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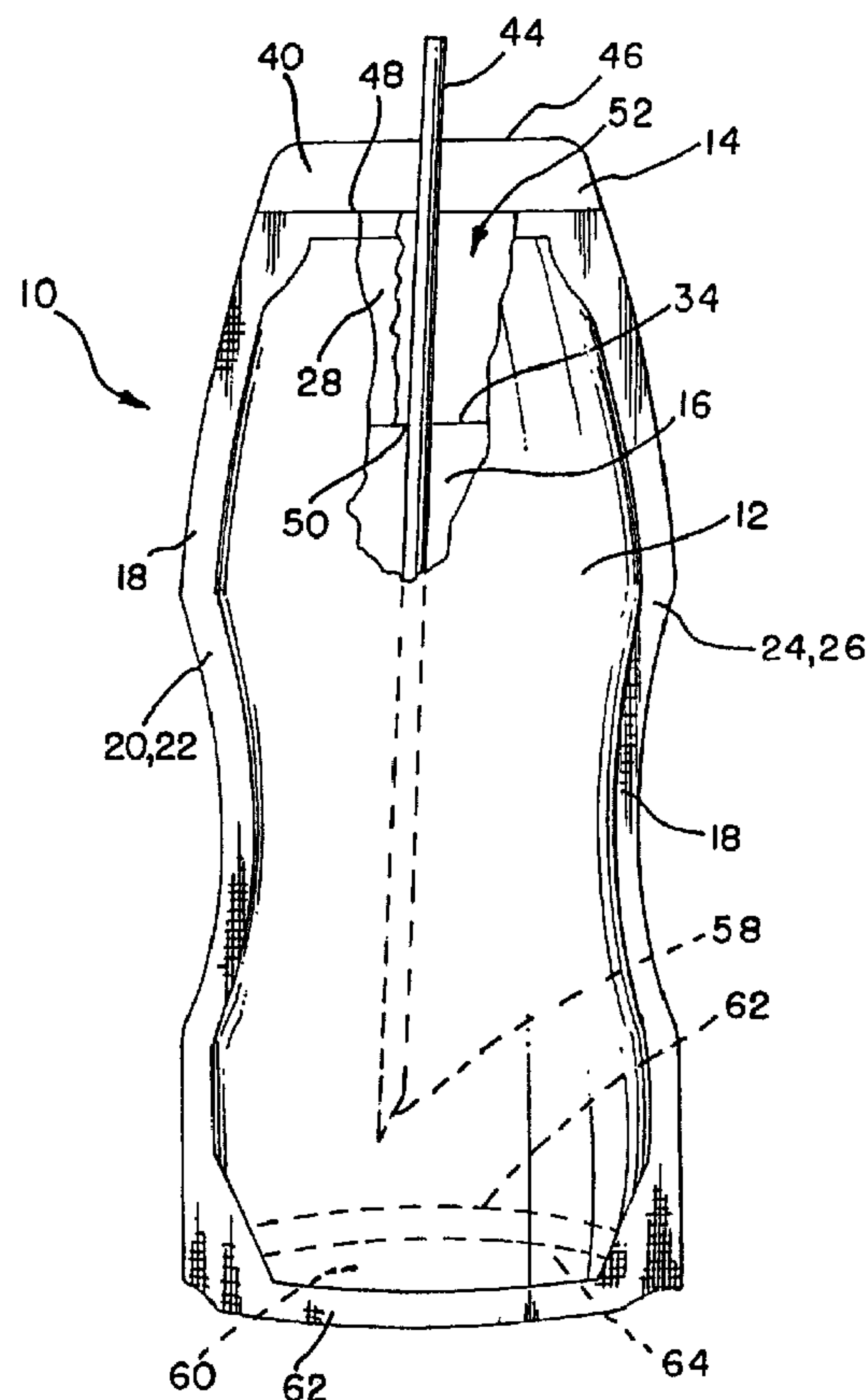
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(54) Title: EASY OPEN FLEXIBLE POUCH



(57) Abrégé/Abstract:

A flexible pouch (10) is formed from a first and second sheet (12, 14) which are in sealing engaged along their side edges. Two gussets (28, 60) are provided at the top and bottom, respectively, of the sheets. The bottom of the uppermost gusset is recessed such that a pocket (52) is formed at one end of the pouch. A compartment (16) is formed within the pouch by the two sheets and

(57) **Abrégé(suite)/Abstract(continued):**

the two gussets. A straw (44) or other suitable instrument can be used to puncture the uppermost gusset in order to remove the contents from the compartment of the pouch. This pocket has a wide mouth and will enable easy insertion of the straw while minimizing or eliminating product spillage.

