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(54) **Gusseted standing pouch**

Standbeutel mit Zwickelfalt

Sachet à soufflet pouvant tenir debout

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Description

[0001] The present invention relates to a container according to the preamble of claim 1, for liquids or for fluid products, including viscous ones, obtained by folding and heat-sealing a single sheet of flexible material.

[0002] A very wide variety of containers for fluids, obtained by folding a single sheet of flexible material, is commercially available.

[0003] Despite their widespread marketing, containers of the prior art are not free from drawbacks.

[0004] In particular, they are not self-supporting when they contain liquids or granular fluids.

[0005] These kinds of substances in fact do not have a shape of their own and accordingly adapt to the container holding them, which when made of flexible material is unable to retain a preset shape.

[0006] Furthermore, currently known containers can be manufactured at costs which are sometimes not competitive and at low speeds.

[0007] A container according to the preamble of claim 1 is known from the document EP 0 620 156 A1.

[0008] The aim of the present invention is to eliminate or substantially reduce the problems of the prior art containers for liquids or fluid products, including viscous ones, obtained by folding and heat-sealing a single sheet of flexible material.

[0009] Within this aim, an important object is to provide containers having such a shape to be self-supporting.

[0010] Another object is to provide containers which have low manufacture and sale costs.

[0011] Another object is to produce containers by using know equipment.

[0012] Another object is to provide containers which can be manufactured rapidly.

[0013] This aim and these and others objects which will become better apparent hereinafter are achieved by a container made of flexible material, particularly for liquids or fluids, characterized in that it is made of a single sheet of flexible material which is folded so as to form two mutually opposite quadrangular faces directly heat-sealed along two consecutive sides and connected along two further sides by accordion-like portions obtained by folding said sheet, a first accordion-like portion forming, on a third side, a substantially triangular base, a second accordion-like portion forming a closure wall on a fourth side, a closable opening for filling said container being provided.

[0014] Further characteristics and advantages of the container according to the invention will become better apparent from the description of a preferred but not exclusive embodiment thereof, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a perspective view of a container according to the invention;

Figure 2 is a further perspective view of the invention;

Figures 3 and 4 are the two side views of a container according to the invention;

Figure 5 is a perspective view of a container provided with an upper opening, according to a second embodiment of the invention;

Figures 6 and 7 are perspective views of the container provided with a straw;

Figure 8 is a perspective view of two containers according to the invention, joined along one of their sides.

[0015] With reference to the figures, a container for liquids or fluid products, including viscous ones, according to the invention, is generally designated by the reference numeral 10.

[0016] The container 10 is obtained by folding a single sheet so as to form two mutually opposite quadrangular faces 11a and 11b.

[0017] The two mutually opposite faces 11a and 11b are directly heat-sealed to each other along two consecutive sides 12 and 13.

[0018] A third side 14, consecutive to the side 13 and opposite to the side 12, connects the two faces 11a and 11b by means of a first accordion-like portion 15 which is produced by heat-sealing and subsequently folding the corresponding portions of the faces 11a and 11b.

[0019] The fourth side 16 constitutes a continuous closure wall of the container 10 and is also provided with a second accordion-like portion 17.

[0020] The third side 14 and the first accordion-like portion 15 form a substantially triangular base for the container 10, which in combination with the second accordion-like portion 17 allows said container to self-support when filled.

[0021] The container 10 has, on the side 12, a closable filling opening 20.

[0022] The opening 20 allows to fill the containers 10 directly during the production process if vertical machines are used.

[0023] The container 10 can also be filled after its manufacture again by means of the opening 20.

[0024] Figures 6 and 7 illustrate a container 10 provided with a straw 21.

[0025] The straw 21 can be inserted in the container 10 through a weakened portion 22 arranged in one of the two faces 11a and 11b.

[0026] Alternatively, the container 10 can be produced directly with a straw 21 arranged inside.

