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3,463,154

DISPOSABLE PANTY SHIELD

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FIG. 1

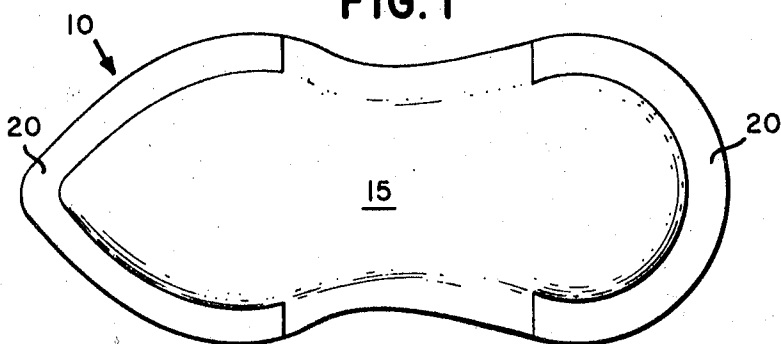


FIG. 2

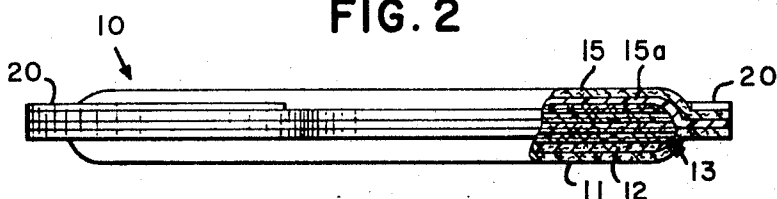
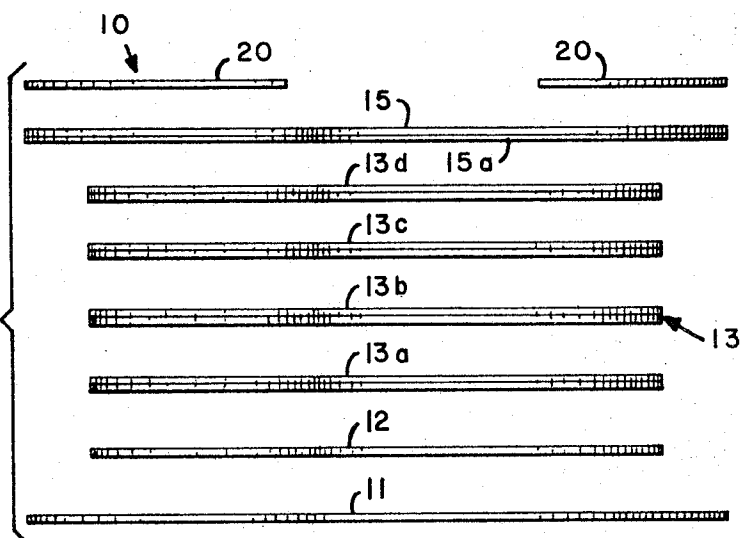


FIG. 3



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DISPOSABLE PANTY SHIELD

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Continuation of application Ser. No. 544,617, Apr. 22, 1966, which is a continuation-in-part of application Ser. No. 525,233, Feb. 4, 1966. This application Dec. 16, 1968, Ser. No. 785,447

Int. Cl. A41b 9/04, 9/12

U.S. Cl. 128—287

10 Claims

ABSTRACT OF THE DISCLOSURE

A disposable shield for undergarments, particularly panties wherein laminations of absorbent material are secured to a contoured liquid repellant material, and wherein adhesive material is affixed to the liquid repellant material so that the shield, in its entirety, may be detachably secured to the inner surface of a panty or the like for the protection of the undergarment.

This application is a continuation of Ser. No. 544,617, filed Apr. 22, 1966, which is a continuation-in-part of Ser. No. 525,233, filed Feb. 4, 1966, for a Disposable Panty Shield.

The present invention relates in general to disposable shields for protecting garments, and more particularly to a disposable shield for protecting an undergarment, such as a panty.

