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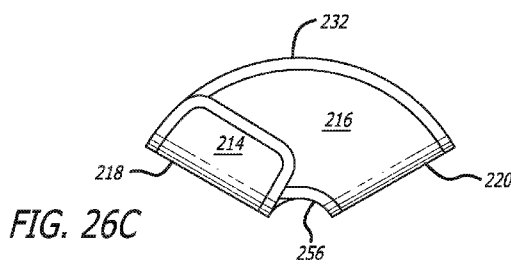
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(54) Title: URINE ABSORBENT PAD



(57) Abstract: A disposable urine trap in the form of a foldable pad that envelops the male genitalia and closes around the organ to form a barrier that prevents urine from escaping the trap. The pad includes an asymmetric pair of wings that are separated by a gap and attached to the main body of the pad. The first wing is preferably trapezoidal and a second wing having an extending distal edge.



URINE ABSORBENT PAD

CROSS-REFERENCES TO RELATED APPLICATIONS

This application claims priority to the continuation-in-part of U. S. Patent Application No. 15/087,557, filed 31 March 2016, which is a continuation-in-part of U.S. Patent Application No. 14/673,549 filed March 30, 2015, which claims priority from U.S. Provisional Patent Application No. 61/998,947, filed July 14, 2014, the contents of which are incorporated by reference herein in their entirety.

BACKGROUND

The present invention relates generally to adult incontinence, and more particularly to a urine absorbent pad designed for a male that provides an easy and convenient manner to more safely replace soiled protective wear than the prior art.

Urinary incontinence (UI) is defined as the involuntary loss of urine. In both men and women, age is a consistently reported risk factor for UI; however, it is not considered a normal consequence of aging. Overall, UI affects up to 30% of community dwelling older adults and more than 50% of nursing home residents. Despite its high prevalence, up to one-half of cases may not be reported because individuals with UI may not seek medical intervention. Embarrassment and the perception that UI is an expected consequence of aging are common factors in the failure to seek a solution or treatment. That reluctance is particularly strong in men, who often deem the problem to be associated with a loss of masculinity.

Urinary incontinence is categorized according to pathophysiology and clinical presentation. The four main categories are (1) stress urinary incontinence (SUI), (2) urge urinary incontinence (UII), (3) overflow incontinence, and (4) functional incontinence. Mixed types of incontinence are common and may complicate diagnosis and treatment because of overlapping symptoms. Studies have found that UI significantly affects psychological well-being and health care-related quality of life. Urinary incontinence may impair sexual function, restrict activities, interfere with interpersonal relationships, decrease self-esteem, increase caregiver burden, increase financial burden, and cause anxiety or depression. It is a common precipitant of institutionalization in older adults.

Because of current demographic trends, UI is an increasingly common medical and socioeconomic problem. One place where the issue arises with great propensity is nursing homes, where older patients often suffer moderate to severe UI due to a variety of physiological conditions. In men, incontinence is often related to prostate problems or treatments that become exacerbated in the elderly. Certain medical conditions, particularly those affecting the brain or nervous system, such as Alzheimer's, Parkinson's, Dementia, Multiple Sclerosis and brain damage, can also lead to incontinence. This is due to the nerve passageways from the brain becoming damaged. The result can be either an overactive bladder (the need to go often and frequently) or an under-active bladder (ineffective emptying leading to leakage). Diabetes and or a stroke can also bring on incontinence.

With aging, bladder capacity decreases, ability to inhibit urination declines, involuntary bladder contractions (detrusor overactivity) occur more often, and bladder contractility is impaired. Thus, voiding becomes more difficult to postpone and tends to be incomplete. Postvoid residual volume increases in as much as ≤ 100 mL (normal < 50 mL). A weakening of the endopelvic fascia often results as well. In men, the tendency for the prostate to enlarge with age causes the partial obstruction of the urethra, leading to incomplete bladder emptying and strain on the detrusor muscle. These changes occur in many normal, continent elderly males and may facilitate incontinence but do not cause it.

One challenge associated with male incontinence is the necessity for changing clothing, bedding, and other items that may become soiled due to an incontinence patient. When a disabled patient has voided his urine, the caregiver(s) must remove the patient's clothing and bedding while the patient is in a prone position. This can be challenging to the caregiver(s), who must lift the patient to remove the clothing and bedding while simultaneously trying to extract the soiled garments and sheets, blankets, etc. If the patient is large or overweight, the problem becomes magnified even greater. The task is thus labor intensive and time consuming, and can result in injury to the care giver(s) from reaching over the bed in an awkward position to hoist the patient, particularly when multiplied by changes every five or six hours, or in the case of facilities offering extraordinary care, every two hours or so. Additionally, adult diapers are typically relatively large and bulky to cover the patient's groin and anal area, thus adding to the bulk for supply and disposal of some four to ten diapers a day.

Elderly patients and residents of nursing homes who are immobile or have reduced mobility are at high risk for developing pressure ulcers (bed sores). This condition is exacerbated if the patient is incontinent because the moisture from urine causes the surface of the skin to become irritated and infected. For this reason, it is
5 important to prevent urine from migrating to extended areas of the skin and from remaining in contact with any part of the skin for any extended period of time, and that it be removed as soon as possible.

The U.S. Census Bureau estimates there are 76.4 million baby boomers, and the oldest of this generation, which includes those born between 1946 and 1964, are over 65
10 years old. For many of these people, adult diapers are a way to ameliorate the effects of moderate to severe incontinence. Adult diapers are a \$7 billion global market, and sales have grown more than 8 percent over the past five years due to this increasing number of baby boomers entering their 70s and 80s. This trend appears to be rising as the stigma of wearing protective undergarments becomes less and the popularity of these products grow.

15 Frequently two or more caregivers will be assigned to the changing task each time the diaper is soiled. The task itself can be quite time consuming, particularly if fecal matter has migrated from the anal area due to defecation and propagated by urine saturated in an outer diaper.

For males, particularly invalid males, diapers can be an unsatisfactory solution
20 for several reasons. First, the previously raised issue that, once soiled, the patient must be changed like an infant by a caregiver who may not have the strength to lift a full grown adult male. Changing a diaper can lead to the patient being moved in positions that may strain or injure the patient, particularly when moved by a caregiver with inadequate strength to properly maneuver a full grown adult male. Second, unlike females where the
25 origin and direction of the urine stream is fairly predictable, males tend to urinate from different positions, angles, and directions, and this inconsistency leads to leakage. This is especially true when the patient is lying on his back and suffers incontinence, because a gap in the top of the diaper at the patient's stomach can provide an opening where urine can leak outside of the diaper, leading to the issues raised above. Patients who go
30 frequently can get ignored because of the challenges in changing the patient, leading to health issues as well.

Efforts have been made to devise an absorbent pad to cover the penis. One such device is in the form of an elongated rectangular pad foldable along a centrally transverse fold line and configured on one end with a U-shaped opening to receive a penis to be positioned between the two halves. A device of this type is shown in U.S. Patent No.

5 6,129,719 to Nozaki. Such devices, while effective to absorb some of the urine released, suffer the shortcoming that the device is relatively bulky, is inconvenient to apply and fails to securely entrap the penis to protect against release of urine outside the pad.

The art is in need of a simple, cost effective device that is directed to the problem of male incontinence, and can reduce the opportunity for leakage as well as the frequency and extent to which a patient must be moved for a change after an incontinent event has occurred. The present invention is directed to this objective.

SUMMARY OF THE INVENTION

In one aspect, the present invention is directed to a disposable urine trap in the form of a foldable pad that envelops the male genitalia and closes around the penis to form a barrier to prevent urine from escaping the trap. The pad includes an asymmetric pair of wings that are separated by a void attached to the main body of the pad. The first wing is preferably rectangular in that the distal angles are substantially right angles with parallel side edges and a perpendicular distal edge, and has a length that exceeds a length of a second wing, which terminates so that the distal edge of the second wing is angled to form an obtuse and an acute angle with respect to its generally parallel sides. The void between the two wings may be formed by eliminating a triangular component from each inner side of the first and second wings to establish a "kite" or "diamond"-shaped void in the pad. The void in the pad may receive the patient's penis at its base such that the penis extends over the widest and thickest portion of the pad and the head of the penis occupies the middle area of the pad. Once the pad is arranged so that the penis is laid over the pad through the void, the first wing is folded over the top of the penis along a crease where the void lies to overlay the penis and sandwich the penis between the pad and the first wing. The angle that the first wing protrudes away from the pad is selected so that the inner side edge of the first wing aligns with a proximal edge of the second wing when folded over penis as described above. The folding of the first wing closes the void so that the void now encircles the base of the penis as the penis lays on the pad. Once the inner side edge of the first wing is placed against the proximal edge of the second wing, the second wing

is then folded over the first wing such that the distal edge of the first wing and the distal edge of the second wing are substantially orthogonal. The asymmetric nature of the first and second wings allow the configuration described above, such that the wings cooperate to overlay the penis can capture the penis between the two wings and the thick portion of the pad. An adhesive strip on the opposite side of the first wing attaches to the second wing and secures the urine trap in the closed configuration. The corners of the pad can then be folded over the outer side edges of the adjacent first and second wings to close the trap and envelope the penis inside the pad.

In another aspect, the urine trap is formed with a larger main absorbent region and distally projecting, flanking, first and second absorbent wings to be folded cooperating to form therebetween a gap terminating in a closed extremity defining an opening. The first wing is constructed to be folded proximally and laterally inwardly preferably over the main absorbent region to cover a wearer's penis projecting through the opening and overlapping the main absorbent region. The second wing is constructed to be folded proximally and laterally inwardly over such first wing to cooperate therewith in trapping the penis between the first wing and main absorbent region.

In a still further aspect, the main absorbent region is formed with a rounded proximal edge of a predetermined contour and the first wing is constructed with a distal edge formed with a complementary predetermined contour such that, when folded on the main region, the contours may be aligned.

In another aspect, the urine trap is formed with a large main absorbent region and distally projecting, flanking first and second absorbent wings cooperating to form therebetween a gap terminating in a closed extremity defining an opening. The first wing is constructed to be folded proximally and laterally inwardly over the main absorbent region to have a wearer's penis projecting through the opening and overlapping the main absorbent region. The second wing is constructed to be folded

A benefit of the present invention is that it can be placed inside an undergarment such as an over-diaper. If a male patient should urinate in the urine trap with the patient on his back, a caregiver can simply remove the urine trap from the diaper or undergarment without the need to undress, change the over-diaper, or move the patient. A new urine trap can be placed on the patient with little or no disturbance to the patient and without rolling

the patient over, lifting the patient, or undressing the patient. Moreover, the configuration of the urine trap minimizes any opportunity for leakage at the patient's waistline where most diapers can leak for male wearers. The way the wings of the present invention fold diagonally over one another to envelope the penis and isolate it and incoming urine from the abdomen, eliminating any gaps and serves to simplify changing and protect the patient's skin.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a top view of a first preferred embodiment of the present invention;

FIG. 2 is a bottom view of a the embodiment of FIG. 1;

10 FIG. 3 is an elevated, perspective view of the present invention shown on a male user;

FIG. 4 is an enlarged, perspective view of the present invention;

FIG. 5 is an elevated, perspective view of the present invention with the first wing folded;

15 FIG. 6 is an enlarged, perspective view of the present invention with the adhesive strip removed;

FIG. 7 is a perspective view of the second wing folded into place;

FIG. 8 is an enlarged, perspective view of corners being upturned to enclose the male genitalia;

20 FIG. 9 is an elevated, perspective view of the adhesive strip being removed so as to be applied to a garment;

FIG. 10 is an elevated, perspective view of the pouch adhered to an undergarment;

FIG. 11 is an enlarged, perspective view partially in shadow showing the pouch in place inside an undergarment;

25 FIG. 12 is a first cross sectional view of the pad in the pouch configuration;

FIG. 13 is a second cross sectional view of the pad in the pouch configuration;

FIGS. 14 – 23 illustrate an alternate way of wearing the pad of the present invention;

FIG. 24 is a planform view of an alternate embodiment of the pad of the present invention;

5 FIG. 25 is an elevated perspective view of the embodiment of FIG. 24 on a patient;

FIG. 26 is plan view of a further embodiment of the pad device of the present invention; and

FIG. 27 is an elevated perspective view of the embodiment shown in FIG. 26.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

10 Figure 1 illustrates a plan view of a first preferred embodiment of the present invention, comprising a pad 12 generally formed by a base 24 and first and second wings 14, 16. The pad 12 is formed by enclosing fluid absorbent material between an fluid impervious outer lining 18 and a soft fluid transmissive inner lining 20. The outer lining 18 may be made of a polyethylene film or other low cost, biocompatible material to seal in
15 the urine and prevent leakage outside of the trap. The inner lining 20 that bear's against the user's skin may be made of polypropylene or suitable non-abrasive, non-toxic material that transmits fluid while largely staying relatively fluid free at the surface. The absorbent center 22 may contain wood pulp and super-absorbent polymers such as sodium polyacrylate. Sodium polyacrylate is effective in wicking away fluid from the skin
20 through the inner lining 20, and can soak up to 30 times its weight in urine. The absorbent center is bordered around its edges by adhering the inner lining 20 and outer lining 18, and the matching of the two mating linings 18,20 can be arranged to give the pad a rounded shape 64 in the undeformed condition. That is, a shallow, conically shaped "bowl" or saucer is created by the fit of the two mating edges such that the edges of the pad are
25 raised with respect to the base 24. The main region of base 24 is particularly padded at this middle portion, which is where the introduction of urine is expected in most cases.

As further seen in Figure 1, the first wing 14 extends outwardly from an imaginary fold line 30. The first wing 14 includes an outer side edge 32, an inner side edge 34, and a distal edge 36. The side edges 32,34 are substantially parallel, and the
30 distal edge substantially perpendicular thereto, such that right angles α , β are formed. A

generally triangular portion 36 of the inner edge 34 is removed at the juncture 38 of the first and second wings 14, 16, creating half of a void 42 through which the penis 76 is inserted.

The second wing 16, which in a preferred embodiment has a length that is
5 approximately one half a length of the first wing 14, protrudes from an imaginary fold line 52 and includes an inner side edge 46, outer side edge 48, and distal edge 50. As with the first wing, the inner side edge 46 and outer side edge 48 are substantially parallel, but the distal edge 50 forms an acute angle ν with the outer side edge 48 and an obtuse angle σ with the inner side edge 46. A triangular portion 54 of the inner edge 46 is removed at the
10 juncture 38 of the first and second wings 14, 16, creating the other half of the void 42, which is thusly formed in a shape of a diamond based on the two triangular resections 36,54 on the inner edges 34, 46.

Figure 2 illustrates a rear view of the pad 12, including a peel away adhesive strip 70 that can be used to secure the pad to the patient or a waistband of the patient. A second
15 adhesive strip 72 is used to hold the pad in a pouch, or folded position to envelope the patient's genitalia 76.

Figures 3 - 13 illustrate a first method for how the pad 12 encloses the male organ and creates a cocoon-like wrap around the organ to collect any urine and prevent leakage. With the patient 80 preferably standing or lying on his back, the pad 12 is placed on the
20 user's thighs with the first wing 14 on the upper right thigh/abdomen and the second wing 16 over the user's left thigh/abdomen. The user's penis 76 is placed in the void 42 between the first and second wings 14,16 so that the base of the penis is at the juncture 38 and the head of the penis is on the main region, or base 24 of the pad 12 (Figure 4). The first wing 14 is then folded inwardly diagonally along the fold line 30 over the top of the penis such
25 that the inner side edge 34 is approximately along fold line 52 (Figures 4, 5). The placement of the first wing 14 in this position covers the penis 76, and exposes the adhesive strip 72 adjacent the second wing 16. The protective cover is removed from the adhesive strip 72 (Figure 6), and the second wing 16 is then folded at fold line 52 over the first wing 14 such that the distal edge 50 is approximately parallel to and adjacent to the
30 side outer edge 32 of the first wing 14 (Figure 7). This configuration encloses the penis 76 in the void 42 and creates a leak-proof pouch over the penis. The first and second wings 14, 16 overlap diagonally and cooperate to form a "V" shape over the penis (Figure 8),

angling diagonally toward the respective opposite corner 64 in the direction of arrow 300 (Figure 8) to close the pouch like an envelope, eliminating any opportunity for urine to escape during urination. A double layer of protection created by the wings 14, 16 (Figures 12 and 13) reduces the opportunity for leakage and creates a drier, more moisture-free environment for the user 80.

As shown in Figures 9 – 11, the urine trap 12 can be placed inside a diaper or underpants 90 of a patient 80 without the need to fully undress the patient. If the patient should have incontinence while wearing the urine trap, a caretaker can efficiently and quickly remove the soiled pad to be replaced by a new pad with minimal jostling or movement of the patient. That is, with the patient on his back, the caretaker may easily draw the front of the undergarment down to expose the trap and then lift the wings 16 and 14 so the soiled pad may be withdrawn for disposal, all without lifting or maneuvering the weight of the patient. The caretaker may then select a replacement pad and apply to be held in place by a larger adhesive strip 70 placed on the backside of the pad to secure the pad to the patient's waistband 92 of his undergarment such as his outer diaper, pants or underwear 90 to maintain the urine trap in position. Alternatively, a plurality of adhesive strips can be secured to the back side or front side of the urine trap to secure it to a gown or other more loose-fitting clothing.

The unique shape, configuration and positioning of the first and second wings have multiple benefits over the existing prior art. First, the wings minimize the amount of material needed to establish a secure and reliable pouch, and eliminate excess flaps that can catch on garments and inadvertently open the pouch. For example, the inner side edge 46 of the second wing 16 aligns with the base of the first wing 14 at the fold line 30 when the second wing 16 is folded over the first wing 14. Similarly, the inner side edge 34 of the first wing 14 aligns perfectly with the base of the second wing 16 at the fold line 52 when the first wing 14 is folded over the penis. The alignment of the inner edges against the opposite crease maximizes the volume of the pouch and eliminates excess wing material bunching up or contacting the penis. The novel shape aligns the edges of the wings to ends of the pouch itself, creating a perfectly formed and reliable pouch with no excess material. Second, cut-outs 36, 54 form a more comfortable opening through which the wearer's penis is secured, reducing chaffing and skin irritation. By eliminating all excess material, the user can wear the urine trap under street clothes as well without large,

bulky bulges that can be created by traditional diapers. A taped border may extend along the wings from the respective creases to ensure that the edges mate more smoothly and prevent gaps that can cause leakage.

In an alternative embodiment as shown in Figures 14 – 23, the pouch can be
5 applied and worn in a reverse manner. Advantages may be seen in this configuration depending on whether the user is prone or ambulatory. The adhesive strip may be secured to the user 80 in this embodiment, wear only a gown or other loose fitting clothing are worn and there is nothing else to which one can apply the adhesive strip.

Figures 24 and 25 illustrate yet another embodiment 112 of a urinary pad that
10 also includes an inner fluid transmissive layer, an absorbent layer, and a fluid impermeable layer cooperating to form a pad as previously discussed above. The pad 112 has a different shape that includes a main absorbent region 124 and first and second wings 114, 116 defining a gap 142 between a portion of the first and second wings. The main absorbent region 124 is configured with a predetermined curved contour which in the
15 preferred embodiment defines a substantially circular perimeter 125 extending from a rounded registration edge 150 in the upper left quadrant and curves around to the upper right quadrant to define the free edge 151 of the second wing 116 to then turn inwardly and downwardly to define an inwardly and downwardly angled edge 147. The first wing 114 is trapezoidal shaped with the outer side registration edge 149 and the distal edge 153
20 formed at an angle α that is approximately 105° , and the distal edge 153 and the inner edge 155 formed an included angle β that is substantially 90° . The second wing 116 includes an inner side edge 158, and a side edge 161, the inner side 158 substantially parallel to the inner edge 155 of the first wing 114, the outer side edge 147 and the side edge 161 forming an angle γ that is substantially 90° and the inner side edge 158 and the
25 side edge 161 forming an angle θ that is substantially 135° , the second wing 116 extending distally beyond the distal edge 153 of the first wing 114.

The inner edges 155 and 158 of the wings cooperate to form an elongated gap 142 originating at a closed end to define an opening 156 and projects axially therefrom. Referring to Fig. 24B, the second wing 116 may thus be folded proximally and inwardly
30 over the main absorbent region 124 sufficiently far to align the curved distal edge 151 with the curved registration edge 150 so those edges are somewhat congruent causing the absorbent layer of the periphery of the wing 116 to be protected from the patient's skin by

the marginal edge of the main absorbent region. Thus, liquid distributed in the absorbent layer of the wing 116 will be physically blocked from direct contact with the patient's abdomen.

Figure 25 illustrates one example of a patient wearing the embodiment of Figure 24. The adhesive tape strips are substantially located as with the embodiment of Figures 14 – 23 although not shown for simplicity in Figures 24 – 25.

As will be appreciated by those skilled in the art, when laid flat as shown in Fig. 24, the wings 114 and 116 will be disposed in the same plane as the main absorbent region 124. Then, when placed on the abdomen of the patient, as shown in Fig. 25, the absorbent region 124 will typically lie directly on the abdomen with the penis projected through the opening 156 so the wing 116 may be raised from the distal outer edge 151 to fold over the main region 124 so that the registration edges 147 and 150 are aligned in somewhat congruent fashion, as shown in Fig. 25. The adhesive tape strip on the impermeable side of the wing 147 will thus be exposed. Then, the distal end of the first wing 114 may be folded proximally and laterally inwardly to a position overlying the wing 116 to cooperate therewith to form a double layer of absorbent material over the penis as it extends through the opening 156 to overlie the main region. In this arrangement, the penis will remain comfortably projecting through the open opening 156 but trapped in the trap created between the respective wings 114 and 116 and main absorbent region 124 to thereby contain and absorb any urine released.

As shown, the first wing 114 is formed with an area at least 20% as great as the main absorbent region 124. In practice, we prefer to configure the second wing 116 with at least 85% of the area of the main absorbent region and preferably 90% as shown. In the preferred embodiment, we configure the absorbent region with an area of 130 square inches and the wing 116 substantially the same or slightly less.

In practice, we have constructed the registration edges 150 and distal edge 151 with a continuous, common radius of curvature to thus induce the caregiver to align these edges when dressing the patient. In other embodiments, such edges may be formed with other configurations of curved registration edges to induce registration. In practice we form these edges with a radius of curvature of 12 inches but understand that, depending on the patient, a radius of curvature of between 6 and 14 inches will suffice.

Referring to Figs. 26A-26C, in a further embodiment of the trap of the present invention, we incorporate a pad with a rounded peripheral edge to define a sector of a circle of approximately 300 degrees. The pad includes a central main absorbent section 224, a first wing 214 and a second wing 216, the wings being foldable along respective imaginary fold lines 218 and 220 to fold the wing 216 over on the main absorbent section 224. In this construction, for an adult male, we selected a radius of eight inches for the outside periphery 226 of the pad. It should be understood that a radius of between 6 inches and 14 inches will also suffice for different sizes of the pads of the present invention.

We have discovered that the area of the second wing should be at least 50% of the area of the main region and preferably about 90 % to 100% of that area to create an effective trap. In one preferred embodiment we form the main region with an area of about 130 square inches and the second wing with about the same area to provide maximum absorption for minimum bulk.

In practice it will be appreciated that the subject pad is formed with a central U-shaped opening 255 by means of laterally spaced-apart edges 242 of the respective wings 214 and 216 to thus provide an opening for access of the patient's penis to be positioned in the opening 256 when the wings are folded over the main absorbent region 224.

