag 40 has a top hole 41 and a bottom hole 42. When the coupling tube 22 is inserted through the top hole 41, a clamp 29 is fastened to the coupling tube 22 to secure the heat-resisting polybag 40 in place and simultaneously to seal the top hole 41 of the heat-resisting polybag 40. As illustrated, wet clothes 50 are hung on the crossbar 25, the output flow of hot air of the air dryer 10 passes from the air inlet 24 through the air outlets 24 into the inside of the heat-resisting polybag 40 and then passes out of the heat-resisting polybag 40 through the bottom hole 42, therefore the water in the clothes 50 is gradually evaporated and moistened air is continuously driven out of the heat-resisting polybag 40.

Referring to Figure 4, the hanging bar 27 may be coupled to the coupling hole 251 of the crossbar 25 of the hollow frame 21 and arranged at right angles to stretch the heat-resisting polybag 40 so that hot air is

allowed to smoothly pass through the inside space of the heat-resisting polybag 40.

It is to be understood that the drawings are designed for purposes of illustration only, and are not intended as a definition of the limits and scope of the invention disclosed. 5

Claims

1. A garment hanger and air dryer assembly comprising: 10

a hanger for hanging clothes, said hanger comprising a hollow frame having an air inlet, at least one air outlet in communication with said air inlet, and a coupling tube connected to said coupling tube. 15
2. A garment hanger and air dryer assembly according to Claim 1, wherein the hollow frame of said hanger comprises a crossbar suspending below said at least one air outlet. 20
3. A garment hanger and air dryer assembly according to Claim 2, wherein the hollow frame of said hanger further comprises a receiving chamber, a detachable hanging rod being mounted in said receiving chamber and adapted for coupling to said crossbar. 25
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4. A garment hanger and air dryer assembly according to Claim 3, wherein said crossbar has a coupling hole, and said detachable hanging rod has a neck adapted for coupling to the coupling hole of said crossbar. 35
5. A garment hanger and air dryer assembly according to any preceding claim, wherein the hollow frame of said hanger further comprises a plurality of air outlets, and a plurality of flow guides adapted for guiding intake air from said air inlet to said air outlets. 40
6. A garment hanger and air dryer assembly according to any preceding claim, wherein said coupling tube has two inward lugs raised from the inside wall thereof at two opposite locations; and said air dryer has a split coupling flange raised around the periphery and adapted for coupling to the inward lugs of said coupling tube. 45
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7. A garment hanger and air dryer assembly according to any preceding claim, further comprising a collapsible, heat-resisting container adapted for coupling to said hanger, said collapsible, heat-resisting container having a top hole fastened to said coupling tube by a clamp to receive hot air from said air dryer through said at least one air out-

let, and a bottom hole for exhaust of hot air.

8. A garment hanger and air dryer assembly according to Claim 7, wherein said collapsible, heat-resisting container is a heat-resisting plastic suit bag.