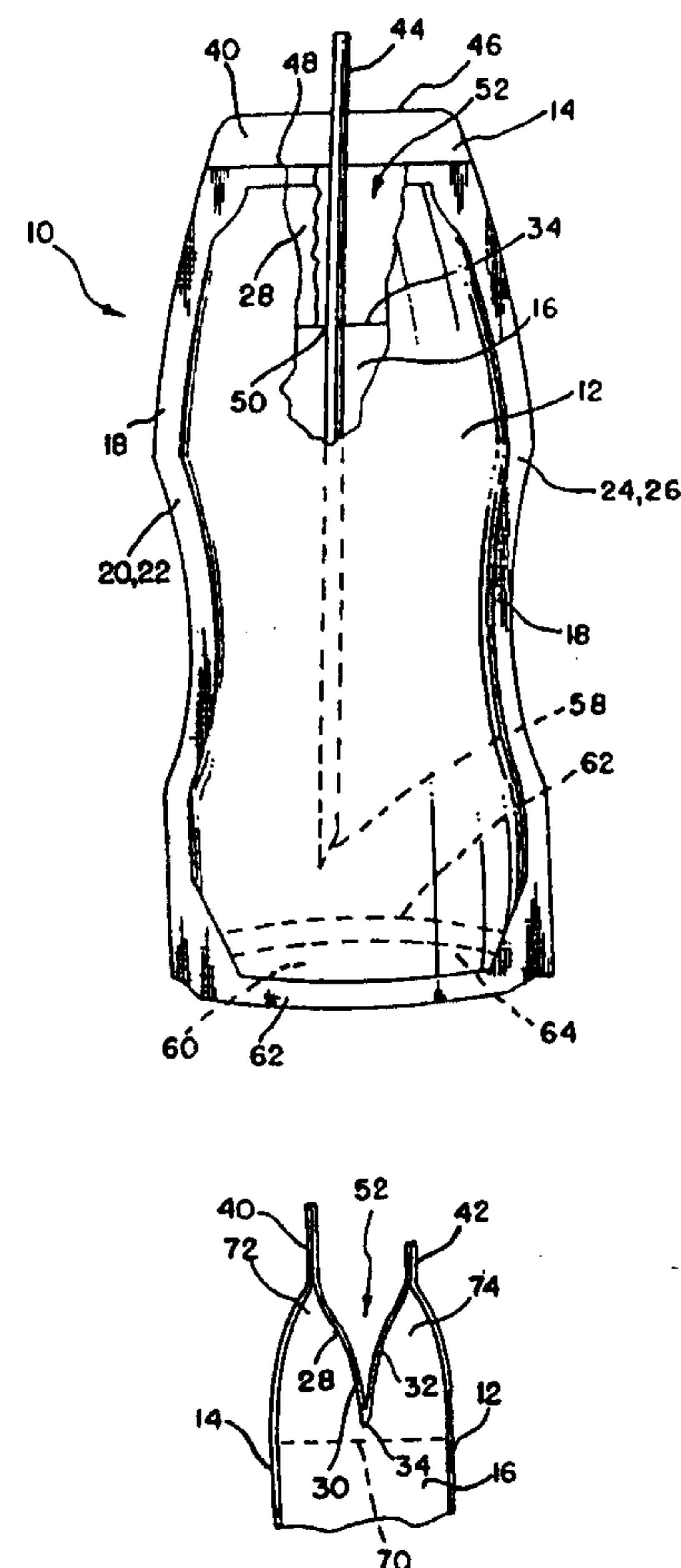
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(21) International Application Number: PCT/US97/21905 (22) International Filing Date: 26 November 1997 (26.11.97) (30) Priority Data: 08/756,528 26 November 1996 (26.11.96) US (71) Applicant: THE COCA-COLA COMPANY [US/US]; 310 North Avenue, Atlanta, GA 30313 (US). (72) Inventors: SMITH, James, W.; 814 Thicket Lane, Houston, TX 77079 (US). RODGERS, Abigail, L.; 2127 North Boulevard, Houston, TX 77098 (US). RILEY, Thomas, E., Jr.; 2041 North Magnolia Street, Chicago, IL 60614 (US). HOLMES, Mark, W.; 52 West Honeysuckle Lane, Round Lake Beach, IL 60073 (US). (74) Agents: BIRCH, Anthony, L. et al.; P.O. Box 747, Falls Church, VA 22040-0747 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

(54) Title: EASY OPEN FLEXIBLE POUCH**(57) Abstract**

A flexible pouch (10) is formed from a first and second sheet (12, 14) which are in sealing engaged along their side edges. Two gussets (28, 60) are provided at the top and bottom, respectively, of the sheets. The bottom of the uppermost gusset is recessed such that a pocket (52) is formed at one end of the pouch. A compartment (16) is formed within the pouch by the two sheets and the two gussets. A straw (44) or other suitable instrument can be used to puncture the uppermost gusset in order to remove the contents from the compartment of the pouch. This pocket has a wide mouth and will enable easy insertion of the straw while minimizing or eliminating product spillage.



TITLE OF THE INVENTION
EASY OPEN FLEXIBLE POUCH

BACKGROUND OF THE INVENTION

5 FIELD OF THE INVENTION

The present invention relates to an easy open flexible pouch. This pouch has a wide-mouth pocket into which a straw is inserted to pierce a frangible membrane for discharge of pouch contents.

10 DESCRIPTION OF THE BACKGROUND ART

Various flexible pouches are known in the prior art. These flexible pouches are often difficult to open. In particular, they are very hard to penetrate with a straw. Often when attempting to puncture the packages with the straw, the product will spill. Also, the straw can puncture both the front and back wall of the pouch resulting in an unsatisfactory arrangement. For example, U.S. Patent 3,337,117 discloses a beverage package which requires a great deal of precision to insert a straw during opening.

Accordingly, a need in the art exists for a pouch which can be easily opened while minimizing product spillage.

20

SUMMARY OF THE INVENTION

Accordingly, it is a primary object of an aspect of the present invention to provide a flexible pouch which can be easily opened and in which product spillage is minimized or eliminated.

25 It is additionally a further object of an aspect of the present invention to provide a flexible pouch which can be opened with a straw and which would avoid inadvertent piercing of both the front and back of the package.

It is a further object of an aspect of the present invention to provide a wide mouth pocket on the pouch which can aid straw insertion into the pouch.

30 According to an aspect of the present invention, there is provided a flexible pouch comprising:

a first sheet, having a first edge and a second edge;

a second sheet having a first edge and a second edge, the first edges of the first and second sheets being sealed together by a first side seal and the second edges of the first and second sheets being sealed together by a second side seal, the first and second side seals having innermost edges and extending continuously across from the first and second edges of the first and second sheets to the innermost edges;

a compartment being formed in part by the first and second sheets between the first and second edges sealed by the first and second side seals; and

10 a frangible element defining a pocket having a mouth opening and an access area extending from and between the first and second innermost edges of the first and second side seals, the frangible element further defining a wall portion of the compartment configured to receive an opening device within the access area of the pocket and rupturably form a drink opening to the compartment
15 each of the first and second side seals at the first and second edges of the first and second sheets having a varying thickness, which is measured from the first and second edges of the sheets along a direction toward the compartment, that increases from a first thickness to a second thickness at an area adjacent to the pocket such that the mouth opening and the access area of the pocket bow open
20 about the first and second side seals when the first and second side seals are moved together.

In accordance with another aspect of the invention, a flexible pouch has a membrane and a sealed compartment, the compartment being formed at least in part by the membrane, the membrane having two walls, the two walls of the
25 membrane forming a V-shaped crease and the walls of the membrane defining a pocket therebetween, the improvement comprises edges of the walls of the membrane on each side of the crease being in sealed engagement to thereby form sides of the pocket, the membrane being readily frangible to provide a drink opening to the compartment, the crease extending to outermost edges of the
30 membrane, a majority of a length of the crease being engaged with the pocket, the majority of the length of the crease having a same length as a length of an opening to the pocket such that a wide-mouth pocket is provided.

In accordance with a further aspect of the invention, a flexible pouch has a membrane, a sealed compartment, and an access pocket the compartment being formed at least in part by the membrane and the access pocket being formed by the membrane, the compartment being on an
5 opposite side of the membrane from the access pocket, the membrane being readily frangible to provide a drink opening to the compartment, the membrane having at least four edges with first and second edges of the membrane being opposed to one another and third and fourth edges of the membrane being opposed to one another, the first and second edges of the
10 membrane each being in sealed engagement and being on opposed sides of the pocket, wherein the improvement comprises the third and fourth edges of the membrane being offset from one another and the access pocket having means for readily identifying an opening to the access pocket, the means for readily identifying including the third and fourth edges of the membrane being
15 offset whereby a consumer can readily identify an area of the pouch to open.

