Office de la Propriété Intellectuelle du Canada
Un organisme d'Industrie Canada

Canadian Intellectual Property Office
An agency of Industry Canada

CA 2547548 A1 2007/09/10

(21) 2 547 548

(12) DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION

(13) A1

(22) Date de dépôt/Filing Date: 2006/05/23

(41) Mise à la disp. pub./Open to Public Insp.: 2007/09/10

(30) Priorité/Priority: 2006/03/10 (US11/372,263)

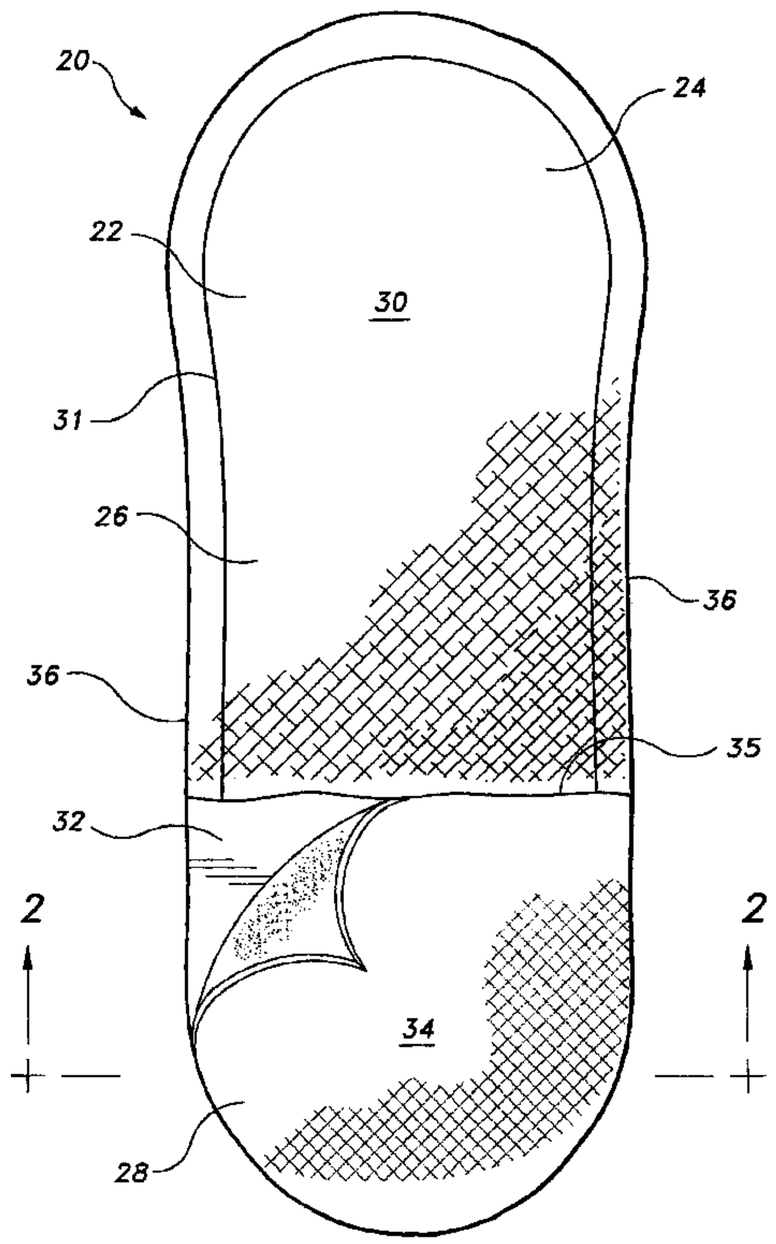
(51) Cl.Int./Int.Cl. *A61F 13/471* (2006.01)

(71) Demandeur/Applicant:
ALLETSEE, GEORGE, CA

(72) Inventeur/Inventor:
ALLETSEE, GEORGE, CA

(74) Agent: MCFADDEN, FINCHAM

(54) Titre : COUCHE JETABLE POUR INCONTINENTS
(54) Title: DISPOSABLE INCONTINENCE NAPKIN FOR MEN



(57) Abrégé/Abstract:
The disposable incontinence napkin for men (20) is an elongated sanitary napkin (22) with a liquid permeable top layer (30) that faces a user's pubic area, a liquid impermeable bottom layer (40) that faces the user's undergarment, and an absorbent middle layer (44) disposed between the top (30) and bottom (40) layers. The sanitary napkin (22) has an anterior portion (24) that overlies the base of the penis and upper pubic area, a posterior portion (28) that overlies the scrotum, and a medial portion (26) that extends between the anterior (24) and posterior (28) portions. A posterior shield (32) of liquid impermeable material covers the posterior portion (28) of the napkin's top layer (30). Adhesive strips disposed on the bottom layer adhere the sanitary napkin (22) to the undergarment and prevent bunching of the napkin.

ABSTRACT OF THE DISCLOSURE

The disposable incontinence napkin for men (20) is an elongated sanitary napkin (22) with a liquid permeable top layer (30) that faces a user's pubic area, a liquid impermeable bottom layer (40) that faces the user's undergarment, and an absorbent middle layer (44) disposed between the top (30) and bottom (40) layers. The sanitary napkin (22) has an anterior portion (24) that overlies the base of the penis and upper pubic area, a posterior portion (28) that overlies the scrotum, and a medial portion (26) that extends between the anterior (24) and posterior (28) portions. A posterior shield (32) of liquid impermeable material covers the posterior portion (28) of the napkin's top layer (30). Adhesive strips disposed on the bottom layer adhere the sanitary napkin (22) to the undergarment and prevent bunching of the napkin.