[0027] In the illustrated case, the straw 21 is arranged transversely, with one end 23 located at a peel-off heat-sealed portion 24 of the container 10.

[0028] Advantageously, in this case, the peel-off heat-sealed portion 24 is located in the comer where the directly heat-sealed consecutive sides 12 and 13 converge.

[0029] Two identical containers 10a and 10b can form

a double container, generally designated by the reference numeral 25, as shown in Figure 8.

[0030] The two containers 10a and 10b are joined by means of their directly heat-sealed sides 13a and 13b which are consecutive to the bases 14a and 14b.

[0031] The two containers 10a and 10b can be separated by means of a series of prescores 26 formed longitudinally along the joined sides 13a and 13b.

[0032] In practice it has been found that the present invention has achieved the intended aim and objects.

[0033] In particular, it is evident that a container for liquids or fluid products, including viscous ones, has been provided which is capable of self-supporting when filled and of keeping a preset shape.

[0034] The container can also be manufactured at low costs and by using equipment of the known type or in any case equipment already used to manufacture containers having a different shape.

[0035] The present invention is susceptible of numerous modifications and variations, all of which are within the scope of the claims.

[0036] All the details may be replaced with other technically equivalent elements.

[0037] In practice, the materials used, so long as they are compatible with the contingent use, as well as the dimensions, may be any according to requirements.

[0038] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A container (10) made of flexible material, particularly for liquids or fluids, having a substantially triangular base and two mutually opposite quadrangular faces (11a, 11b), **characterized in that** it is made of a single sheet of flexible material which is folded so as to form the two mutually opposite quadrangular faces (11a,11b) directly sealed along two consecutive sides (12,13) and connected along two further sides, a third side (14) and a fourth side (16), by accordion-like portions (15,17) obtained by folding said sheet, a first accordion-like portion (15) forming, on the third side (14), the substantially triangular base, a second accordion-like portion forming a closure wall on the fourth side (16), a closable opening (20) for filling said container (10) being provided.

2. The container (10) according to claim 1, **characterized in that** said closable opening (20) is provided at the directly sealed side that lies opposite the base

3. The container (10) according to claim 1, **characterized in that** said first accordion-like portion (15) on the base folds within the dimensions of said container (10).

4. The container (10) according to claim 1, **characterized in that** it is connected to an identical container, separated along at least one longitudinal prescore (26) formed along the directly sealed side consecutive to the base.

5. The container (10) according to claim 1, **characterized in that** it comprises a straw (21) arranged internally with one end at an openable portion of the two directly sealed sides (12, 13).

Patentansprüche

1. Behälter (10) aus flexiblem Material, insbesondere für Flüssigkeiten oder Fluide, mit einer im Wesentlichen dreieckigen Grundfläche und zwei sich gegenüberliegenden viereckigen Seitenflächen (11a, 11b), **dadurch gekennzeichnet, dass** er aus einem einzigen Blatt aus flexiblem Material hergestellt ist, das derart gefaltet ist, um die zwei sich gegenüberliegenden viereckigen Seitenflächen (11a, 11b) zu bilden, die entlang zweier aufeinanderfolgender Seiten (12, 13) direkt versiegelt und entlang zweier weiterer Seiten, einer dritten (14) und einer vierten Seiten (16), durch ziehharmonikaartige Abschnitte (15, 17), die durch Falten des Blattes erhalten werden, verbunden sind, wobei ein erster ziehharmonikaartiger Abschnitt (15) an der dritten Seite (14) die im Wesentlichen dreieckige Grundfläche und ein zweiter ziehharmonikaartiger Abschnitt (17) an der vierten Seite (16) eine Verschlusswand bilden, wobei eine verschließbare Öffnung (20) zum Füllen des Behälters (10) vorgesehen ist.

2. Behälter (10) nach Anspruch 1, **dadurch gekennzeichnet, dass** die verschließbare Öffnung (20) an der direkt versiegelten Seite, die der Grundfläche gegenüberliegt, vorgesehen ist.