Further scope of applicability of the present invention will become apparent from the detailed description given hereinafter. However, it should be understood that the detailed description and specific
5 examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

10 BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become more fully understood from the detailed description given hereinbelow and the accompanying drawings which are given by way of illustration only, and thus are not
15 limitative of the present invention, and wherein:

Figure 1 is a front elevational view of the flexible pouch of the present invention with certain portions broken away;

Figure 2 is a view similar to Figure 1 without the
20 broken away portions;

Figure 3 is a front view of an unfilled pouch of the present invention; and

Figure 4 is a cross sectional view taken along line IV-IV of Figure 3.

25 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring in detail to the drawings and with particular reference to Figure 1, a flexible pouch 10 is shown. This flexible pouch can be made from a heat-sealable, heat-weldable or ultrasonic sealing flexible
30 laminate such as an aluminum sheet covered with a plastic material or from any other suitable material. The pouch 10 can be filled with liquids such as beverages, liquid, pasty media, fine granular material or any other suitable objects. It is contemplated that

the flexible pouch will primarily be used as a beverage container.

As seen in Figures 1 and 2, this flexible pouch 10 generally has a figure eight shape. The flexible pouch is made from a first sheet 12 and a second sheet 14. In Figure 1, the first sheet 12 is in front of the second sheet 14. The shape of the first sheet 12 matches the second sheet 14 except at the uppermost edge thereof as will be explained in detail below. The two sheets 12 and 14 are sealed together around their periphery to form a compartment 16. The compartment 16 is formed between the first and second sheets 12 and 14 and will hold the contents of the flexible pouch 10. For example, a beverage can be placed within the compartment 16.

A seam 18 extends along the sides of the first and second sheets 12 and 14. While this seam is shown as being continuous in the figures, it should be appreciated that it could be discontinuous as long as a sealed compartment 16 was provided. This seam 18 can be formed by heat-sealing, heat-welding or ultrasonic sealing the two sheets 12 and 14 together. Otherwise, adhesives, crimping or any other suitable arrangement could be used in order to bond these sheets together. Also, a single extruded tube can be used in place of the two sheets. Alternatively, a single sheet can be folded over on itself and can have its free ends bonded together to thereby define a portion of the sealed compartment 16. It is merely necessary that an appropriate sealed compartment 16 be provided. It is contemplated that this compartment 16 will be fluid tightly sealed.

A first edge 20 of the first sheet 12 and a first edge 22 of the second sheet 14 are provided on the left-hand side of the pouch 10 as seen in Figure 1. The seam 18 extends along these first edges 20, 22. In addition, a second edge 24 on the first sheet 12 and a second edge

26 on the second sheet 14 are provided along the right-hand side of the flexible pouch 10. The edges 22, 26 of the second sheet 14 are behind the first edges 20, 24, respectively, of the first sheet 12. The edges 20, 22 and the edges 24, 26 conform such that the shape of the first and second sheets 12, 14 along the sides of the pouch 10 are uniform. As previously noted, the first edges 20, 22 are sealed together and the second edges 24, 26 are sealed together.

At the top of flexible pouch 10, a frangible element or membrane 28 is provided. This element or membrane 28 is partially shown in Figure 1 because a portion of the first sheet 12 has been removed. Referring to Figure 4, the frangible element or membrane 28 is better shown. This Figure 4 is a side view between the first and second sheets 12, 14 taken along line IV-IV of Figure 3. As can be seen in Figure 4, the frangible element or membrane 28 includes a flexible first gusset provided at the end of the pouch. When the pouch 10 is standing upright, this end will be the top of the pouch. This gusset generally has a V-shape. Two walls 30, 32 are provided on the one-piece gusset. These walls 30, 32 converge to form the V-shape in side sectional view.

In particular, it is contemplated that the flexible first gusset forming the frangible element or membrane 28 is a single sheet which has been folded to form a crease 34. This crease 34 is generally linear and extends to the outermost edges 36, 38 of the first and second sheets 12, 14 as indicated in Figure 3. This crease length is achieved because the first gusset has the same length and shape as the sheets 12, 14 at the top of the flexible pouch 10. Of course, any other suitable configuration could be had for the gusset. In other words, the frangible element or membrane could be formed from a flexible gusset which does not extend completely to the outermost edges 36, 38 of the sheets

or which extends beyond these edges. While it is contemplated that the contour of the outer edges of the frangible element or membrane 28 will match the contour of the uppermost portion of the pouch 10, other designs for the frangible element or
5 membrane 28 are possible. Also, instead of using a single gusset which is folded to form crease 34, two separate membranes could be welded or otherwise adhered to one another to form a crease along the joint between them.

Two seams 40, 42 are provided at the upper end of the
10 pouch 10. The wall 30 of the frangible element or membrane 28 is heat-sealed or heat welded or otherwise sealed to the second sheet 14 at seam 40. This frangible element or membrane 28 is also adhered at its wall 32 to the first sheet 12 along seam 42. It should be noted that seam 40 is longer than seam 42.
15 Therefore, the frangible element or membrane 28 is not completely symmetrical about the crease 30. Moreover, the rear or second sheet 14 is slightly longer than the first sheet 12. By gripping seam 40, a user may avoid increasing pressure on the contents of the pouch. As seen in Figure 3, this seam 40
20 provides an exposed area which a user can grip in order to hold the pouch. Such an arrangement can be useful when attempting to insert a straw 44 into the wide mouth pouch 10 as will be described below. Of course, the instant invention will work regardless of where it is held by the user. In other words, it
25 is not necessary for the user to grasp this seam 40 in order to insert the straw 44 into the pouch 10. It is therefore possible for the lengths of the first sheet 12 and second sheet 14 to be the same. In such a modified arrangement, the uppermost edges of seams 40 and 42 would be aligned. In such a modified
30 arrangement or in the arrangement shown in the drawings, it should be noted that the top of the pouch between the first and second edges 22, 26 of the second sheet 14 is generally flat. It is contemplated that when the pouch 10 is filled and standing upright, the upper edge 46 will be

horizontal. As will be described below, the gusset of the frangible element or membrane 28 will define a pocket 52. At least when the pocket is closed, the upper edge 48 of the first sheet 12 will also be flat and generally horizontal when the pouch is standing upright.

The frangible element or membrane 28 is made from a readily rupturable material such as a flexible laminate. A straw 44 can be inserted into the area formed between the walls 30, 32 of the frangible element or membrane 28. Then a small portion of the crease 34 will be pierced by the straw to form an opening 50 to the compartment 16. It should be noted that the diameter of the straw 44 is relatively small compared to the length of the crease 34. In other words, the length of the frangible element or membrane 28 is considerably greater than that of the diameter of the straw 44. Only a small opening 50 is punctured in the pouch 10. It is not contemplated that the entire seam or crease 34 will be ruptured. In other words, the opening 50 extends over a portion of the gusset but is out of contact with the first and second sides of the pouch 10 at seams 18. However, the entire length of the crease 34 could be ruptured if so desired.

