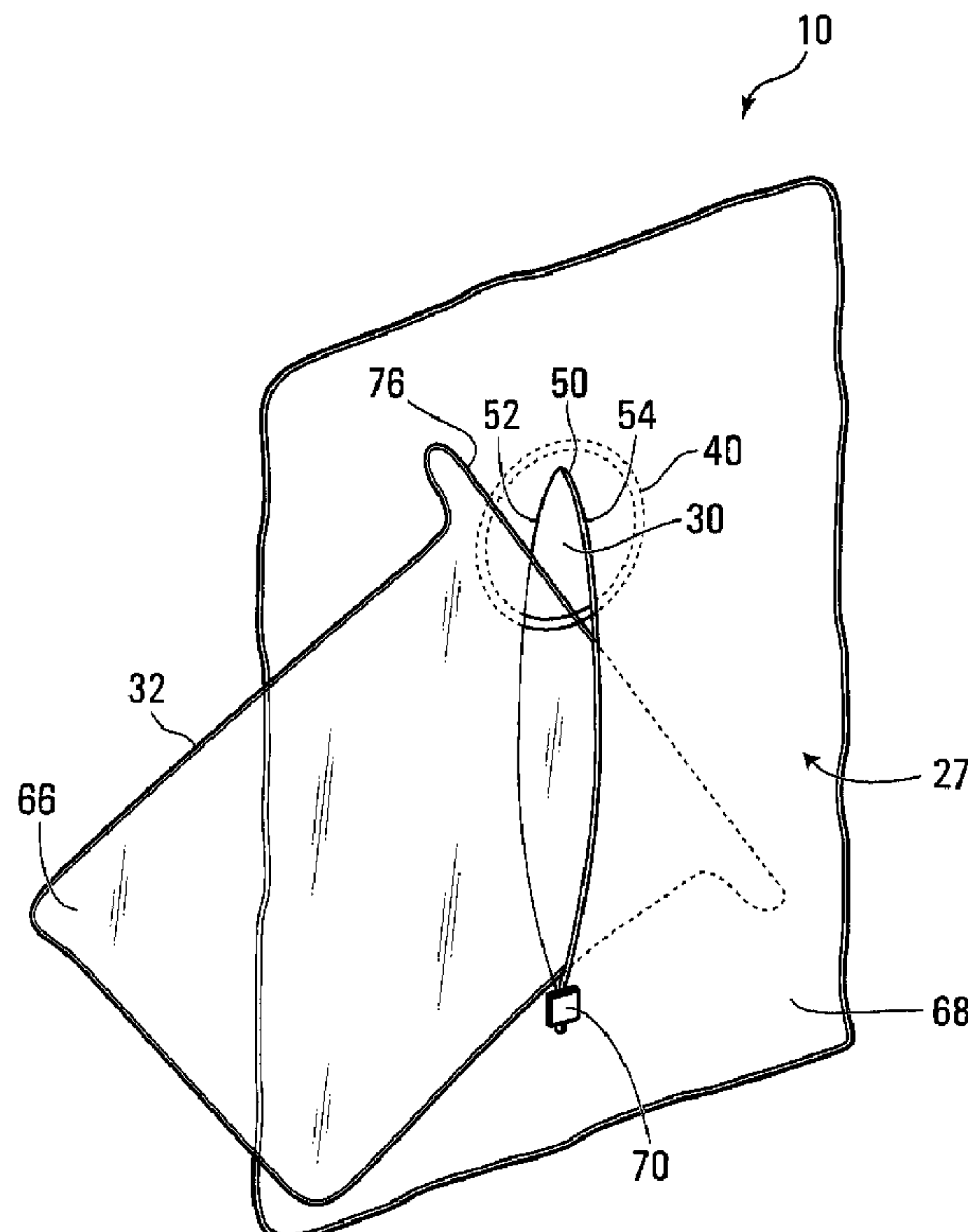




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(72) **Inventeur/Inventor:**
WOLRICH, DOUGLAS HAROLD, CA
(73) **Propriétaire/Owner:**
COLO-MAJIC ENTERPRISES LTD., CA
(74) **Agent:** FETHERSTONHAUGH & CO.

(54) **Titre : APPAREIL FORMANT UNE POCHE DE STOMIE A OUVERTURE REFERMABLE**
(54) **Title: OSTOMY POUCH APPARATUS WITH CLOSABLE OPENING**



(57) **Abrégé/Abstract:**

An ostomy pouch apparatus is disclosed. The apparatus includes first and second sheets of flexible sheet material having perimeter edge portions and respective broad surface portions, the first and second sheets joined at the perimeter edge portions to



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

form a pouch having an interior portion between the first and second sheets. The apparatus also includes a waste admitting opening on the broad surface portion of the first sheet for admitting intestinal waste material into a waste holding bag when the waste holding bag is disposed within the interior portion of the pouch. The apparatus further includes a coupling on the broad surface portion of the first sheet, the coupling being disposed about the waste admitting opening and operable to connect to a flange secured to a patient about a waste releasing opening on the patient to place the waste admitting opening in communication with the waste releasing opening such that intestinal waste material from the waste releasing opening is admitted to the waste holding bag through the waste admitting opening. The apparatus also includes a closable opening on at least one of the broad surface portions for admitting the waste holding bag into the interior portion of the pouch such that the waste holding bag can be positioned in the pouch such that intestinal waste material is directed into the waste holding bag when the coupling is connected to the flange. The closable opening further permits the waste holding bag to be removed from the pouch therethrough to reduce the risk of spillage of the contents of the waste holding bag as the waste holding bag is removed from the pouch.

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(71) Applicant (for all designated States except US): **COLO-MAJIC ENTERPRISES LTD.** [CA/—]; 1857 Welch Street, North Vancouver, British Columbia V7P 1B7 (CA).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WOLRICH, Douglas H.** [CA/CA]; #2-1752 Mahon Avenue, North Vancouver, British Columbia V7M 2T1 (CA).(74) Agents: **KNOX, John W.** et al.; Fetherstonhaugh & Co., Box 11115 Royal Centre, 2300-1055 West Georgia Street, Vancouver, British Columbia V6E 3P3 (CA).

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[Continued on next page]