It will be appreciated that when the second wing 216 is folded on the fold line 220, the circular peripheral, distal edge 232 thereof will be disposed in overlying relationship in proximity with the registration edge 234 of the main region, to dispose the terminal edge 238 generally along the fold line 218. This then places the wing 216 in covering relationship over the patient's penis as projected through the opening 256 to overlie the main absorbent region 224 to thus be disposed in a favorable location so the first wing 214 may be folded along the imaginary line 218 to overlie the edge of the wing 216 and, to be held in position by the patient's undergarment or adhesive tape attached to one or the other of the wings.

From the foregoing it will be apparent to those of skill in the art that with the construction of the pad of the present invention, the imaginary fold lines 218 and 220 are merely markers for convenience of explanation indicating where in may be desirable to make a fold. In some embodiments, the fold lines 218 and 220 are marked by indicia or

other markers to help guide the caretaker. In practice, however, we have found that with the particular shape of the pads described hereinabove, the desirable fold lines are intuitive to the caretaker so that the folds may be made to position the wings in a somewhat conical configuration cooperating with the main region 224 for entrapping the penis within the opening 256 to maximize the comfort of the patient and minimize the opportunity for leakage stemming from any openings which might otherwise be left even with the trap closed. We formed the opening to remain open and not press on the penis.

By forming the distal edge of the second wing with a curve of approximating the shape of that of the periphery of the main absorbent region at the registration edge, as in this case, the same radius of curvature, the care taker is induced to substantially align those edges when forming the trap so as to leave no portion of the absorbent layer of the first wing exposed to the patient's skin to thus provide a barrier against urine making direct contact with the skin.

As will be appreciated by those of skill, the pads of the present invention are relatively small, with a high capacity for moisture absorption, and configured to form an envelope around the penis so that urine projected even by stream from the penis will be captured within the trap to escape therefrom and consequent contact with the patient's abdomen and consequent irritation to the skin. Additionally, it will be appreciated that the pads of the present invention serve to encapsulate the penis and maintain it isolated from the patient's anal area to thus protect against migration of feces and the like which may otherwise exist in the anal area and be conveyed to the patient's abdomen.

The trap is convenient to replace in the patient's undergarment, provides maximum absorption and highly effective protection with a minimum of bulk and cost of manufacture, as well as reducing the bulk of waste on disposal.

The foregoing description is intended to be illustrative and not exclusive. That is, there are many variations and modifications that can be made to the foregoing descriptions and preferred embodiments that would be readily apparent to one of ordinary skill in the art, and the present invention is intended to include all such modifications and variations. Such modifications may include choice of materials, overall dimensions of the embodiment, etc. Accordingly, the scope of the present invention should not be limited to any specific embodiment, illustration, or description herein, but rather the scope of the

invention should be determined by the appended claims using the plain and ordinary meaning of the words used therein.

I Claim:

1. A urine trap for a male, comprising:

an inner fluid transmissive layer, an absorbent layer, and a fluid impermeable layer cooperating to form a pad, the pad including:

5 a main absorbent region formed on a first side with a main region registration edge and the first and second wings projecting from a second side opposite the first side to cooperate in defining a gap;

the first wing having a trapezoidal shape having an outer side edge, an inner side edge, and a distal edge, the inner side edge having a triangular cut-out therealong, the
10 outer side edge and the distal edge cooperating to form an obtuse angle α that is substantially 105° and the inner side edge and the distal edge forming an angle β that is substantially 90° ; and

the second wing having an outer side edge, an inner side edge, and a distal edge, the inner side edge substantially parallel to the inner side edge of the first wing, the outer
15 side edge and the distal edge cooperating to form an angle γ that is substantially 90° and the inner side edge and the distal edge cooperating to form an angle θ that is substantially 135° , the second wing extending distally beyond the extended plane of the distal edge of the first wing;

whereby the first wing may be folded on the main region to register the distal
20 edges with the main region's edge.

2. The urine trap of Claim 1, further comprising an adhesive strip on the side of the main absorbent region opposite the fluid impermeable layer.

25 3. The urine trap of Claim 1 that includes:

an adhesive strip on the impermeable layer of the pad.

4. The urine trap of Claim 1 wherein:

the main absorbent region of formed with a substantially circular perimeter

5 extending between the first and second wings.

5. The urine trap of Claim 1 wherein:

the main absorbent region is formed with the main region's edge of a

predetermined circular contour; and

the first wing is constructed with the distal edge formed with the predetermined

10 contour so that the first wing may be folded on the main absorbent region to dispose the
distal edge congruent with the main region's edge.

6. The urine trap of Claim 5 wherein:

the main region's edge and distal edge are formed with the same radius of

15 curvature.

7. The urine trap of Claim 6 wherein:

the radius of curvature is circular.

20 8. The urine trap of Claim 1 wherein:

the main absorbent region is configured with a predetermined area; and

the second wing is constructed with an area at least 50% of the predetermined area.

9. The urine trap of Claim 8 wherein:

the second wing is constructed with an area substantially 90% the predetermined area.

10. A urine trap apparatus for a male patient, comprising:

5 an inner fluid transmissive layer, an absorbent layer, and a fluid impermeable layer cooperating to form a pad, the pad including:

a main absorbent region formed with a first side having a main region registration edge toward one lateral side formed with a predetermined contour and elongated first and second flanking wings projecting distally from a second side opposite the first side and

10 cooperating to define there between a gap and an opening; and

the second wing disposed the lateral side opposite the one lateral side and formed with a distal edge of substantially the same shape as the predetermined contour, the second wing of a sufficient length to be folded on the main absorbent region and extend to the registration edge to disposed in alignment with the main region registration edge, whereby
15 the main absorbent region may be placed on the abdomen of the patient with his penis projecting through the opening to overlie the main absorbent region of the first wing folded once to overlie the penis and main absorbent region with the distal edge aligned with the registration edge.

20 11. The urine trap of claim 10 wherein:

the second wing is longer than the first wing.

12. The urine trap of claim 10 that includes:

an adhesive sticker between the first and second wings.

13. The urine trap of claim 10 wherein:

the main absorbent region is formed with a predetermined area; and

the first wing is formed with an area at least 50% of predetermined area.

5 14. The urine trap of claim 11 wherein:

the second wing is formed with an area substantially 100% of the predetermined

area.

15. The urine trap of claim 10 wherein:

10 the absorbent regions of the wings are constructed to form the opening to remain in
its open position as the first wing is folded over on the absorbent region to avoid placing
pressure on the penis.

16. The urine trap of claim 10 wherein:

15 the registration edge and distal edge are both formed with a continuous radius of
curvature.

17. The urine trap of claim 10 wherein:

the registration edge and distal edge are formed with the same radius of curvature.

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FIG. 1

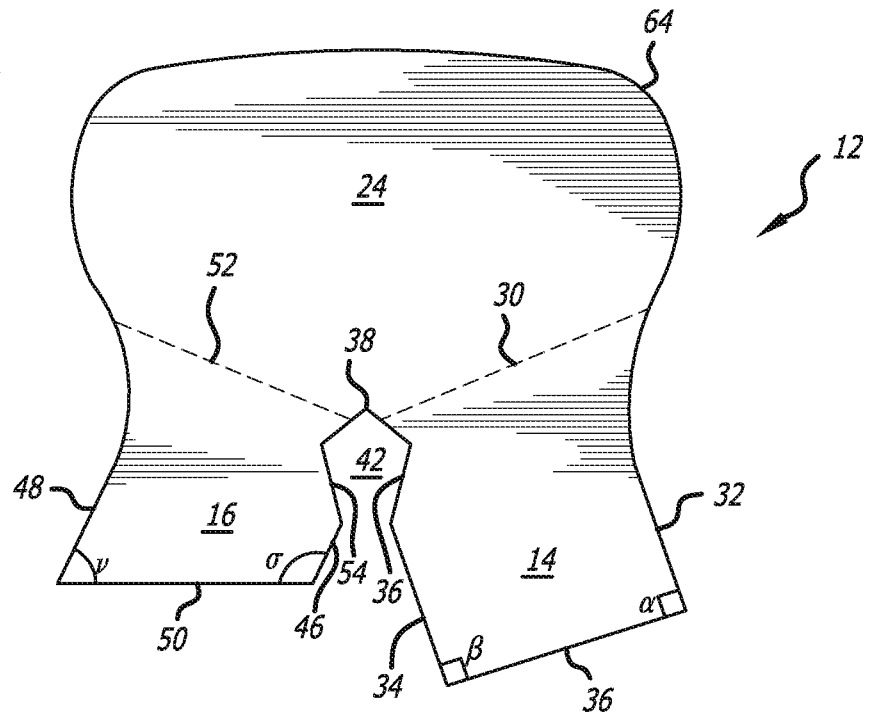
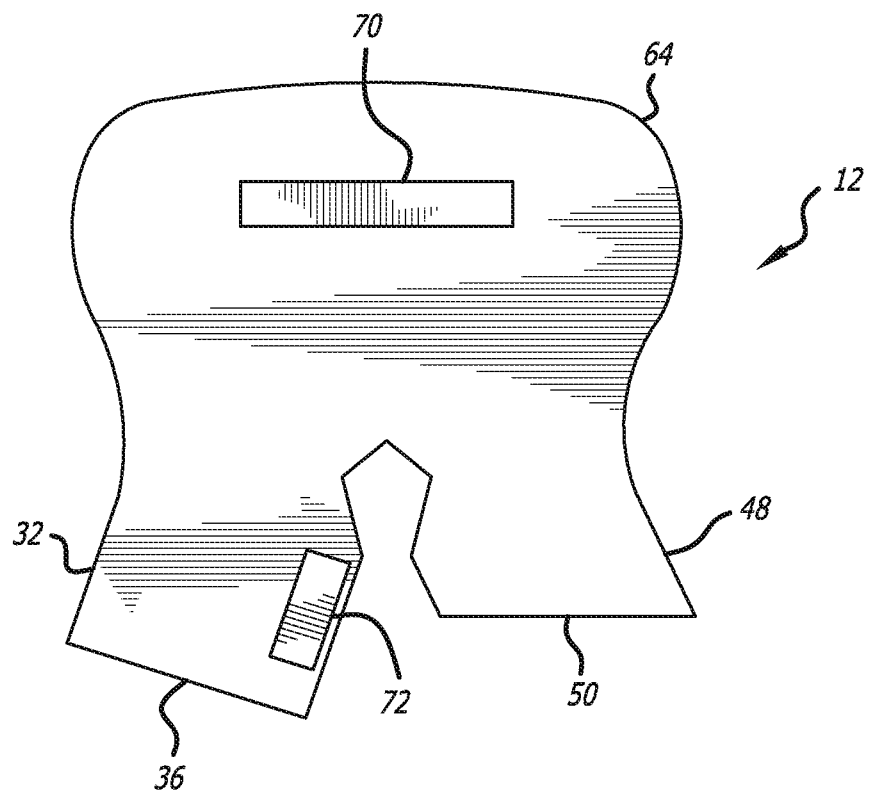


FIG. 2



2/23

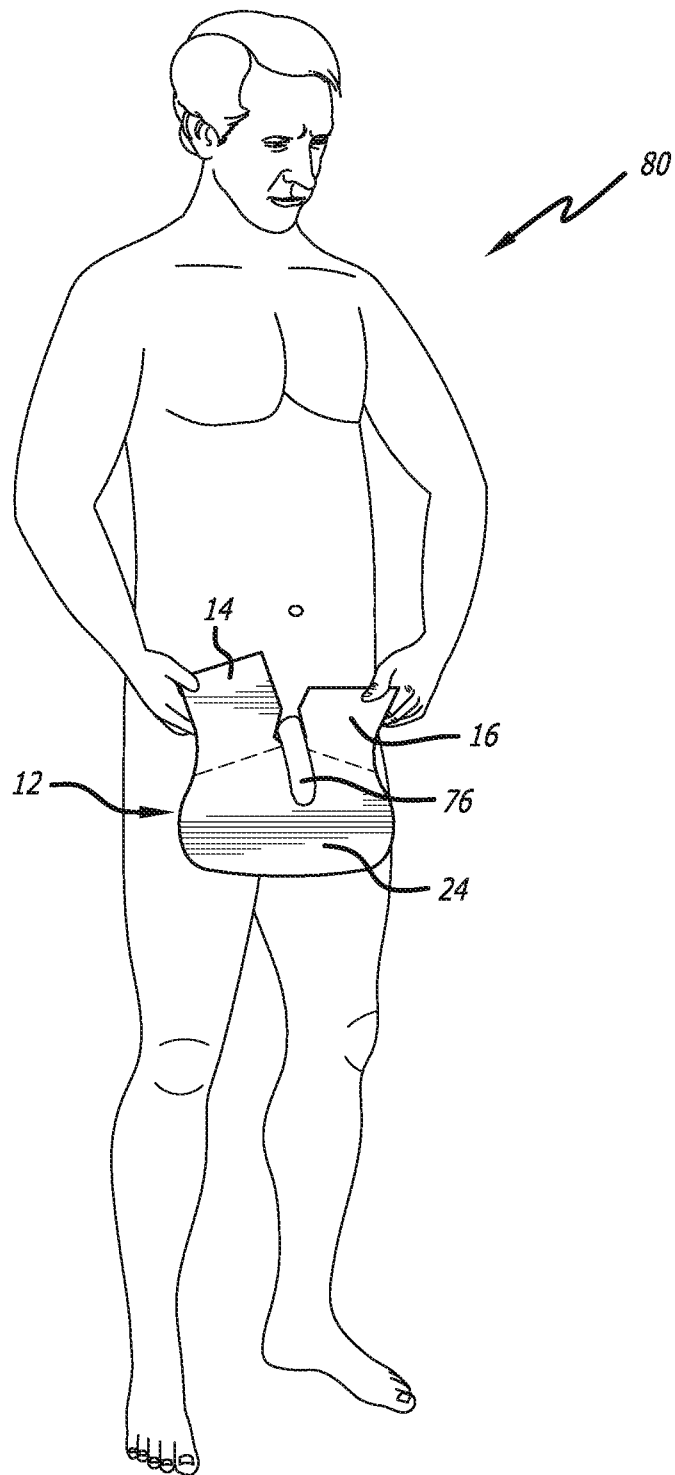
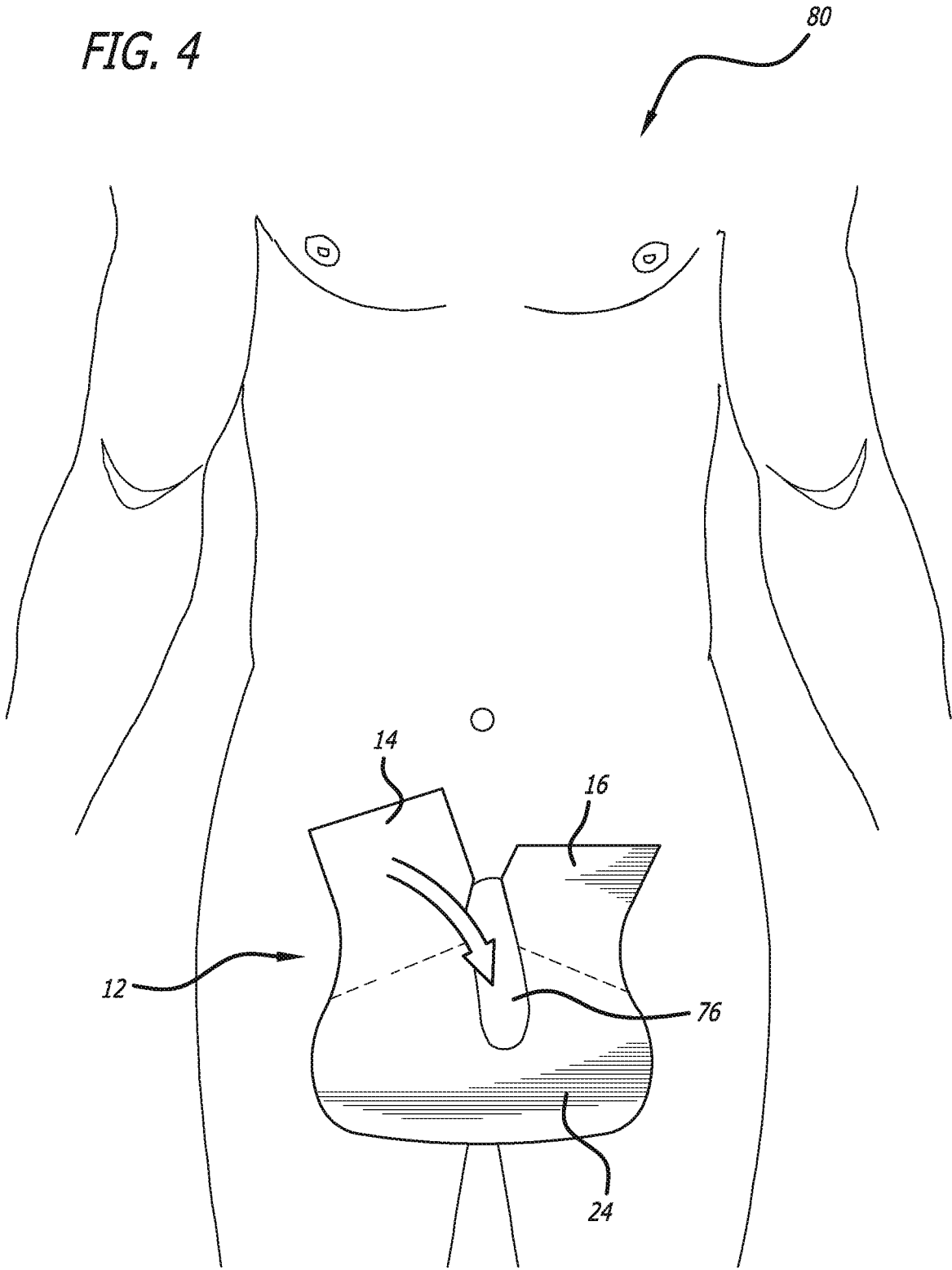
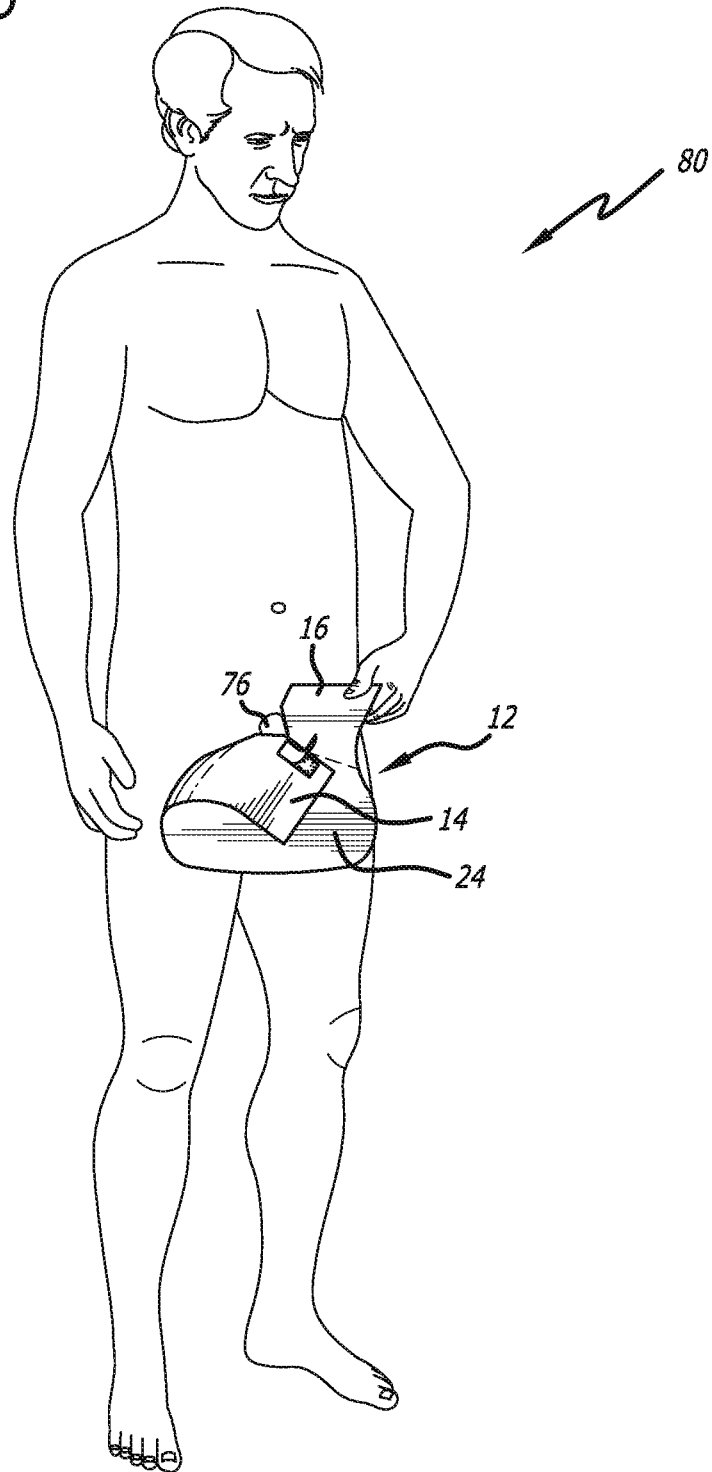
FIG. 3