DISPOSABLE INCONTINENCE NAPKIN FOR MEN

TECHNICAL FIELD

The present invention relates to incontinence napkins. More particularly, the present invention relates to a disposable incontinence napkin for men.

BACKGROUND ART

Disposable sanitary napkins worn in the crotch area for the absorption of body exudates during menstruation by women are well known and widely used. Such napkins are also useful for the absorption of minor amounts of urine by those suffering from incontinence. The typical sanitary napkin has a liquid permeable upper layer, a liquid impermeable bottom layer, and an absorptive material encased therebetween. When urine is discharged into the napkin, the entire liquid permeable layer becomes wetted due to wicking of the material and gravity flow. When used by a male person, the scrotum comes in contact with the upper layer, which, upon wetting of the upper layer with urine, causes itching and discomfort to the user in the scrotum area. Moreover, when wet urine contacts the scrotum, it creates an extremely offensive odor.

It would be desirable to provide a disposable sanitary napkin useful by men with incontinence that avoids discomfort to the scrotum after wetting with urine. Also, present sanitary napkins tend to bunch in the area of the scrotum causing further discomfort to men. It would be desirable to provide a sanitary napkin for men that does not bunch in the area of the scrotum. Thus, a disposable incontinence napkin for men solving the aforementioned problems is desired.

DISCLOSURE OF INVENTION

The disclosure is directed to a disposable incontinence napkin for men. The invention includes an elongated sanitary napkin with a liquid permeable top layer, a liquid impermeable bottom layer, and an absorbent middle layer disposed between the top layer and the bottom layer. The sanitary napkin has an anterior portion, a posterior portion, and a medial portion. The sanitary napkin is adapted for attachment to an undergarment so that the anterior portion is opposite a user's upper pubic area and the base of the penis. The posterior portion is opposite the user's scrotum and the top layer faces the user's pubic area. A posterior shield is

disposed over the posterior portion of the top layer. The posterior shield is made from a liquid impermeable material, whereby the scrotum is kept dry and protected from the moisture in the top layer when the sanitary napkin absorbs urine that has been discharged from the penis.

The disclosure is also directed to a disposable incontinence napkin that includes adhesive strips for attachment to a user's undergarment. The napkin is elongated and has a liquid permeable top layer, a liquid impermeable bottom layer, and an absorbent middle layer disposed between the top layer and the bottom layer. The sanitary napkin has an anterior portion, a posterior portion, and a medial portion. The sanitary napkin is adapted for attachment to a user's undergarment. The anterior portion of the napkin is opposite a user's upper pubic area and the base of the penis, and the posterior portion is opposite the user's scrotum. The top layer of the napkin faces the user's pubic area. A pair of adhesive strips are disposed laterally on the posterior portion of the bottom layer. The adhesive strips are adapted for attaching lateral edges of the posterior portion of the sanitary napkin to a user's undergarment in order to prevent bunching of the sanitary napkin around the scrotum.

This disclosure is further directed to a disposable incontinence napkin for men with a means for shielding a man's scrotum from moisture as well as a means for preventing the sanitary napkin from bunching around the man's scrotum. The invention includes an elongated sanitary napkin with a liquid permeable top layer, a liquid impermeable bottom layer, and an absorbent middle layer disposed between the top layer and the bottom layer. The sanitary napkin has an anterior portion, a posterior portion, and a medial portion. The sanitary napkin is adapted for attachment to a user's undergarment so that the anterior portion is opposite a user's upper pubic area and the base of the penis, and the posterior portion is opposite the scrotum. The top layer of the napkin faces a user's pubic area. The napkin also includes a means for shielding the scrotum from moisture absorbed by the sanitary napkin as well as a means for preventing the sanitary napkin from bunching around the scrotum.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a top plan view of a disposable incontinence napkin for men according to the present invention.

Fig. 2 is a section view drawn along section lines 2-2 of Fig.1.

Fig. 3 is a bottom view of the disposable incontinence napkin of Fig. 1.

Fig. 4 is a top plan view of an alternative embodiment of a disposable incontinence napkin for men according to the present invention.

Similar reference characters denote corresponding features consistently throughout the attached drawings.

BEST MODES FOR CARRYING OUT THE INVENTION

The disposable incontinence napkin for men is an elongated sanitary napkin having a liquid permeable top layer that faces the pubic area in use, a liquid impermeable bottom layer that faces the undergarment in use, and an absorbent middle layer disposed between the top and bottom layers for absorbing urine. The sanitary napkin has an anterior portion that overlies the base of the penis and upper pubic area, a posterior portion that overlies the scrotum, and a medial portion extending between the anterior and posterior portions. A posterior shield of liquid impermeable material covers the posterior portion of the top layer, and a soft layer of cotton is disposed over the posterior shield. Adhesive strips disposed on the bottom layer adhere the sanitary napkin to the undergarment and prevent bunching of the napkin.