(54) Title: OSTOMY POUCH APPARATUS WITH CLOSABLE OPENING

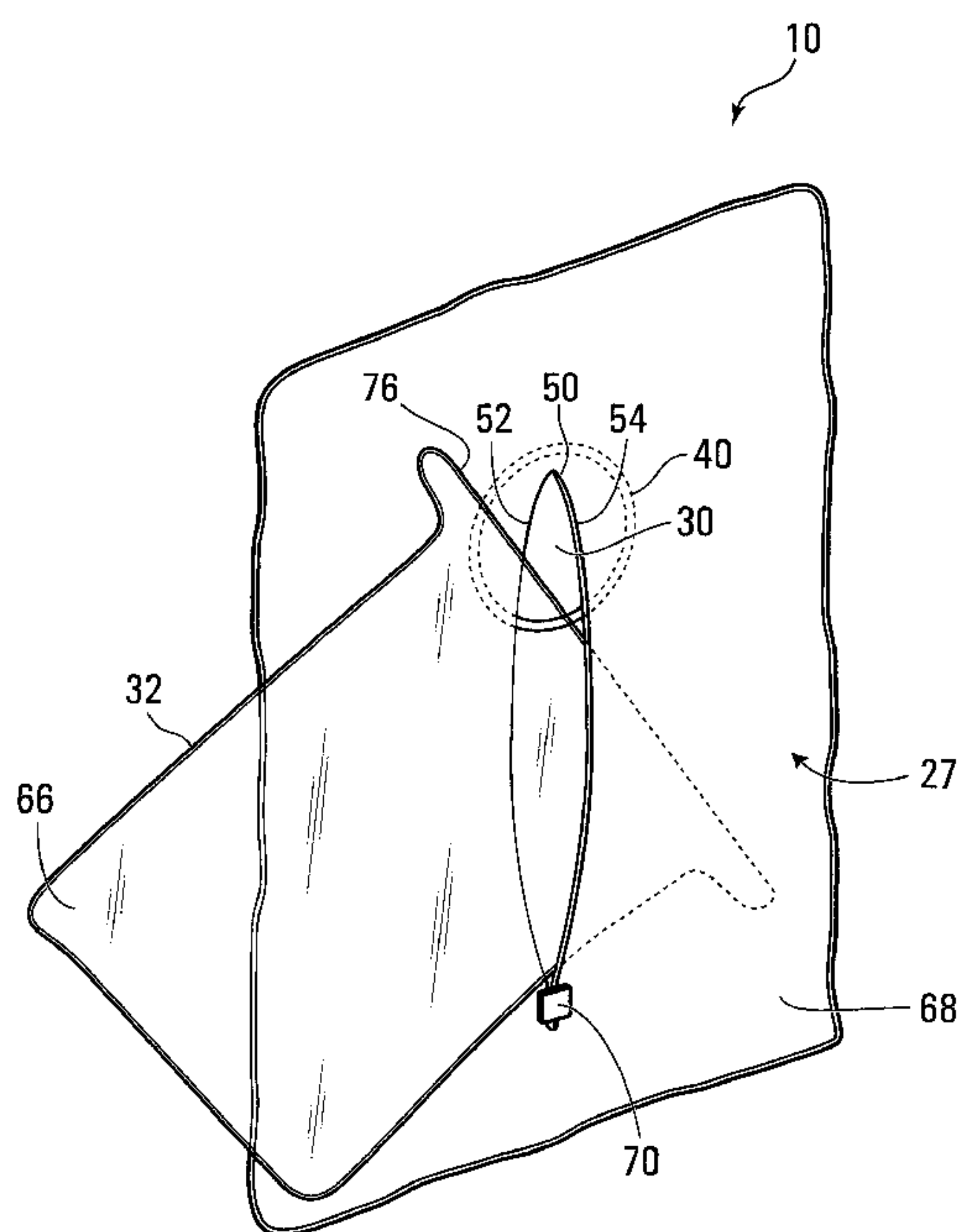


FIG. 5

(57) Abstract: An ostomy pouch apparatus is disclosed. The apparatus includes first and second sheets of flexible sheet material having perimeter edge portions and respective broad surface portions, the first and second sheets joined at the perimeter edge portions to form a pouch having an interior portion between the first and second sheets. The apparatus also includes a waste admitting opening on the broad surface portion of the first sheet for admitting intestinal waste material into a waste holding bag when the waste holding bag is disposed within the interior portion of the pouch. The apparatus further includes a coupling on the broad surface portion of the first sheet, the coupling being disposed about the waste admitting opening and operable to connect to a flange secured to a patient about a waste releasing opening on the patient to place the waste admitting opening in communication with the waste releasing opening such that intestinal waste material from the waste releasing opening is admitted to the waste holding bag through the waste admitting opening. The apparatus also includes a closable opening on at least one of the broad surface portions for admitting the waste holding bag into the interior portion of the pouch such that the waste holding bag can be positioned in the pouch such that intestinal waste material is directed into the waste holding bag when the coupling is connected to the flange. The closable opening further permits the waste holding bag to be removed from the pouch therethrough to reduce the risk of spillage of the contents of the waste holding bag as the waste holding bag is removed from the pouch.

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- 1 -

OSTOMY POUCH APPARATUS WITH CLOSABLE OPENING

BACKGROUND OF THE INVENTION

5 1. **Field of Invention**

This invention relates to an ostomy pouch apparatus having a closable opening and more particularly to an ostomy pouch apparatus having a closable opening on a broad face thereof.

10 2. **Description of Related Art**

A conventional ostomy pouch commonly has a single opening through which a disposable ostomy bag is loaded to and removed from the pouch and through which waste material is admitted into the disposable ostomy bag inside the pouch. The opening must be configured to fit an ostomy opening
15 on a patient and thus its size and shape are thereby limited. The conventional pouch may include further openings such as a drainage opening at the bottom of the pouch for draining spilled waste material or condensation or an access opening through which the disposable ostomy bag may be accessed and opened to release excess gas trapped therein. However, as these openings
20 are not configured for loading and removing a disposable ostomy bag from the conventional ostomy pouch, using these openings in such a manner leads to problems.

Because the access opening of a conventional ostomy pouch is not
25 configured in size, shape, location or orientation for loading and removing the disposable ostomy bag therethrough, physical limitations make loading and removing the disposable ostomy bag using the access opening difficult and cumbersome. Further, drainage openings are usually located at the bottom of the ostomy pouch and as a result, trapped waste material can be released
30 when they are opened. Thus, loading and removing a disposable ostomy bag using a drainage opening can result in unwanted spillage of the trapped waste material.

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SUMMARY OF THE INVENTION

In one embodiment there is provided an ostomy pouch apparatus. The apparatus includes first and second sheets of flexible sheet material having respective perimeter edge portions and respective broad surface portions. The first and second sheets are joined at their respective perimeter edge portions to form a pouch having an interior portion between the first and second sheets. The apparatus also includes a waste admitting opening on the broad surface portion of the first sheet for admitting intestinal waste material into a waste holding bag when the waste holding bag is disposed within the interior portion of the pouch and a coupling on the broad surface portion of the first sheet, the coupling being disposed about the waste admitting opening and operable to connect to a flange secured to a patient about a waste releasing opening on the patient to place the waste admitting opening in communication with the waste releasing opening such that intestinal waste material from the waste releasing opening is admitted to the waste holding bag through the waste admitting opening. The apparatus also includes a closable opening on at least one of the broad surface portions for admitting the waste holding bag into the interior portion of the pouch such that the waste holding bag can be positioned in the pouch such that intestinal waste material is directed into the waste holding bag when the coupling is connected to the flange. The closable opening further permits a lower portion of the waste holding bag to be brought through the closable opening before the coupling is disconnected from the flange to reduce the risk of spillage of the contents of the waste holding bag as the waste holding bag is removed from the pouch. The closable opening is oriented on the at least one of the broad surface portions such that the closable opening extends in a direction that is parallel to or diagonal to a longitudinal axis of the pouch apparatus. The closable opening has a first terminus and a second terminus disposed at opposite ends thereof. The second terminus is disposed adjacent and spaced apart from a lower portion of the perimeter edge portion of the first or second sheet.

The closable opening may include a slit.

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The sheet associated with the at least one of the broad surface portions that has the closable opening has a lateral axis and the closable opening extends at an angle of between about 30 and about 60 degrees to the lateral axis.