Within the areas between the first and second sheets 12, 14 at the top of the pouch, the above-noted pocket 52 is formed. This pocket 52 has a wide mouth or opening which can easily accommodate insertion of the straw 44. A portion of the first and second sheets 12, 14 are movable toward and away from one another to define this pocket 52. The first and second edges 48, 46 of the sheets 12, 14 are sealed to the frangible element or membrane 28. The gusset of this frangible element or membrane 28 will be exposed when the first and second sheets 12, 14 are moved away from one another. It is not contemplated that the seams 18 at the sides of the sheets 12, 14 and gusset 28 will be

ruptured. Rather, the sheets and gusset will be bowed in order to open the pocket 52. Of course, the seams 18 at the top of the pouch could be torn if the sheets 12, 14 were pulled sufficiently far apart. Because the
5 frangible element or membrane 28 extends completely across the pouch to the outermost edges of the sheets 12, 14, such an opening of the sides of pocket 52 should not detrimentally effect the sealing of the pouch.

In other words, as seen in Figure 3, the crease 34
10 of the frangible element or membrane 28 will extend completely between the outermost edges 36, 38 of the membrane. Therefore, closed sides of pocket 52 are formed by the edges of sheets 12, 14 and the edges of the membrane 28 all being welded or otherwise sealed
15 along seam 18. As noted this seal between the side edges of the seams 40, 42 could be omitted. It is preferable, however, to extend these side seams 18 to the tops of the sheets 12 and 14 such that the pocket 52 is clearly defined.

20 Nonetheless, as noted above, it is contemplated that either and or both of the sheets 12, 14 will be bowed at their top portion in order to open the pocket 52 and insert the straw 44. Moreover, it should be noted that it is not necessary for the consumer to
25 expressly open this pocket 52. Rather, insertion of the straw 44 will act to slightly wedge these sheets 12, 14 as well as the walls 30, 32 of the frangible element or membrane 28 apart in order to open the pocket. Accordingly, only a very slight opening of the pocket 52
30 can be carried out. On the other hand, the pocket 52 is sufficiently big such that a user could insert his or her fingers in order to more fully open the pocket before or during insertion of the straw 44.

As seen in Figure 4, a majority of the frangible
35 element or membrane 28 is contained between the first and second sheets 12, 14. A small portion of the rear wall 30 of the membrane 28 would extend above the top of

the upper seam 42 of the first sheet 12. However, the uppermost edge of this wall 30 could terminate at or below the uppermost edge of the first sheet 12. In other words, it is now contemplated that the uppermost edges of the walls 30, 32 will extend to the uppermost edges of the seams 40, 42 to match the uppermost edges of the walls 12, 14. However, these uppermost edges of the walls 30, 32 of the membrane 28 could be terminated short of the uppermost edges of the walls 12, 14, if so desired.

When the frangible element or membrane 28 is unfolded, it will have a length which is shorter than that of the first and second sheets. For example, the rear wall could have a length of 1.19 inches whereas the overall length of the second wall 14 would be 6.50 inches. Likewise the length of the forward wall 32 could be 0.79 inches whereas the length of the first sheet 12 could be 6.1 inches. Therefore, there would be a total length of 1.98 inches for the frangible element or membrane 28 and this total length is considerable less than the 6.50 inch or 6.1 inch length of the second and first sheet 14, 12, respectively. These particular lengths are merely given as an example and it should be appreciated that the present pouch can be of any suitable size.

As previously noted, it is contemplated that the frangible element or membrane 28 will be a unitary one piece structure. Before the pocket 52 is opened or even when this pocket 52 is only slightly opened to accommodate a straw, the upper edges 46, 48 of the sheets 12, 14 will be generally parallel to the crease 34 formed by the folded frangible element or membrane 28.

As seen in Figure 3, the innermost edges 54, 56 of the seams 18 terminate at the sides of the pocket 52. In other words, the edges of the first sheet 12, second sheet 14 and the frangible element or membrane 28 are

all sealed such that the sides 52 of the pocket are closed. As previously noted, it is not contemplated that these sides will normally be ruptured during use of the pouch 10. Nonetheless, a wide mouth area is formed
5 by pocket 52 for easy insertion of the straw 44. The distance between the edges 54, 56 at the upper side of the pouch 10 can be 1.88 inches, for example. Therefore, a relatively wide area is provided. This enables easy insertion of the straw. It is contemplated
10 that the crease 34 will be pierced anywhere along its length between these edges 54, 56. It is not contemplated that the entire crease 34 would be ruptured although this is possible if so desired.

The sloping walls 30, 32 of the frangible element
15 or membrane 28 will act to cam or guide an end 58 of the straw 44 towards the crease 34 as can be appreciated from Figure 4. The opposed walls 30, 32 of the gusset forming the frangible element or membrane 28 act as a guide for the straw. As seen in Figure 1, the end 58 of
20 the straw 44 is tapered. This tapering can also aid in puncturing of the crease 34. However, a flat end similar to the upper end of the straw 44 could be used at end 58. Moreover, while a generally straight straw 44 is shown, it is contemplated that a flexible straw or
25 any other known straw could be utilized with the pouch 10 of the present invention.

When using the present invention, the straw 44 will be inserted from the outside of the compartment 16. This straw 44 can be somehow bonded or otherwise
30 attached to the exterior of the pouch 10 if so desired. Such a bonding should be easily rupturable so that the straw can be removed from the pouch 10 and inserted into the pocket 52 in order to pierce the frangible element or membrane 28. While it has been discussed that the
35 straw will pierce a portion of the crease 34, any suitable portion of the frangible element or membrane 28 could be punctured. For example, it would be possible

to form the frangible element or membrane 28 such that the crease would slope downwardly in a V-shape from sides 20, 22 to sides 24, 26, for example. Then, this arrangement would guide the straw to the central part of the pocket 52 relative to the two seams 18. Additionally, the frangible element or membrane 28 could be formed without a crease 34 such that any area of this membrane would be pierced by the straw 44. For example, a flat membrane could extend between the first and second sheets 12, 14. Any suitable portion of this membrane can be pierced.

However, due to the provision of the relatively large pocket 52, the straw is easily inserted into the pouch 10. It is unlikely that a user will pierce the front and back of the pouch 10 in the instant invention. Rather, it is likely that the frangible element or membrane 28 alone will be ruptured such that a suitable seal will be maintained for the pouch 10 except at this rupture area. This rupture or opening 50 will enable the contents of the pouch to be withdrawn. In other words, the beverage can be drunk from the pouch through straw 44. This limited opening arrangement will minimize or eliminate product spillage from the pouch 10. The pocket 52 will act as a reservoir which will contain any liquid which is expelled from the pouch from opening 50.