An object of the present invention is to provide an improved disposable panty shield.

Another object of the present invention is to provide a disposable panty shield that is comfortable to use without sacrificing durability or the absorbent quality thereof.

Another object of the present invention is to provide a disposable panty shield that conforms to the contour of the body.

Another object of the present invention is to provide a disposable panty shield that is economical to manufacture without sacrificing effectiveness and comfort.

Other and further objects and advantages of the present invention will be apparent to one skilled in the art from the following description taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a plan view of the disposable panty shield embodying the present invention.

FIG. 2 is a side view of the disposable panty shield shown in FIG. 1 partially broken away to show the laminated construction thereof.

FIG. 3 is a diagrammatic exploded side view of the disposable panty shield of the present invention to illustrate the juxtaposed layers forming the disposable panty shield.

Illustrated in FIGS. 1-3 is the disposable panty shield 10 of the present invention which is caused to adhere to an inner surface of a panty and is adapted to contact the body of a woman surrounding the vaginal area to absorb excretions from the woman's body commonly referred to as vaginal discharges to protect the panty from soiling. The disposable panty shield 10 of the present invention is not intended to be used as a sanitary napkin for use during menstrual periods.

The disposable panty shield 10 is of a laminated construction and comprises a layer 11 of relatively thin, absorbing, soft, flexible material, such as absorbent tissue paper. The absorbent tissue is sufficiently soft so as to be comfortable and not irritate the skin, and yet it is sufficiently strong so as not to shred easily or wear away with contact. Such tissue is somewhat resilient or yieldable.

It is the layer 11 of absorbent tissue that contacts the body of the woman using the disposable panty shield 10 surrounding the vaginal area and serves to absorb the vaginal discharge when present.

The absorbent tissue layer 11 has a configuration similar to the contour of the outer layer shown in FIG. 1. One end thereof is formed with a semicircular edge and the opposite end thereof has its edges meeting at an angle midway between the sides of the absorbent layer 11. The angular end is inwardly directed with gradually tapering edges to meet midway between the sides of the absorbent layer 11. The side edges of the absorbent layer 11 interconnect the above described end edges and have similar serpentine configurations.

A second absorbent layer 12 is juxtaposed with the absorbent layer 11 and serves as a filler absorbent layer for the laminated construction of the disposable panty shield 10. The configuration of the filler absorbent layer 12 is similar to the shape of the body contact absorbent layer 11, but reduced in size. In addition, the filler absorbent layer 12 is disposed outwardly of the body contact absorbent layer 11.

The filler absorbent layer 12 comprises an absorbent, flexible, relatively thin matting material, which is formed by the intertwining or interweaving of cotton and tissue paper. The matting filler absorbent layer 12 is very durable and yet highly absorbent.

Juxtaposed with the filler absorbent layer 12 is an outer filler layer 13 which comprises a plurality of two-ply relatively thin, flexible material, such as two-ply or double-ply tissue paper. The outer filler layer 13, in the preferred embodiment, comprises laminated, juxtaposed, two-ply tissue sheets 13a-13d. The outer filler layer 13 has a configuration and size identical with the contour and size of the absorbent filler layer 12.

A liquid repellant or moisture proof layer 15 of relatively thin, soft, flexible material, such as tissue paper, is disposed in juxtaposition with the outer filler layer 13. The outer liquid repellant layer 15 includes a plurality of thin sheets of vinyl or polyethylene material 15a that retains the liquid or vaginal discharge within the disposable panty shield 10 and prevents the same from soiling the panty of the user of the disposable panty shield 10. The vinyl or polyethylene sheets are the same size and configuration as the tissue sheet of the layer 15 and are pressed thereto for adhering thereto. The configuration and size of the liquid repellant outer layer 15 is identical with the contour and size of the inner absorbent layer 11.

