(19) Europäisches Patentamt
European Patent Office
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(11) EP 1 442 990 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
04.08.2004 Bulletin 2004/32

(51) Int Cl.[7]: **B65D 30/06**, B65D 33/10

(21) Application number: **03380009.5**

(22) Date of filing: **22.01.2003**

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

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(54) A bag with handles, for horticultural and fruit products

(57) The bag (7), which is of the tubular mesh type, is characterized in that the ends (9,10) of the handle (8) are attached to the laminar elements which form the mouth of the bag (7) in a manner such that the upper portion (13) of the handle (8) which is intended for the grasping thereof is arranged transversely relative to the laminar elements for closing the mouth of the bag (8), presenting to user's hand the wide portion of the strip constituting the handle (8), facilitating the handling of the bag (7).

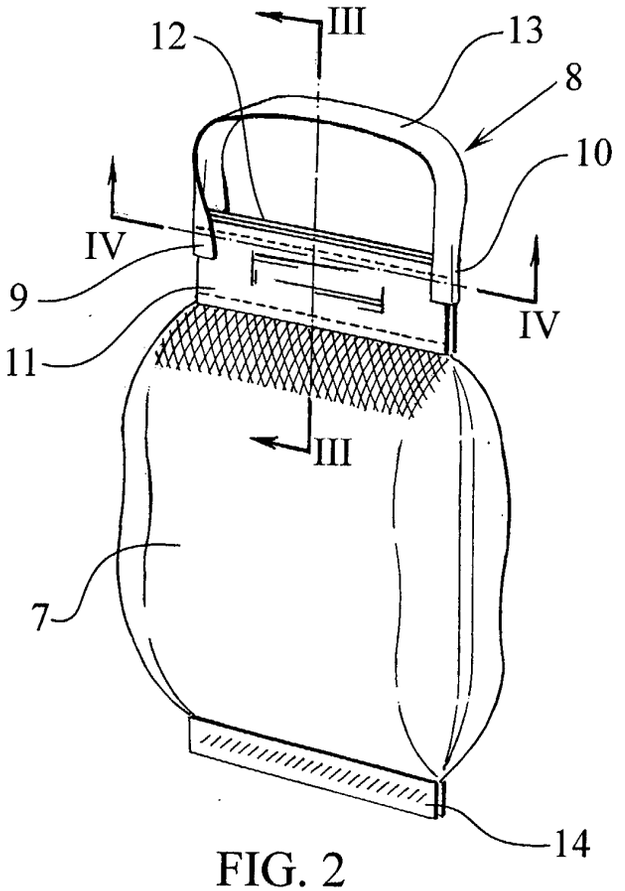

FIG. 2

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Description

[0001] The present invention relates to a bag with handles usable particularly for horticultural and fruit products, affording notable characteristics of novelty and inventive step with respect to those of the prior art.

[0002] In particular, the bag with handles of the present invention is especially applicable to mesh bags which are intended to hold items of fruit or other horticultural or fruit products and which have, in their upper portions and in their lower portions, respective semi-rigid regions formed by bands or plates which are preferably attached by welding and which close the bag and also allow for the writing of advertizing information or information relating to the type of material contained in the bags, or the like. In bags of this type, the arrangement of proper handles on the upper edge of the bag is a feature which is advantageous for a sector of the public; this feature facilitates handling of the bag and can also positively increase its value from the qualitative point of view.

[0003] However, the production of a handle in the upper portion of the bag represents a complication in manufacture and an increase in cost. In particular, in a currently known type, the handle is constituted by a single strip of laminar material which is secured by its ends in the inside of the mouth of the bag during the welding of the edges of the bag or their securing by another method. However, this type of handle has the disadvantage that it necessarily forms a twisted central region in which the central portion of the strip is disposed in a plane substantially parallel to the bag, that is, with the strip arranged substantially on edge, which makes manipulation of the handle difficult since the contact region of the user's hand grasping the bag handle receives a rather unpleasant, possibly even painful pressure produced by the bag handle, especially depending on the weight contained therein.

[0004] The present invention is intended to solve the problems mentioned by providing a bag with a handle, for horticultural and fruit products, in which the handle is arranged with its upper manual grasping portion in a flat position in the area level with the area of contact with the hand, which considerably increases the contact area and reduces the unitary pressure, making handling easy and convenient; the handle can be fitted on bags of the type which comprises a mesh body constituting the bag of which the lower end is secured by means of a narrow transverse welded band and the upper end has opposed laminar elements secured to the edges of the bag and constituting the mouth through which the bag is filled, including the type which comprises a mesh body constituting the bag of which the upper and lower ends are welded between two laminar plastics bands which extend from the upper end to the lower end of the mesh which is interposed between the two bands, the bag having a handle formed by a single laminar element in the form of a narrow strip.