The posterior shield provides a liquid impermeable barrier between the posterior portion of the absorbent pad and the scrotum so that the scrotum remains dry and is insulated from urine that is absorbed by the absorbent middle layer. The soft layer of cotton or other soft fabric is disposed over the shield to provide a comfortable surface adjacent the scrotum in order to prevent chaffing. The adhesive strips may be disposed along the lateral edges of the posterior portion of the bottom layer, and a wider, centrally disposed adhesive strip may extend longitudinally from the anterior edge to the posterior edge of the bottom layer.

Referring to Figs. 1-3, there is shown a plan view, a sectional view, and a bottom view, respectively, of the disposable incontinence napkin for men, designated generally as **20** in the drawings. Incontinence napkin **20** includes an elongated sanitary napkin **22** having a structure corresponding to a sanitary napkin typically used by women as a panty liner. Sanitary napkin **22** has a liquid impermeable bottom layer **40**, which normally faces the undergarment, a liquid permeable top layer **30**, which normally faces the pubic area, and an absorbent middle layer **44**, which is disposed between the bottom layer **40** and the top layer **30**. The sanitary napkin **22** may have a peripheral seam **31** joining the top layer **30** and the bottom layer **40** together and enclosing the middle layer **44** therebetween

Bottom layer **40** may be made from a plastic or flexible polymer film. Top layer **30** may be made from an absorbent web of synthetic polymeric material, and may be perforated. Top layer **30** should, however, help to wick moisture into absorbent middle layer **44** and minimize leakage back out of sanitary napkin **22**. Absorbent middle layer may be made from an absorbent fluff or loose agglomeration of natural or synthetic fibers. Sanitary napkins are well known in the art, and any materials conventionally known in the art for providing a liquid permeable layer, a liquid impermeable layer, and an absorbent middle layer therebetween may be used in constructing the elongated sanitary napkin **22** of the present invention. An exemplary sanitary napkin that may be incorporated into the present invention is a Kotex "Maxi" pad or napkin made by Kimberly-Clark Corporation, Neenah, Wisconsin. However, other similar sanitary napkins and designs may be used.

As shown in Fig. 2, the sanitary napkin **22** may also include an absorbent pad **46**, e.g., a mat or web of absorbent fibers, to maximize the liquid-holding capacity of the sanitary napkin **22**. The absorbent pad **46** also helps maintain the elongate shape of the sanitary napkin **22**, and to assist in the distribution of liquid exudates to the absorbent middle layer **44**.

The sanitary napkin **22** has an anterior portion **24** that is disposed opposite or overlies the base of the penis and upper pubic area when the incontinence napkin **20** is in use. The sanitary napkin has a posterior portion **28** that is disposed opposite or overlies the scrotum when the incontinence napkin **20** is in use. The sanitary napkin **22** has a medial portion **26** that extends between the anterior portion **24** and the posterior portion **28**. The sanitary napkin **22** may have lateral recesses formed generally in the medial portion **26** for conforming to the contour of the thighs, although lateral recesses are not requisite in the present invention.

The disposable incontinence napkin **20** of the present invention supplements the sanitary napkin **22** with a posterior shield **32** made from a liquid impermeable material that covers the posterior portion **28** of the top layer **30** of the sanitary napkin **22**. The posterior shield **32** may be made from a polymer film, and may be made from the same material as bottom layer **40**. Posterior shield **32** prevents the possibly wet surface of top layer **30** from coming into contact with the scrotum of the user, providing a barrier against moisture. The posterior shield **32** preferably extends from the posterior edge of the sanitary napkin **22** about three inches towards the medial portion **26** of the napkin **22**, the leading edge **35** of the peripheral shield **32** generally denoting the boundary between the posterior portion **28** and the medial portion **26**. The posterior shield **32** covers substantially the entire surface area of the top layer **30** between the lateral edges **36** of the sanitary napkin **22**, and between the posterior

edge and the boundary between the posterior portion **28** and the medial portion **26** of the sanitary napkin **22**, and may be adhered or otherwise bonded thereto over the entire overlapping surface area, or about the periphery of the posterior shield **32**.

A layer **34** of soft fabric, such as cotton or other natural or synthetic material is disposed over the entire surface area of the posterior shield **32**. The soft fabric layer **34** provides comfort for the scrotum and prevents the posterior shield **32** from chaffing or otherwise irritating the scrotum. The soft fabric layer **34** may be adhered or bonded to the posterior shield **32** over the entire surface area of the shield **32**, or only about the periphery of the shield **32**.

As shown most clearly in Fig. 3, adhesive strips **48** may be disposed along the lateral edges **36** of the posterior portion **28** on the bottom layer **40** of the incontinence napkin **20**. The adhesive strips **48** may be covered by a peel-off paper backing **50** until the napkin **20** is ready for use. The adhesive strips **48** are used to attach the posterior portion **28** of the napkin **20** to the undergarment, thereby disposing the posterior portion opposite the scrotum and preventing the lateral edges **36** of the napkin **20** from bunching up around the scrotum. A wider, centrally disposed strip of adhesive **51** extends longitudinally on the bottom layer **40** of the napkin **20**, and is covered by a peel-off paper backing **52** until the napkin **20** is ready for use. The central strip of adhesive **51** is used to adhere the incontinence napkin **20** to the undergarment throughout the length of the napkin **20**, disposing the napkin opposite the pubic area.