As indicated in Figure 1, a second gusset 60 is provided at the bottom of pouch 10. This second gusset 60 is also a flexible element or membrane and can be made from the same material as the sheets 12, 14. A seam 62 will connect the second gusset 60 to the first and second sheets 12, 14. The first sheet 12, second sheet 14, first gusset of the frangible element or membrane 28 and second gusset 60 will define the compartment 16. When the pouch 10 is filled, it is contemplated that a majority of the second gusset 60 will generally be flat. In a folded unfilled state, the

gusset will have a generally flat bottom portion 64. Figure 3 indicates the connection of the fold line 68 for the second gusset 60 and its connection 64. When the pouch is filled, the second gusset 60 will unfold to have a flat bottom portion 64. Heat sinks 66 are provided at the second gusset 60. These sinks 66 are merely areas which are cut out of or omitted from the seal dies when forming pouch 10. Any suitable number or shape of heat sinks 66 can be used or they may be omitted altogether.

As seen in Figure 4, the contents such as a beverage can be filled to level 70 within the compartment 16. If the pouch 10 is compressed, the level of the liquid 70 will rise above the crease 34. Alternatively, this content level 70 could always be above the crease 34 when the pouch 10 is initially filled. Either way, due to the provision of spaces 72, 74 within the compartment 16, a level of contents 70 can be above opening 50, if so desired.

Apart from the flexible pouch, a method for dispensing contents from a flexible pouch is disclosed by the present invention. In this method, the step of providing a compartment 16 within a flexible pouch 10 is provided. This compartment is initially sealed. Additionally, two sheets 12, 14 and a gusset of a frangible element or membrane 28 is provided. The two sheets 12, 14 and gusset 28 will form a portion of the compartment 16. The two sheets 12, 14 will have sealed edges 18 and the gusset of the frangible element or membrane 28 will be at a first end of the compartment 16. The method additionally includes the step of separating a portion of the first sheet 12 from a portion of the second sheet 14 adjacent the first end of the compartment 16 in order to expose the gusset 28. The compartment is maintained in a sealed state during the step of separating. The gusset of the frangible element or membrane 28 is then pierced by a straw 44.

As previously noted, this step of inserting the straw 44 can actually cause the separation of the portions of the first and second sheets 12, 14. Then, the contents within the compartment 14 are removed through the opening 50 in the gusset.

Instead of using a straw 44, a suitable tool such as pin, funnel or nail, for example, could be used to pierce the frangible element or membrane 28. This tool would then be removed and the contents of the pouch 10 can be poured through the opening. However, it is contemplated that the pouch 10 will be normally be used as a beverage container and therefore a straw 44 will normally be used to discharge the contents.

When the opening 50 is formed, it is contemplated that this will be the only opening to the compartment 16. Of course, a plurality of openings could be provided in the frangible element.

With this pouch 10, a beverage or other contents from the compartment 16 can be easily dispensed. It is very easy to open the container and spillage of the product is minimized or eliminated. Inadvertent damage to the pouch 10 is avoided such as puncturing of both the front and rear walls when attempting to insert the straw. The flexible pouch can be easily manufactured and provides a secure arrangement for holding a product.

The invention being thus described, it will be obvious that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.

CLAIMS

1. A flexible pouch comprising:
 - a first sheet, having a first edge and a second edge;
 - 5 a second sheet having a first edge and a second edge, the first edges of the first and second sheets being sealed together by a first side seal and the second edges of the first and second sheets being sealed together by a second side seal, the first and second side seals having innermost edges and extending continuously across from the first and second edges of the first and
 - 10 second sheets to the innermost edges;
 - a compartment being formed in part by the first and second sheets between the first and second edges sealed by the first and second side seals; and
 - a frangible element defining a pocket having a mouth opening and an
 - 15 access area extending from and between the first and second innermost edges of the first and second side seals, the frangible element further defining a wall portion of the compartment configured to receive an opening device within the access area of the pocket and rupturably form a drink opening to the compartment each of the first and second side seals at the first and
 - 20 second edges of the first and second sheets having a varying thickness, which is measured from the first and second edges of the sheets along a direction toward the compartment, that increases from a first thickness to a second thickness at an area adjacent to the pocket such that the mouth opening and the access area of the pocket bow open about the first and
 - 25 second side seals when the first and second side seals are moved together.
 2. The flexible pouch according to claim 1, wherein the frangible element is a flexible gusset provided between the first and second sheets and wherein the first and second edges of the first sheet conform to the first and second
 - 30 edges of the second sheet, respectively.
 3. The flexible pouch according to claim 2, wherein the gusset is folded when between the first and second sheets to have a crease therein, the drink opening to the compartment being formable in the crease.

4. The flexible pouch according to claim 3, wherein the gusset is folded only once and is provided at an end of the pouch, the end of the pouch being flat between the first and second edges of the second sheet.

5

5. The flexible pouch according to claim 3, wherein the gusset is made from a material which is readily rupturable and wherein a majority of the gusset is contained between the first and second sheets.

10 6. The flexible pouch according to claim 5, wherein a portion of the first and second sheets are movable toward and away from one another to expose a portion of the gusset, the first and second edges of the first and second sheets being sealed to the gusset, the gusset being between the pocket and the compartment.

15

7. The flexible pouch according to claim 5, wherein:

the first edge of the first sheet is shorter than the first edge of the second sheet, the first edge of the first sheet being sealed to the first edge of the second sheet along an entire length of the first sheet;

20 the second edge of the first sheet is shorter than the second edge of the second sheet, the second edge of the first sheet being sealed to the second edge of the second sheet along an entire length of the first sheet; and the gusset is shorter than both the first and second sheets.

25 8. The flexible pouch according to Claim 7, wherein the gusset is a first gusset and wherein the flexible pouch further comprises a second gusset, the second gusset being at an opposite end of the compartment from the first gusset and the second gusset being sealed to the first and second sheets, the compartment being entirely formed by the first sheet, the second sheet, the
30 first gusset and the second gusset.

9. The flexible pouch according to claim 2, wherein:

the first edge of the first sheet is shorter than the first edge of the second sheet, the first edge of the first sheet being sealed to the first edge of

the second sheet along an entire length of the first sheet;

the second edge of the first sheet is shorter than the second edge of the second sheet , the second edge of the first sheet being sealed to the second edge of the second sheet along an entire length of the first sheet ; and

5 the gusset is shorter than both the first and second sheets, the first and second edges of the first and second sheets being sealed to the gusset.

10. The flexible pouch according to claim 1, wherein the first and second edges of the first and second sheets form sides of the pouch and the sides of the pouch are curved to thereby resemble a figure eight shape.