3. Behälter (10) nach Anspruch 1, **dadurch gekennzeichnet, dass** der erste ziehharmonikaartige Abschnitt (15) auf der Grundfläche innerhalb der Abmessungen des Behälters (10) faltet.

4. Behälter (10) nach Anspruch 1, **dadurch gekennzeichnet, dass** er mit einem identischen Behälter verbunden ist, getrennt entlang wenigstens einer Längsperforation (26), die entlang der direkt versiegelten, an der Grundfläche anschließenden Seite gebildet ist.

5. Behälter (10) nach Anspruch 1, **dadurch gekennzeichnet, dass** er einen Strohhalm (21) umfasst, der mit einem Ende innen an einem zu öffnenden Abschnitt der zwei direkt versiegelten Seiten (12, 13) angcordnet ist.

Revendications

1. Un récipient (10) réalisé en matériau flexible, en particulier pour des liquides ou des fluides, ayant une base sensiblement triangulaire et deux faces (11a, 11b) quadrangulaires mutuellement opposées, **caractérisé en ce qu'**il est réalisé à partir d'une feuille unique en matériau flexible, pliée de manière à former les deux faces quadrangulaires (11a, 11b) mutuellement opposées, scellées directement sur deux côtés (12, 13) consécutifs et reliés sur deux autres côtés, un troisième côté (14) et un quatrième côté (16), par des parties (15, 17) analogues à un soufflet en accordéon, obtenue par pliage de ladite feuille, une première partie (15), analogue à un soufflet d'accordéon, formant, sur le troisième côté (14) la base sensiblement triangulaire, une deuxième partie (17) analogue à un soufflet d'accordéon formant une paroi de fermeture sur le quatrième côté (16), une ouverture (20) refermable, pour le remplissage dudit récipient (10), étant prévue.

2. Le récipient (10) selon la revendication 1, **caractérisé en ce que** ladite ouverture (20) refermable est prévue sur le côté directement scellé opposé à la base.

3. Le récipient (10) selon la revendication 1, **caractérisé en ce que** ladite première partie (15), analogue à un soufflet d'accordéon, de la base est pliée dans les limites des dimensions dudit récipient (10).

4. Le récipient (10) selon la revendication 1, **caractérisé en ce qu'**il est relié à un récipient identique, séparé le long d'au moins un pré-encochage (26) longitudinal formé sur le côté scellé directement, consécutif à la base.

5. Le récipient (10) selon la revendication 1, **caractérisé en ce qu'**il comprend une paille (21) agencée intérieurement, une extrémité étant placée à la partie ouvrable des deux faces (12, 13) scellées directement.