In use, the paper backings **50** and **52** are peeled off the bottom layer **40** and the incontinence napkin **20** is attached to the inside of the undergarment. The anterior portion **24** overlies the upper pubic area and base of the penis, the posterior portion **28** overlies the scrotum, and the medial portion **26** overlies the intermediate region. When urine is excreted, the urine is wicked up by the top layer **30** and absorbed by the middle layer **44**, the bottom layer **40** keeping the undergarment dry. The posterior shield **32** provides a moisture-proof barrier between the top layer **30** and the scrotum, keeping the scrotum dry. The soft fabric layer **34** cushions the scrotum and prevents the shield **32** from chaffing the scrotum. Adhesive strips **48** prevent the posterior portion from bunching up and causing discomfort to the scrotum.

Fig. 4 shows an alternative embodiment of a disposable incontinence napkin for men, designated generally as **60** in the drawing. The construction of the incontinence napkin **60** is substantially identical to the first embodiment of the napkin **20**, except that the anterior portion **64** of the sanitary napkin **62** is substantially wider than the anterior portion **24** of

sanitary napkin **20** in order to overlie a larger portion of the upper pubic area. The medial portion **66** tapers in width from the anterior portion **64** to the posterior portion **68**. The top layer **70** is bonded to the bottom layer around peripheral seam **71** to enclose the absorbent middle layer, as described above. Posterior shield **32** and soft fabric layer **34** are disposed over the posterior portion **68** as described above, and adhesive strips disposed on the bottom layer of incontinence napkin **60** are used to attach the incontinence napkin **60** and the lateral edges of posterior portion **68** to the undergarment in the same manner as incontinence napkin 20, described above.

It is to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claims.

CLAIMS

I claim:

1. A disposable incontinence napkin for men, comprising:

an elongated sanitary napkin having a liquid permeable top layer, a liquid impermeable bottom layer, and an absorbent middle layer disposed between the top layer and the bottom layer, the sanitary napkin having an anterior portion, a posterior portion, and a medial portion, the sanitary napkin being adapted for attachment to an undergarment with the anterior portion opposite a man's upper pubic area and base of the penis and the posterior portion opposite the scrotum, the top layer facing the pubic area; and

a posterior shield disposed over the posterior portion of the top layer, the posterior shield being made from a liquid impermeable material, whereby the scrotum is kept dry and protected from moisture in the top layer when the sanitary napkin absorbs urine discharged from the penis.

2. The disposable incontinence napkin according to claim 1, further comprising a soft fabric layer disposed over said posterior shield in order to prevent chaffing of the scrotum by said posterior shield.

3. The disposable incontinence napkin according to claim 1, further comprising a pair of adhesive strips disposed laterally on the posterior portion of the bottom layer, the adhesive strips being adapted for attaching lateral edges of the posterior portion of said sanitary napkin to an undergarment in order to prevent bunching of the sanitary napkin around the scrotum.

4. The disposable incontinence napkin according to claim 1, further comprising a central strip of adhesive disposed on the bottom layer extending from the anterior portion to the posterior portion of said sanitary napkin, the central strip of adhesive being adapted for attaching said sanitary napkin to an undergarment opposite the pubic area.

5. The disposable incontinence napkin according to claim 1, wherein said middle layer comprises a loose agglomeration of absorbent fibers.

6. The disposable incontinence napkin according to claim 5, wherein said middle layer further comprises an elongated, absorbent pad disposed between said top layer and said loose agglomeration of fibers, the absorbent pad maintaining said sanitary napkin's shape and distributing absorbed liquids to said loose agglomeration of fibers.

7. A disposable incontinence napkin for men, comprising:

an elongated sanitary napkin having a liquid permeable top layer, a liquid impermeable bottom layer, and an absorbent middle layer disposed between the top layer and the bottom layer, the sanitary napkin having an anterior portion, a posterior portion, and a medial portion, the sanitary napkin being adapted for attachment to an undergarment with the anterior portion opposite a man's upper pubic area and base of the penis and the posterior portion opposite the scrotum, the top layer facing the pubic area; and

a pair of adhesive strips disposed laterally on the posterior portion of the bottom layer, the adhesive strips being adapted for attaching lateral edges of the posterior portion of said sanitary napkin to an undergarment in order to prevent bunching of the sanitary napkin around the scrotum.

8. The disposable incontinence napkin according to claim 7, further comprising a posterior shield disposed over the posterior portion of the top layer, the posterior shield being made from a liquid impermeable material, whereby the scrotum is kept dry and protected from moisture in the top layer when the sanitary napkin absorbs urine discharged from the penis.

9. The disposable incontinence napkin according to claim 8, further comprising a soft fabric layer disposed over said posterior shield in order to prevent chaffing of the scrotum by said posterior shield.

10. The disposable incontinence napkin according to claim 7, further comprising a central strip of adhesive disposed on the bottom layer extending from the anterior portion to the posterior portion of said sanitary napkin, the central strip of adhesive being adapted for attaching said sanitary napkin to an undergarment opposite the pubic area.

11. The disposable incontinence napkin according to claim 7, wherein said middle layer comprises a loose agglomeration of absorbent fibers.

12. The disposable incontinence napkin according to claim 11, wherein said middle layer further comprises an elongated, absorbent pad disposed between said top layer and said loose agglomeration of fibers, the absorbent pad maintaining said sanitary napkin's shape and distributing absorbed liquids to said loose agglomeration of fibers.