FIG. 4



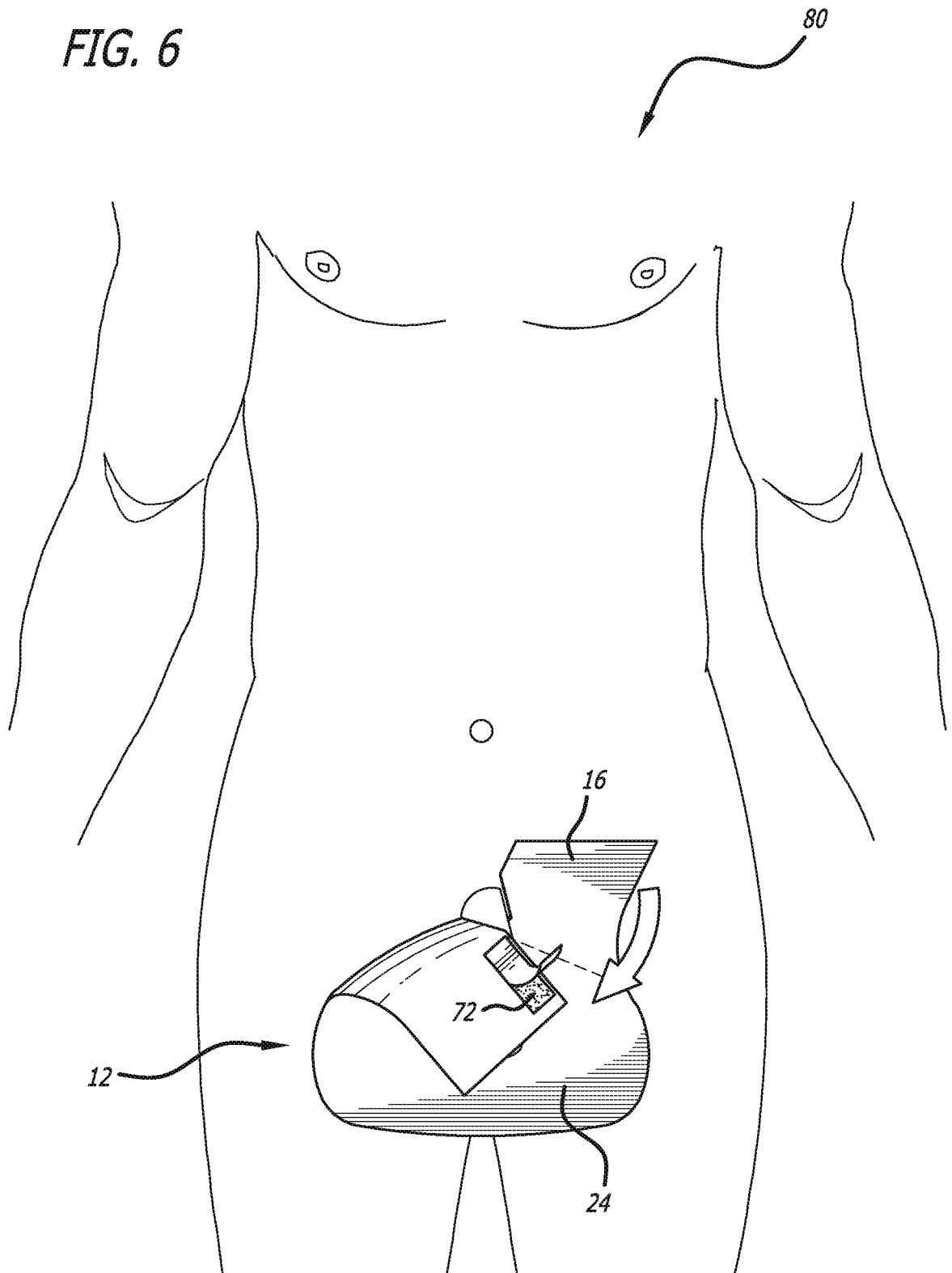
4/23

FIG. 5



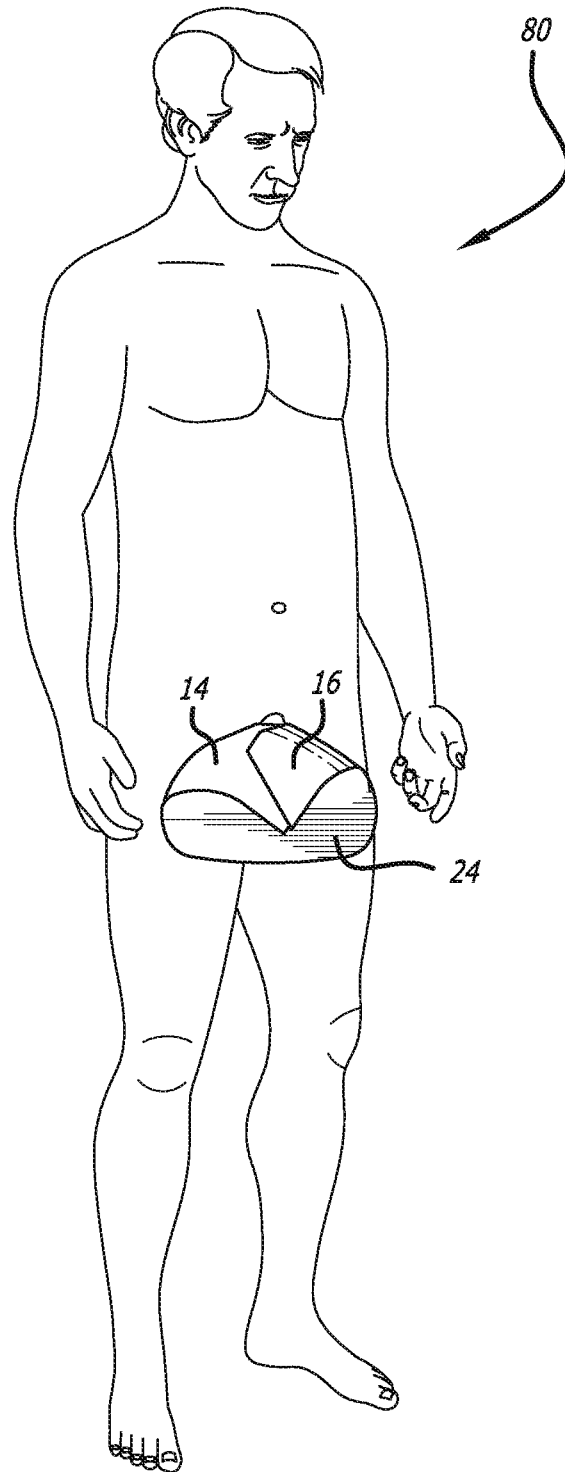
5/23

FIG. 6



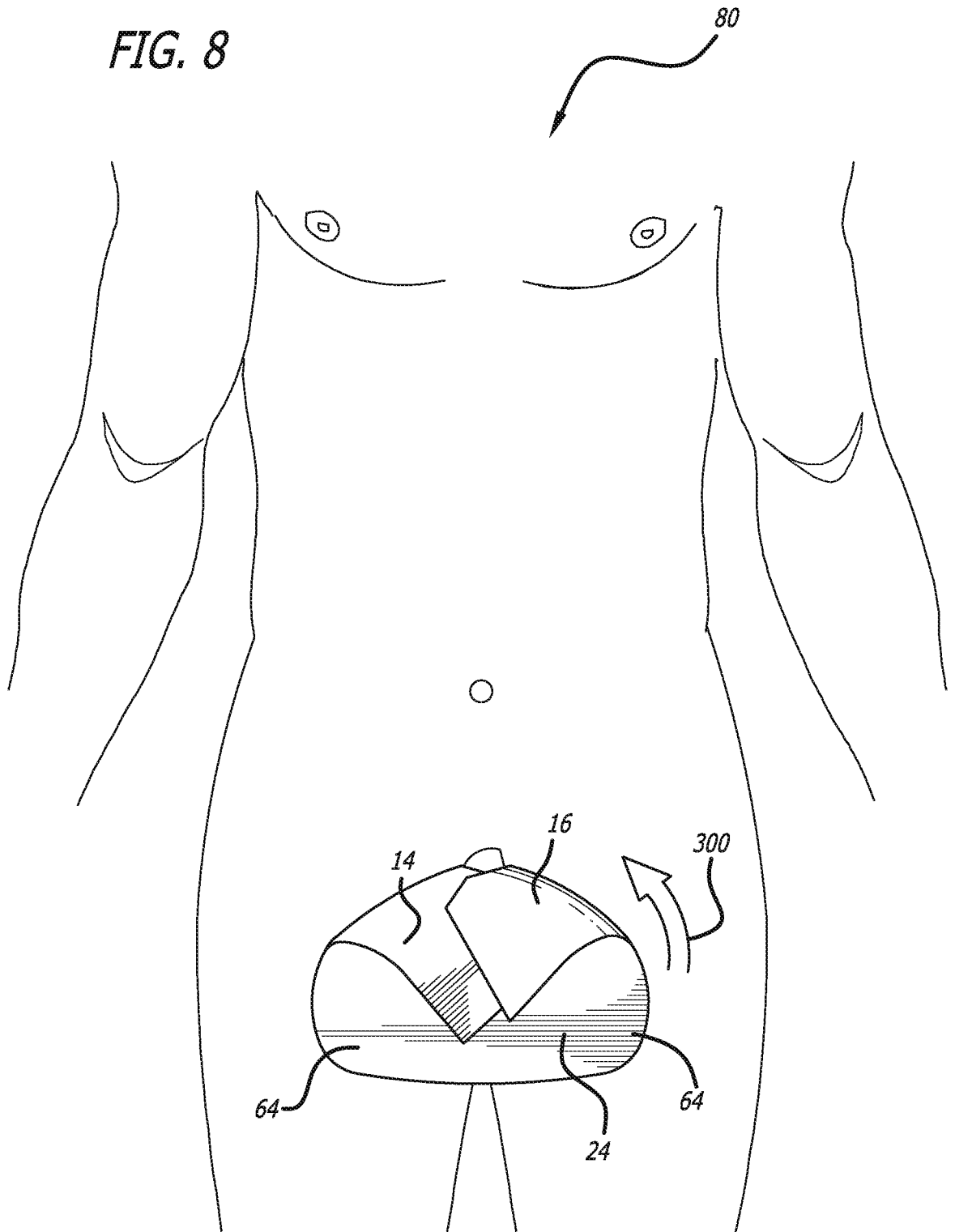
6/23

FIG. 7



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FIG. 8



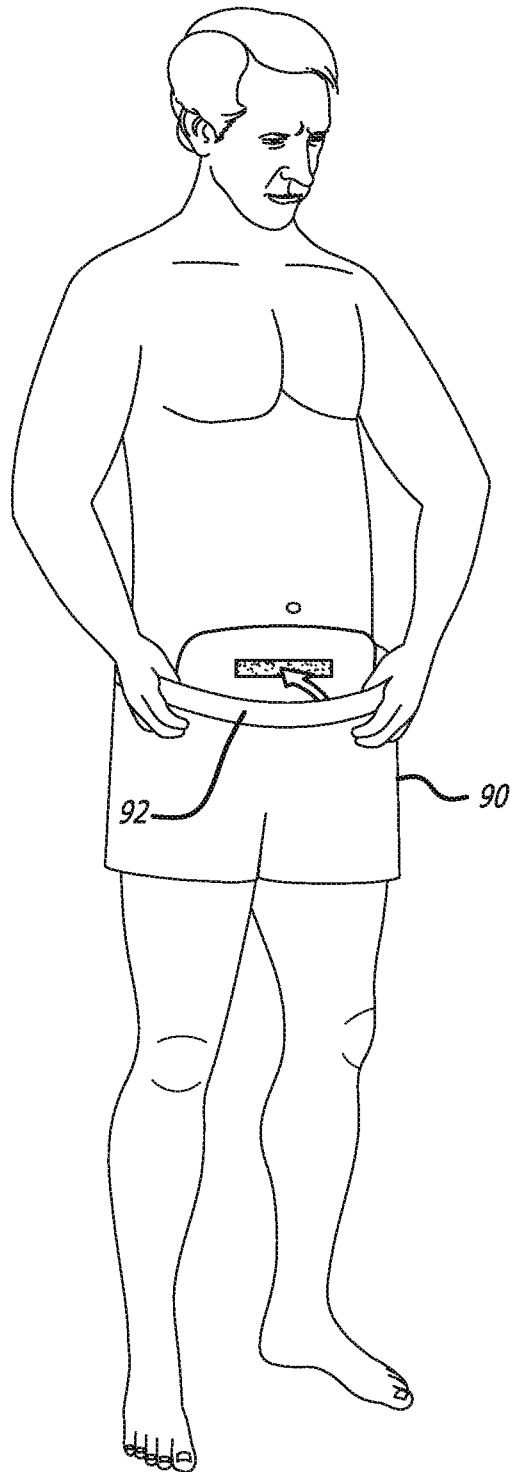
8/23

FIG. 9



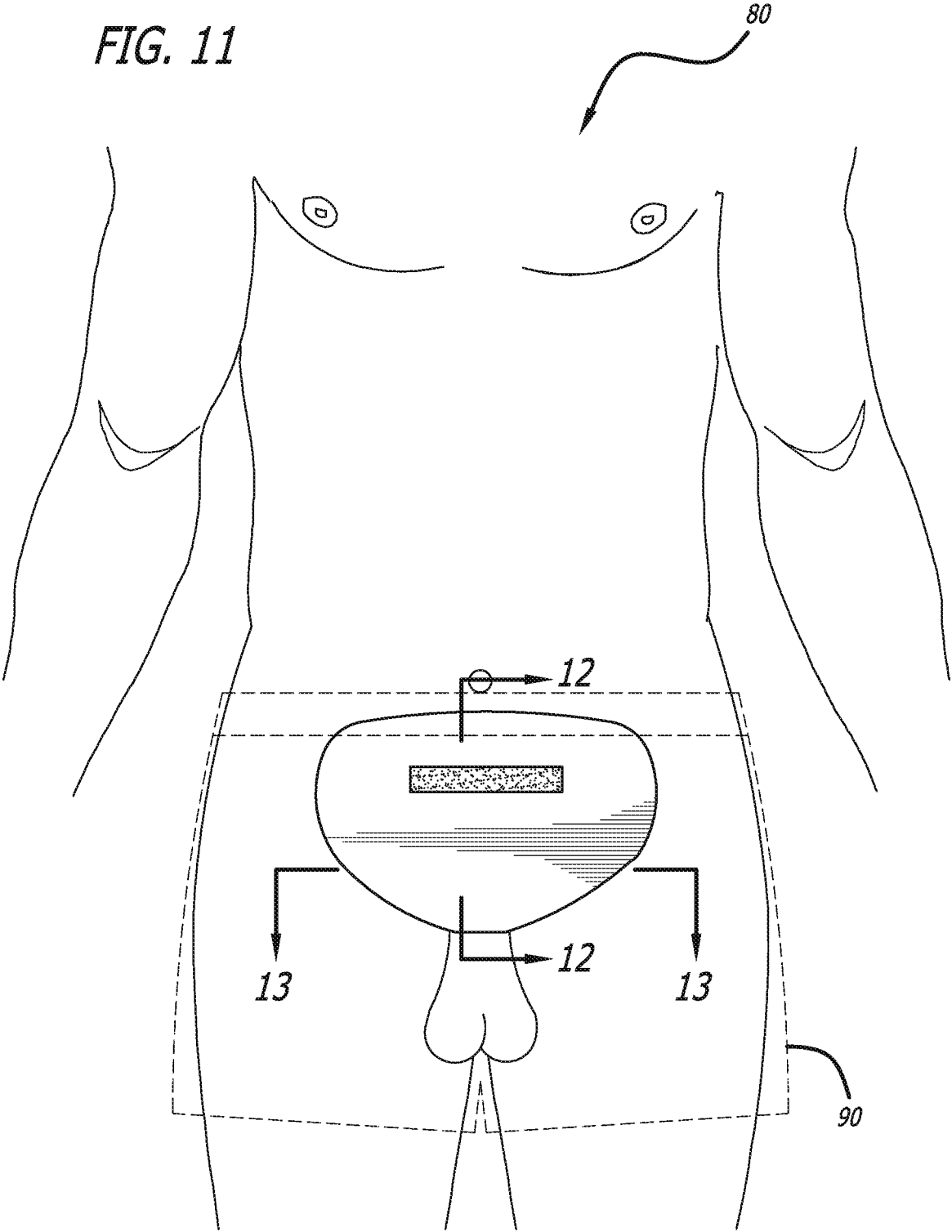
9/23

FIG. 10



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FIG. 11



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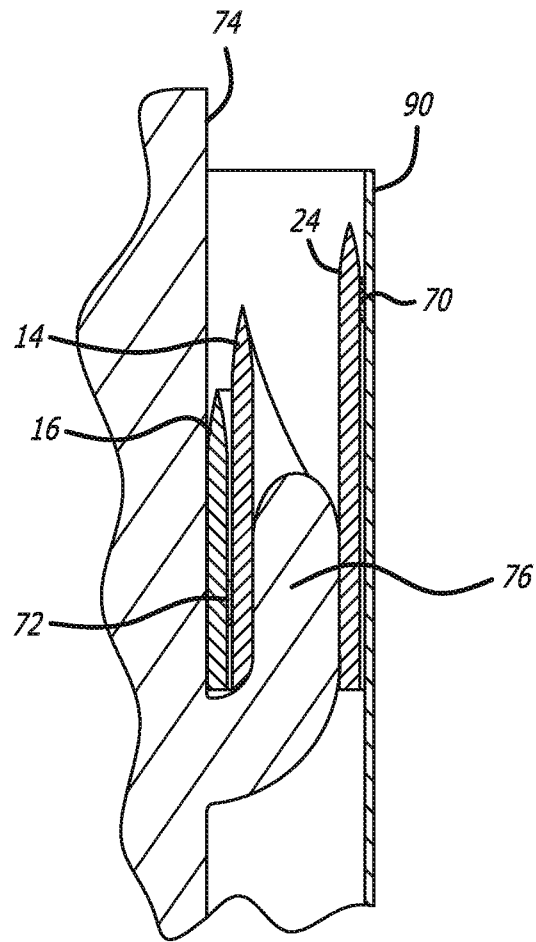


FIG. 12

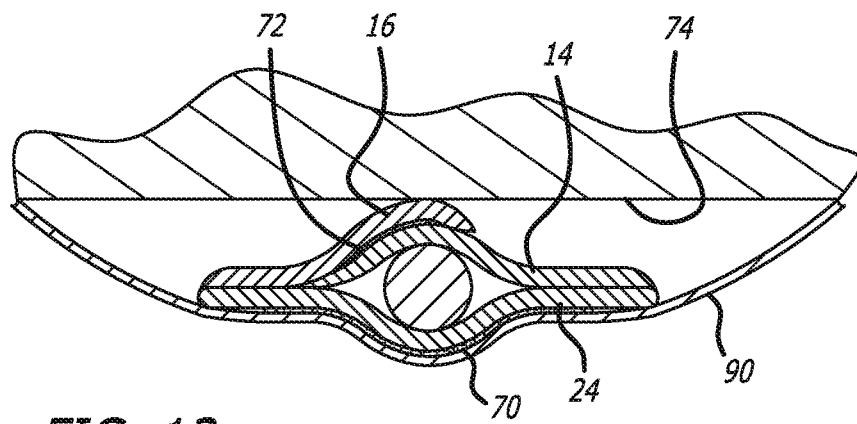
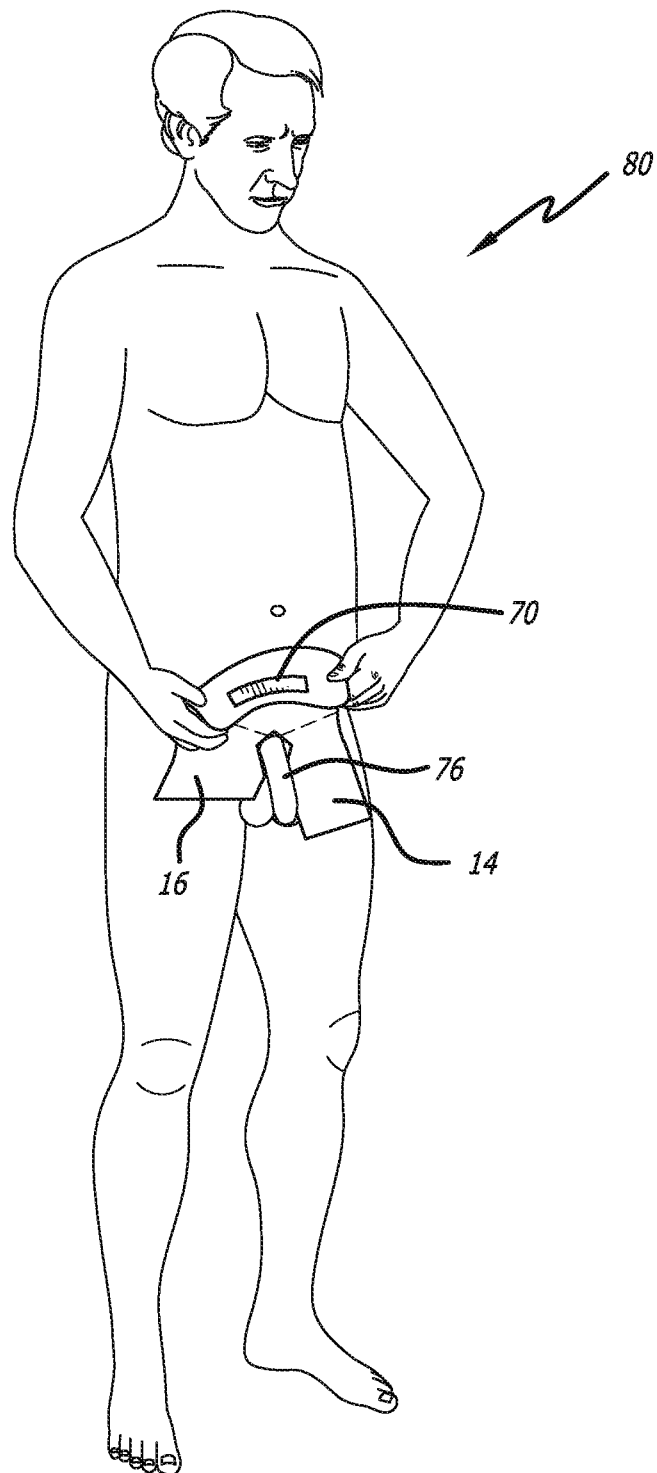