[0005] In a preferred embodiment, the bag has, in its semi-rigid mouth portion, a laminar element in the form of a single band or strip which is fitted at its ends on the lateral ends of the semi-rigid closure region of the bag and which has a structure that may be, for example, U-shaped, clasping the front and rear faces and the upper closure region of the bag, the handle being welded to the above-mentioned semi-rigid laminar closure region of the bag by the U-shaped regions themselves, achieving the desired effect.

[0006] In a variant, the single laminar strip itself has, at its ends, respective short, centred, longitudinal incisions enabling the two branches which the incision forms to be fitted on one and the other of the front and rear sides of the semi-rigid closure region of the bag, respectively.

[0007] In another variant, similar to the previous one, the ends of the laminar element which constitutes the handle, which are in the form of two branches, are attached to the inner faces of the upper closure elements of the bag, that is, to the inner portion of the mouth, in a manner such that, at each of the ends of the handle, one of the branches is secured to one of the sides and the other to the opposite side. Again, the handle is thus formed in a manner such that its upper grasping portion has its flat side facing the user's hand.

[0008] Finally, another variant may be constituted by a single strip of material which is secured, at one end, to the outer face of the semi-rigid laminar closure element of the bag and, at the other end, is secured on the other face or rear face of the laminar closure element of the bag by the opposite face of the laminar band itself.

[0009] The bag may correspond to the type which has a mesh body with a narrow welded lower band and an upper, semi-rigid laminar element normally formed by two pieces welded together, or may also have laminar extensions in the upper portion to provide a larger area for the printing of advertizing designs, etc.

[0010] For a better understanding, some drawings of the bag of the present invention are appended by way of non-limiting example.

Figure 1 shows schematically a partial front elevational view of a bag with a handle of conventional type.

Figure 2 shows an embodiment of a bag with a handle according to the present invention.

Figures 3 and 4 show respective sections through the bag of Figure 2, taken in the section planes indicated.

Figures 5, 6 and 7 are views similar to Figures 2, 3 and 4 showing a second embodiment of the present invention.

Figures 8, 9 and 10 are, respectively, a perspective view and sections taken in the section planes indicated, of another version of this embodiment in which the ends are split by longitudinal incisions in a similar manner to the bag of Figures 5, 6 and 7.

Figures 11, 12 and 13 correspond to a version of the bag of the present invention in which the ends of the laminar strip are secured on opposite sides of the upper closure element of the bag.

Figures 14 and 15 show schematically the fitting of handles according to the present invention on bags with complete laminar bands joining the lower and upper closure regions of the bag, and in a version with simple extensions of the upper closure region of the bag.

[0011] As shown in the drawings, a conventional bag 1, Figure 1, has an upper closure element 2 with a handle 3 constituted basically by a single laminar element the ends 4 and 5 of which are secured between the individual laminar elements which constitute the closure 2, and are clasped and welded in the inside of the mouth of the closure element 2. The attachment is performed by the same welding operation that closes the bag. As can be seen, the upper portion 6 of the handle 3 is necessarily arranged substantially edgewise relative to the hand which will grasp the handle 3, so that handling of the bag is inconvenient.

[0012] Figure 2 shows a mesh bag 7 according to the present invention which has a handle 8 in the form of a single laminar strip the ends 9 and 10 of which are U-shaped transversely and overlap the front face 11 and the rear face 12 of the upper laminar closure element of the bag 7. With this arrangement, the handle is secured during the same welding operation which closes the bag so that the upper portion 13 of the handle is arranged in a transverse plane, practically perpendicular to the upper closure element of the bag constituted by the faces 11 and 12. The user's hand will thus receive the flat region 13, facilitating convenient handling of the bag.

[0013] As can be seen, the bag is closed at the bottom by means of a narrow band 14 welded to the lower ends of the bag 7. As shown in Figure 5, the present invention also comprises an alternative version in which the bag 15, which also has a lower closure band 16, has a laminar element 17 constituting the handle, the ends of which have a short longitudinal incision defining two opposed branches, as indicated 18 and 18' at one end and 19, 19' at the other end. The branches are secured to the front face 20 and to the rear face 21 of the laminar closure element of the bag, respectively. In this embodiment, the upper portion 22 is again arranged in a plane perpendicular to the bag, that is, transversely relative thereto, achieving the same effect as the bag of Figure 2, that is, having a wide and comfortable region to be handled in the user's hand.