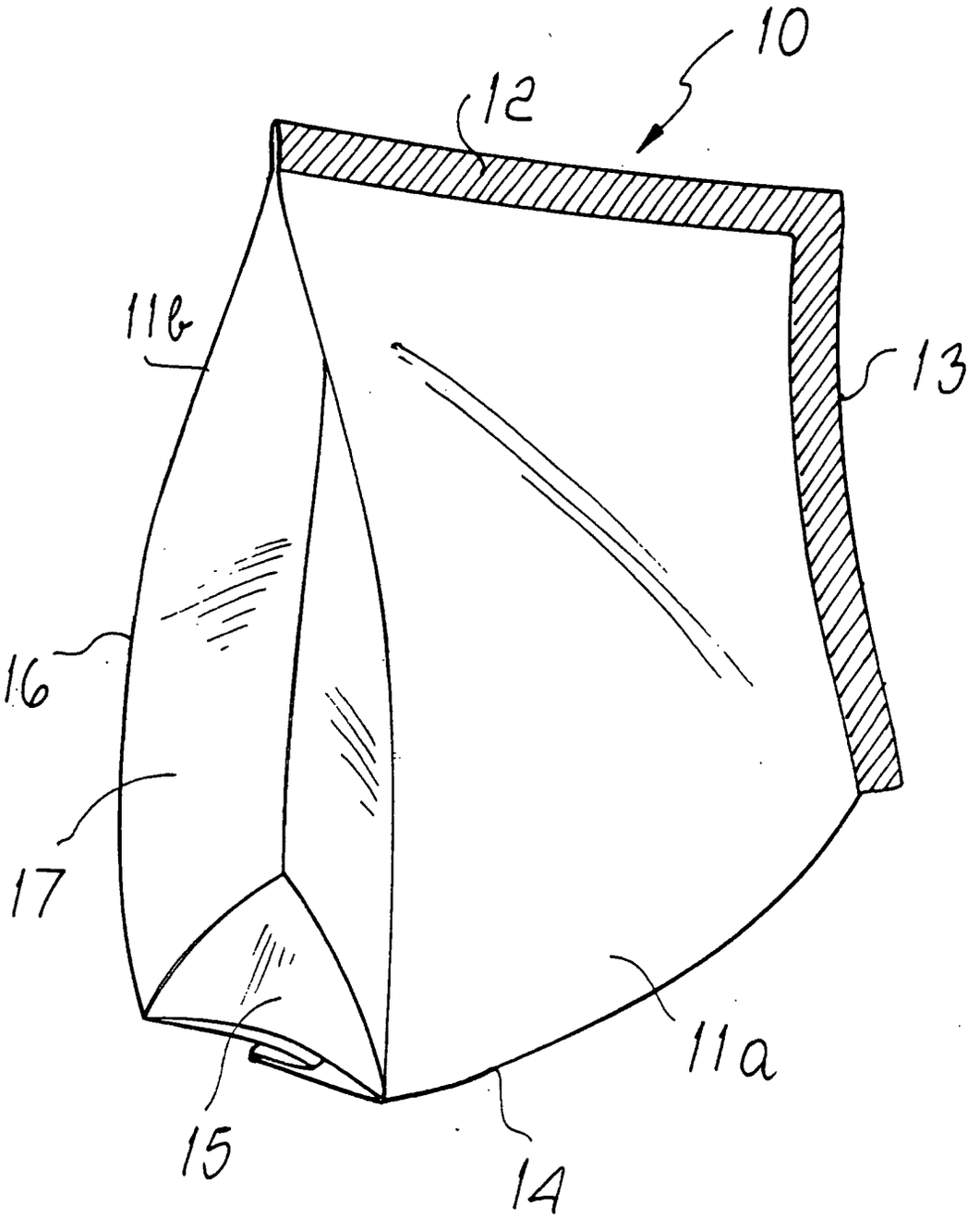

Fig. 1

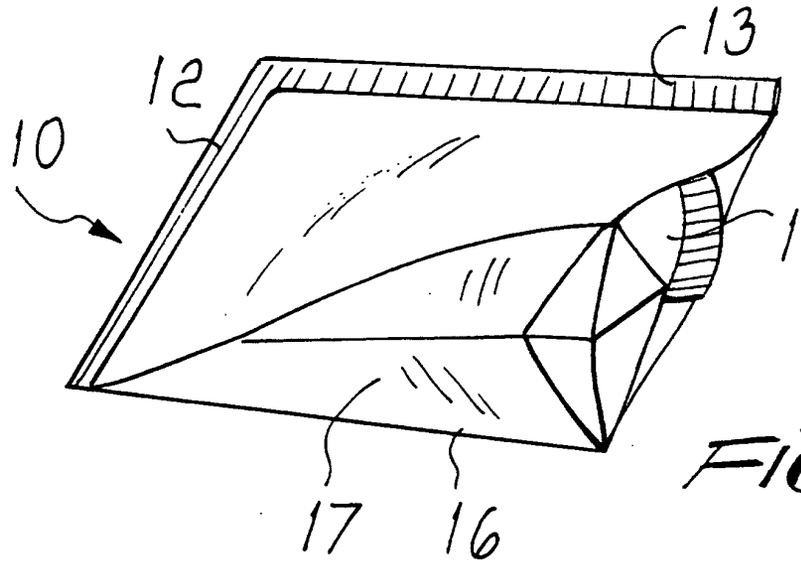

Fig. 2