The sheet associated with the at least one of the broad surface portions that has the closable opening has a lateral axis and the closable opening extends at an angle of about 45 degrees to the lateral axis.

The first terminus may be disposed adjacent an upper portion of the perimeter edge portion of the second sheet.

The first terminus may be disposed adjacent the coupling on the broad surface portion of the first sheet.

The second terminus may be spaced apart from the lower portion of the perimeter edge portion of the second sheet by between about 1.3 centimeters and about 2.5 centimeters.

The second terminus may be spaced apart from the lower portion of the perimeter edge portion of the second sheet by about 2 centimeters.

The second terminus may be spaced apart from the lower portion of the perimeter edge portion of the first sheet by between about 1.3 centimeters and about 2.5 centimeters.

The second terminus may be spaced apart from the lower portion of the perimeter edge portion of the first sheet by about 2 centimeters.

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The closable opening may include first and second opposite elongated edge portions operable to couple to each other such that the closable opening is closed when the first and second opposite elongated edge portions are coupled to each other.

The apparatus may include provisions for maintaining the closable opening in a closed state.

The provisions for maintaining the closable opening in a closed state may include zipper.

The closable opening may have a length of about 15 centimeters.

Other aspects and features of the present invention will become apparent to those ordinarily skilled in the art upon review of the following description of specific embodiments of the invention in conjunction with the accompanying figures.

BRIEF DESCRIPTION OF THE DRAWINGS

In drawings which illustrate embodiments of the invention:

Figure 1 is a front perspective representation of an ostomy pouch apparatus being affixed to an ostomy patient in accordance with a first embodiment of the invention;

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Figure 2 is a partially cut away perspective view of the ostomy pouch shown in Figure 1;

5 Figure 3 is a rear perspective view of the ostomy pouch shown in Figure 1;

Figure 4 is a rear perspective view of an ostomy pouch apparatus according to a second embodiment of the invention;

10 Figure 5 is a front perspective view of a waste holding bag being inserted into an interior portion of the ostomy pouch of Figure 1;

Figure 6 is a front perspective view of an ostomy pouch apparatus according to a third embodiment of the invention; and

15

Figure 7 is a front perspective view of an ostomy pouch apparatus according to a fourth embodiment of the invention.

20

DETAILED DESCRIPTION

Referring to Figure 1, an ostomy pouch apparatus according to a first embodiment of the invention is shown generally at **10**. The ostomy pouch apparatus **10** is an improvement to conventional ostomy pouch apparatuses that are used to couple to a patient **12** to receive intestinal waste material from an ostomy opening **14** in the patient.

25

Referring to Figure 2, the apparatus **10** includes first and second sheets **20** and **22** of flexible sheet material having respective perimeter edge portions shown generally at **24** and **25** and broad surface portions **26** and **28** respectively. The broad surface portion **26** of the first sheet **20** is intended to face the patient **12** as shown in Figure 1.

30

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The broad surface portion **28** of the second sheet **22** faces outwardly from the patient **12** in a direction opposite the broad surface portion **26** of the first sheet **20**. The perimeter edge portions **24** and **25** are joined such as by ultrasonic welding to form a pouch **27** having an interior portion **34** between the first and second sheets **20** and **22**.

The first sheet **20** has a waste admitting opening **30** on the broad surface portion **26**. The waste admitting opening **30** is for receiving and admitting intestinal waste material into a waste holding bag shown in broken outline at **32** disposed inside the interior portion **34**. The waste holding bag **32** may be of the type sold by Colo-Majic Liners Inc. of North Vancouver, British Columbia, for example.

The apparatus **10** further includes a coupling **40** disposed on the broad surface portion **26** of the first sheet **20**. The coupling **40** is disposed about the waste admitting opening **30** and is operable to connect to a flange such as shown at **42** in Figure 1 secured to the patient **12** about the ostomy opening **14** on the patient. This places the waste admitting opening **30** in communication with the ostomy opening **14** such that intestinal waste material from the ostomy opening is admitted into the waste holding bag **32** through the waste admitting opening.

A particular advantage of the apparatus **10** is that it includes a closable opening shown generally at **50** for admitting the waste holding bag **32** into the interior portion **34** of the pouch **27**. In the embodiment shown in Figure 2, the closable opening **50** is shown in broken outline disposed on the broad surface portion **28** of the second sheet **22**. The closable opening **50** enables the waste holding bag **32** to be positioned in the pouch **27** such that intestinal material is directed into the waste holding bag **32** when the coupling **40** is connected to the flange **42** (as shown in Figure 1). In addition, the closable opening **50** permits the waste holding bag **32** to be removed from the pouch **27** therethrough to reduce risk of spillage of the contents of the waste holding

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bag as the waste holding bag is removed from the pouch. For example, first and second opposite elongated edge portions **52** and **54** of the closable opening **50** may be separated to permit entry and exit of the waste holding bag **32**. Alternatively, the closable opening **50** may be on the broad surface portion **26** of the first sheet **20**, or there may be more than one closable opening.

In the embodiments shown in Figures **1** to **5**, the closable opening **50** comprises a slit in the broad surface portion **28** of the second sheet **22**.

Referring to Figure **1**, in one embodiment the closable opening **50** is oriented on the broad surface portion **28** such that the opening extends in a direction that is generally vertically aligned when the apparatus is secured to the patient **12**. In this embodiment, the closable opening **50** has a length of about **6** inches (about **15** cm). In other embodiments the closable opening **50** may be longer or shorter than **6** inches.

Referring to Figure **3**, the closable opening **50** has a first terminus **60** disposed adjacent an upper portion **61** of the perimeter edge portion **25** of the second sheet **22** and has a second terminus **62** disposed adjacent and spaced apart from a lower portion **63** of the perimeter edge portion by a distance **64**. The distance **64** may be between about $\frac{1}{2}$ inch (about **1.3** cm) and about **1** inch (about **2.5** cm) and in one embodiment is about $\frac{3}{4}$ of an inch (about **2** cm).

In the embodiment shown in Figure **4**, the closable opening **50** extends in a diagonal direction across the broad surface portion **28** of the second sheet **22** for a distance of between about **5** and **7** inches (about **13** and **18** cm) and in this embodiment about **6** inches (about **15** cm). If the second sheet **22** is considered to have a lateral axis **56**, the orientation of the closable opening **50** may be defined by an angle **58** between the opening and the lateral axis **56**.

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In one embodiment, the angle **58** is between about **30** and about **60** degrees, or in the embodiment shown about **45** degrees with respect to the lateral axis.

Still referring to Figure **4**, the first terminus **60** is disposed between the
5 perimeter edge portion **24** of the first sheet **20** and the waste admitting opening **30**. The second terminus **62** is disposed adjacent and spaced apart from the lower portion **63** of the perimeter edge portion **24** by the distance **64** which may be between about $\frac{1}{2}$ inch (about **1.3** cm) and **1** inch (about **2.5** cm), and in one embodiment is $\frac{3}{4}$ of an inch (about **2** cm).