[0014] In the version shown in Figure 8, a bag 23 is shown which, as in the previous embodiments, is provided with a lower closure band 24 and with two, opposed, upper closure elements 25 and 26 between which the ends of the single laminar strip 27 which constitutes the handle of the bag are introduced; as in the embodiment of the bag of Figure 5, the ends of the strip are also provided with short longitudinal incisions defining respective branches which are attached to the inner faces of the elements 25 and 26, respectively, in respective opposed positions. In this embodiment, the upper portion 28 of the handle 27 again presents a wide and easily grasped region to the user's hand.

[0015] Figure 11 shows another version in which the bag 29, which is provided with a lower closure band 30 and opposed laminar closure elements 31 and 32, has a handle 33, again in the form of a single strip, which is attached at one of its ends, indicated 34, to the outer face of the laminar element 31 whereas, at the other end, indicated 35, it is fitted on the outer face of the laminar element 32 so that the faces that are attached to the elements 31 and 32 correspond to distinct faces of the laminar element 33. In this embodiment, the upper portion 36 of the handle again presents its wider side to the user's hand, facilitating grasping thereof.

[0016] The bag of the present invention may adopt the general structure shown in Figures 2 to 11, or may have laminar bands on one or on both faces, such as the band 37 shown in Figure 14, which is attached to the lower transverse band 38 and to the upper closure element or elements of the bag 39, respectively, the bag being able to receive handles 40, 41 or 42 corresponding, respectively, to the version with the U-shaped end, to the version with the end provided with a longitudinal incision, and to the version with the straight end, as in the drawings indicated and described above.

[0017] As can be seen in Figure 15, the bag of the present invention may also be formed with a lower transverse band 43 and upper flat laminar closure elements 44 which will form the mouth of the bag and to which the three basic versions of the elements constituting the handle, indicated 45, 46 and 47, will be secured.

[0018] As can be seen, the essential characteristic of the bag of the present invention is that the handle is produced as a single laminar element in the form of a straight strip, but is secured by its ends to the laminar elements for closing the mouth of the bag in a manner such that the upper portion is included substantially in a plane perpendicular to that of the laminar closure elements of the bag, the strip which forms the handle being in a flat arrangement for its contact with the user's hand, facilitating the handling of the bag.

Claims

1. A bag with handles for horticultural or fruit products having handles and a mesh body, a lower end of the bag being secured by means of a narrow, welded transverse band and an upper end having opposed laminar elements secured to the edges of the bag and constituting a mouth through which the bag is filled, including a bag having a mesh body the upper and lower ends of the bag being welded between two laminar plastics bands which extend from the

upper end to the lower end of the mesh, the mesh being interposed between the two bands, the bag having a handle formed by a single laminar element in the form of a narrow strip, **characterized in that** the ends of the handle are attached to the laminar elements which form the mouth of the bag in a manner such that the upper portion of the handle which is intended for the grasping of the handle, is arranged transversely relative to the laminar elements for closing the mouth of the bag, presenting to the user's hand the wide portion of the strip constituting the handle, facilitating the handling of the bag.

2. A bag with handles, for horticultural and fruit products, according to Claim 1, **characterized in that** the single laminar strip constituting the handle is provided, at its ends, with respective transverse U-shaped regions which fit on the upper side edges of the laminar elements which constitute the mouth of the bag.

3. A bag with handles, for horticultural and fruit products, according to Claim 1, **characterized in that** the ends of the single strip constituting the handle have respective short longitudinal incisions defining two short branches which are secured to the front face and to the rear face of the laminar closure region of the bag, respectively.

4. A bag with handles, for horticultural and fruit products, according to Claim 1 and Claim 3, **characterized in that** the branches of each of the ends of the laminar strip constituting the handle are attached, respectively, to one and to the other of the opposed inner faces of the laminar elements which define the mouth of the bag.

5. A bag with handles, for horticultural and fruit products, according to Claim 1, **characterized in that** the single laminar strip is attached at one end, by one of its faces, to the front face of the laminar closure element of the mouth and at its other end, by the other face of the strip constituting the handle, to the rear face of the laminar element itself that constitutes the closure of the bag.