11. An apparatus comprising a flexible pouch according to claim 1, and further comprising a drinking straw having a diameter, a length of the frangible element in a direction between the ends of the first and second sheets being
15 considerably greater than the diameter of the straw.

12. A method for dispensing contents from a flexible pouch according to claim 1, the method comprising the steps of:

separating a portion of the first sheet from a portion of the second
20 sheet adjacent the first end of the compartment to thereby expose the gusset:

maintaining the compartment in a sealed state during the step of separating the first and second sheets ;

piercing the gusset after the steps of separating and maintaining to thereby form the drink opening in the gusset; and

25 removing contents from the compartment through the drink opening in the gusset.

13. The method according to claim 12, further comprising the step of moving an end of a straw through a pocket between the first and second
30 sheets, the step of moving resulting in the step of separating the first sheet from the second sheet and the step of piercing includes using the end of the straw to puncture the gusset to form the drink opening therein.

14. A flexible pouch having a membrane and a sealed compartment, the compartment being formed at least in part by the membrane, the membrane having two walls, the two walls of the membrane forming a V-shaped crease and the walls of the membrane defining a pocket therebetween, the
5 Improvement comprising edges of the walls of the membrane on each side of the crease being in sealed engagement to thereby form sides of the pocket, the membrane being readily frangible to provide a drink opening to the compartment, the crease extending to outermost edges of the membrane, a majority of a length of the crease being engaged with the pocket, the majority
10 of the length of the crease having a same length as a length of an opening to the pocket such that a wide-mouth pocket is provided.

15. The flexible pouch according to claim 14, further comprising a first sheet and a second sheet, both sheets being attached to the membrane and
15 both sheets forming a portion of the compartment, the first sheet having a first edge and a second edge, the second sheet having a first edge and a second edge, the first edges of the first and second sheets being in sealing engagement and the second edges of the first and second sheets being in sealing engagement, the membrane extending between a portion of the first
20 and second edges of the first and second sheets.

16. The flexible pouch according to claim 14, wherein the membrane is at an end of the pouch and wherein the membrane extends into the compartment with portions of the compartment being above the crease such
25 that a level of contents within the compartment can be above the crease, a majority of the compartment being below the crease and the pocket being on an outboard side of the membrane from the compartment.

17. The flexible pouch according to claim 14, wherein the membrane is a
30 unitary, one-piece sheet and wherein the pouch has curved sides to thereby resemble a figure eight shape.

18. The flexible pouch according to claim 14, wherein the crease is generally linear and wherein the pouch further comprises a first sheet and a

second sheet forming a portion of the compartment, both of the sheets being attached to the membrane and an upper edge of one of the sheets being generally parallel to the crease.

5 19. A flexible pouch having a membrane, a sealed compartment, and an access pocket the compartment being formed at least in part by the membrane and the access pocket being formed by the membrane, the compartment being on an opposite side of the membrane from the access pocket, the membrane being readily frangible to provide a drink opening to the
10 compartment, the membrane having at least four edges with first and second edges of the membrane being opposed to one another and third and fourth edges of the membrane being opposed to one another, the first and second edges of the membrane each being in sealed engagement and being on opposed sides of the pocket, wherein the improvement comprises the third
15 and fourth edges of the membrane being offset from one another and the access pocket having means for readily identifying an opening to the access pocket, the means for readily identifying including the third and fourth edges of the membrane being offset whereby a consumer can readily identify an area of the pouch to open.

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20. The flexible pouch according to claim 19, further comprising at least one sheet which is sealed to the membrane, the compartment being formed by the at least one sheet and membrane, the compartment being sealed until the membrane is ruptured when the drink opening to the compartment is
25 formed.

21. The flexible pouch according to claim 20, wherein an exposed portion of the membrane is a different color or material from an exposed area of the at least one sheet to thereby enhance the identification of the access pocket
30 by the means for readily identifying.

22. The flexible pouch according to claim 19, wherein the membrane has a crease therein with the crease extending to outermost edges of the membrane.

23. The flexible pouch according to claim 1, further comprising means for avoiding pressurizing of the pouch during opening of the pouch, the frangible element having two walls with each wall having a top edge, the top edges of the walls being offset from one another, the means for avoiding pressurizing including an area on one of the top edges of the wall which is grippable by a consumer such that an increase in pressure of the compartment can be avoided.

10 24. The flexible pouch according to claim 1, wherein the compartment has a bottom and wherein the opening to the pocket extends over a majority of a width of the bottom of the compartment, the width of the bottom of the compartment extending in a direction between the seals at the edges of the first and second sheets.

15

25. The flexible pouch according to claim 14, wherein the compartment has a bottom and wherein the length of the opening of the pocket extends over a majority of a width of the bottom of the compartment, the width of the bottom of thi compartment extending in generally a same direction as the length of the opening of the pocket.