Referring to Figure **5** the waste holding bag **32** may be easily inserted into the
10 interior portion **34** (shown in Figure **2**) of the pouch **27** such that a user can easily insert fingers into the closable opening **50** while holding a top portion **76** of the waste holding bag **32** to enable the top portion to be directed toward the
15 waste admitting opening **30** and at least a portion pulled therethrough for engagement with the coupling **40** and holding thereon when the coupling is connected to the flange **42** on the patient **12** (shown in Figure **1**). Similarly, the user can insert fingers and tuck a lower portion **66** of the waste holding bag **32** into a lower portion **68** of the apparatus **10**.

Referring to Figures **3** and **4**, by positioning the second terminus **62** at the
20 distance **64**, from the lower portion **63** of the perimeter edge portion **25** of the second sheet **22**, the user is protected from inadvertent spillage of contents from the waste holding bag **32** whereby such spillage would be collected in
25 the lower portion **68** of the interior portion **34** (shown in Figure **2**) of the pouch **27**.

Referring back to Figure **3**, the closable opening **50** is made closable by
30 providing structure that allows the first and second opposite elongated edge portions **52** and **54** to couple to each other thereby closing the closable opening. Desirably, this coupling is airtight.

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Such coupling may be effected by forming the first and second opposite elongated edge portions **52** and **54** with structure similar to that found in a Ziploc™ brand slider storage and freezer bag and providing a closure actuator **70**, also as found on a conventional Ziploc™ brand slider storage and freezer bag, to be coupled to the first and second opposite elongated edge portions to pull them together and cause them to couple in a closed position. Thus, the first and second opposite elongated edge portions **52** and **54** and the closure actuator **70** form a zipper. The zipper permits the closable opening **50** to be easily opened and closed by simply operating the closure actuator **70** in opposite directions.

Alternatively, the first and second opposite elongated edge portions **52** and **54** may be formed to overlap and may be fitted with complementary portions of a hook and loop fastener system (not shown).

Referring to Figure 5, to use the apparatus **10**, a user separates the first and second opposite elongated edge portions **52** and **54** of the closable opening **50** and inserts the top portion **76** of the waste holding bag **32** into the closable opening in a direction toward the waste admitting opening **30**. The user then tucks the top portion **76** out of the waste admitting opening **30** by inserting fingers inside the interior portion **34** (shown in Figure 2) of the pouch **27** through the closable opening **50**. Once the top portion **76** of the waste holding bag **32** is held through the waste admitting opening **30**, the user may then use fingers again inserted into the waste admitting opening to push the lower portion **66** of the waste receiving bag into the closable opening **50** and to tuck it down into the lower portion **68** of the interior portion **34** of the apparatus **10**. Similarly, the user may insert fingers into the waste admitting opening **30** to align the waste holding bag **32** in the pouch **27**.

Next, the closure actuator **70** may be actuated into the position shown in Figure 3 to close the closable opening **50**. The apparatus **10** with the waste holding bag **32** inserted therein may then be brought toward the patient **12** as

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shown in Figure 1. With the top portion **76** of the waste holding bag **32** extending slightly through the waste admitting opening **30**, the coupling **40** is fastened to the flange **42** squeezing the top portion **76** of the waste holding bag between the coupling and the flange and aligning the waste admitting opening with the ostomy opening **14** in the patient **12** and holding the apparatus **10** to the patient.

To discard the waste holding bag **32**, the coupling **40** is disconnected from the flange **42** and the apparatus **10** is pulled away from the patient **12** whereupon the closure actuator **70** (shown in Figure 3) can be slid along the closable opening **50** to allow the closable opening to be opened and then the user can simply shift the lower portion **66** (shown in Figure 3) of the waste holding bag upwardly so that it can be brought through the closable opening. The waste holding bag **32** is then removed from the apparatus **10** with contents intact and the apparatus is ready to receive another new clean waste holding bag in the manner described above.

Referring to Figures 3 and 4, because the second terminus **62** of the closable opening **50** is disposed adjacent and spaced apart from the lower portion **63** of the perimeter edge portion **25** of the second sheet **22** by the distance **64**, spilled waste material and/or condensation captured in the pouch **27** below the level of the second terminus remains captured in the pouch, even when the closable opening is opened. Thus, a user may open the closable opening **50** and remove the waste holding bag **32** from the apparatus **10** without releasing the spilled waste material and/or condensation captured therein.

In another embodiment shown in Figures 6 and 7, the closable opening **50** may include a slit in the broad surface portion **26** of the first sheet **20**. Referring to Figure 6, in one embodiment the closable opening **50** extends in a generally vertical direction down the broad surface portion **26** of the first sheet **20** for a distance of between about 3 and 5 inches (about 8 and 13 cm) and in this embodiment about 4 inches (about 10 cm).

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In another embodiment shown in Figure 7, the closable opening **50** extends in a diagonal direction across the broad surface portion **26** of the first sheet **20** for a distance of between about **4** and **6** inches (about **10** and **15** cm) and in this embodiment about **5** inches (about **13** cm). If the first sheet **20** is considered to have a lateral axis **82** and the closable opening **50** is oriented at an angle **84** to the lateral axis **82**, in one embodiment, the angle **84** is between about **30** and about **60** degrees or in the embodiment shown about **45** degrees from the lateral axis.

Referring to Figures **6** and **7**, in the embodiments shown, the first terminus **60** of the closable opening **50** is disposed adjacent the coupling **40** and the second terminus **62** is disposed adjacent and spaced apart from a lower portion **80** of the perimeter edge portion **24** of the first sheet **20** by a distance **86**. The distance **86** may be between about $\frac{1}{2}$ inch (about **1.3** cm) and **1** inch (about **2.5** cm) and in one embodiment is $\frac{3}{4}$ of an inch (about **2** cm).

While specific embodiments of the invention have been described and illustrated, such embodiments should be considered illustrative of the invention only and not as limiting the invention as construed in accordance with the accompanying claims.

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THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. An ostomy pouch apparatus comprising:

first and second sheets of flexible sheet material having respective perimeter edge portions and respective broad surface portions;

said first and second sheets joined at said respective perimeter edge portions to form a pouch having an interior portion between said first and second sheets;

a waste admitting opening on said broad surface portion of said first sheet for admitting intestinal waste material into a waste holding bag when said waste holding bag is disposed within said interior portion of said pouch;

a coupling on said broad surface portion of said first sheet, said coupling being disposed about said waste admitting opening and operable to connect to a flange secured to a patient about a waste releasing opening on said patient to place said waste admitting opening in communication with said waste releasing opening such that intestinal waste material from said waste releasing opening is admitted to said waste holding bag through said waste admitting opening; and

a closable opening on at least one of said broad surface portions for admitting said waste holding bag into said interior portion of said pouch such that said waste holding bag can be positioned in said pouch such that intestinal waste material is directed into said waste holding bag when said coupling is connected to said flange, said closable opening further permitting a lower portion of said waste holding bag to be brought through said closable