FIG. 13

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FIG. 14



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FIG. 15

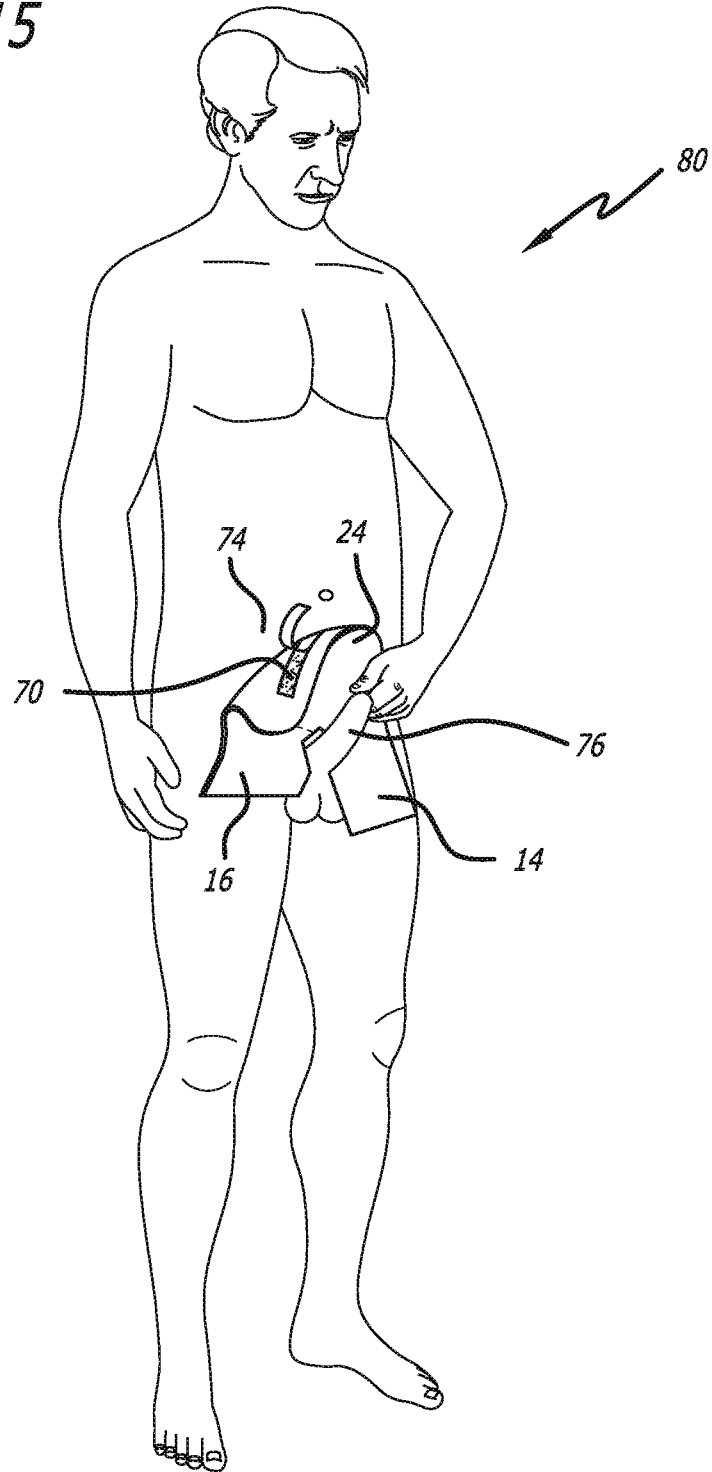
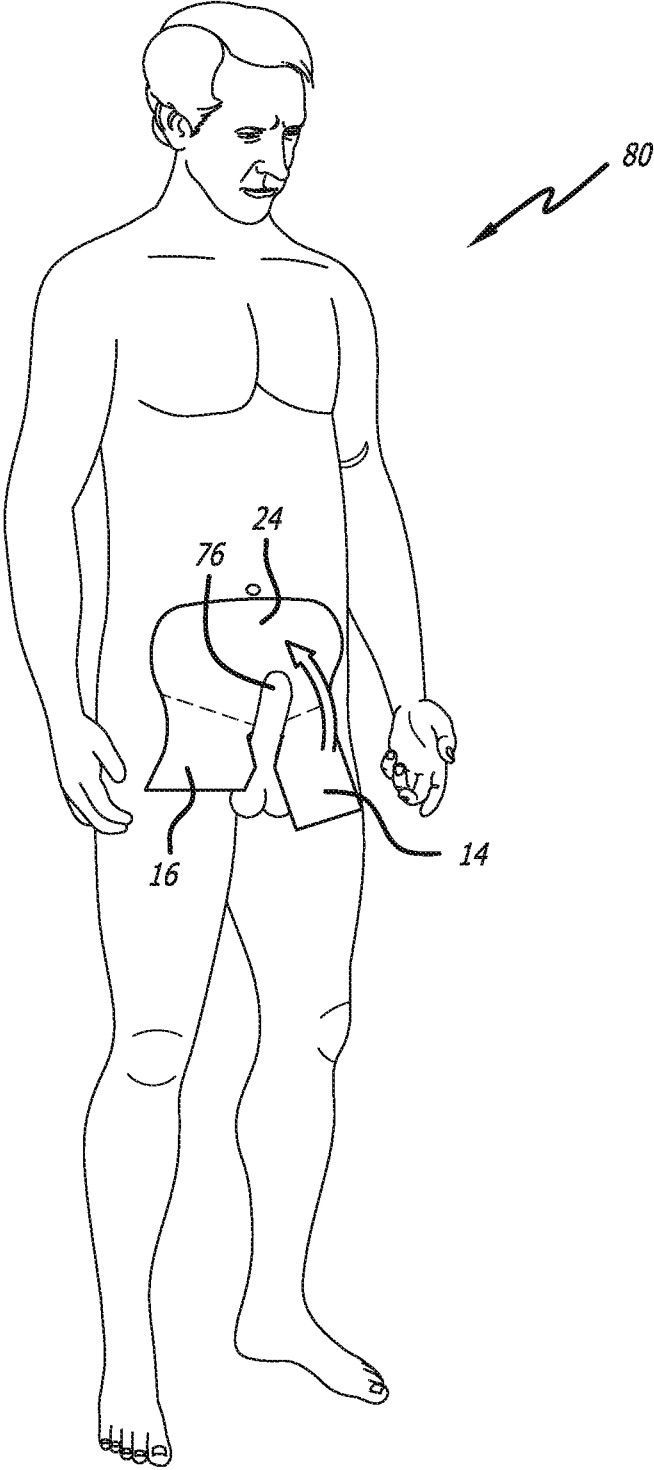
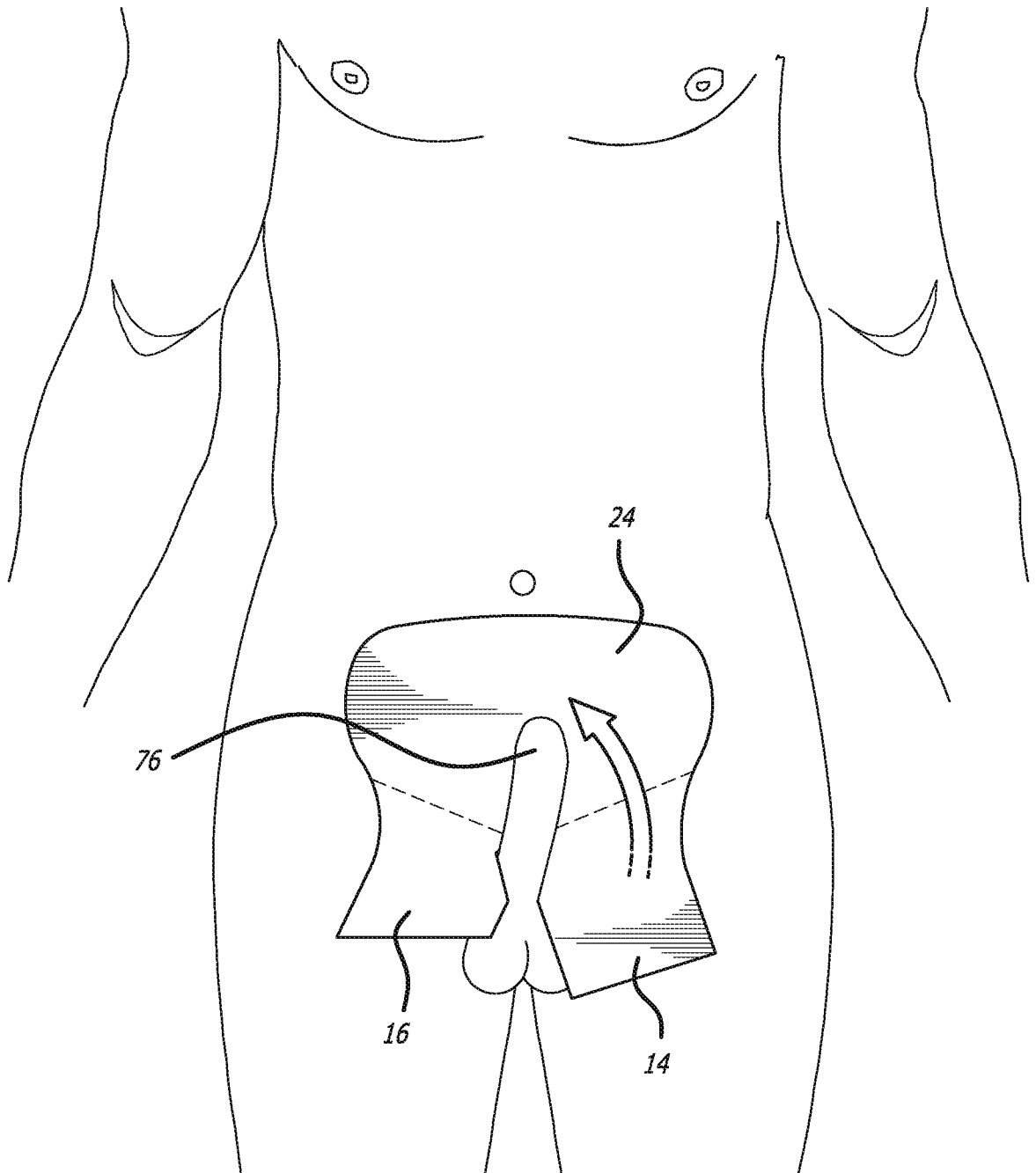


FIG. 16



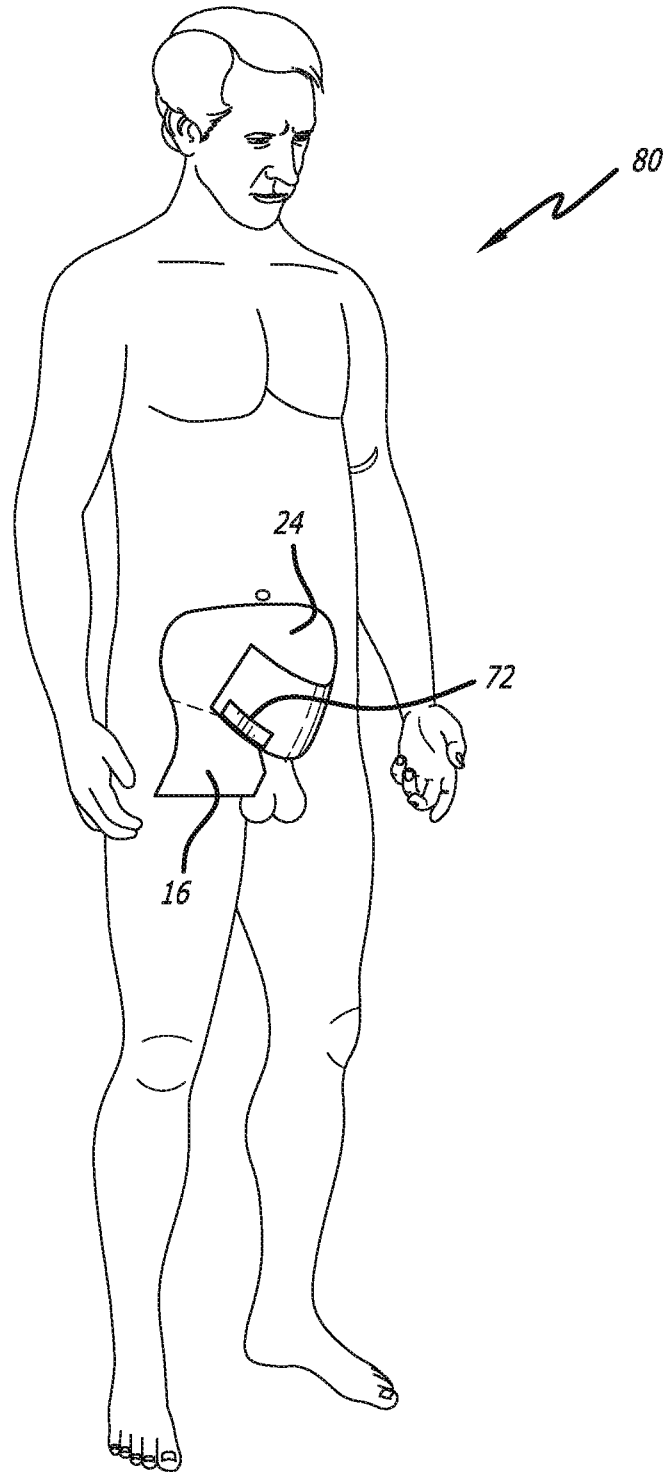
15/23

FIG. 17



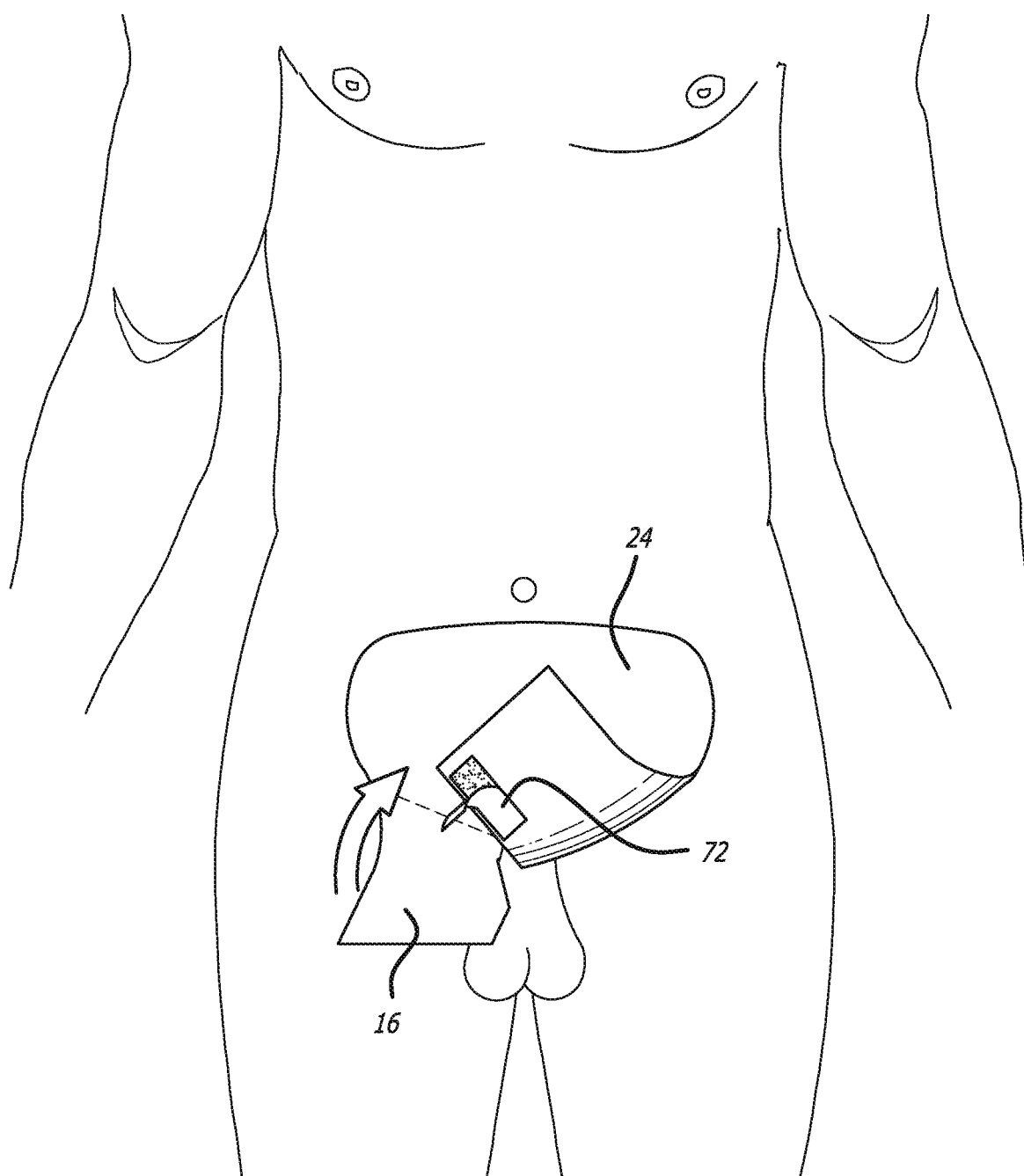
16/23

FIG. 18



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FIG. 19



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FIG. 20

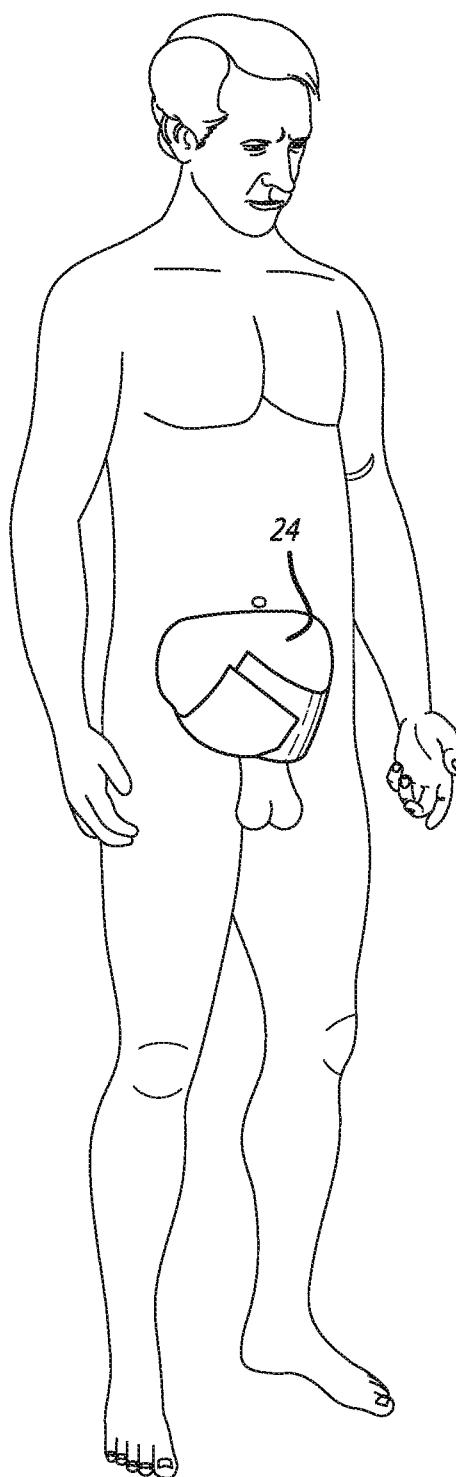
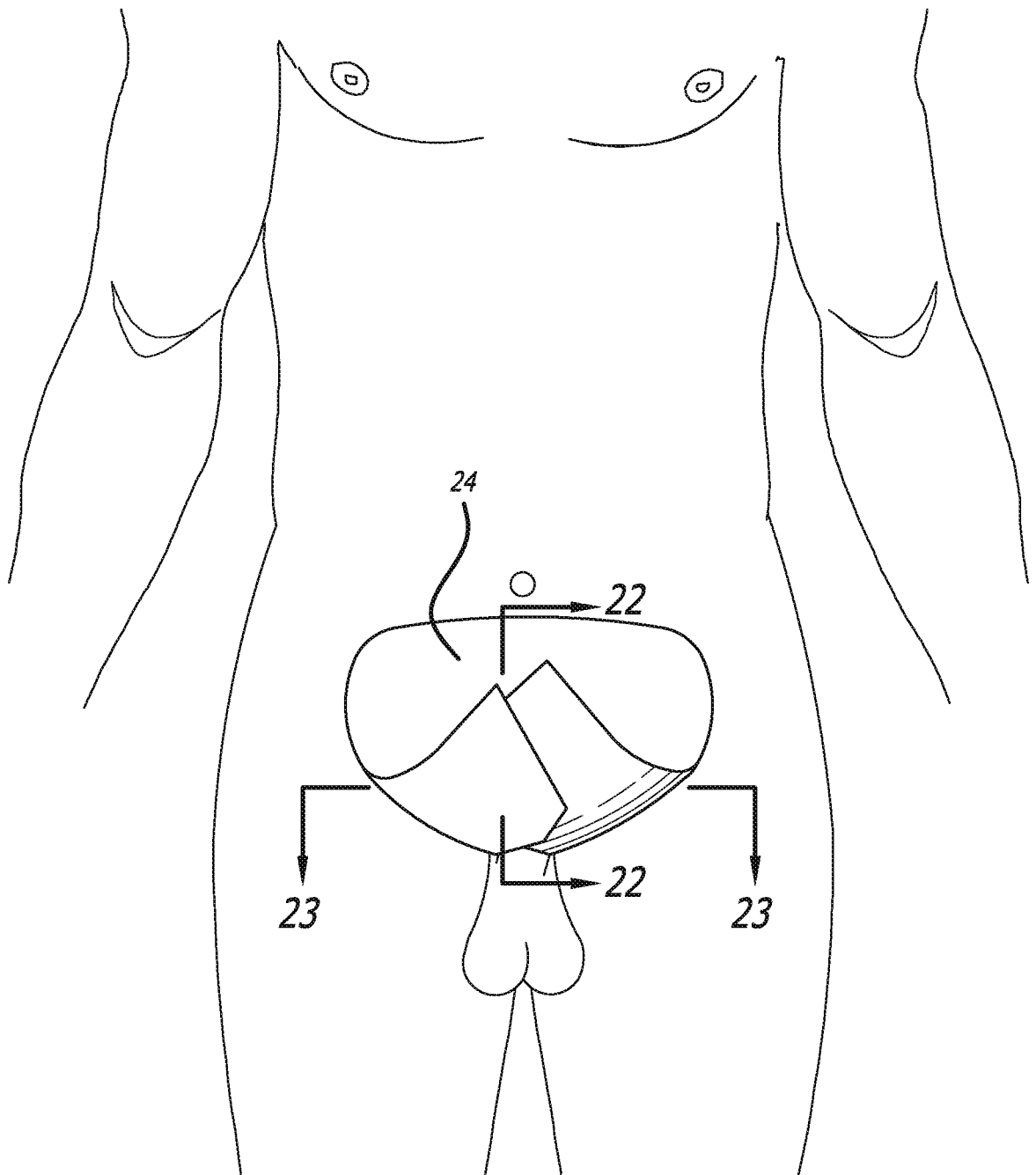