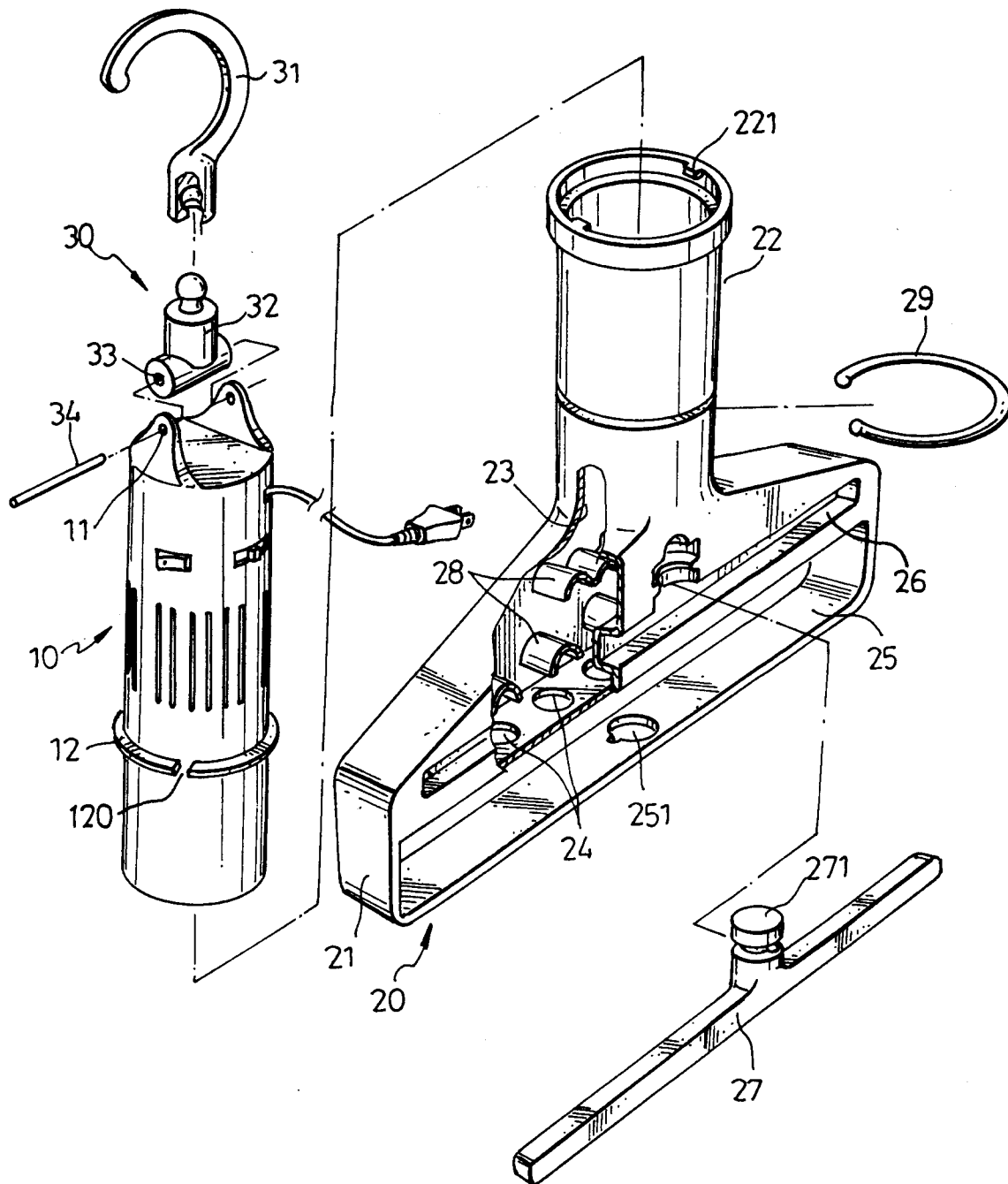


FIG. 1

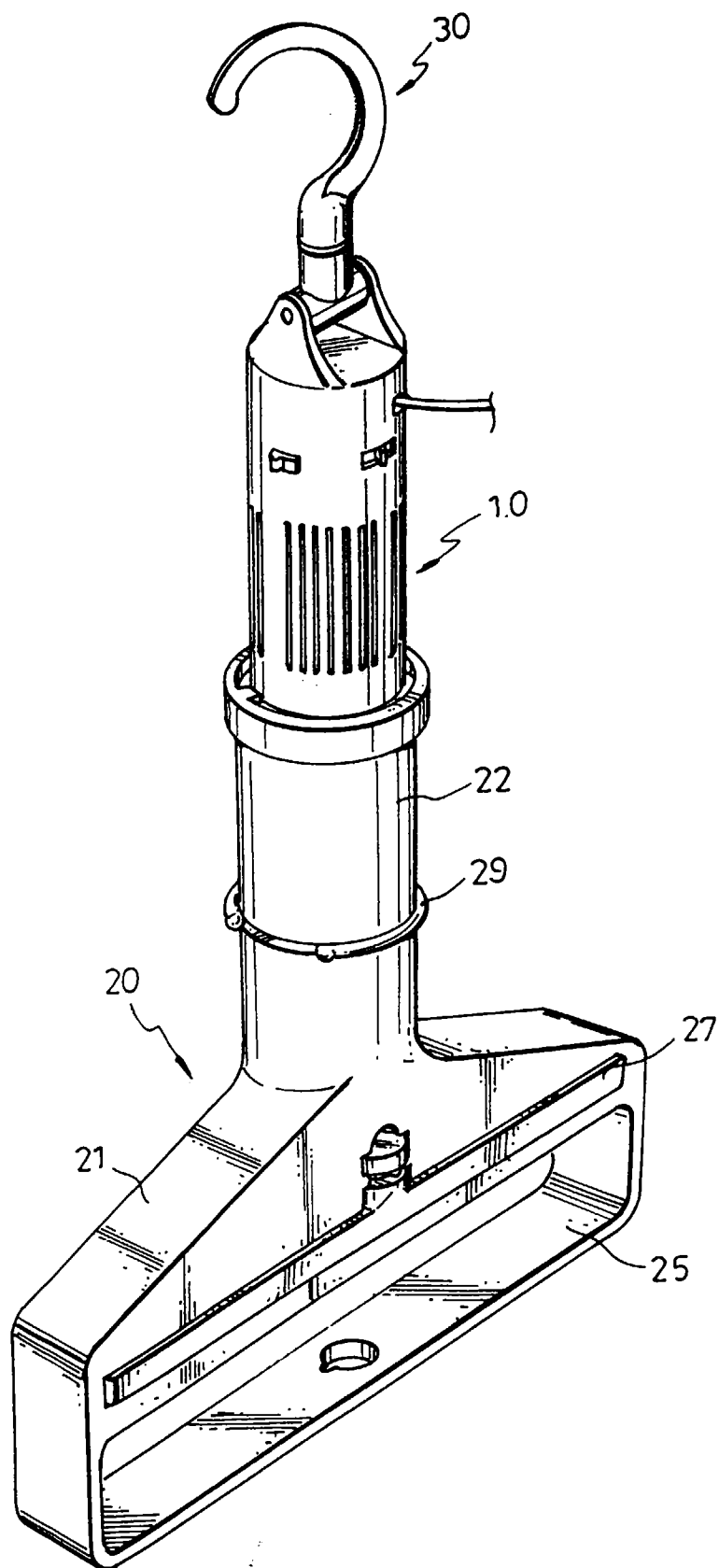


FIG. 2

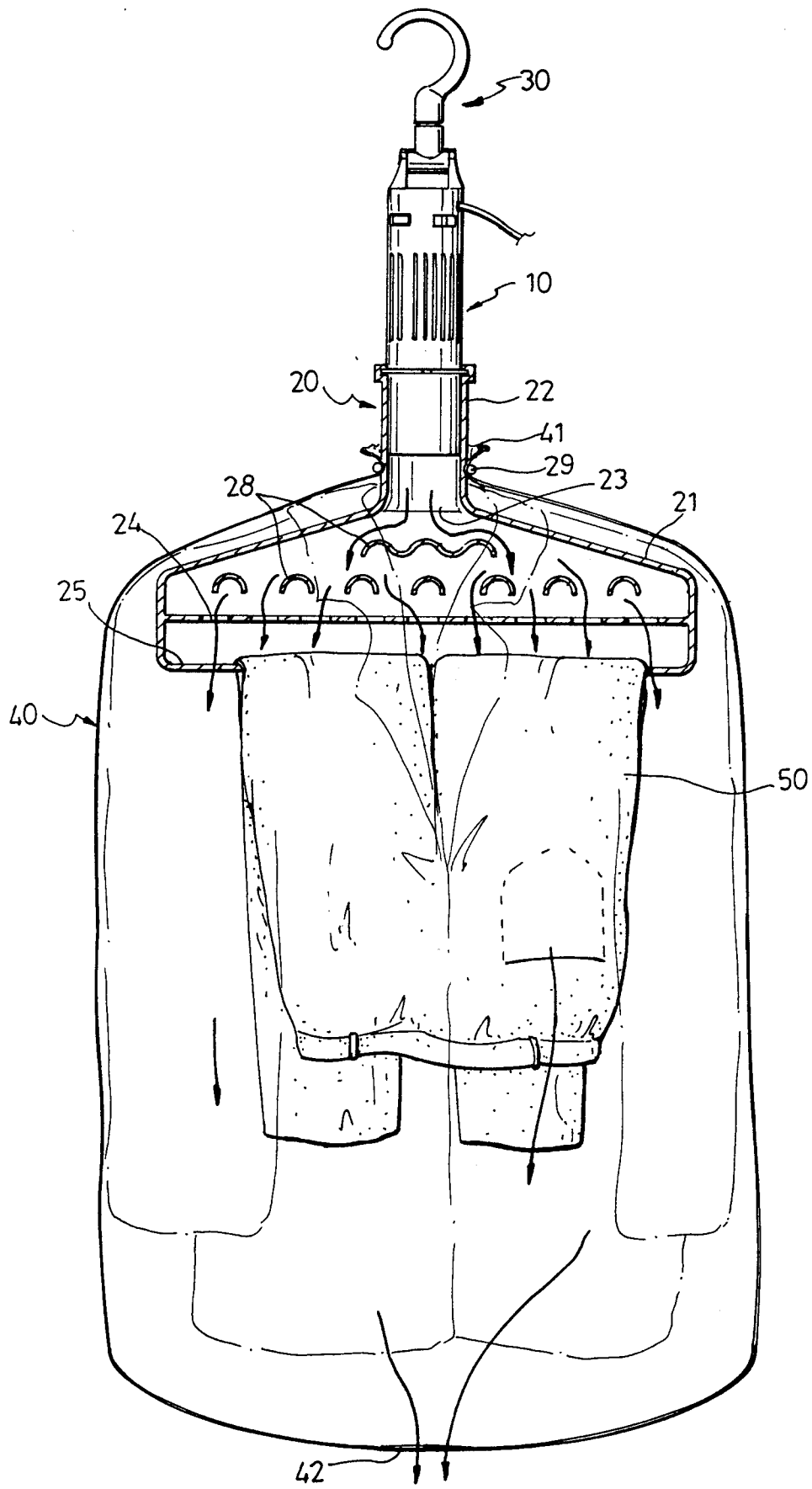


FIG. 3

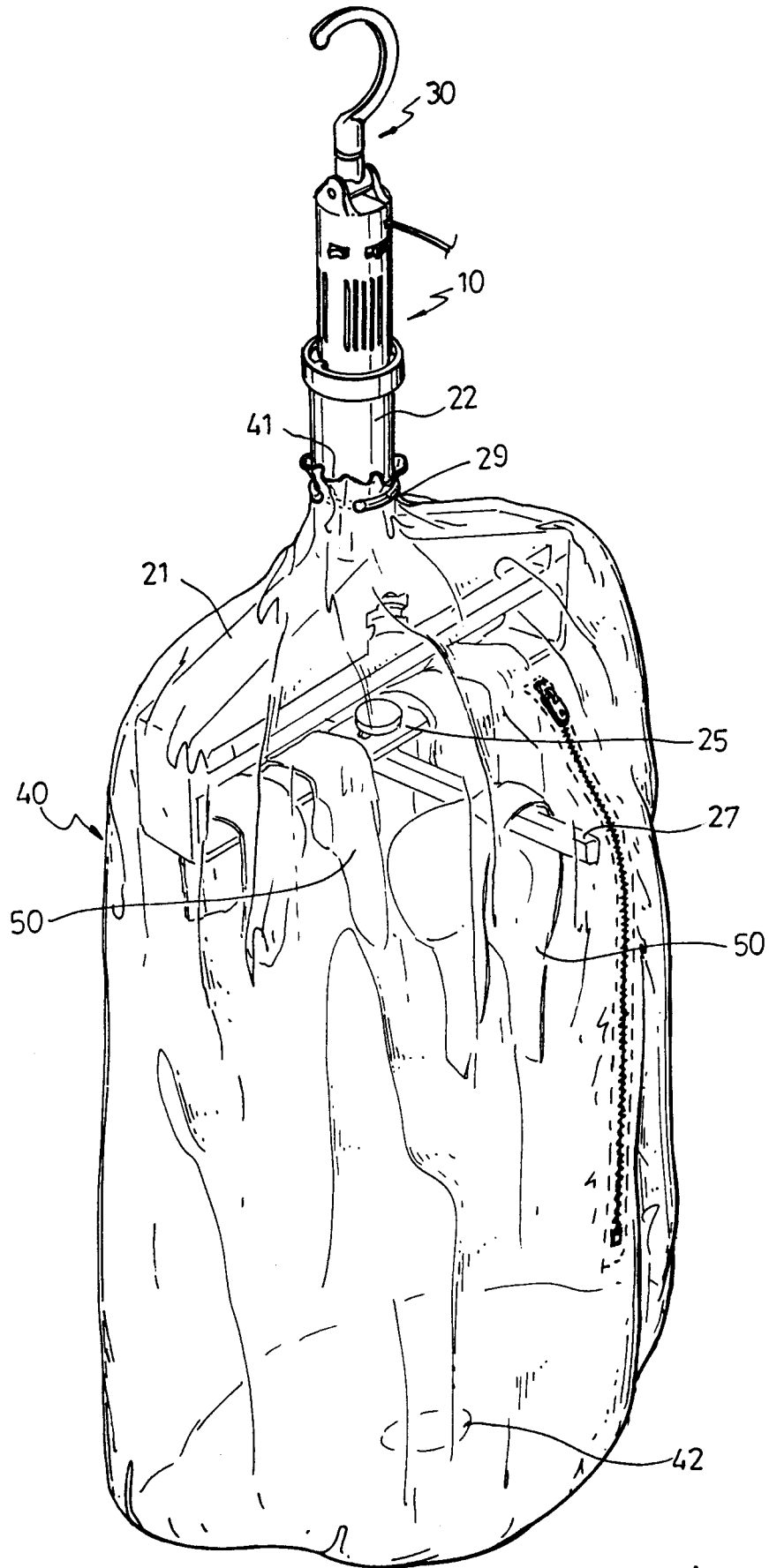


FIG. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 96 30 3322

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X A	FR-A-1 568 513 (BREMSHEY & CO.) * the whole document * ---	1-3,5-8 4	D06F58/14
X A	EP-A-0 119 146 (G. FOURNIER) * the whole document * -----	1,2,5 4,6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			D06F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 October 1996	Examiner Courrier, G
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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