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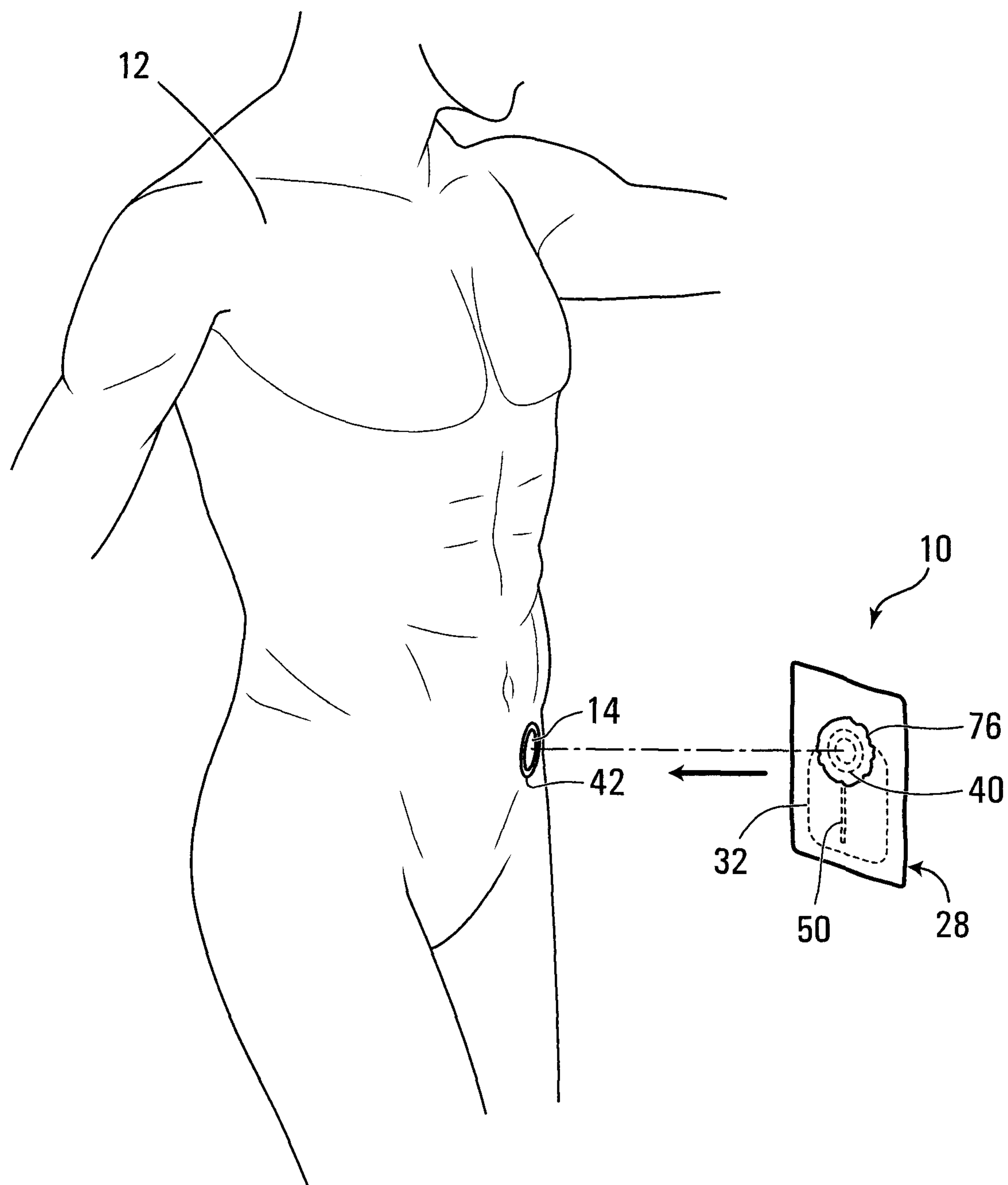
opening before said coupling is disconnected from said flange to reduce the risk of spillage of the contents of said waste holding bag as said waste holding bag is removed from said pouch, wherein said closable opening is oriented on said at least one of said broad surface portions such that said closable opening extends in a direction that is parallel to or diagonal to a longitudinal axis of the pouch apparatus, wherein said closable opening has a first terminus and a second terminus disposed at opposite ends thereof, and wherein said second terminus is disposed adjacent and spaced apart from a lower portion of said perimeter edge portion of said first or second sheet.

2. The apparatus of claim 1 wherein said closable opening comprises a slit.
3. The apparatus of claim 1 wherein the sheet associated with said at least one of said broad surface portions having said closable opening has a lateral axis and wherein said closable opening extends at an angle of between about **30** and about **60** degrees to said lateral axis.
4. The apparatus of claim 1 wherein the sheet associated with said at least one of said broad surface portions having said closable opening has a lateral axis and wherein said closable opening extends at an angle of about **45** degrees to said lateral axis.
5. The apparatus of claim 1 wherein said first terminus is disposed adjacent an upper portion of said perimeter edge portion of said second sheet.
6. The apparatus of claim 1 wherein said first terminus is disposed adjacent said coupling on said broad surface portion of said first sheet.

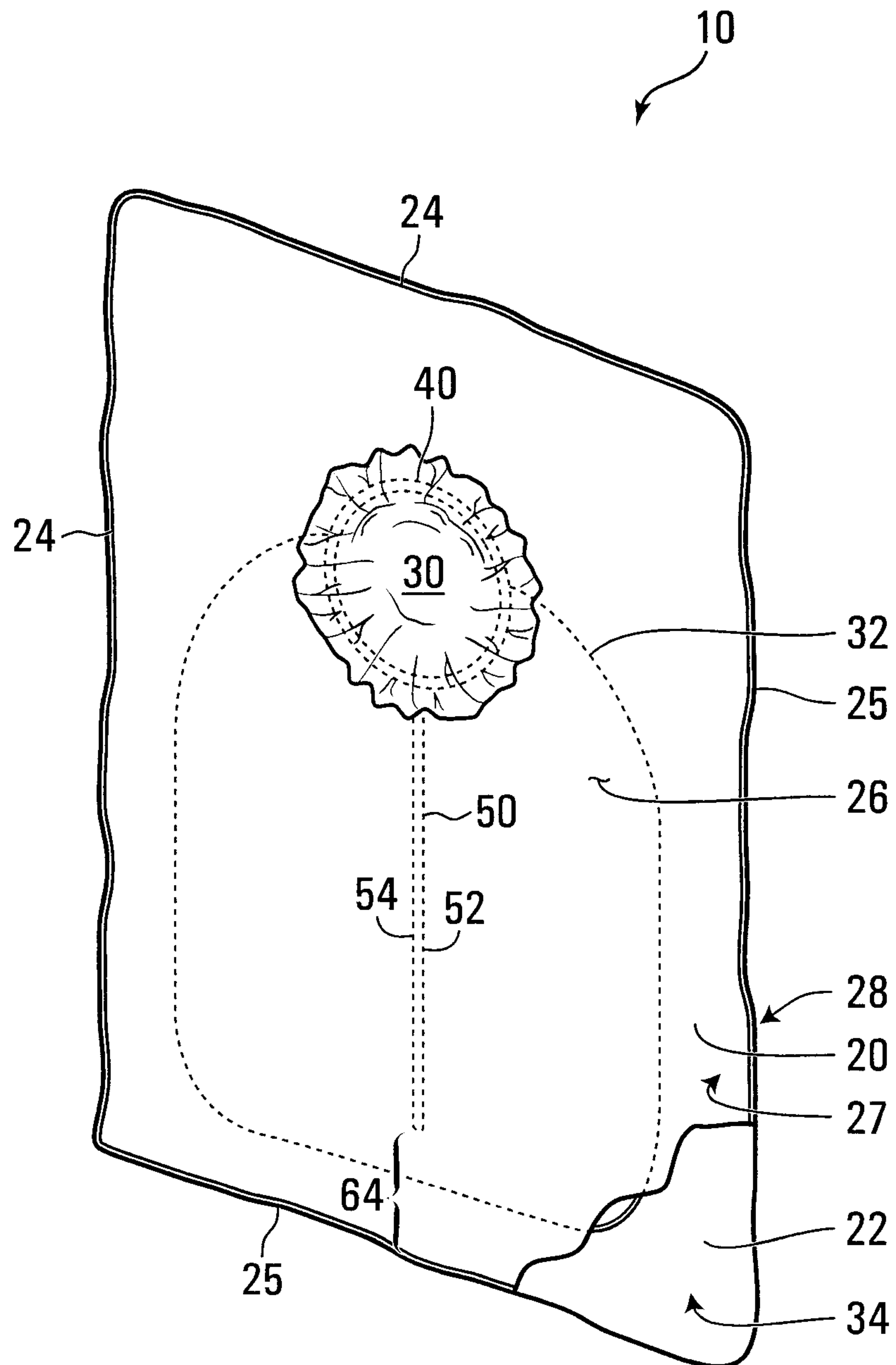
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7. The apparatus of claim **5** wherein said second terminus is spaced apart from said lower portion of said perimeter edge portion of said second sheet by between about **1.3** centimeters and about **2.5** centimeters.
8. The apparatus of claim **5** wherein said second terminus is spaced apart from said lower portion of said perimeter edge portion of said second sheet by about **2** centimeters.
9. The apparatus of claim **6** wherein said second terminus is spaced apart from said lower portion of said perimeter edge portion of said first sheet by between about **1.3** centimeters and about **2.5** centimeters.
10. The apparatus of claim **6** wherein said second terminus is spaced apart from said lower portion of said perimeter edge portion of said first sheet by about **2** centimeters.
11. The apparatus of claim **1** wherein said closable opening comprises first and second opposite elongated edge portions operable to couple to each other such that said closable opening is closed when said first and second opposite elongated edge portions are coupled to each other.
12. The apparatus of claim **1** further comprising means for maintaining said closable opening in a closed state.
13. The apparatus of claim **12** wherein said means for maintaining said closable opening in a closed state comprises a zipper.
14. The apparatus of claim **1** wherein said closable opening has a length of about **15** centimeters.