FIG. 21



20/23

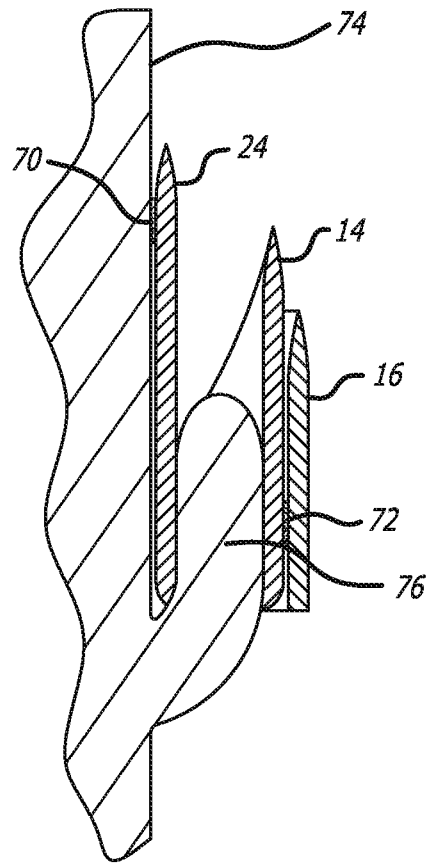


FIG. 22

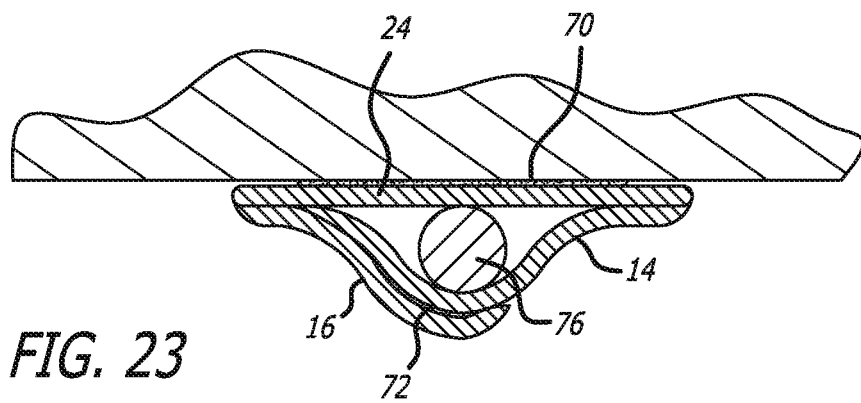


FIG. 23

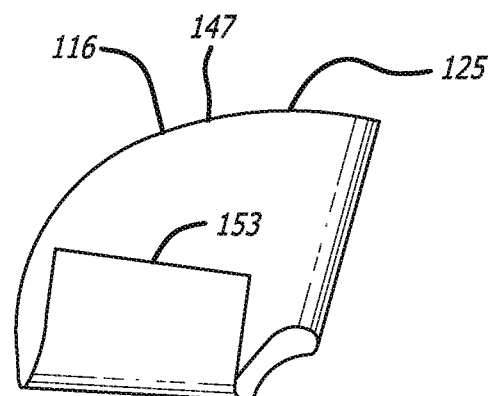
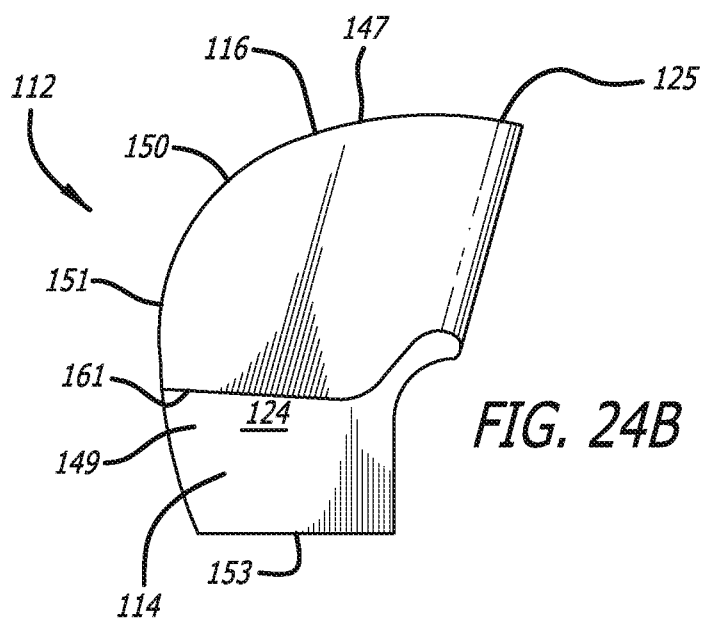
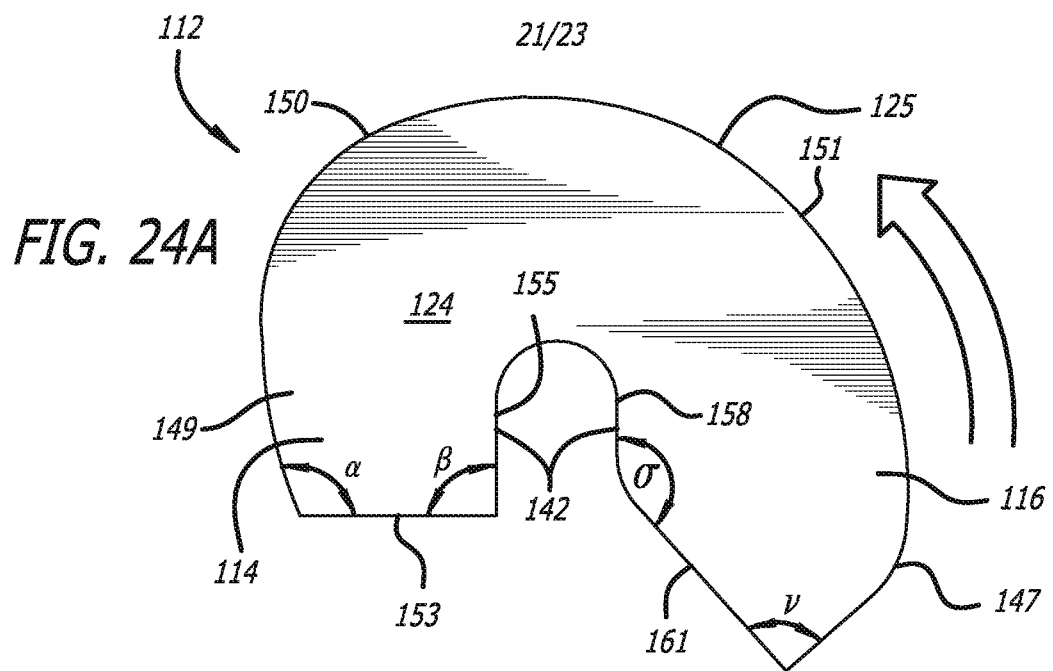
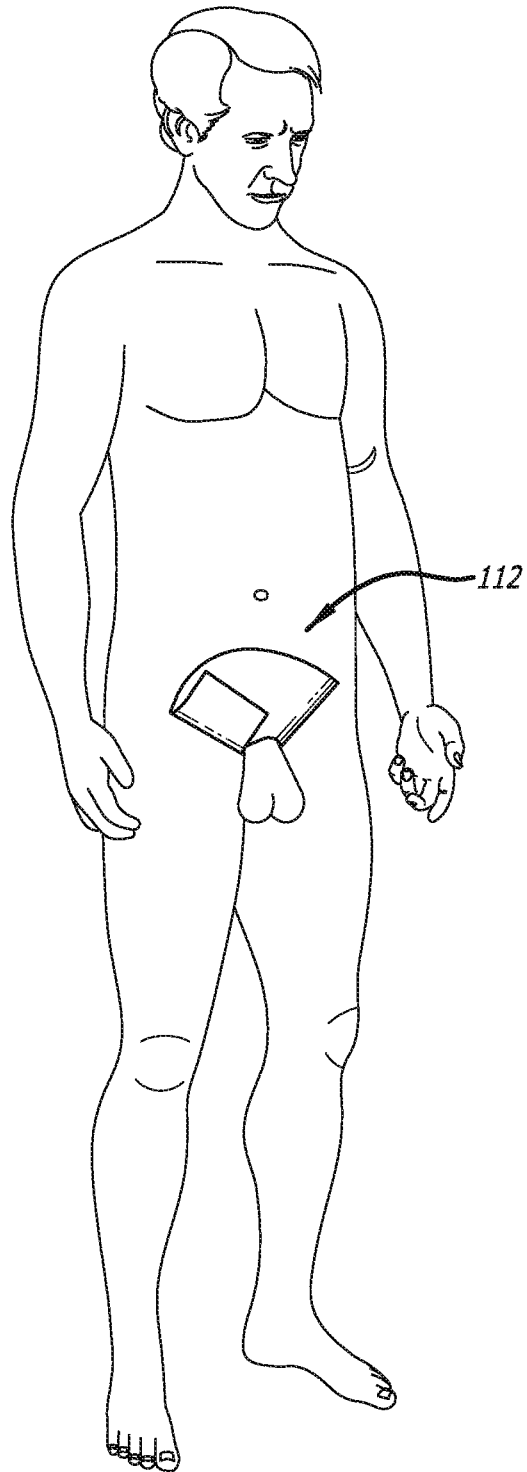


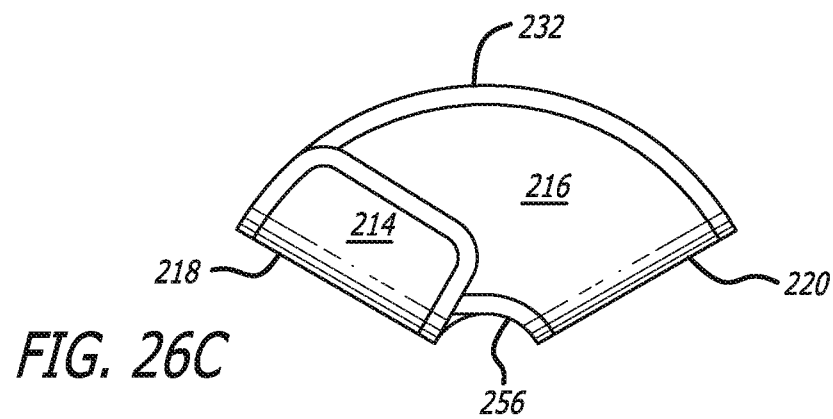
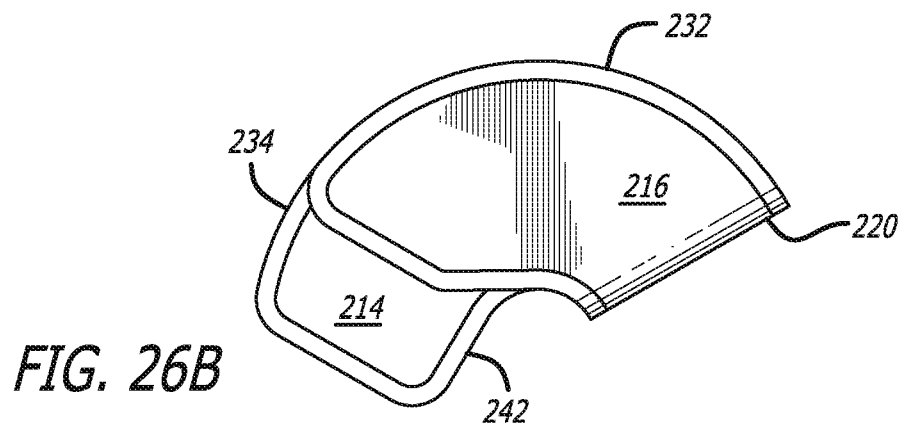
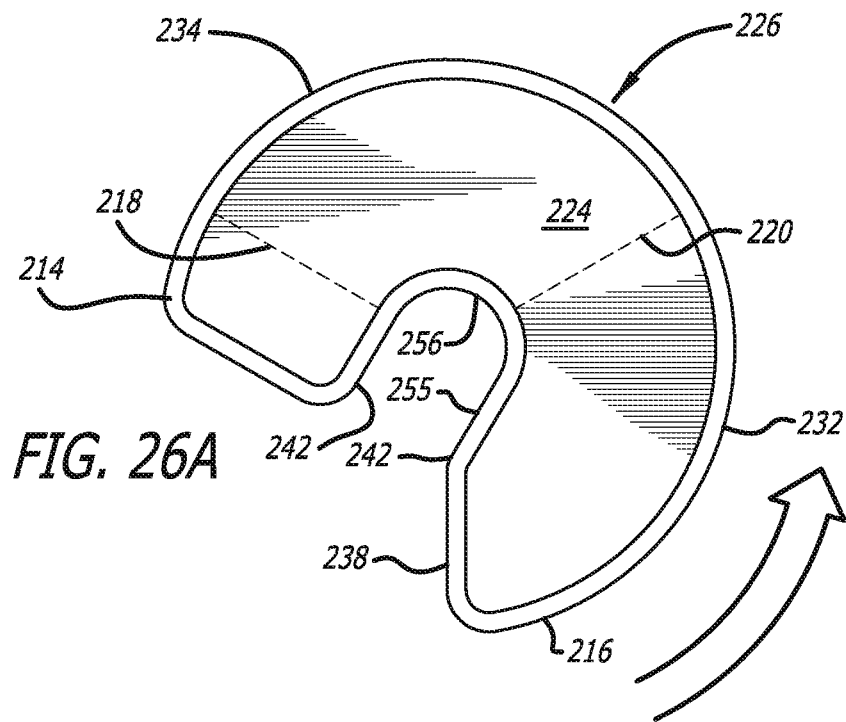
FIG. 24C

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FIG. 25



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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2017/025121

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61F13/56 A61F13/58 A61F13/471
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2016/008188 A1 (LUMAQUE-STEEMAN LORNA MATEO [US]) 14 January 2016 (2016-01-14) figures claims	1-17
A	JP H09 38127 A (UNI CHARM CORP) 10 February 1997 (1997-02-10) figures	1-17
A	US 6 129 719 A (NOZAKI SATOSHI [JP] ET AL) 10 October 2000 (2000-10-10) cited in the application claim 1 figures	1-17



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 May 2017

Date of mailing of the international search report

29/05/2017

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

O'Sullivan, Paul

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2017/025121

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2016008188	A1	14-01-2016	AU 2015290215 A1 02-02-2017
			CA 2954756 A1 21-01-2016
			EP 3169292 A1 24-05-2017
			US 2016008188 A1 14-01-2016
			WO 2016010617 A1 21-01-2016

JP H0938127	A	10-02-1997	NONE

US 6129719	A	10-10-2000	CN 1197632 A 04-11-1998
			EP 0861644 A2 02-09-1998
			ID 20004 A 10-09-1998
			JP 3500269 B2 23-02-2004
			JP H10234765 A 08-09-1998
			MY 118586 A 31-12-2004
			SG 71087 A1 21-03-2000
			TW 422089 U 11-02-2001
			US 6129719 A 10-10-2000

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2017/025121

International filing date (day/month/year)
30.03.2017

Priority date (day/month/year)
31.03.2016

International Patent Classification (IPC) or both national classification and IPC
INV. A61F13/56 A61F13/58 A61F13/471

Applicant
EZ MALE INCORPORATED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0
Fax: +49 89 2399 - 4465

Date of completion of
this opinion

see form
PCT/ISA/210

Authorized Officer

O'Sullivan, Paul

Telephone No. +49 89 2399-0



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2017/025121

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed.
 - ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))
3. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:
 - a. ☐ forming part of the international application as filed:
 - ☐ in the form of an Annex C/ST.25 text file.
 - ☐ on paper or in the form of an image file.
 - b. ☐ furnished together with the international application under PCT Rule 13*ter*.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
 - c. ☐ furnished subsequent to the international filing date for the purposes of international search only:
 - ☐ in the form of an Annex C/ST.25 text file (Rule 13*ter*.1(a)).
 - ☐ on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).
4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	<u>1-17</u>
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	<u>1-17</u>
Industrial applicability (IA)	Yes: Claims	<u>1-17</u>
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1 US 2016/008188 A1 (LUMAQUE-STEEMAN LORNA MATEO [US]) 14
January 2016 (2016-01-14)

Novelty

D1 discloses in the description thereof and figures 1-23 thereof an identical trap to that disclosed in the corresponding parts of the description and figures of the present application, but nevertheless not disclosing all of the features of independent claims 1 and 10.

In particular D1 fails to disclose an article having the angular requirement recited in claim 1, nor an article in which, as required by claim 10, the second wing may of sufficient length to be folded on the main absorbent region and extend to the registration edge to be disposed in alignment with the main region registration edge.

Claims 1-17 are therefore novel.

Inventive step

D1 is the closest prior art and discloses a technical problem identical to that of the present application (paragraph 11). Furthermore, the benefits of the invention as recited in D1 are identical to those disclosed in the present application (D1, paragraph 13).

In fact the only parts of the present application which differ from that of D1 are figures 24-26 and the corresponding section of the description. Although as noted above, the differences concern slight constructional changes over the article of D1, there is no evidence nor plausible reason to consider that said changes in any way represent an improvement over the article first disclosed in D1.

In view of this, the objective technical problem may be seen as the provision of a further urine trap article to that provided in D1. The skilled person seeking such a further trap would consider minor constructional changes to the article of D1 in order to provide a further urine trap, without exercising inventive step. It follows that the

subject-matter of claims 1 and 10 does not involve an inventive step. Furthermore, from the documents on file there appears to be no further features according to the dependent claims which could lead to the acknowledgement of inventive step, since further features are already disclosed for the article of D1, or involve mere further minor constructional modifications without apparent effect.

It follows that the subject-matter of claims 1-17 lacks inventive step.

Re Item VII

Although claims 1 and 10 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and/or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

Re Item VIII

The term "substantially" used in claims 1, 4, 9, 10 and 14 are vague and unclear and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claims unclear, Article 6 PCT. The same applies to the term "trapezoidal" referring to the shape of the first wing: the first wing in none of the embodiments of the figures could be seen as being of trapezoidal shape, which in its normal definition means a quadrilateral with two sides parallel.

Furthermore, the term "registration edge" lacks clarity as it is not defined in the claims and would not appear to be a known term in the field.

Claim 1 defines "the" first and second wings in line 6, which lack an antecedent basis in the claim.

Much of the description, as well as figures 1-23 refers to the subject-matter thereof as belonging to the invention. Since this subject-matter is identical to that of D1, it should be made clear that it is not part of the invention (Art 6 PCT).

Furthermore, although it would appear that claim 1 refers to the embodiments of figures 24 and not to the others, these figures do not comprise a triangular cut-out along the inner side edge of the first wing, as required by claim 1, and therefore do also not appear to be according to claim 1, leading to a lack of clarity.

In order to facilitate the understanding of the claims, reference signs referring to the relevant features in the drawings should be inserted in parentheses (Rule 6.2(b) PCT).

The term "incorporated herein by reference" should be deleted (Art 6 PCT)

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in D1 is not mentioned in the description, nor are these documents identified therein.

Possible steps after receipt of the international search report (ISR) and written opinion of the International Searching Authority (WO/ISA)

General information

For all international applications, the competent International Searching Authority (ISA) will establish an international search report (ISR) accompanied by a written opinion of the International Searching Authority (WO/ISA). The WO/ISA may be responded to by

- filing informal comments with the International Bureau of WIPO (IB) (where no demand for international preliminary examination (demand) is filed)
- filing amendments under Art. 19 PCT (this can be done whether or not a demand is filed)
- filing amendments under Art. 34 PCT and/or formal observations in response to objections raised in the WO/ISA (where a demand is actually filed)

This document explains these possibilities.

Filing informal comments

After receipt of the ISR and WO/ISA, the applicant may file informal comments on the WO/ISA, directly with the IB (see International Search and Preliminary Examination Guidelines 2.15). These will be communicated to the designated/elected Offices, together with the International Preliminary Report on Patentability (IPRP) at 30 months from the priority date.

Amending claims under Art. 19 PCT

The applicant may file amended claims under Art. 19 PCT, directly with the IB by the later of the following dates:

- 2 months from the date of mailing of the ISR and the WO/ISA
- 16 months from the priority date

However, any such amendment received by the IB after the expiration of the applicable time limit shall be **considered to have been received on time** by the IB, if it reaches it **before** the technical preparations for international publication have been completed (the 15th day prior to the date of publication, see PCT Applicant's Guide, International Phase, 9.013).

For further information, please see Rule 46 PCT as well as form PCT/ISA/220.

Please also note that, when filing amended claims under Art. 19 PCT, such amendments shall be **accompanied by a letter** identifying the amendments made and also the basis for the amendments in the application as originally filed (Rule 46.5(b) PCT). Where a **demand** is filed, failure to comply with this requirement may result in the amendments being ignored in the International Preliminary Examination Report (IPER), see Rule 70.2(c-bis) PCT.



US 2016008188A1

(19) **United States**(12) **Patent Application Publication****Lumaque-Steeman**(10) **Pub. No.: US 2016/0008188 A1**(43) **Pub. Date: Jan. 14, 2016**(54) **URINE ABSORBENT PAD**(52) **U.S. Cl.**CPC *A61F 13/5616* (2013.01); *A61F 13/58* (2013.01); *A61F 2013/15146* (2013.01)(71) Applicant: **EZ Male Pads, Inc.**, Long Beach, CA (US)(72) Inventor: **Lorna Mateo Lumaque-Steeman**, Moreno Valley, CA (US)

(57)

ABSTRACT(21) Appl. No.: **14/673,549**(22) Filed: **Mar. 30, 2015****Related U.S. Application Data**

(60) Provisional application No. 61/998,947, filed on Jul. 14, 2014.

Publication Classification(51) **Int. Cl.***A61F 13/56* (2006.01)*A61F 13/58* (2006.01)

A disposable urine trap in the form of a foldable pad that envelops the male genitalia and closes around the organ to form a barrier that prevents urine from escaping the trap. The pad includes an asymmetric pair of wings that are separated by a gap and attached to the main body of the pad. The first wing is preferably rectangular in that the distal angles are substantially right angles with parallel side edges and a perpendicular distal edge, and has a length that exceeds a length of a second wing, which terminates so that the distal edge of the second wing is angled to form an obtuse and an acute angle with respect to its generally parallel sides.