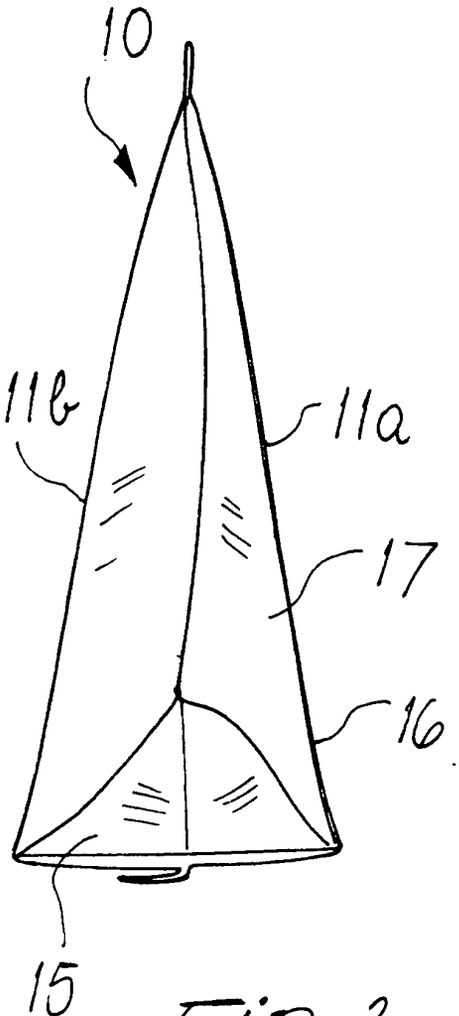

Fig. 3

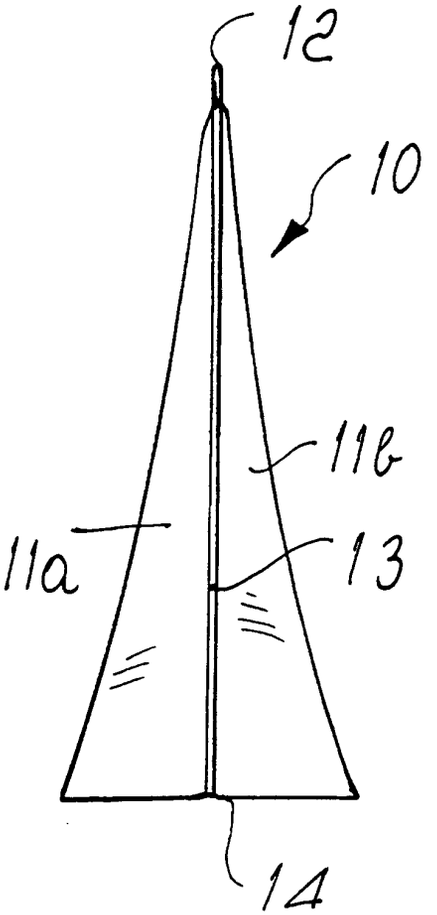

Fig. 4