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FIG. 2

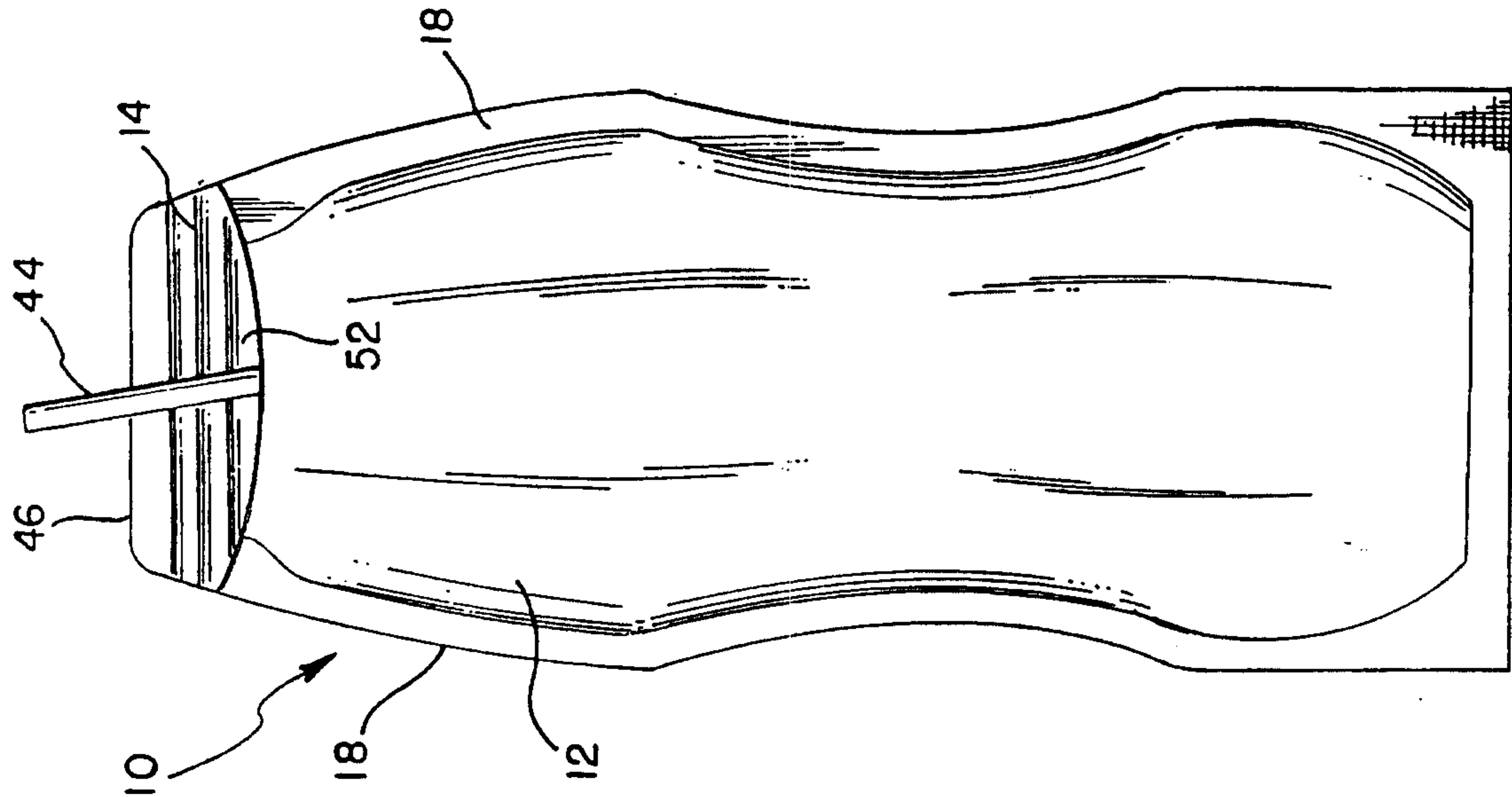
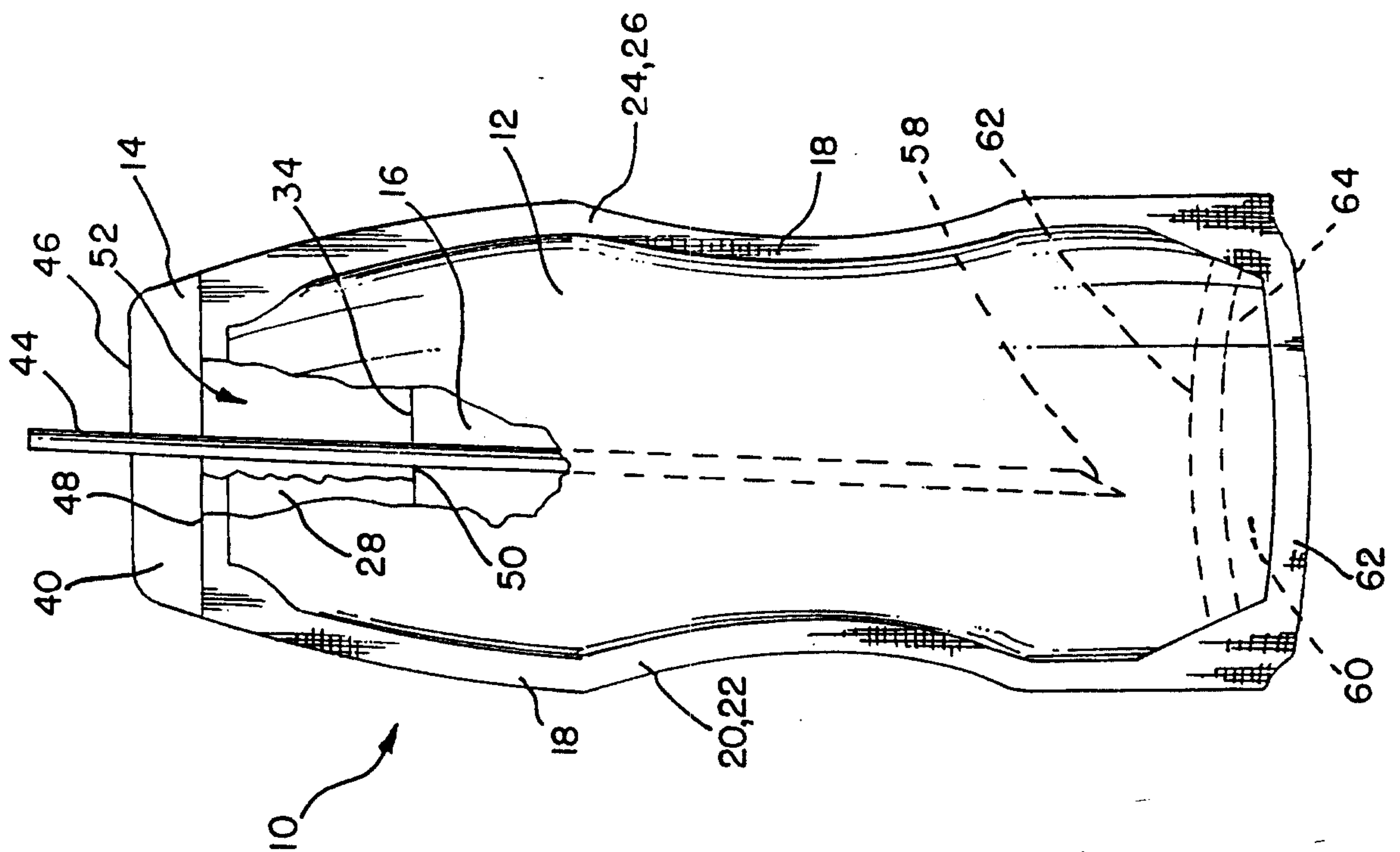