13. A disposable incontinence napkin for men, comprising:

an elongated sanitary napkin having a liquid permeable top layer, a liquid impermeable bottom layer, and an absorbent middle layer disposed between the top layer and the bottom layer, the sanitary napkin having an anterior portion, a posterior portion, and a medial portion, the sanitary napkin being adapted for attachment to an undergarment with the anterior portion opposite a man's upper pubic area and base of the penis and the posterior portion opposite the scrotum, the top layer facing the pubic area;

means for shielding the scrotum from moisture absorbed by the sanitary napkin in order to keep the scrotum dry; and

means for preventing the sanitary napkin from bunching around the scrotum.

14. The disposable incontinence napkin according to claim 13, wherein said means for shielding comprises a posterior shield disposed over the posterior portion of the top layer, the posterior shield being made from a liquid impermeable material, whereby the scrotum is kept dry and protected from moisture in the top layer when the sanitary napkin absorbs urine discharged from the penis.

15. The disposable incontinence napkin according to claim 14, further comprising a soft fabric layer disposed over said posterior shield in order to prevent chaffing of the scrotum by said posterior shield.

16. The disposable incontinence napkin according to claim 13, wherein said means for preventing the sanitary napkin from bunching comprises a pair of adhesive strips disposed laterally on the posterior portion of the bottom layer, the adhesive strips being adapted for attaching lateral edges of the posterior portion of said sanitary napkin to an undergarment in order to prevent bunching of the sanitary napkin around the scrotum.

17. The disposable incontinence napkin according to claim 13, further comprising a central strip of adhesive disposed on the bottom layer extending from the anterior portion to the posterior portion of said sanitary napkin, the central strip of adhesive being adapted for attaching said sanitary napkin to an undergarment opposite the pubic area.

18. The disposable incontinence napkin according to claim 13, wherein said middle layer comprises a loose agglomeration of absorbent fibers.

19. The disposable incontinence napkin according to claim 13, wherein said middle layer further comprises an elongated, absorbent pad disposed between said top layer and said loose agglomeration of fibers, the absorbent pad maintaining said sanitary napkin's shape and distributing absorbed liquids to said loose agglomeration of fibers.