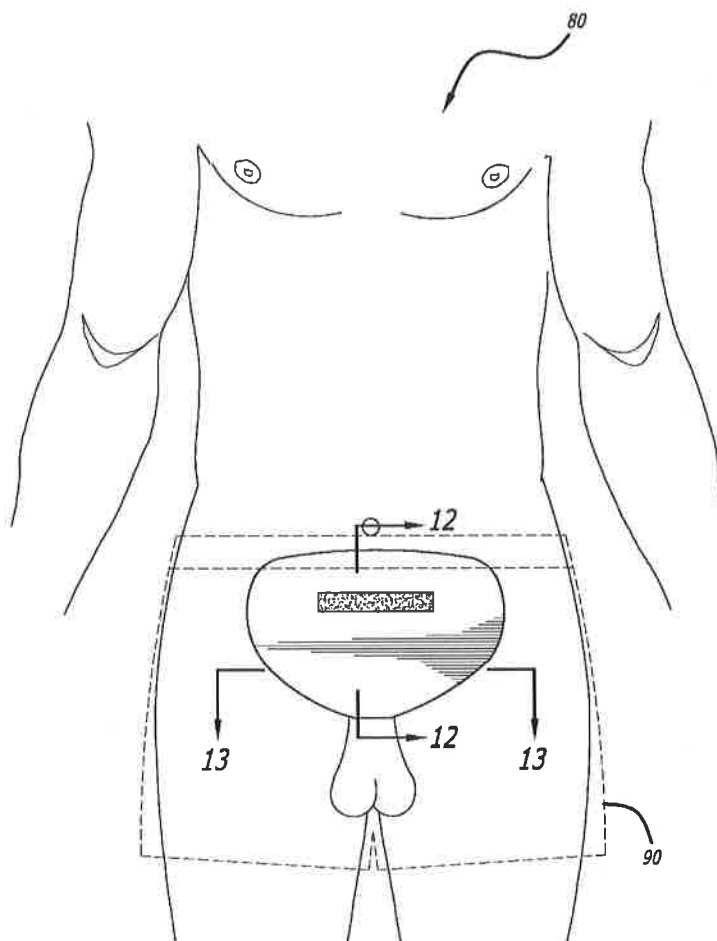


FIG. 1

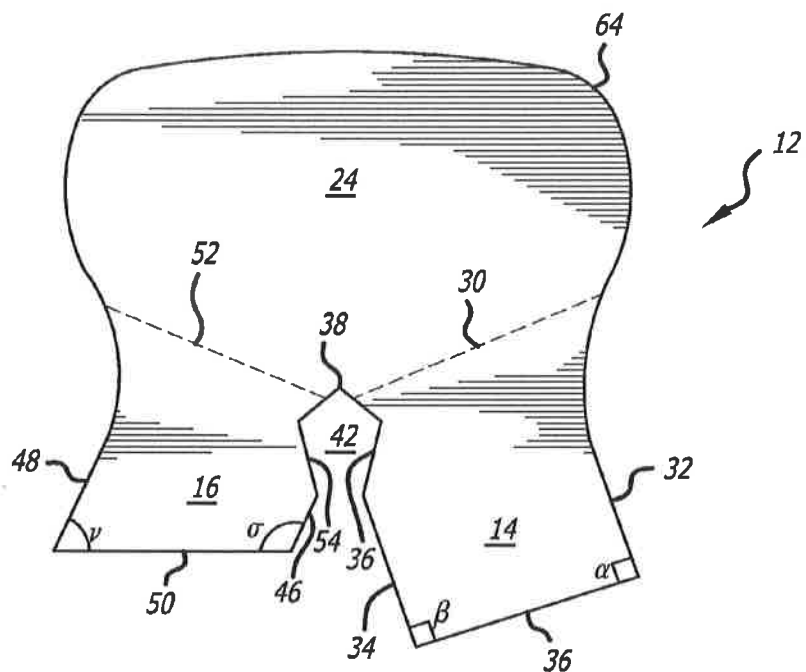


FIG. 2

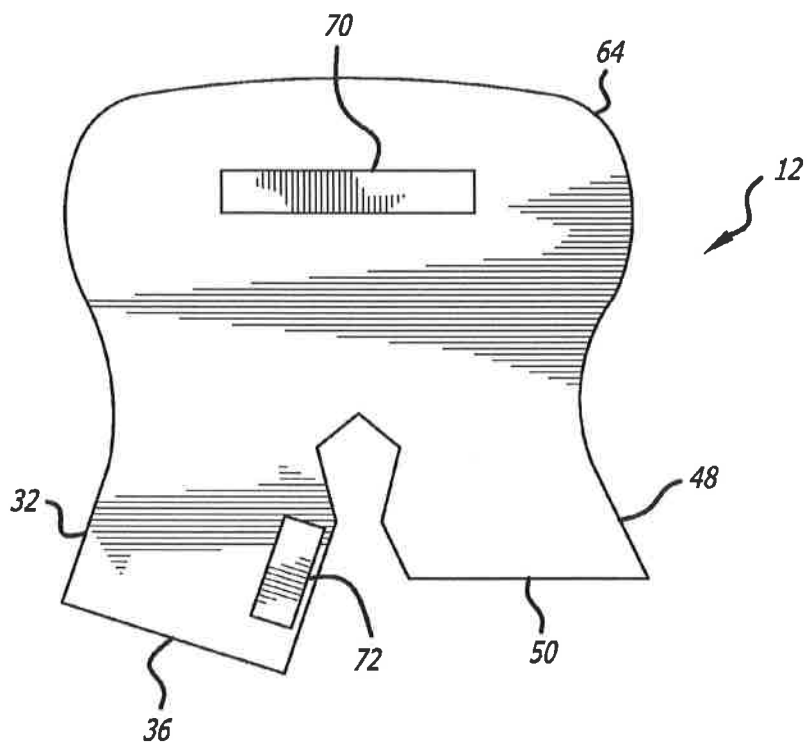


FIG. 3

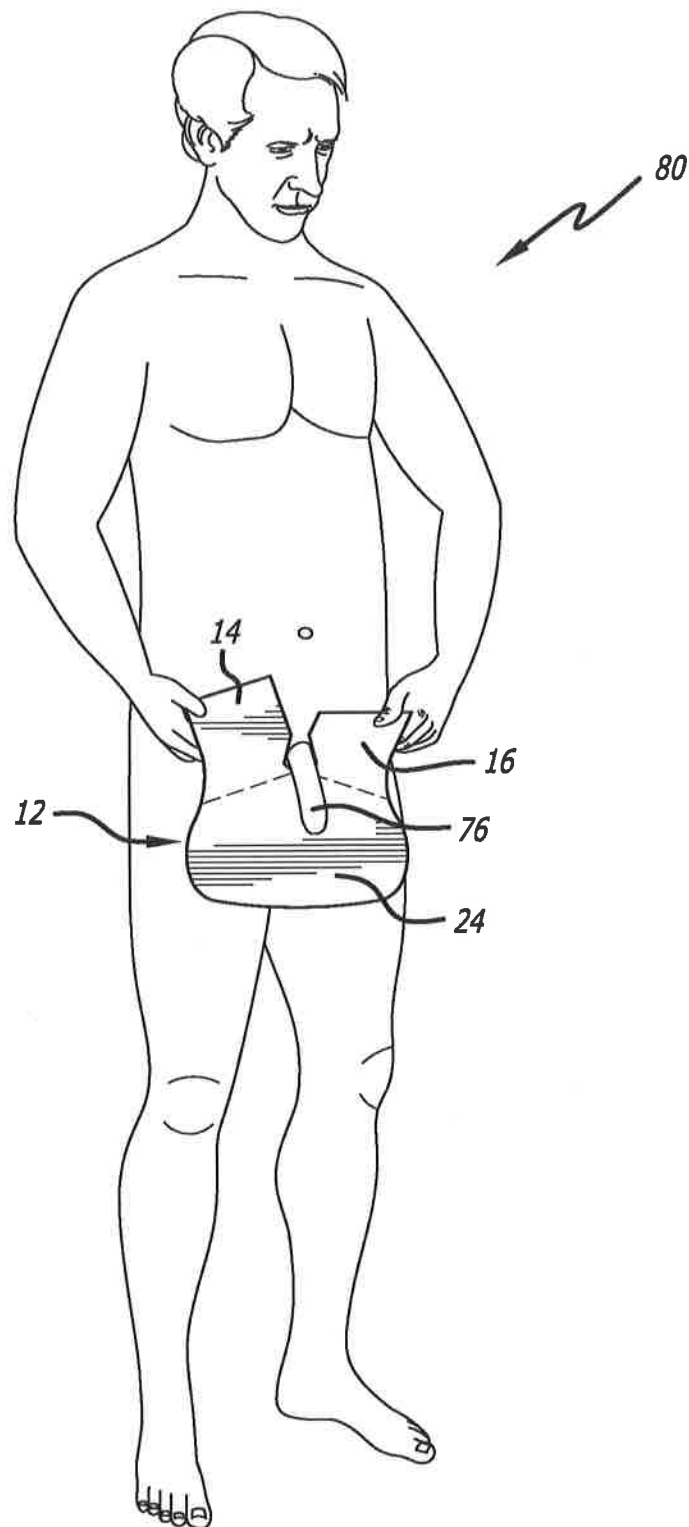


FIG. 4

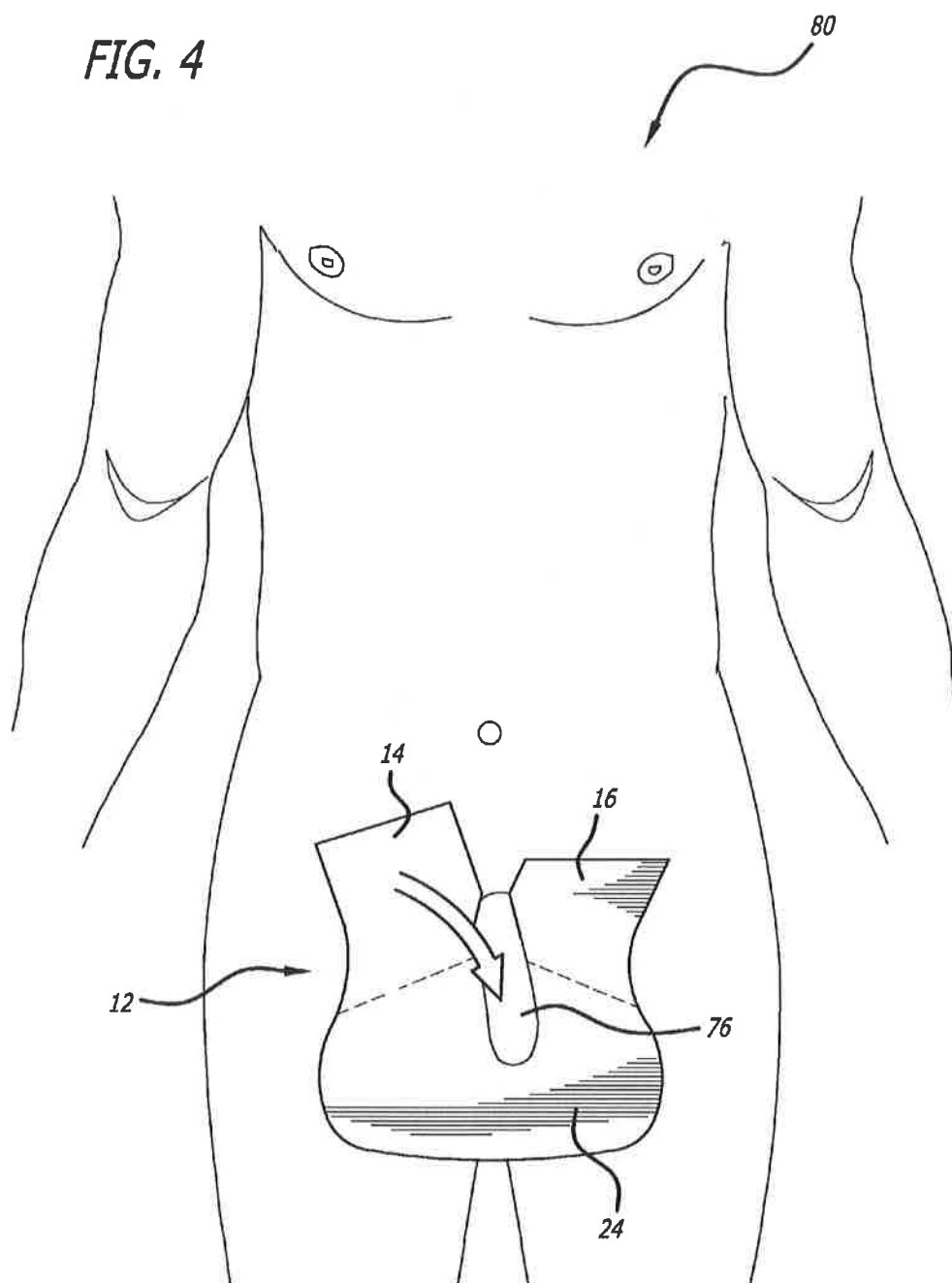


FIG. 5

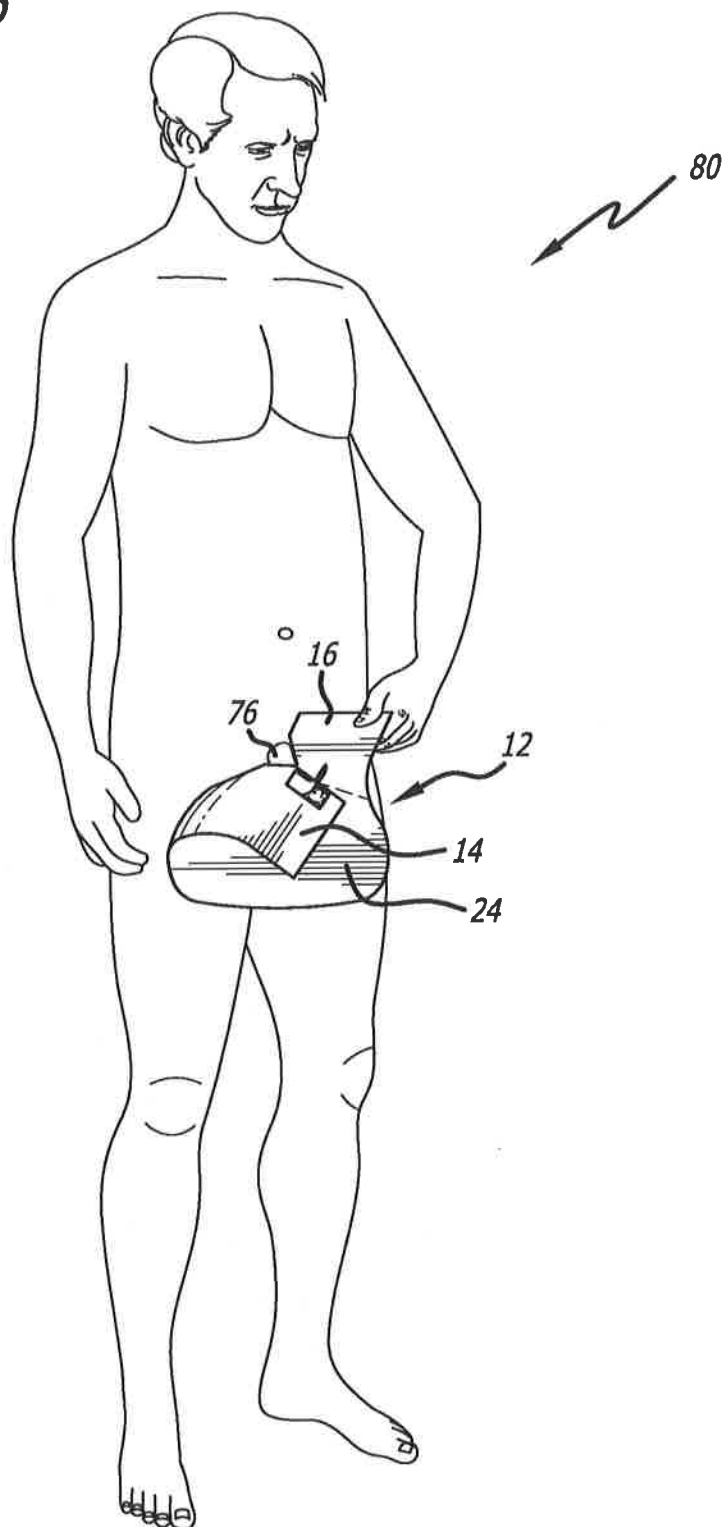


FIG. 6

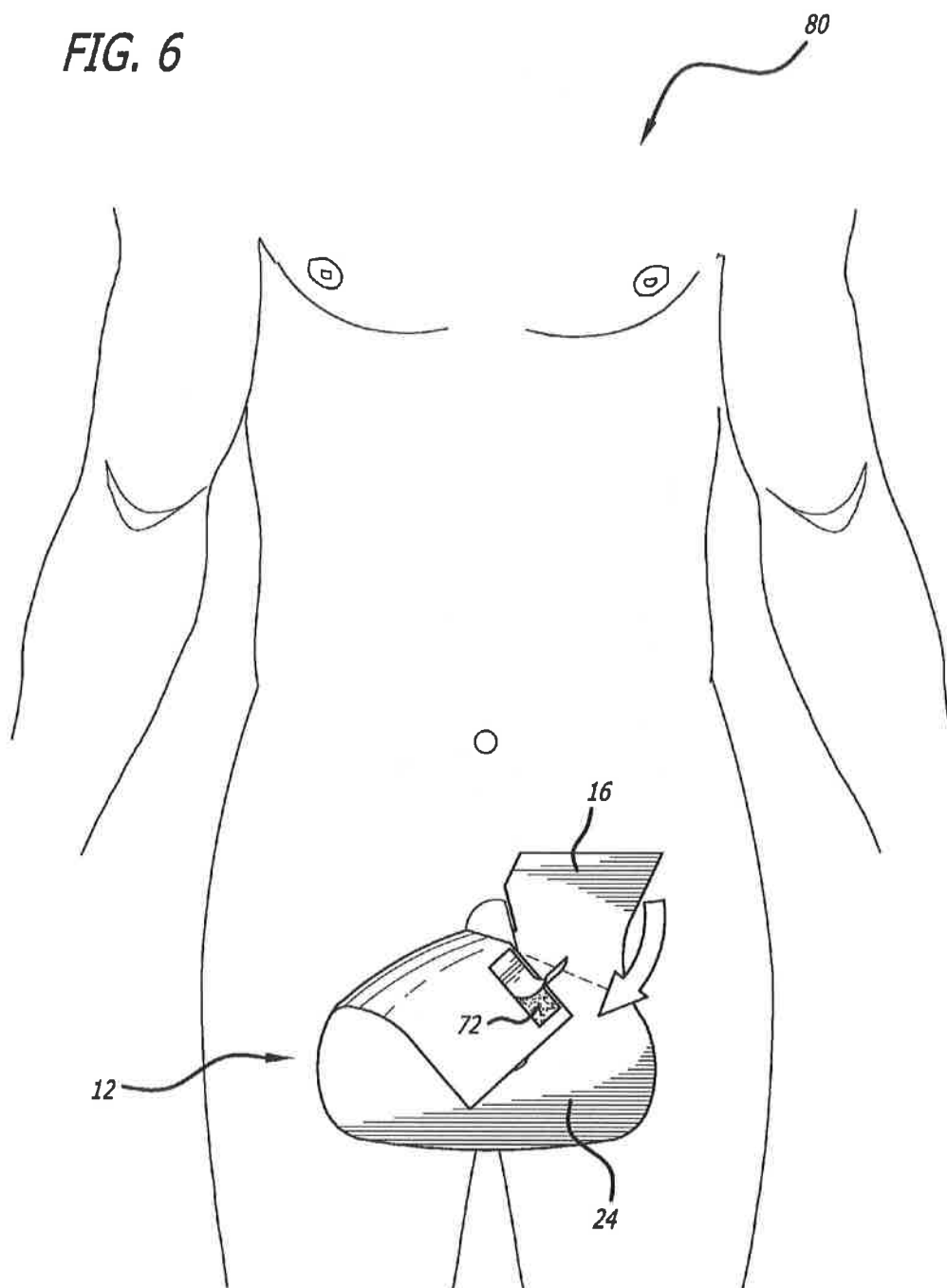


FIG. 7

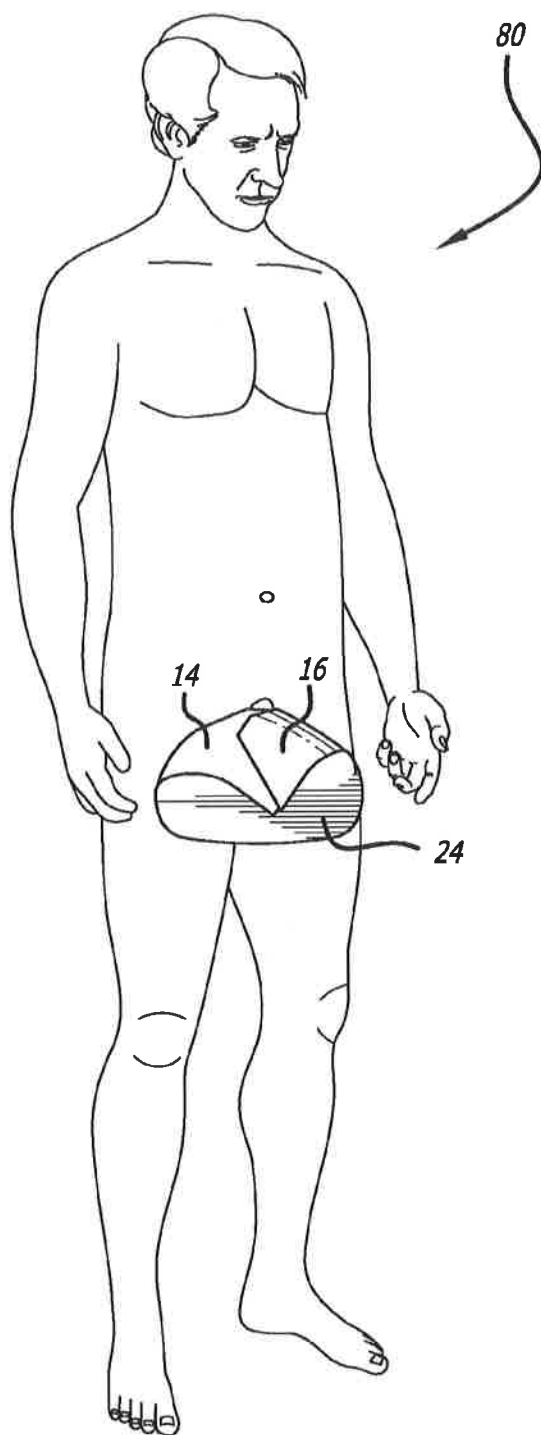


FIG. 8

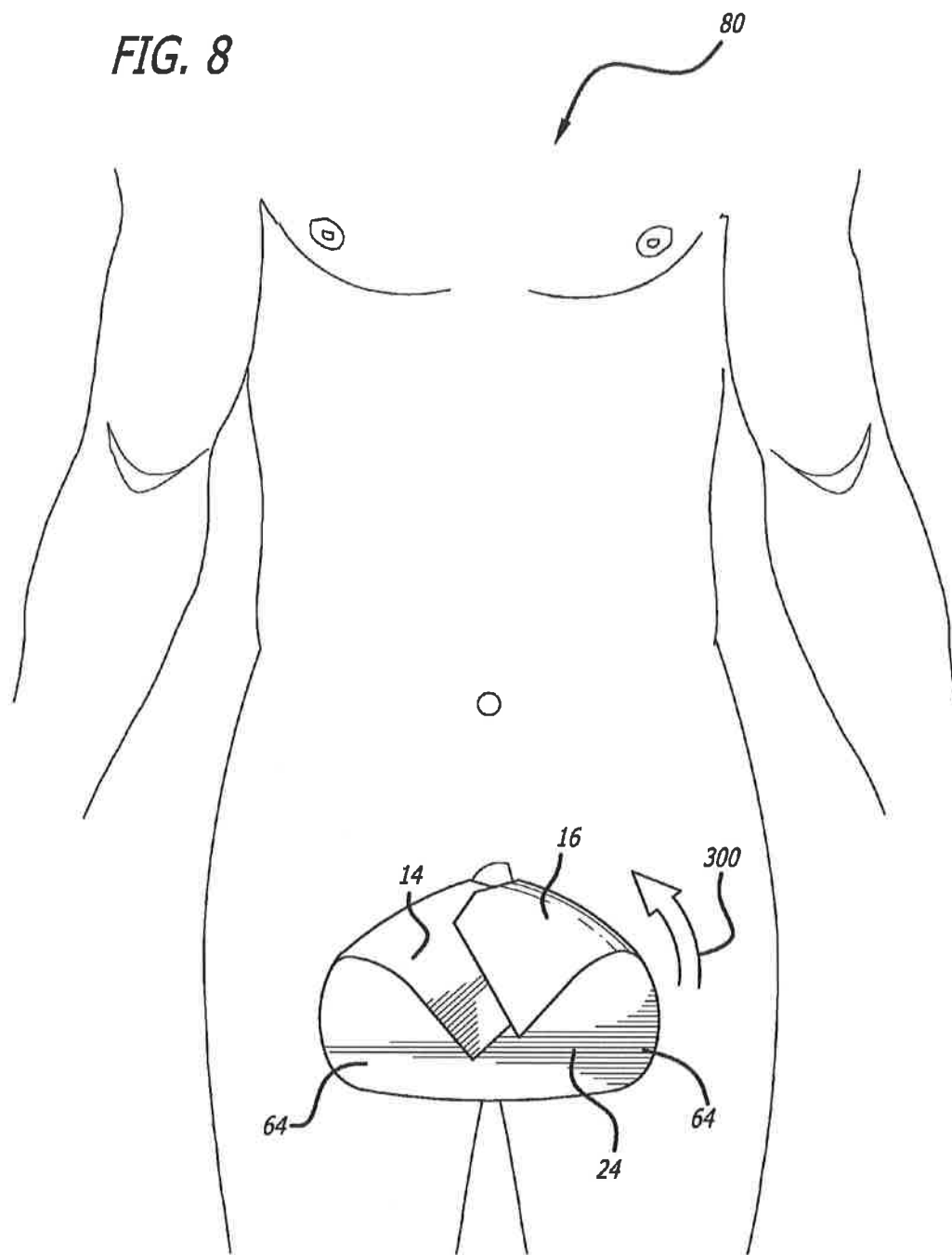


FIG. 9

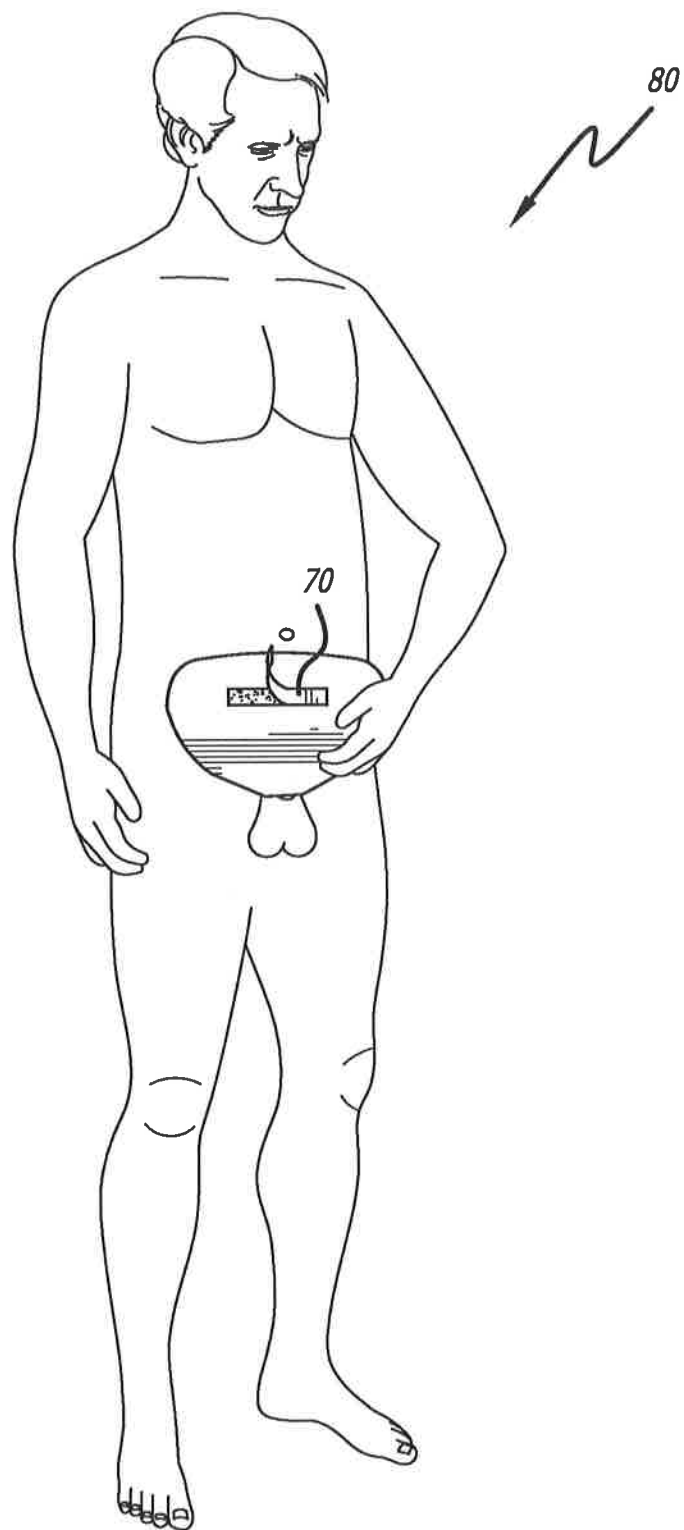


FIG. 10

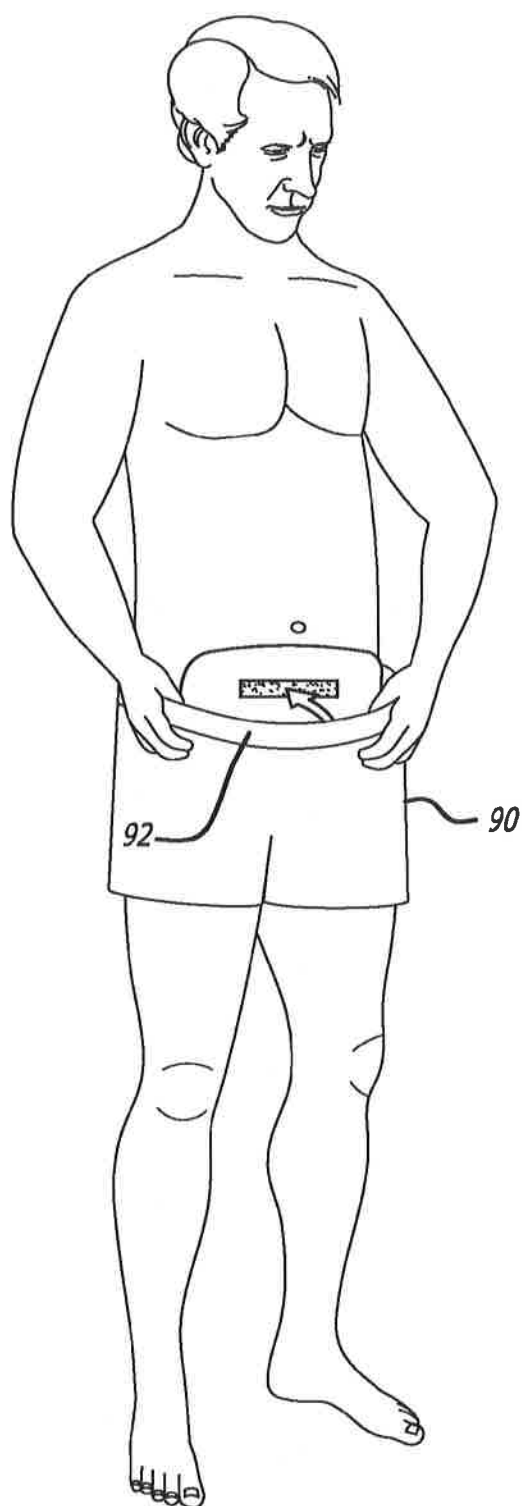
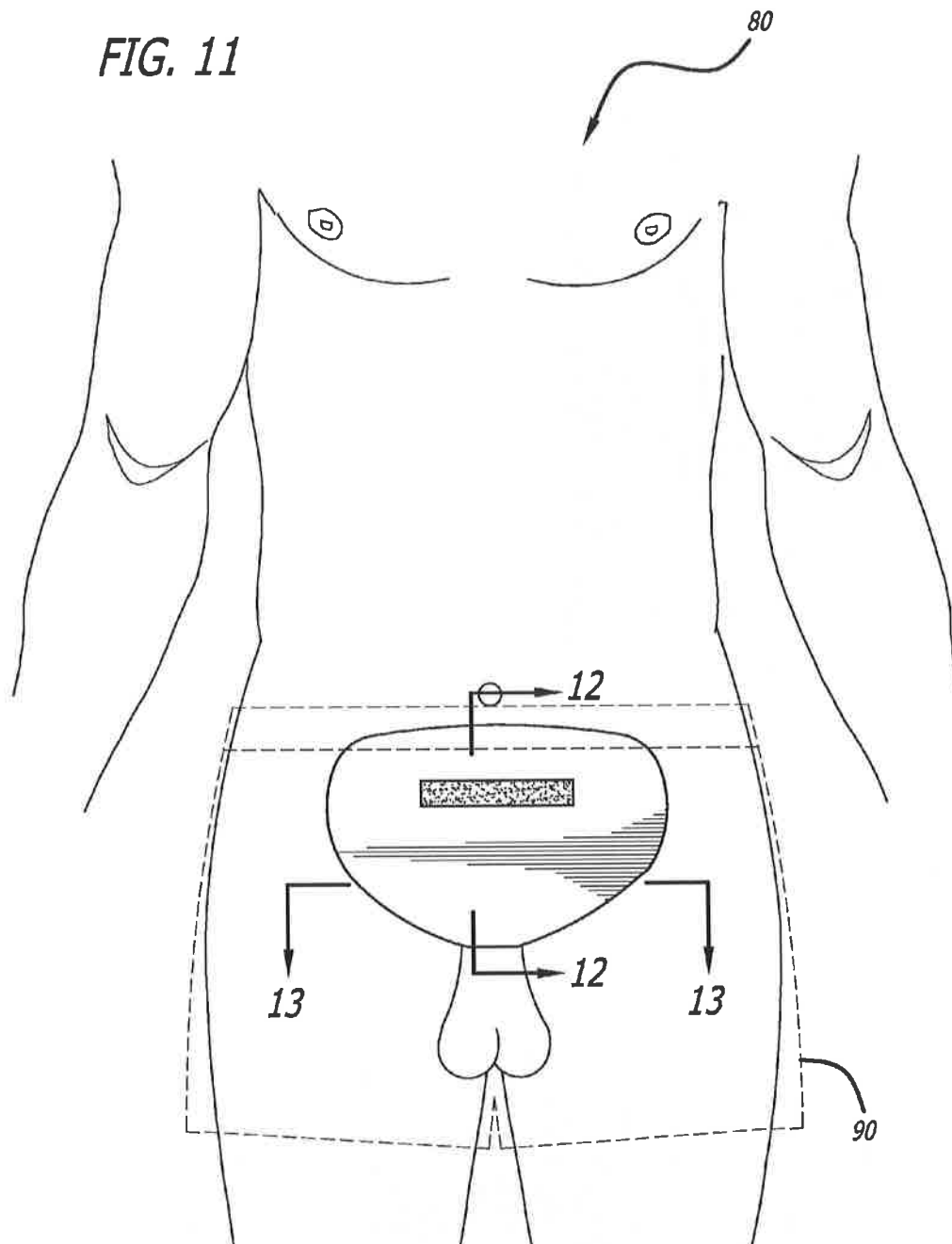