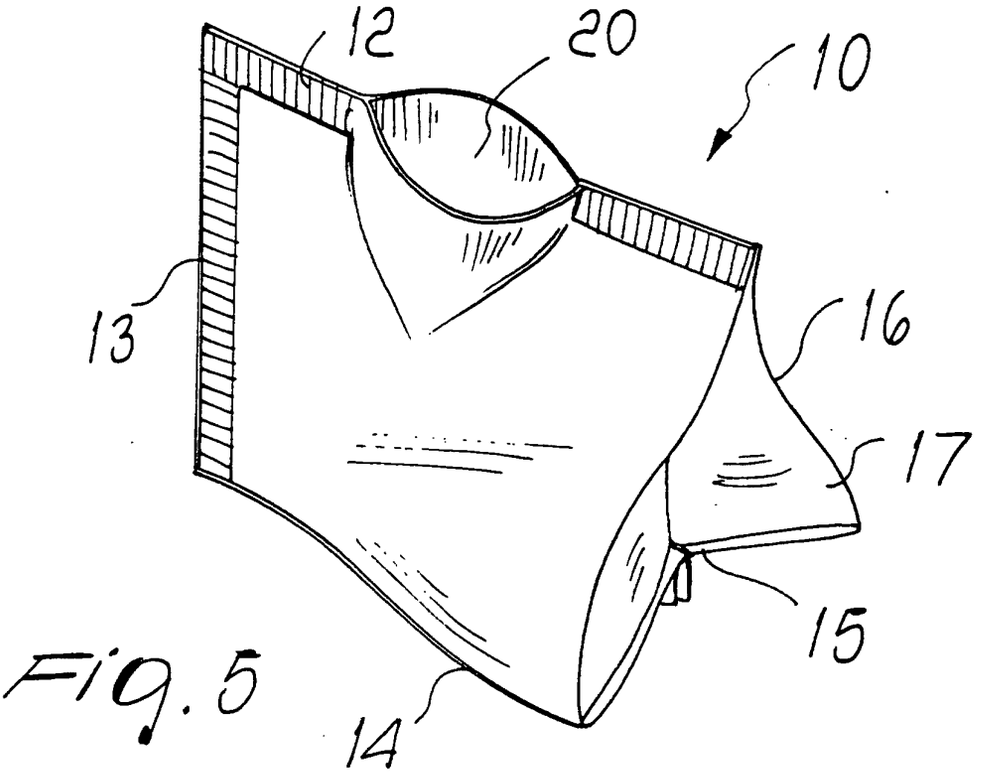

Fig. 5

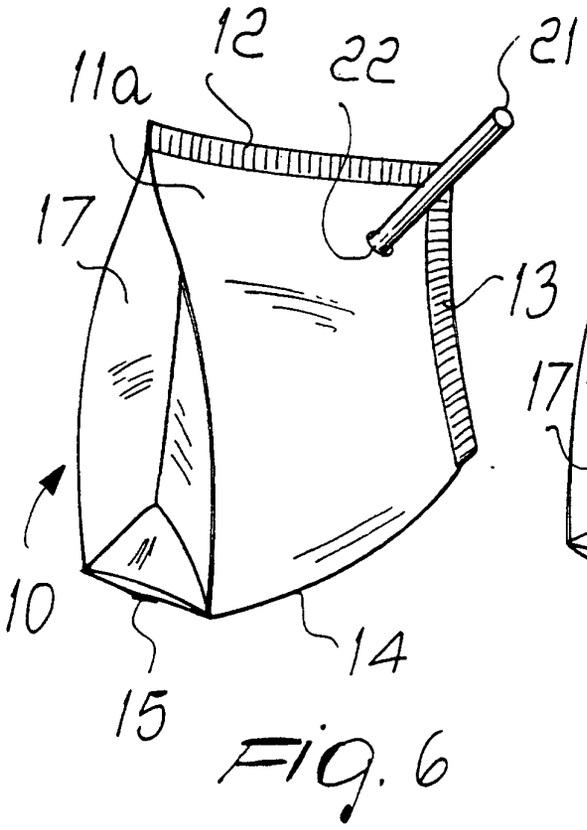

Fig. 6