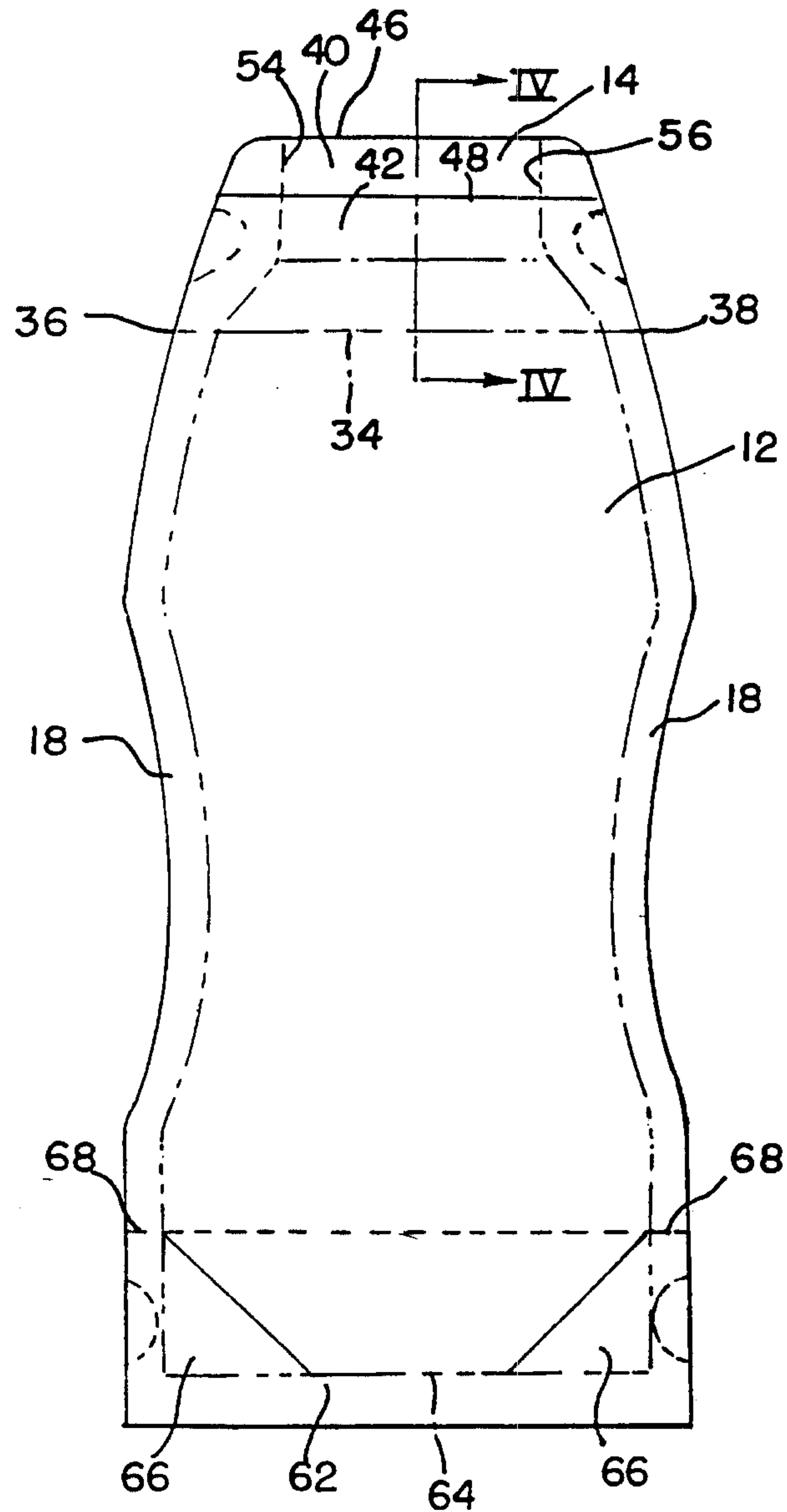
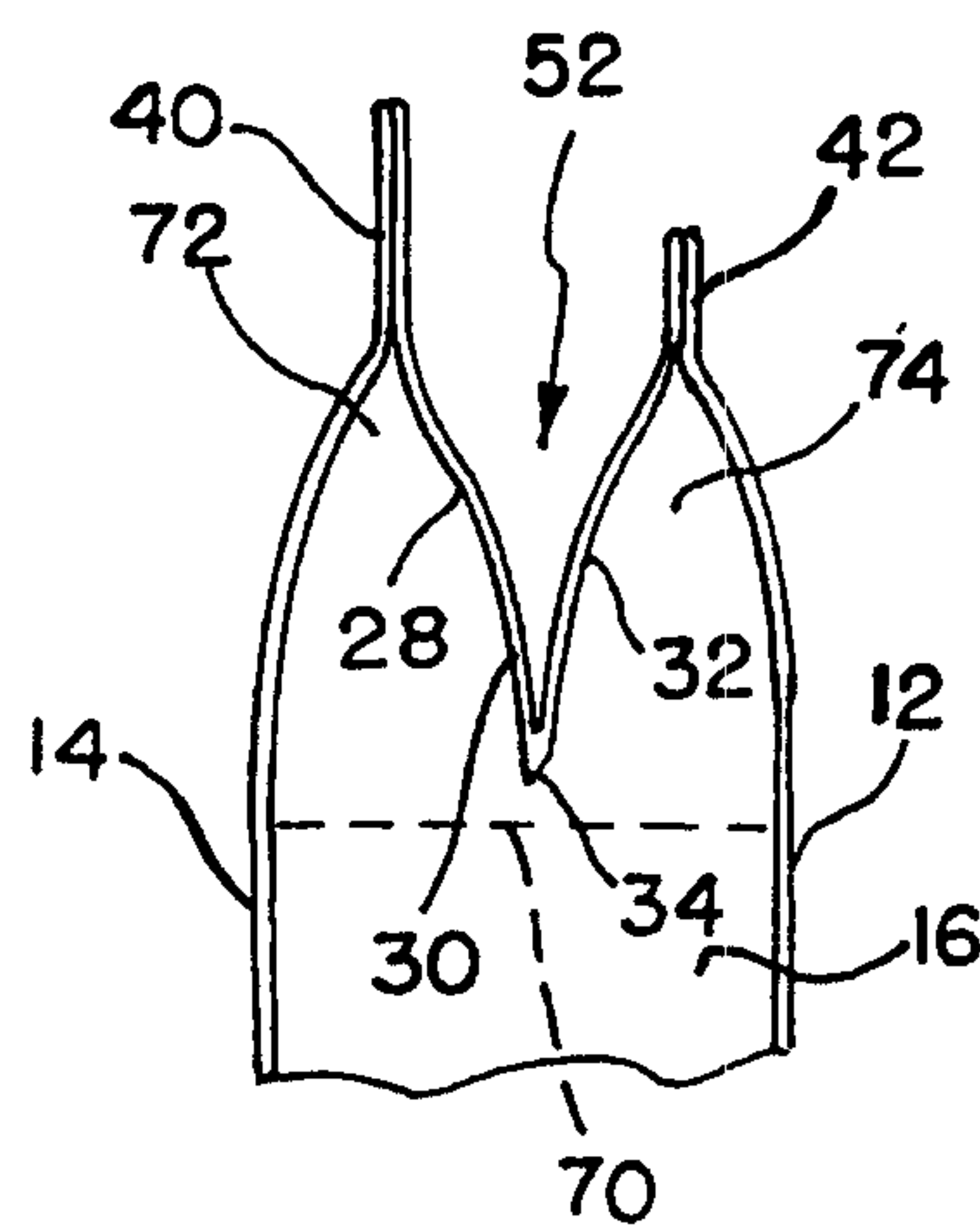


FIG. 1



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**FIG. 3****FIG. 4**