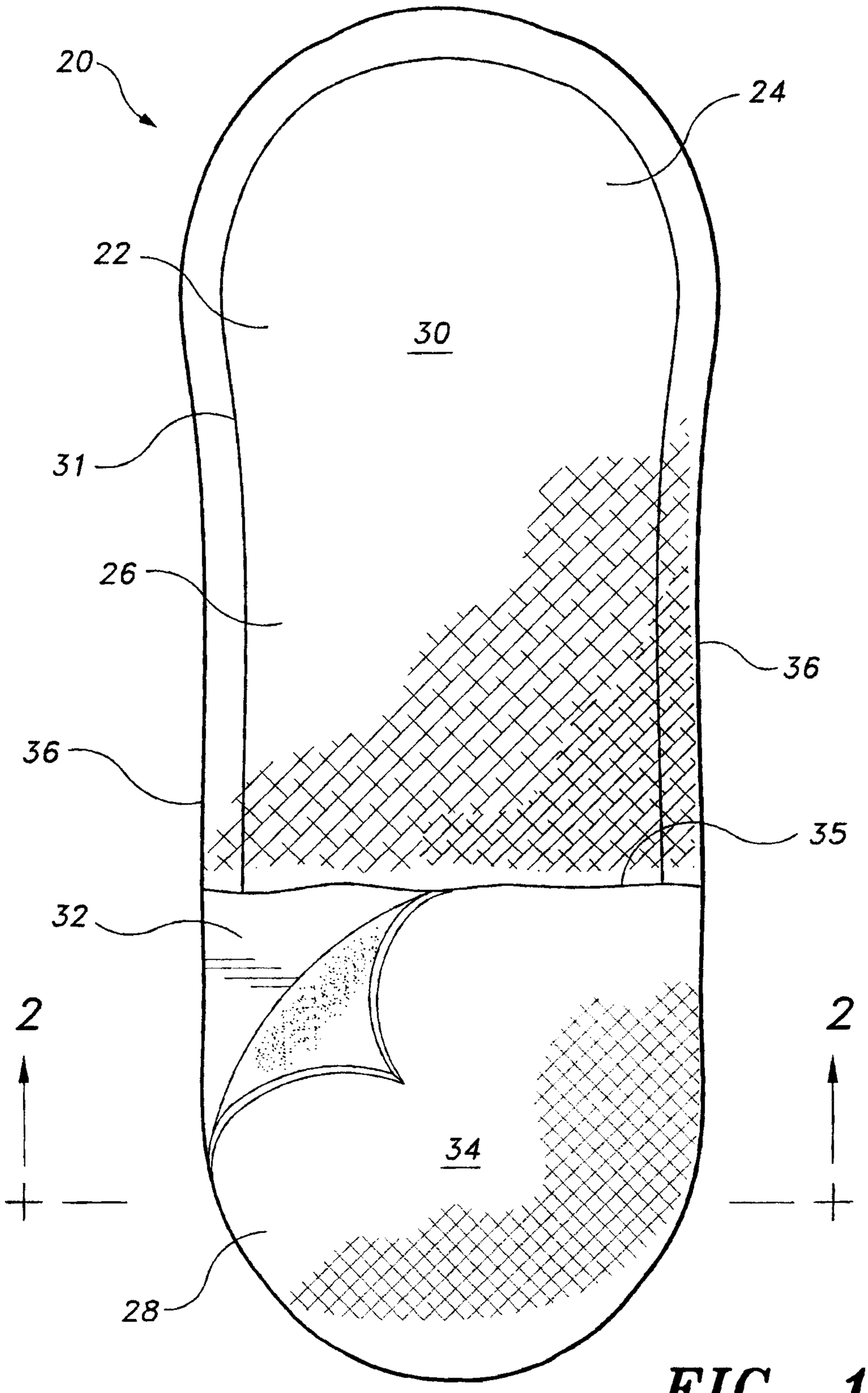


FIG. 1

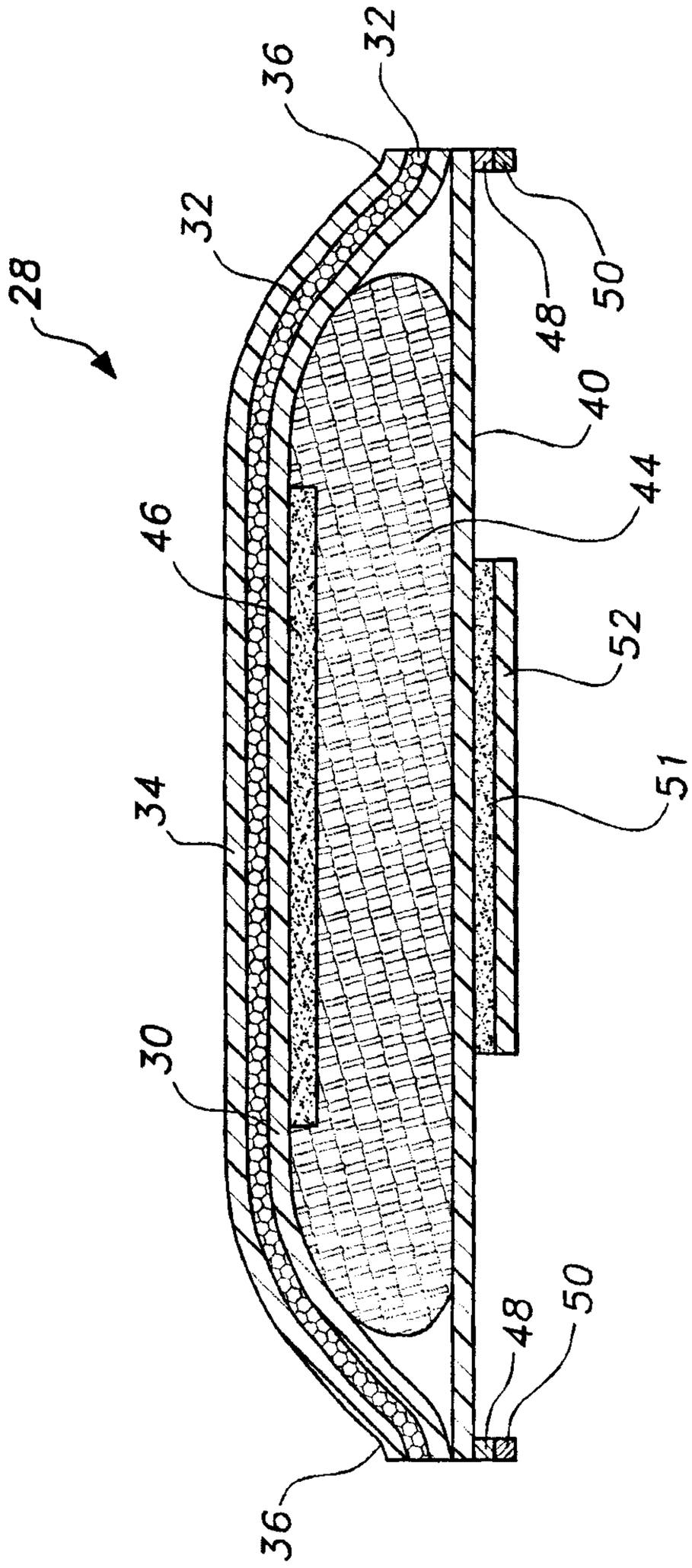