FIG. 11



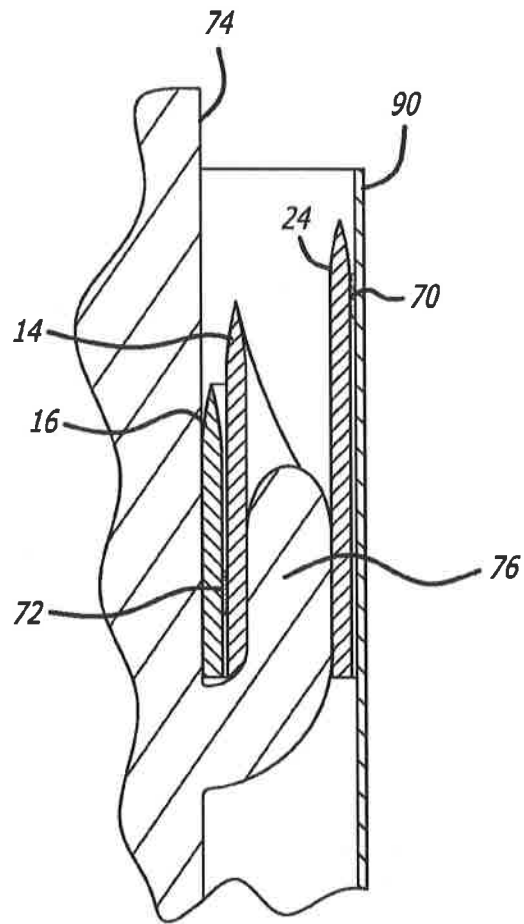


FIG. 12

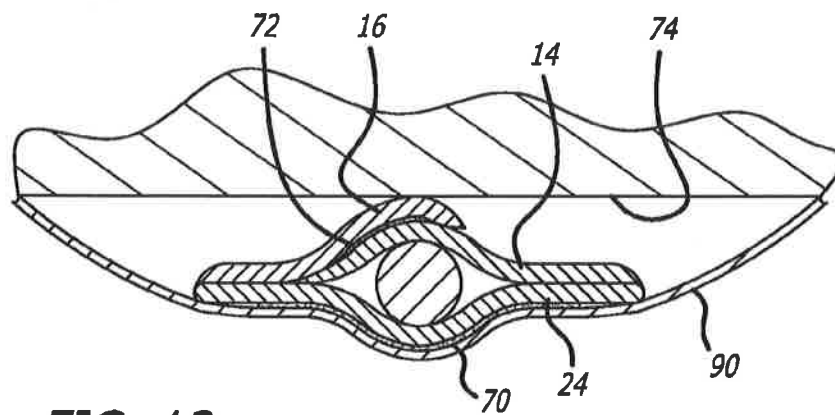


FIG. 13

FIG. 14

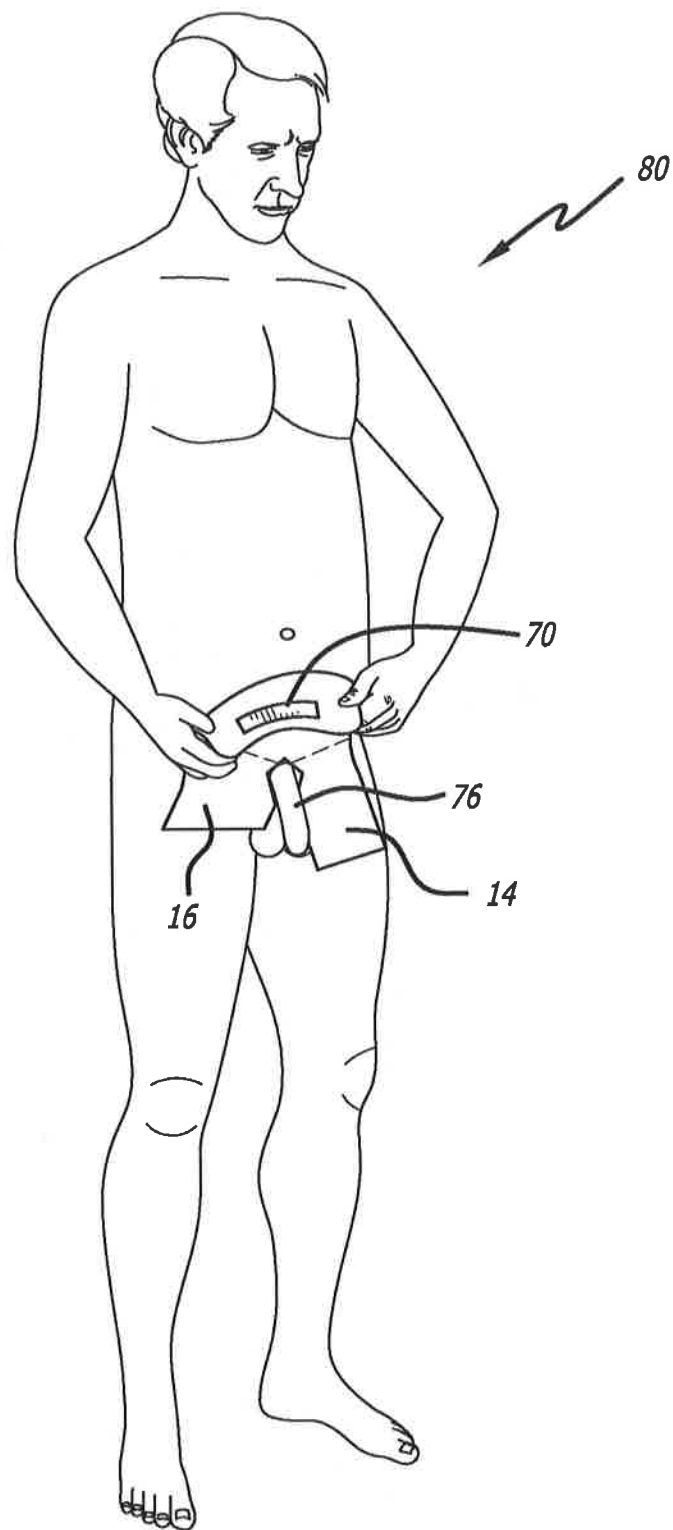


FIG. 15

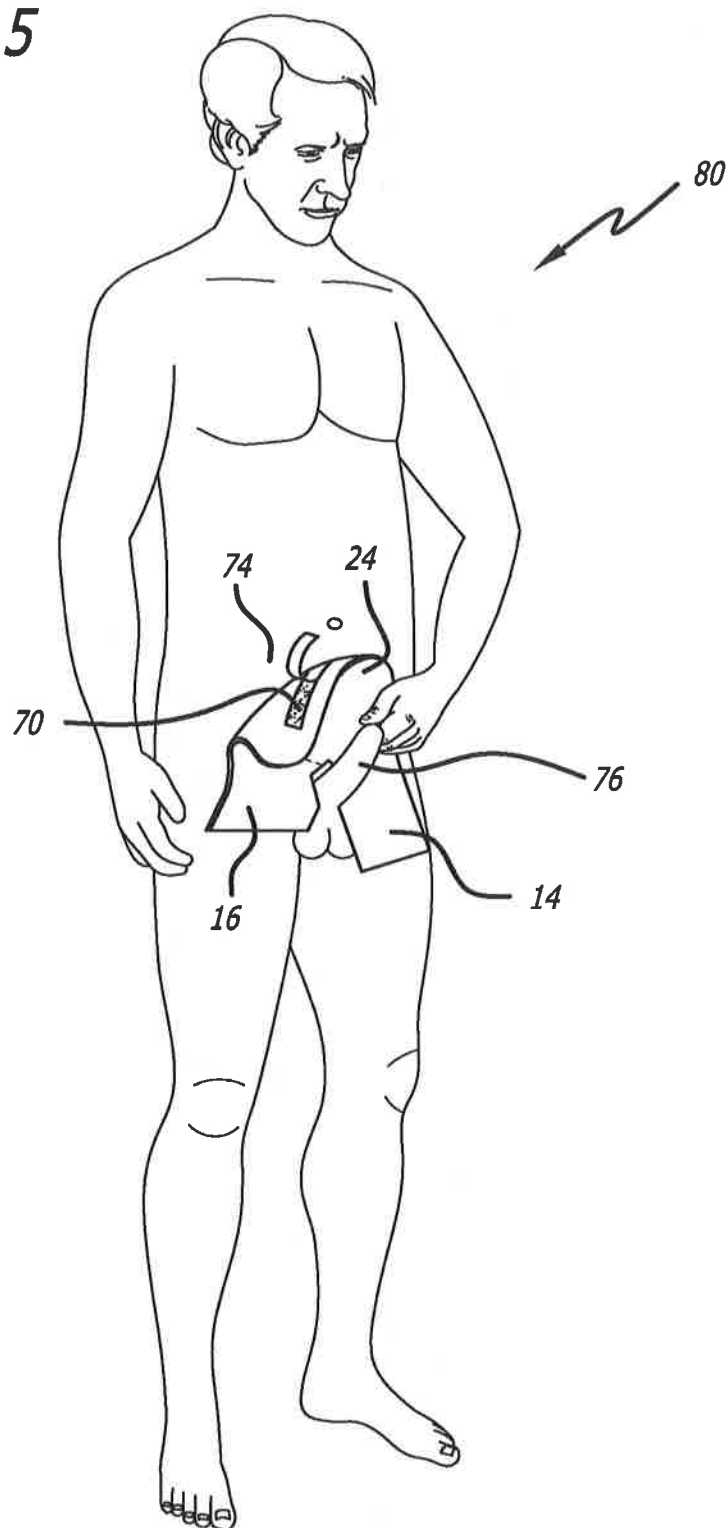


FIG. 16

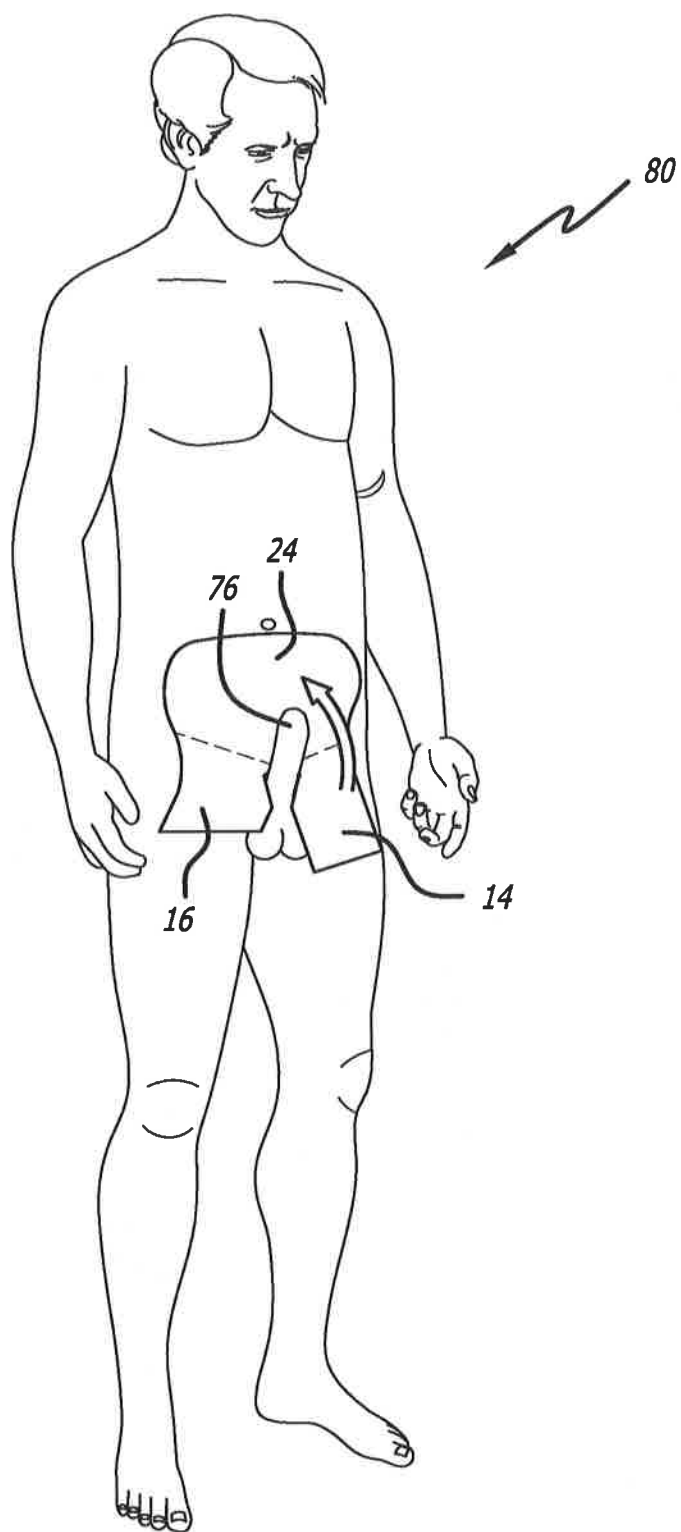


FIG. 17

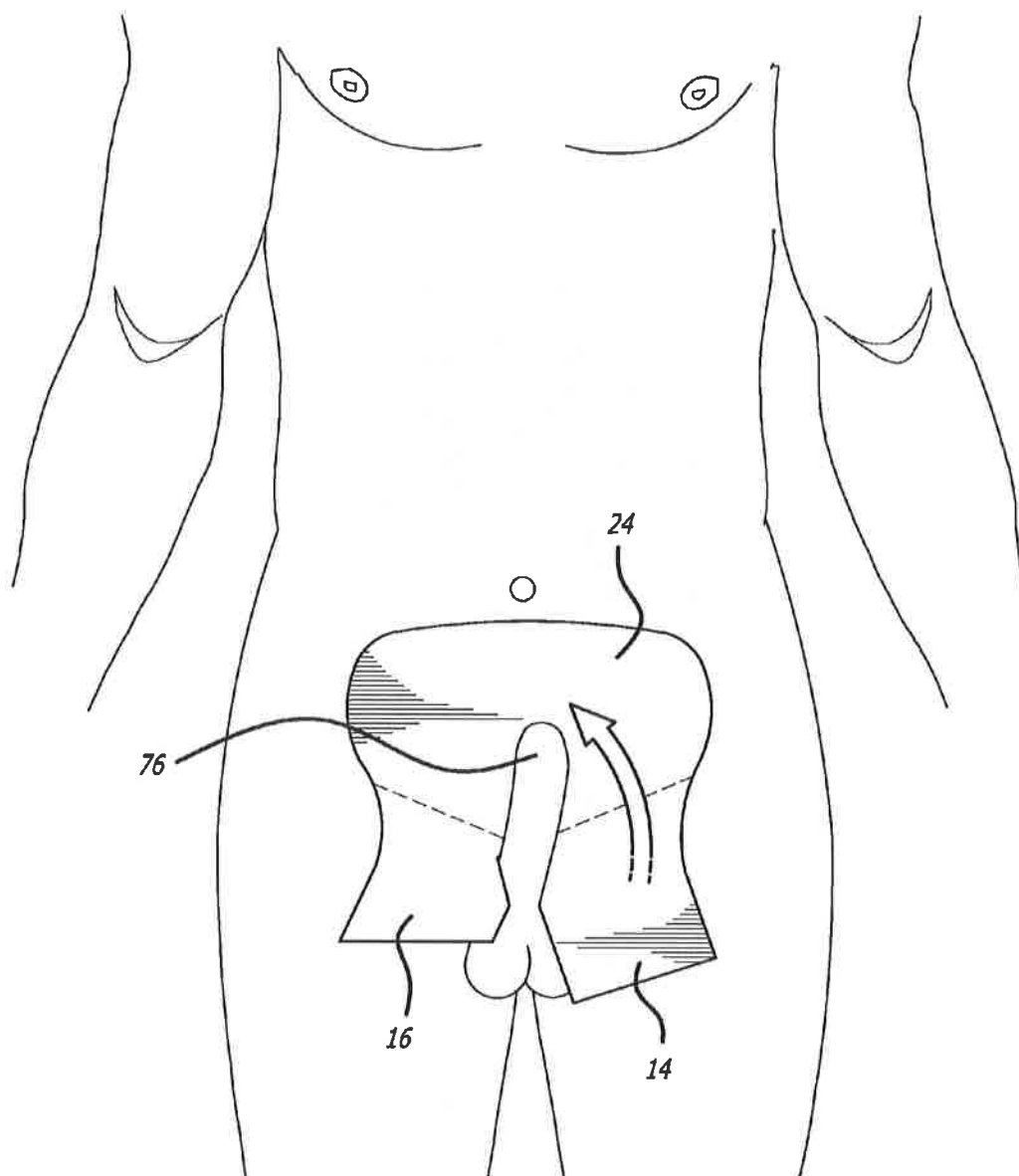


FIG. 18

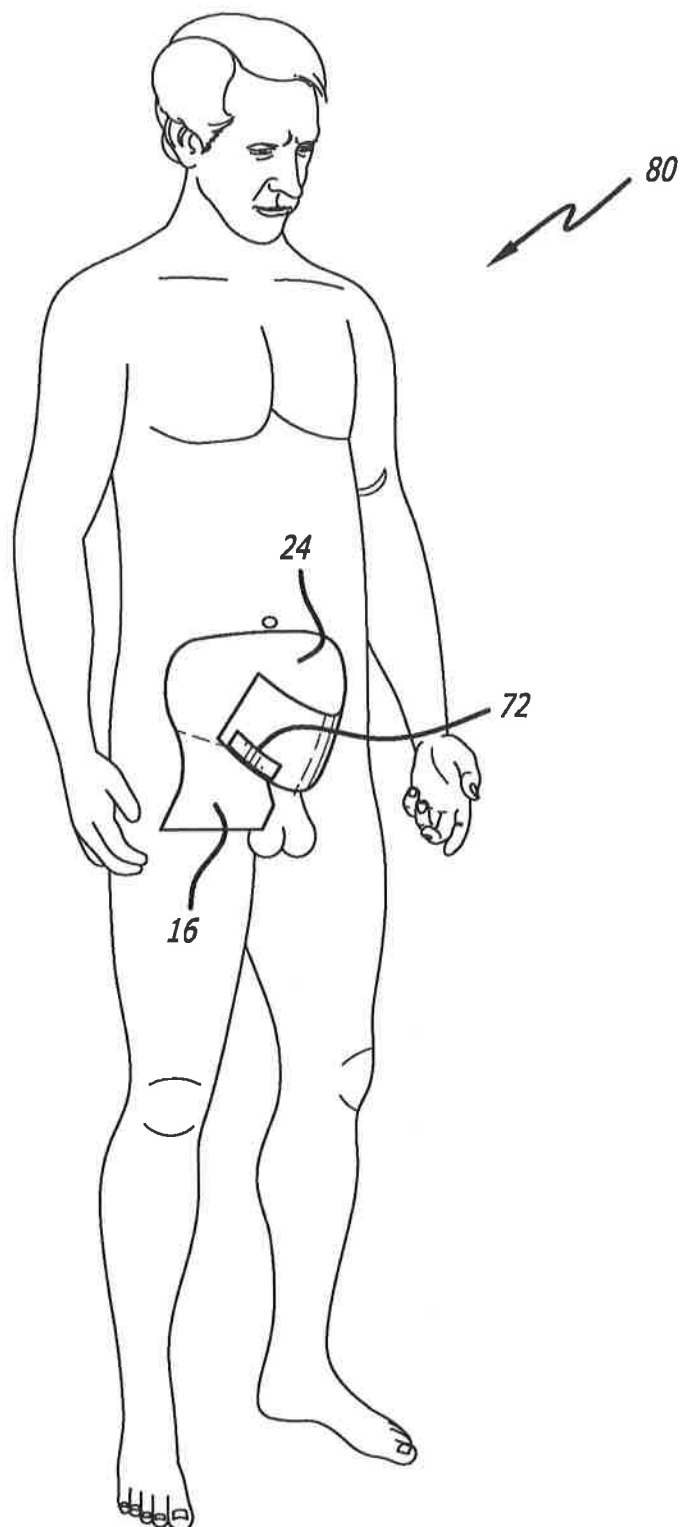


FIG. 19

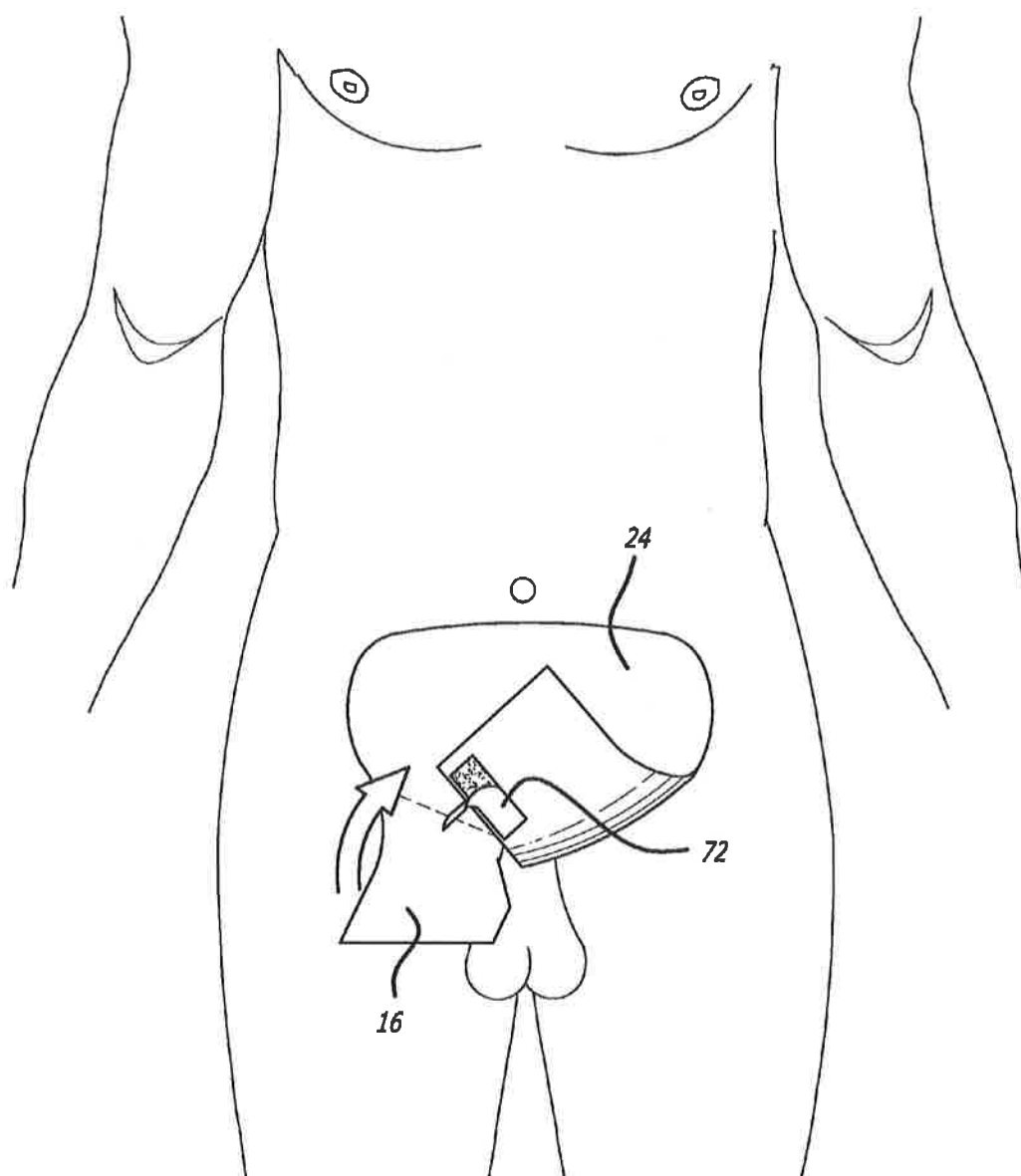


FIG. 20

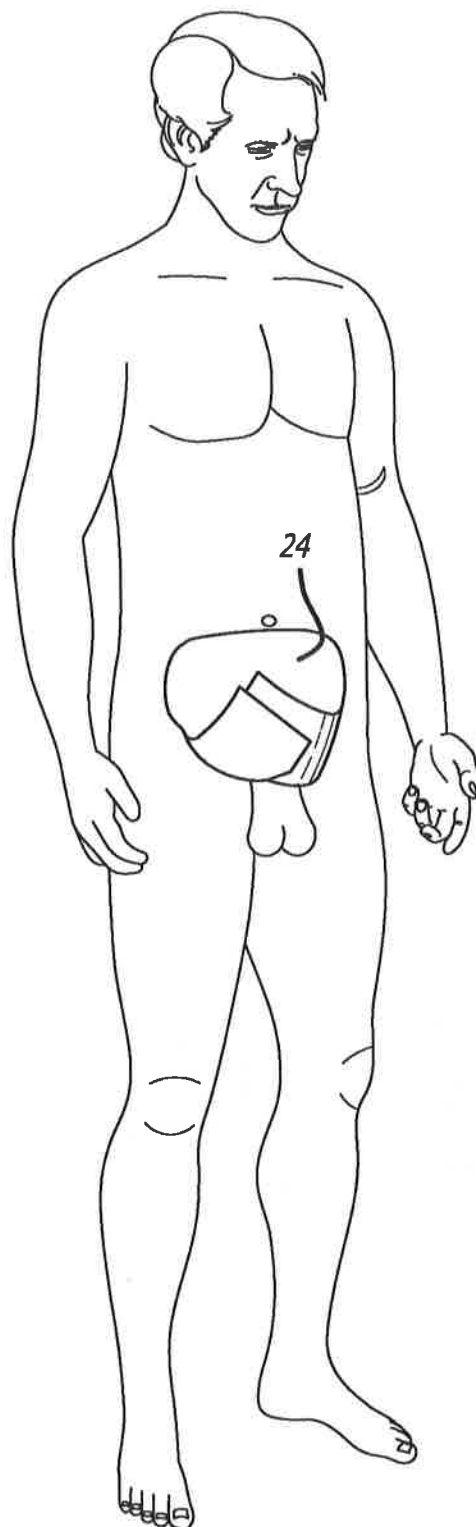
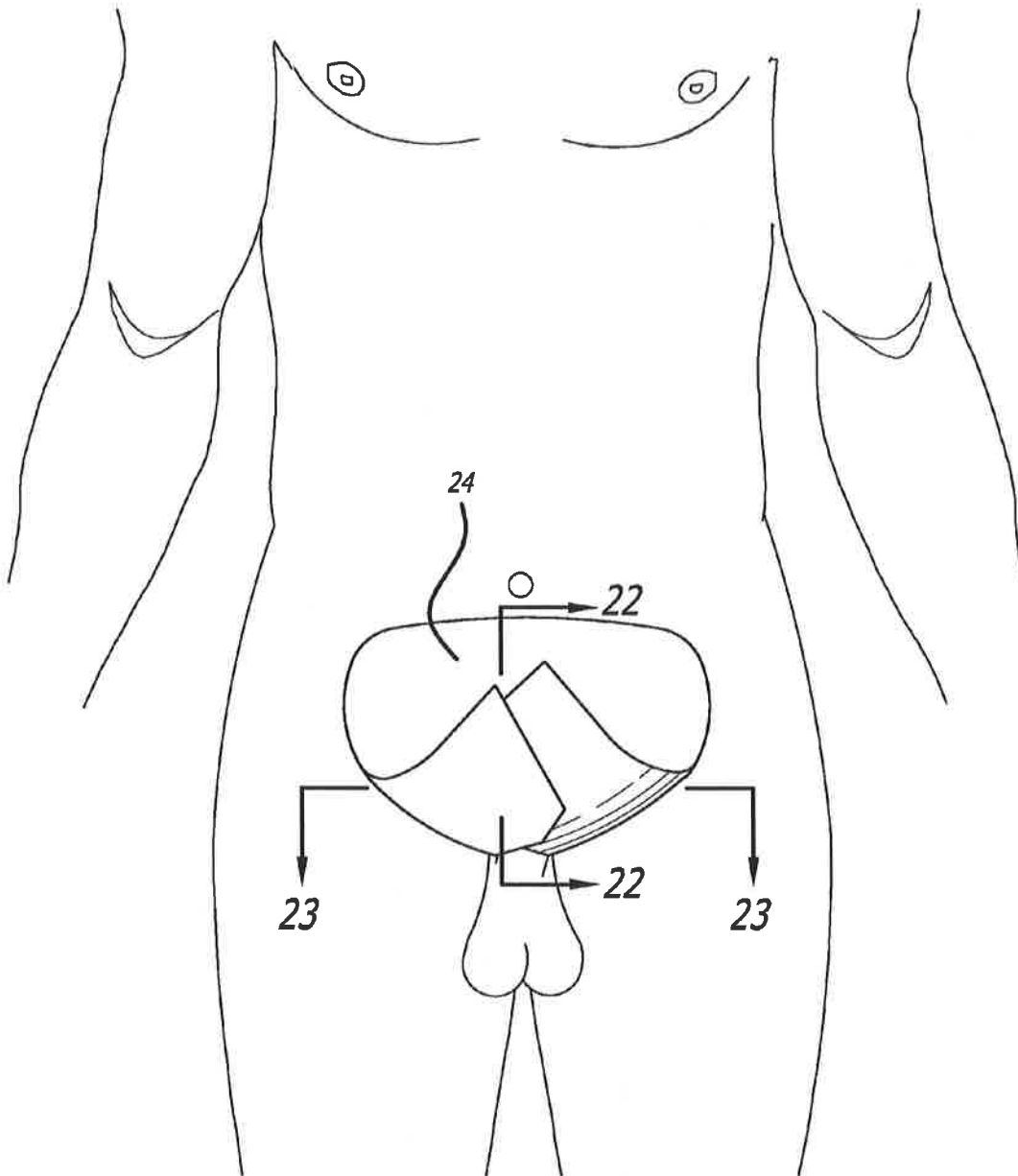


FIG. 21



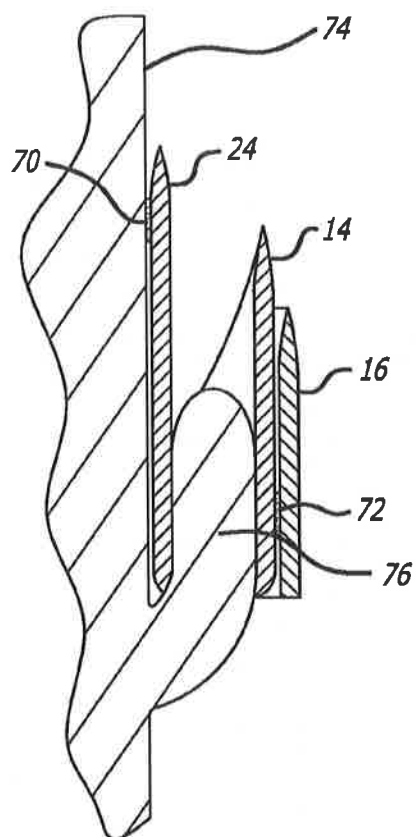


FIG. 22

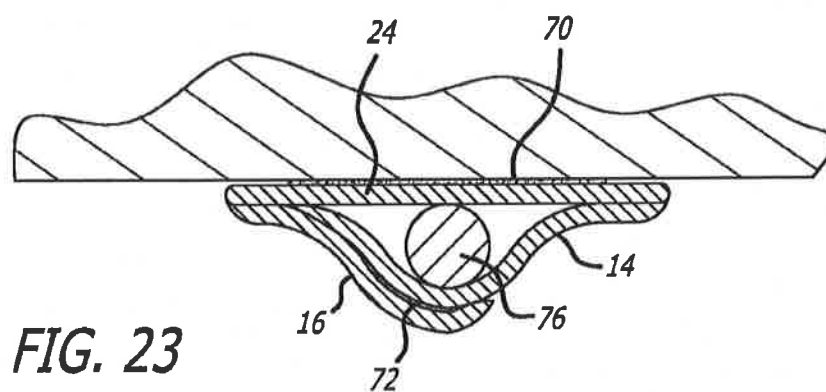


FIG. 23

URINE ABSORBENT PAD

CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application claims priority from U.S. Provisional Patent Application No. 61/998,947, filed Jul. 14, 2014, the contents of which are incorporated by reference herein in its entirety.

BACKGROUND

[0002] The present invention relates generally to adult incontinence, and more particularly to a urine absorbent pad designed for a male that provides an easy and convenient manner to more safely replace soiled protective wear than the prior art.

[0003] Urinary incontinence (UI) is defined as the involuntary loss of urine. In both men and women, age is a consistently reported risk factor for UI; however, it is not considered a normal consequence of aging. Overall, UI affects up to 30% of community dwelling older adults and more than 50% of nursing home residents. Despite its high prevalence, up to one-half of cases may not be reported because individuals with UI may not seek medical intervention. Embarrassment and the perception that UI is an expected consequence of aging are common factors in the failure to seek a solution or treatment. That reluctance is particularly strong in men, who often deem the problem to be associated with a loss of masculinity.

[0004] Urinary incontinence is categorized according to pathophysiology and clinical presentation. The four main categories are (1) stress urinary incontinence (SUI), (2) urge urinary incontinence (UUI), (3) overflow incontinence, and (4) functional incontinence. Mixed types of incontinence are common and may complicate diagnosis and treatment because of overlapping symptoms. Studies have found that UI significantly affects psychological well-being and health care-related quality of life. Urinary incontinence may impair sexual function, restrict activities, interfere with interpersonal relationships, decrease self-esteem, increase caregiver burden, increase financial burden, and cause anxiety or depression. It is a common precipitant of institutionalization in older adults.

[0005] Because of current demographic trends, UI is an increasingly common medical and socioeconomic problem. One place where the issue arises with great propensity is nursing homes, where older patients often suffer moderate to severe UI due to a variety of physiological conditions. In men, incontinence is often related to prostate problems or treatments that become exacerbated in the elderly. Certain medical conditions, particularly those affecting the brain or nervous system, such as Alzheimer's, Parkinson's, Dementia, Multiple Sclerosis and brain damage, can also lead to incontinence. This is due to the nerve passageways from the brain becoming damaged. The result can be either an overactive bladder (the need to go often and frequently) or an underactive bladder (ineffective emptying leading to leakage). Diabetes and or a stroke can also bring on incontinence.

[0006] With aging, bladder capacity decreases, ability to inhibit urination declines, involuntary bladder contractions (detrusor overactivity) occur more often, and bladder contractility is impaired. Thus, voiding becomes more difficult to postpone and tends to be incomplete. Postvoid residual volume increases in as much as ≤ 100 mL (normal < 50 mL). A

weakening of the endopelvic fascia often results as well. In men, the tendency for the prostate to enlarge with age causes the partial obstruction of the urethra, leading to incomplete bladder emptying and strain on the detrusor muscle. These changes occur in many normal, continent elderly males and may facilitate incontinence but do not cause it.

[0007] One challenge associated with male incontinence is the necessity for changing clothing, bedding, and other items that may become soiled due to an incontinence patient. When a disabled patient has voided his urine, the caregiver must remove the patient's clothing and bedding while the patient is in a prone position. This can be challenging to the caregiver, who must lift the patient to remove the clothing and bedding while simultaneously trying to extract the soiled garments and sheets, blankets, etc. If the patient is large or overweight, the problem becomes magnified even greater.

[0008] Elderly patients and residents of nursing homes who are immobile or have reduced mobility are at high risk for developing pressure ulcers (bed sores). This condition is made worse if the patient is incontinent because the moisture from urine causes the surface of the skin to become irritated and infected. For this reason, it is important to prevent urine from remaining in contact with the skin for any extended period of time, and that it be removed as soon as possible.