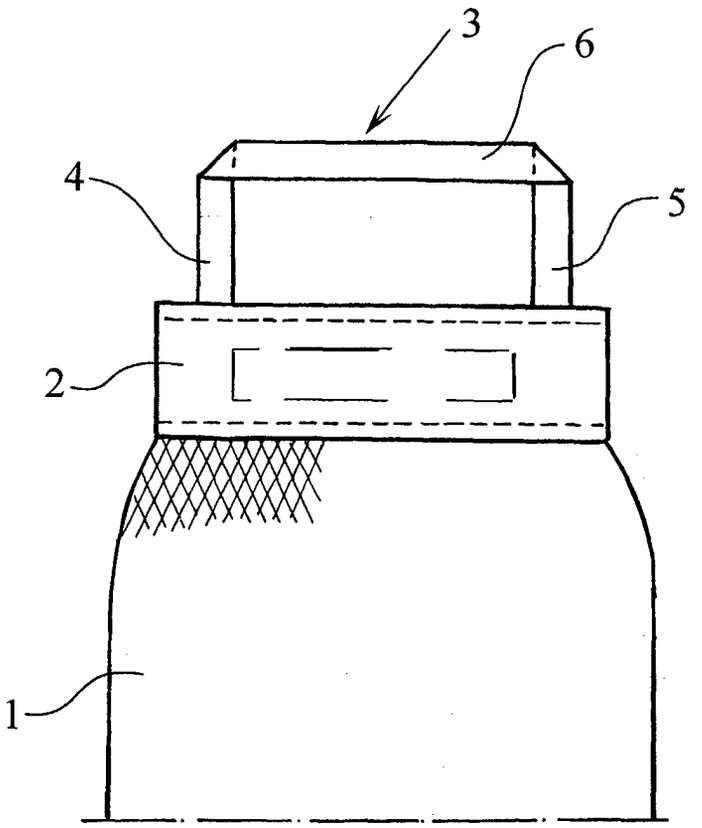

FIG. 1

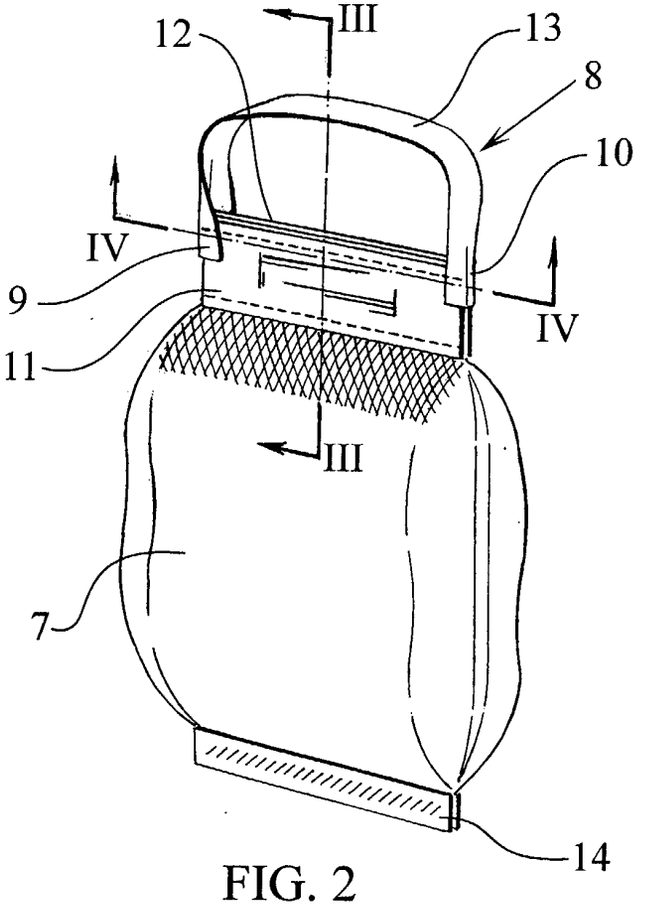

FIG. 2

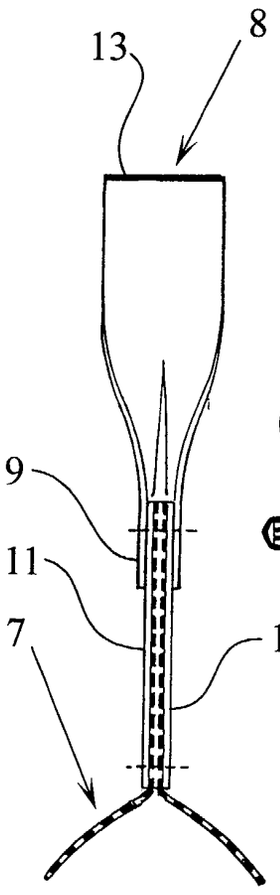

FIG. 3

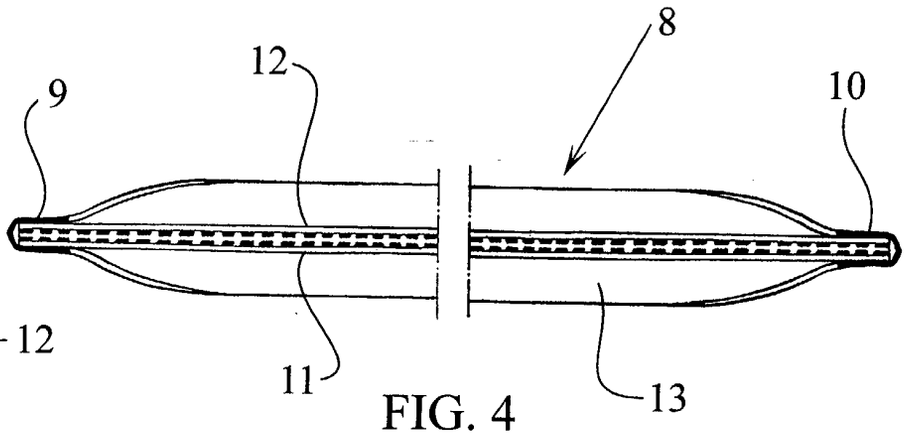