FIG. 2

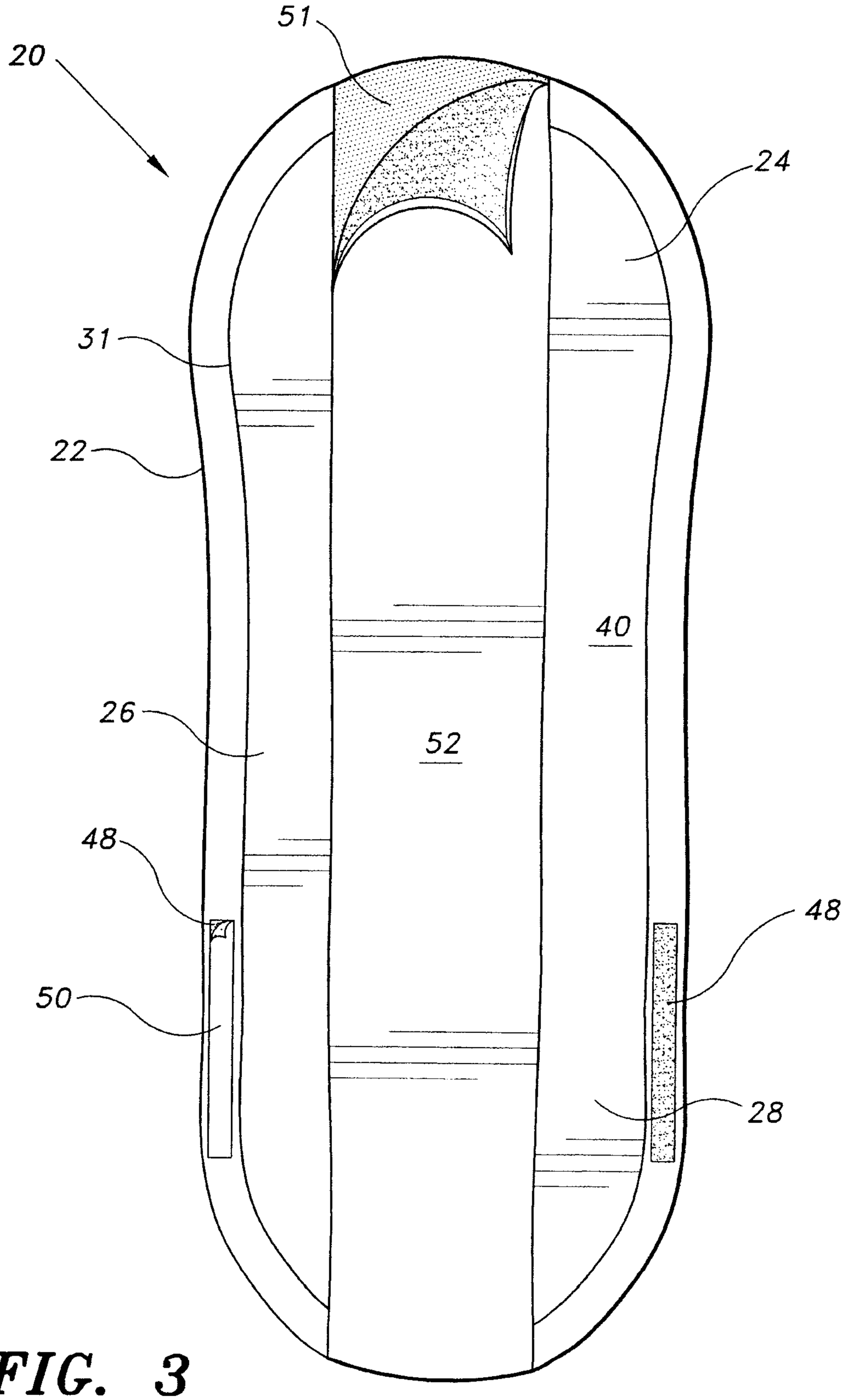


FIG. 3

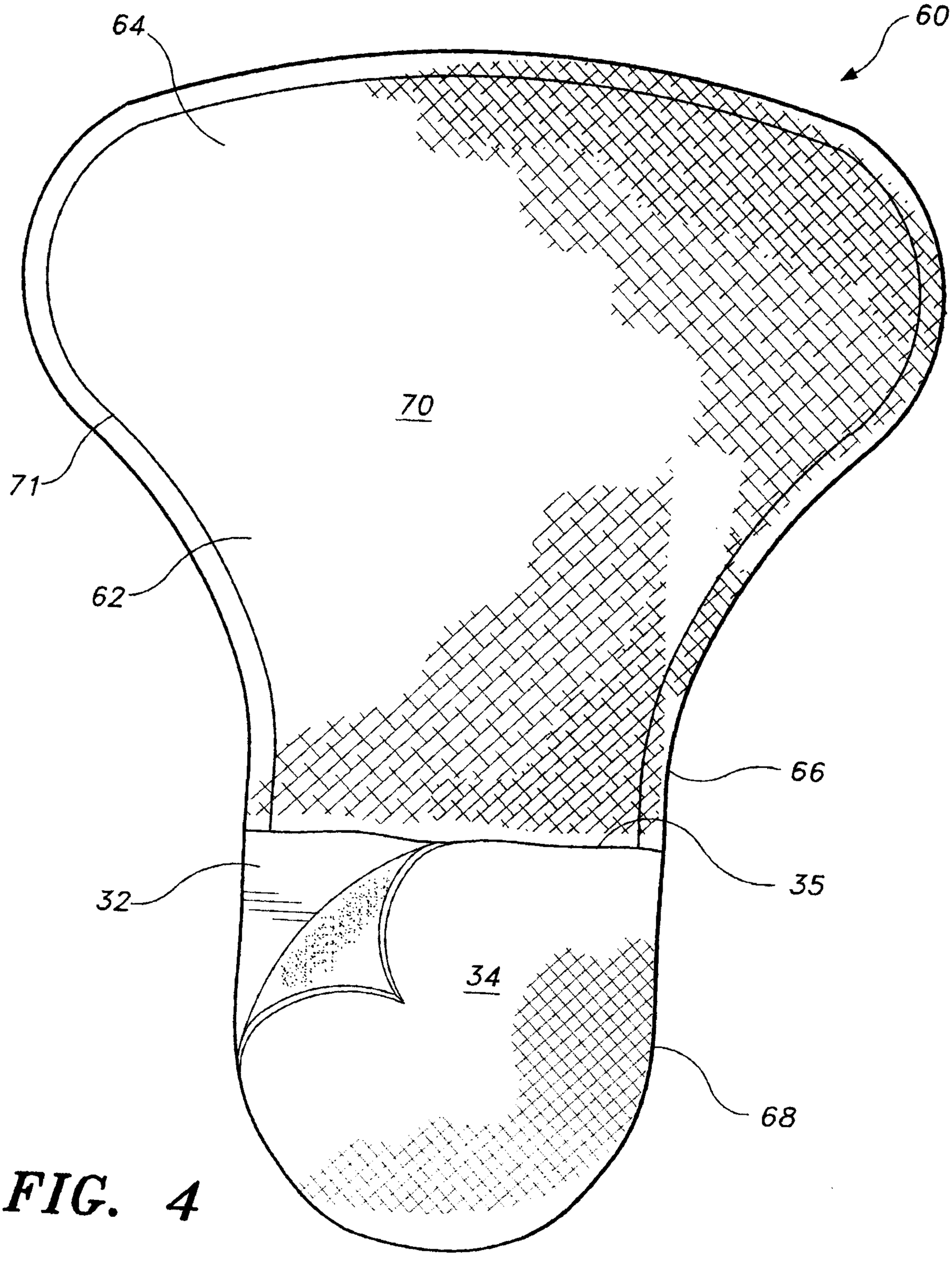