On the outer surface of the outer liquid repellant layer 15 are strips 20 of adhesive material which have a non-adhesive paper backing thereon. The adhesive strips 20 are disposed around the outer edge of the liquid repellant layer 15 at either end thereof in the manner shown in FIG. 1. When the nonadhesive paper backing is removed from the adhesive strips 20, the adhesive strips 20 are caused to adhere to the inner surface of the panty so as to enable the inner absorbent layer 11 of the disposable panty shield 10 to contact the body of a woman wearing the panty to surround the vaginal area of the user thereof. The adhesive employed does not tear the undergarment. It is within the contemplation of the present invention that the layer 15 may be entirely a vinyl or polyethylene sheet. The confronting edges of the absorbent layer 11 and the liquid repellant layer 15a are fused and sealed together by suitable heat-pressure devices to form a fully enclosed, unitary structure with an outer, thin, rim-type edge completely therearound.

In the use of the disposable panty shield 10 of the present invention, the adhesive strips 20 have the non-adhesive paper backing thereon removed to expose the adhesive surface thereof. Thereupon, the disposable panty

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shield 10 is attached to the inner surface of the panty by causing the adhesive strips 20 to adhere to the panty. The disposable panty shield 10 is placed on the panty so that the absorbent layer 11 contacts the body of the woman wearing the panty so as to surround the vaginal area of the user thereof. It is intended that the disposable panty shield 10 absorb vaginal discharge so as to prevent or minimize the soiling of the panty.

From the foregoing, it is to be observed that the disposable panty shield 10 of the present invention is contoured to conform to the figure and shape of the body of a woman surrounding the vaginal area so as to be comfortable and less irritating to the skin. The body contact absorbent layer 11 is soft and in conjunction with the contour conforming feature thereof reduces scratching and chafing.

By virtue of the liquid repellant or moistureproof layer 15, the tendency for the vaginal discharge to soil the undergarment has been greatly reduced. Since the disposable panty shield 10 adheres to the panty and not to the body, greater comfort is realized by the wearer and the ability to remove for disposal has been greatly facilitated.

Having thus described my invention, what I claim as new and desired to protect by Letters Patent is:

1. A disposable panty shield comprising a body contact layer of absorbent material, a panty contact layer of liquid repellant material secured to said body contact layer, said panty contact layer being formed with an endless marginal rim contoured along the end and side peripheral edges thereof to conform to the contour of the body of a wearer, and adhesive means on said contoured panty contact layer disposed along substantially the entire end peripheral edges thereof for detachably securing said disposable panty shield to an undergarment such as a panty, wherein said body contact layer has one edge thereof with an arcuate configuration and with opposite end edges inwardly directed to join intermediate the said edges thereof.

2. A disposable panty shield as claimed in claim 1 wherein said absorbent material comprises tissue paper.

3. A disposable panty shield as claimed in claim 1 wherein said liquid repellant material comprises a sheet of material from a group of sheets of material comprising vinyl and polyethylene.

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4. A disposable panty shield as claimed in claim 3 wherein said absorbent material comprises tissue paper.

5. A disposable panty shield as claimed in claim 1 wherein said side edges have serpentine configurations in joining said end edges.

6. A disposable panty shield as claimed in claim 1 and comprising a filler layer of absorbent matting material interposed between said body contact layer and said panty contact layer.

10. 7. A disposable panty shield as claimed in claim 6 wherein said filler layer of matting material comprises cotton and tissue paper.

8. A disposable panty shield as claimed in claim 7 and comprising a filler layer of laminated absorbent material interposed between said filler layer of absorbent matting material and said panty contact layer.

9. A disposable panty shield as claimed in claim 8 wherein said filler of laminated absorbent material comprises a plurality of multi-ply tissue paper.

20. 10. A disposable panty shield comprising:
a body contact layer of absorbent material,
a panty contact layer of liquid repellant material secured to said body contact layer, said panty contact layer being formed respectively at the front and rear ends thereof with arcuately joined and angularly formed peripheral edges commencing from a longitudinally disposed center line,
and adhesive means disposed along each of said ends of said panty contact layer along substantially the entire length of said peripheral edges thereof.

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