FIG. 4

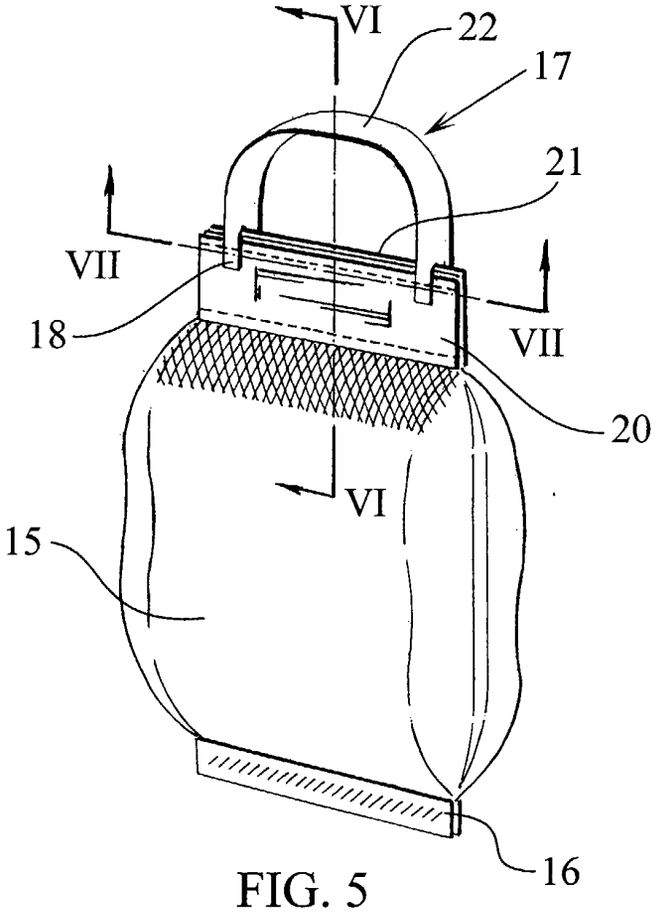

FIG. 5

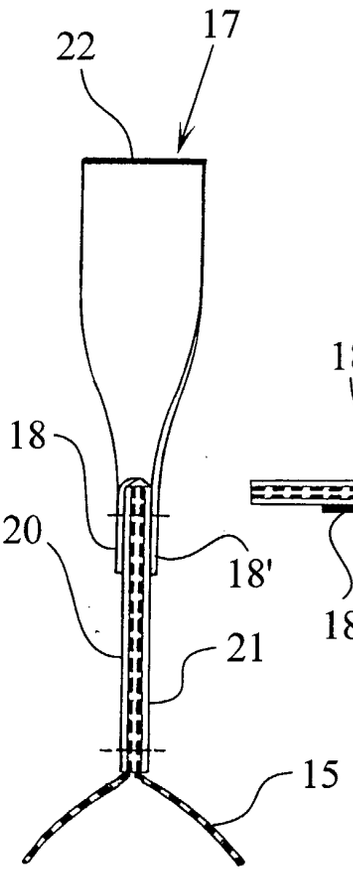

FIG. 6

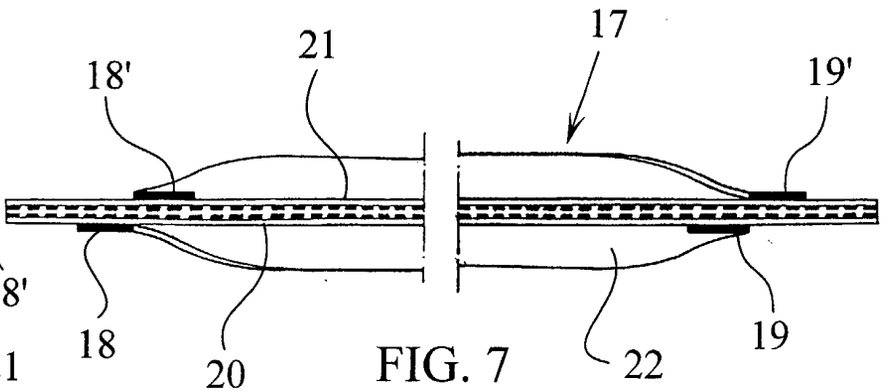

FIG. 7

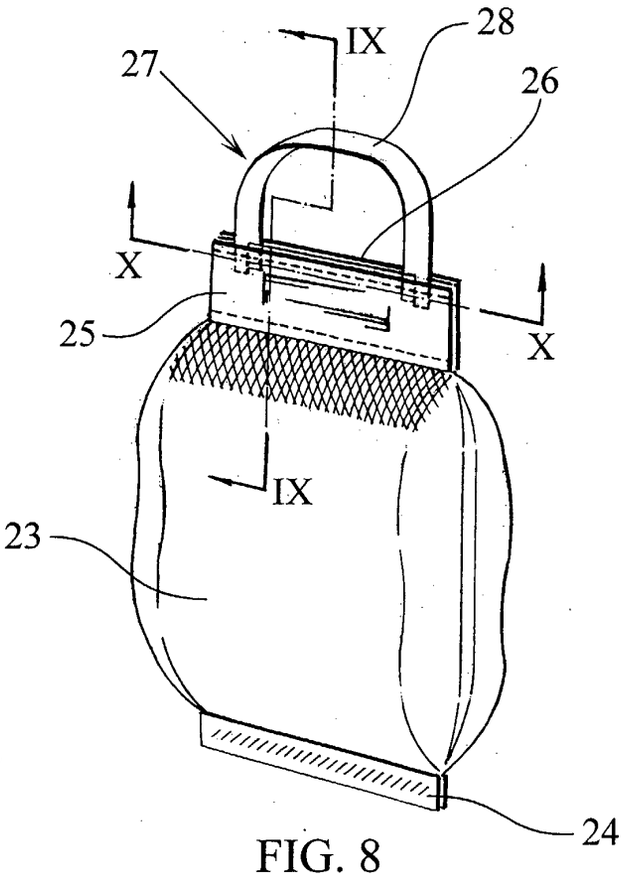