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**FIG. 1**

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**FIG. 2**

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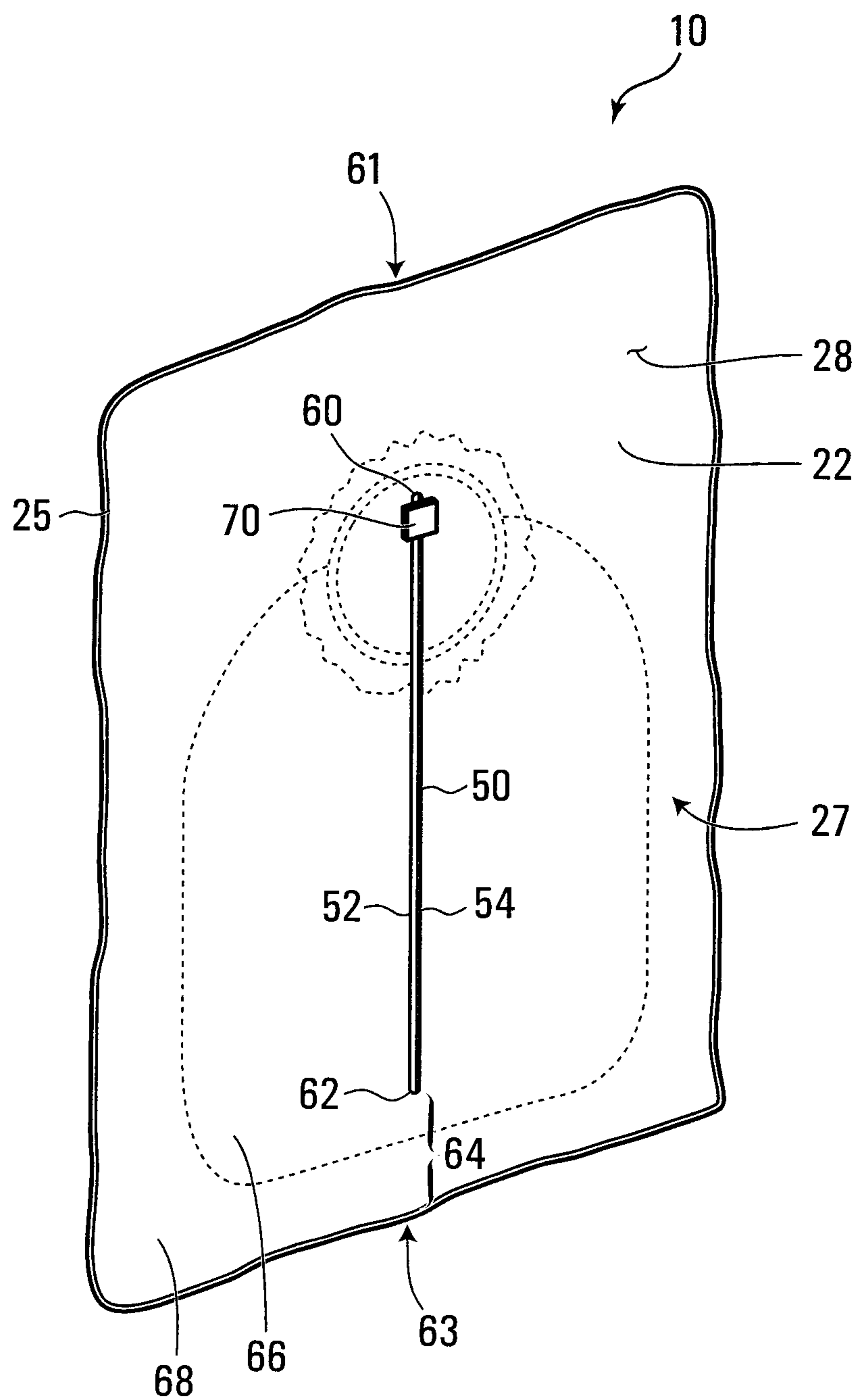
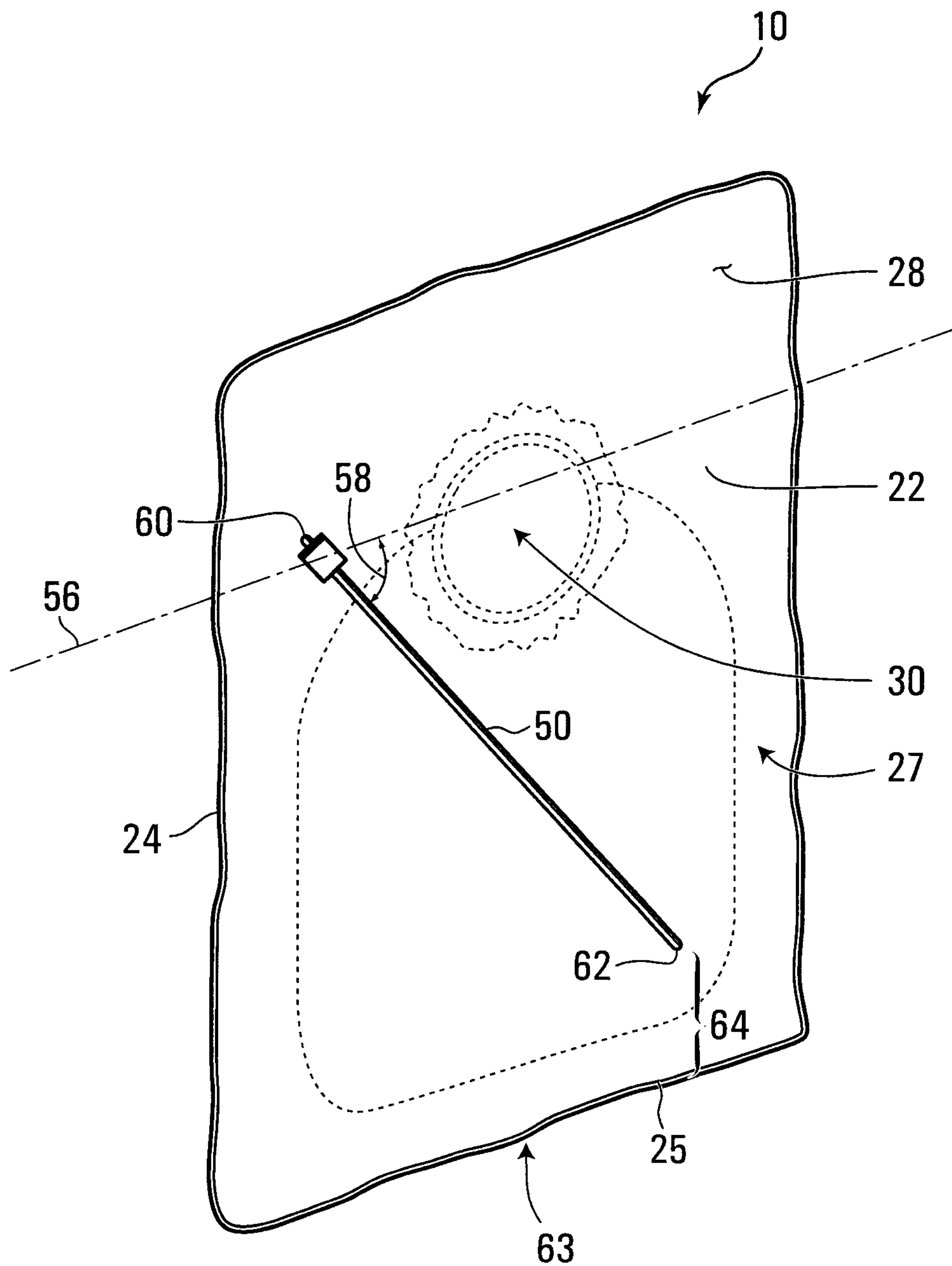