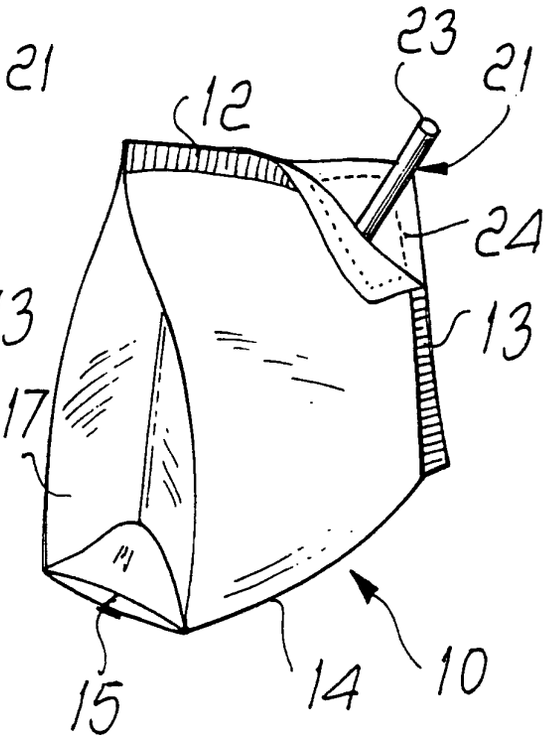

Fig. 7

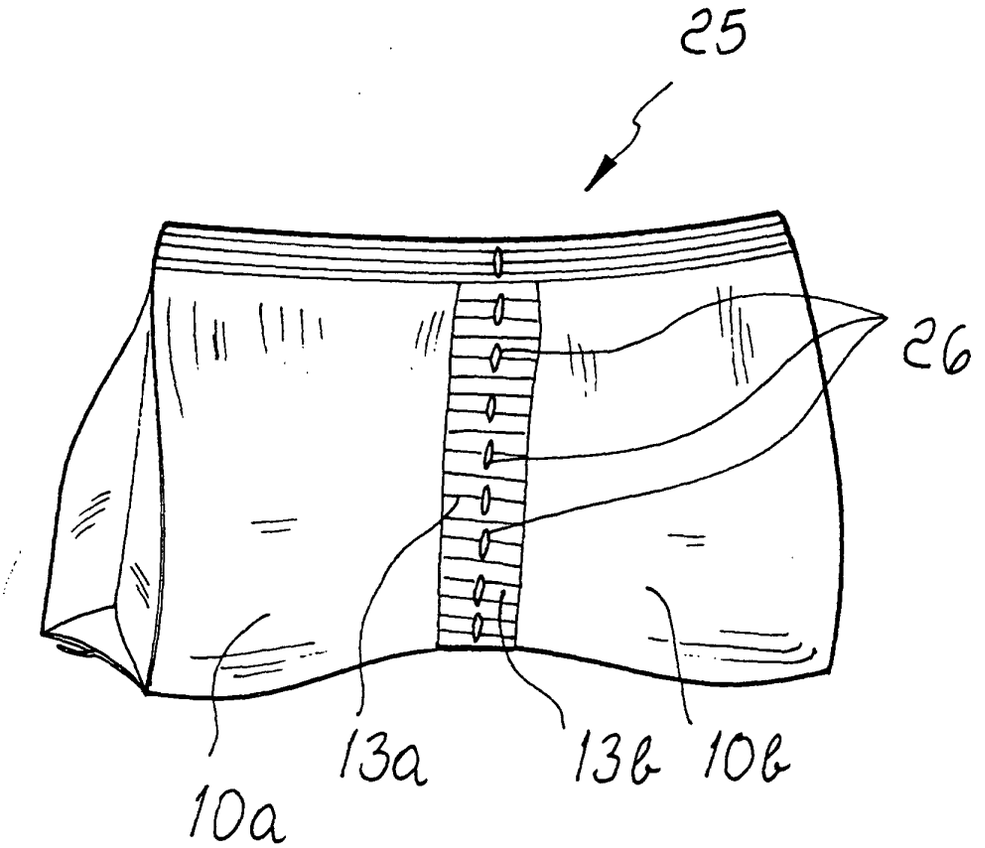

Fig. 8