FIG. 8

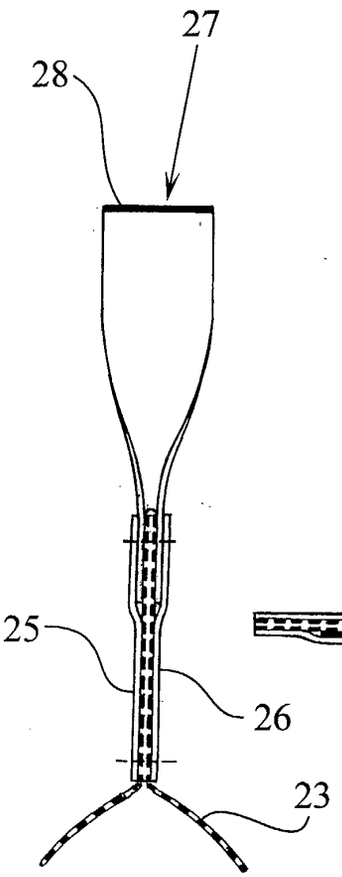

FIG. 9

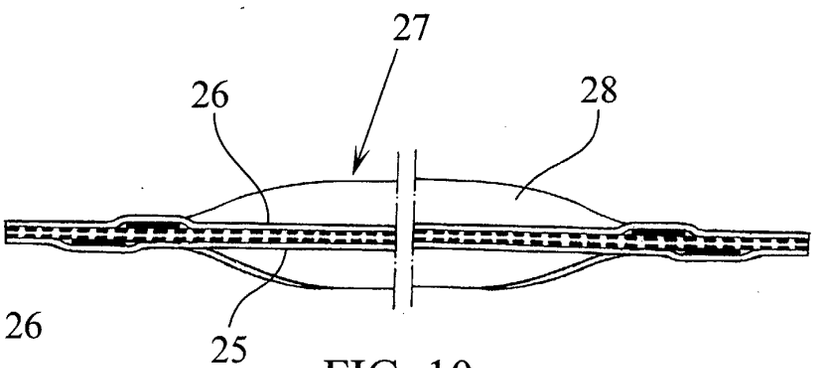

FIG. 10

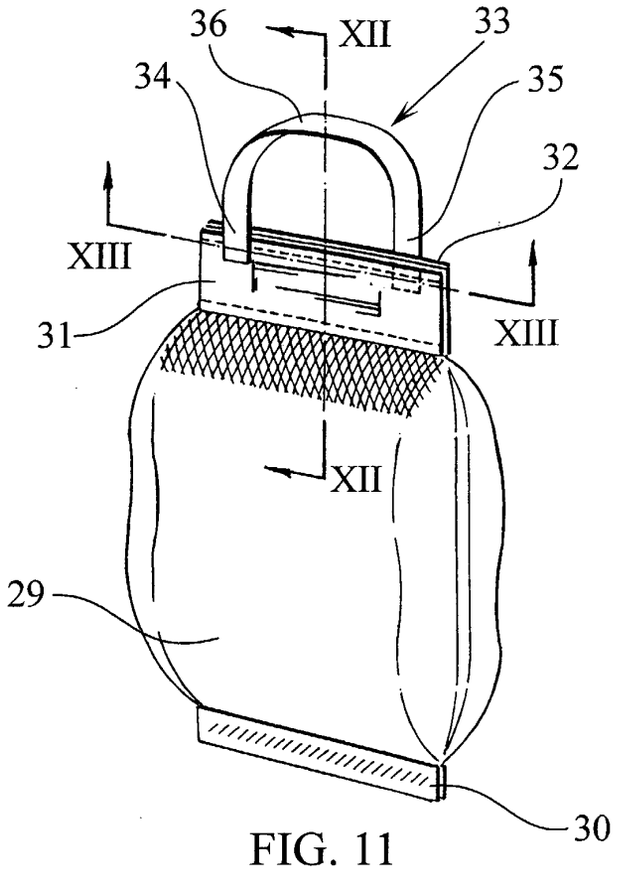

FIG. 11