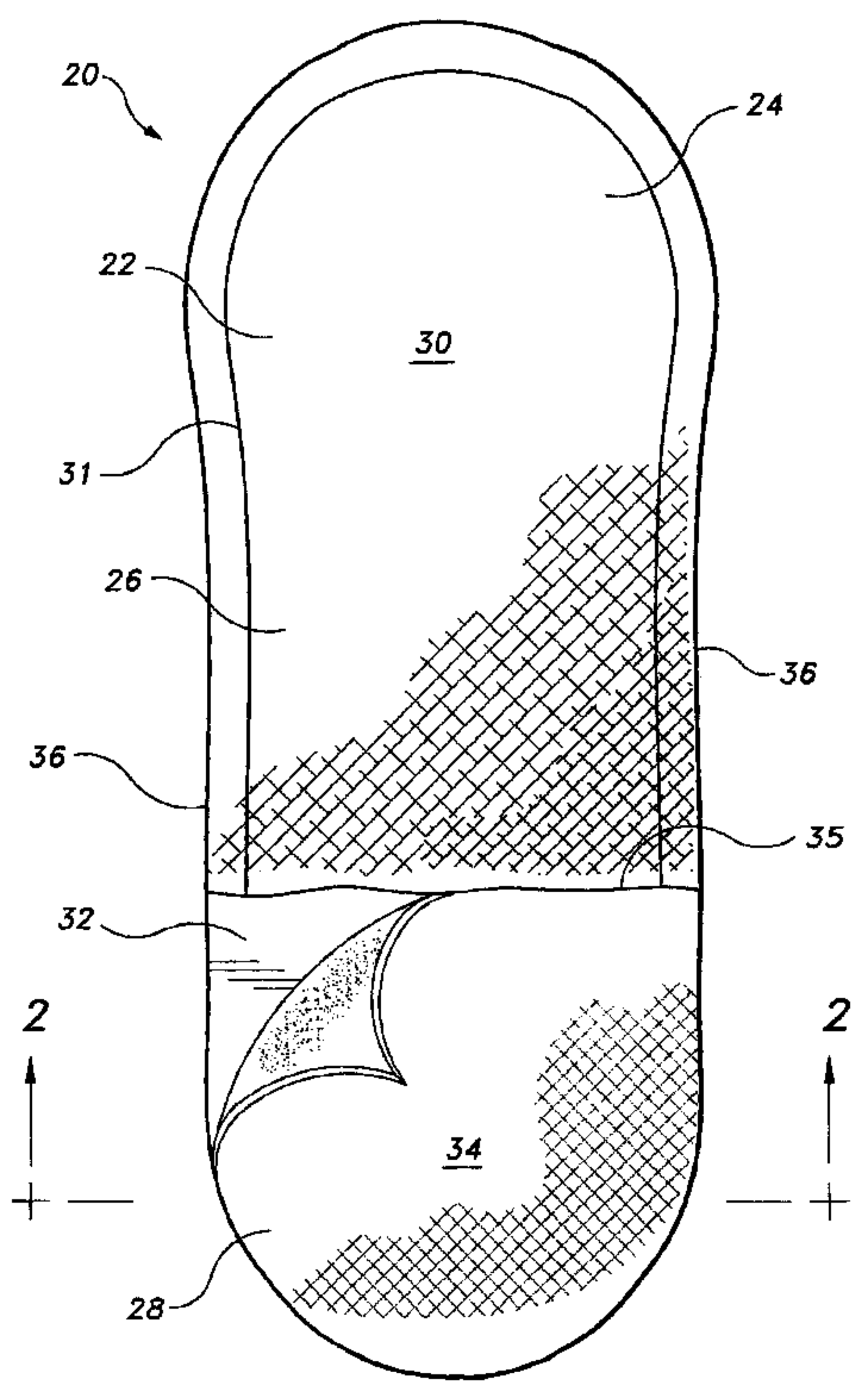


FIG. 4


20
24
22
30
31
26
36
36
35
32
2
2
34
28