FIG. 3

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**FIG. 4**

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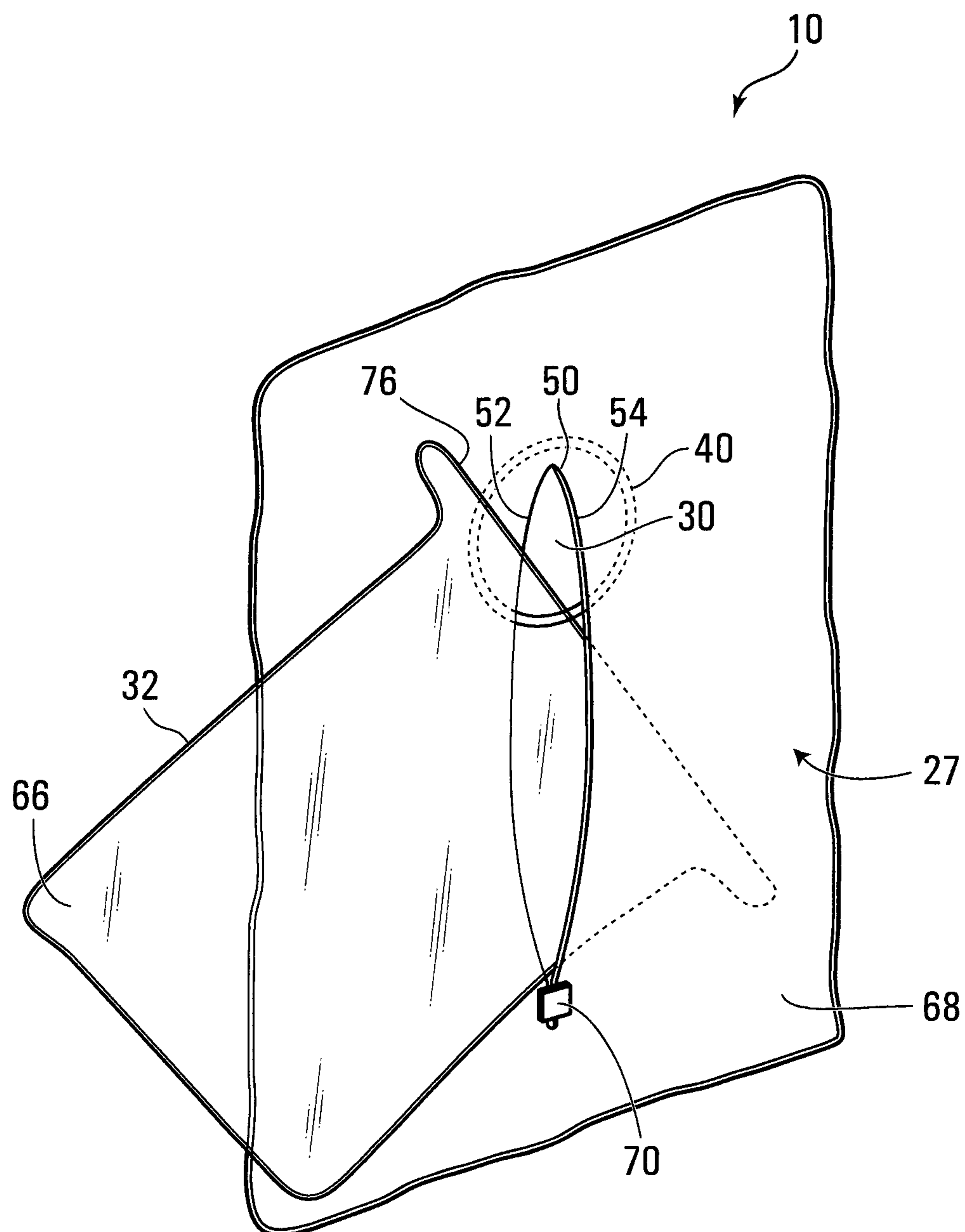
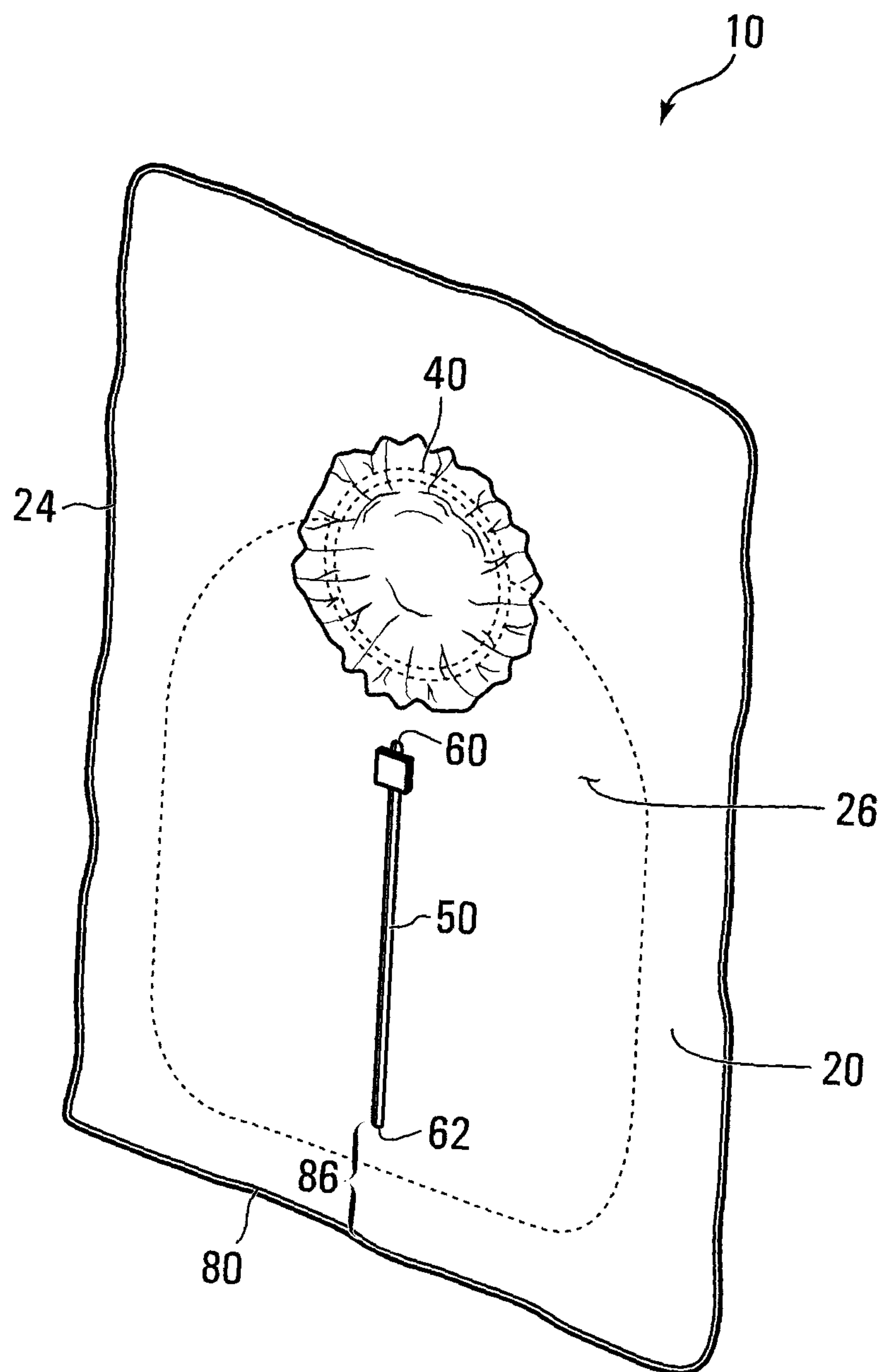