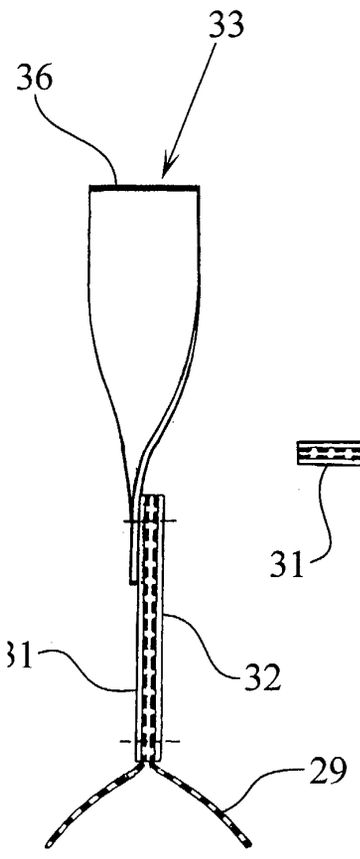

FIG. 12

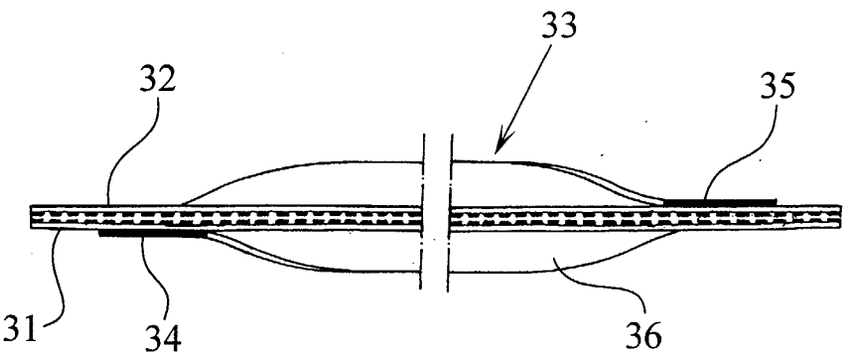

FIG. 13

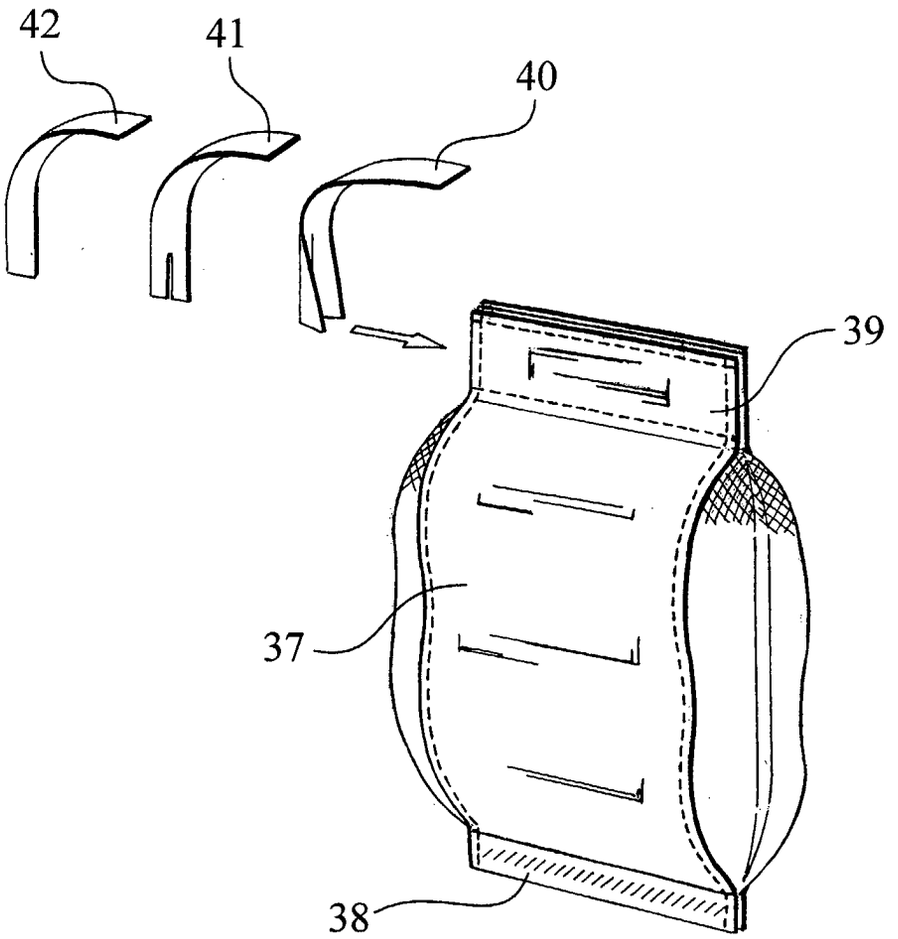

FIG. 14

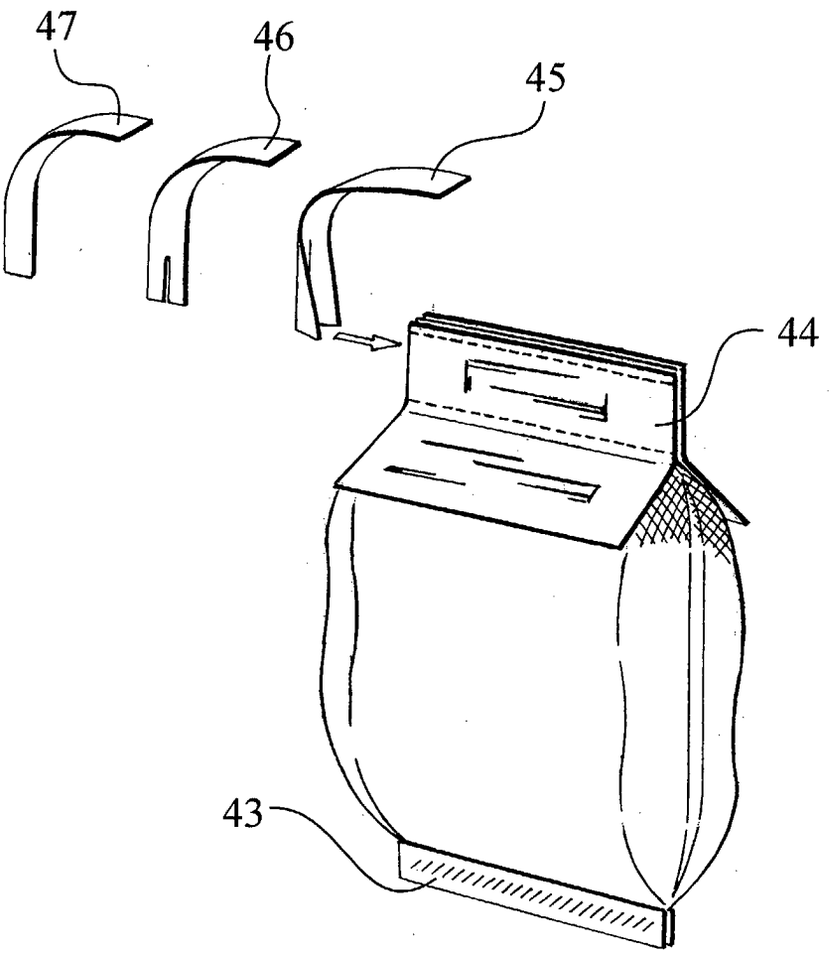

FIG. 15

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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	21 October 2003	Schultz, O

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