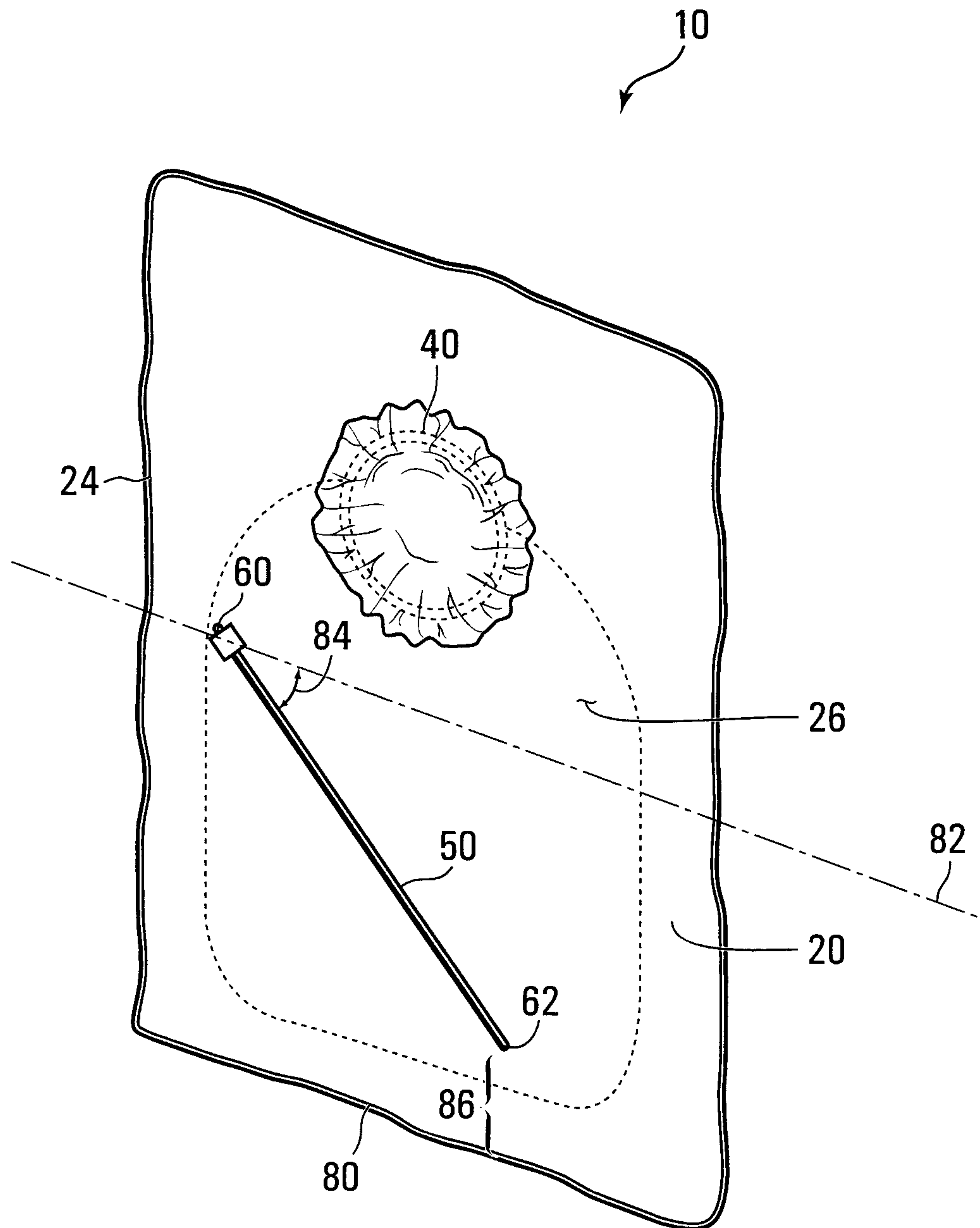


FIG. 5

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**FIG. 6**

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**FIG. 7**