[0009] The U.S. Census Bureau estimates there are 76.4 million baby boomers, and the oldest of this generation, which includes those born between 1946 and 1964, are over 65 years old. For many of these people, adult diapers are a way to ameliorate the effects of moderate to severe incontinence. Adult diapers are a \$7 billion global market, and sales have grown more than 8 percent over the past five years due to this increasing number of baby boomers entering their 70s and 80s. This trend appears to be rising as the stigma of wearing protective undergarments becomes less and the popularity of these products grow.

[0010] However, for males, particularly invalid males, diapers can be an unsatisfactory solution for several reasons. First, the previously raised issue that, once soiled, the patient must be changed like an infant by a caregiver who may not have the strength to lift a full grown adult male. Changing a diaper can lead to the patient being moved in positions that may strain or injure the patient, particularly when moved by a caregiver with inadequate strength to properly maneuver a full grown adult male. Second, unlike females where the origin and direction of the urine stream is fairly predictable, males tend to urinate from different positions, angles, and directions, and this inconsistency leads to leakage. This is especially true when the patient is lying on his back and suffers incontinence, because a gap in the top of the diaper at the patient's stomach can provide an opening where urine can leak outside of the diaper, leading to the issues raised above. Patients who go frequently can get ignored because of the challenges in changing the patient, leading to health issues as well.

[0011] The art is in need of a simple, cost effective device that is directed to the problem of male incontinence, and can reduce the opportunity for leakage as well as the frequency in which a patient needs to be moved when an incontinent event occurs. The present invention is directed to this objective.

SUMMARY OF THE INVENTION

[0012] The present invention is directed to a disposable urine trap in the form of a foldable pad that envelops the male genitalia and closes around the penis to form a barrier to

prevent urine from escaping the trap. The pad includes an asymmetric pair of wings that are separated by a void attached to the main body of the pad. The first wing is preferably rectangular in that the distal angles are substantially right angles with parallel side edges and a perpendicular distal edge, and has a length that exceeds a length of a second wing, which terminates so that the distal edge of the second wing is angled to form an obtuse and an acute angle with respect to its generally parallel sides. The void between the two wings may be formed by eliminating a triangular component from each inner side of the first and second wings to establish a "kite" or "diamond"-shaped void in the pad. The void in the pad may receive the patient's penis at its base such that the penis extends over the widest and thickest portion of the pad and the head of the penis occupies the middle area of the pad. Once the pad is arranged so that the penis is laid over the pad through the void, the first wing is folded over the top of the penis along a crease where the void lies to overlay the penis and sandwich the penis between the pad and the first wing. The angle that the first wing protrudes away from the pad is selected so that the inner side edge of the first wing aligns with a proximal edge of the second wing when folded over penis as described above. The folding of the first wing closes the void so that the void now encircles the base of the penis as the penis lays on the pad. Once the inner side edge of the first wing is placed against the proximal edge of the second wing, the second wing is then folded over the first wing such that the distal edge of the first wing and the distal edge of the second wing are substantially orthogonal. The asymmetric nature of the first and second wings allow the configuration described above, such that the wings cooperate to overlay the penis can capture the penis between the two wings and the thick portion of the pad. An adhesive strip on the opposite side of the first wing attaches to the second wing and secures the urine trap in the closed configuration. The corners of the pad can then be folded over the outer side edges of the adjacent first and second wings to close the trap and envelope the penis inside the pad.

[0013] A benefit of the present invention is that it can be placed inside a diaper as well as an undergarment. If a male patient should urinate in the urine trap, a caregiver can simply remove the urine trap from the diaper or undergarment without the need to undress, change the diaper, or move the patient. A new urine trap can be placed on the patient with little or no disturbance to the patient and without rolling the patient over, lifting the patient, or undressing the patient. Moreover, the configuration of the urine trap prevents any opportunity for leakage at the patient's waistline where most diapers can leak for male wearers because of the way the present invention envelopes the penis and the way the corners fold over the pad to eliminate gaps.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 is a top view of a first preferred embodiment of the present invention;

[0015] FIG. 2 is a bottom view of a the embodiment of FIG. 1;

[0016] FIG. 3 is an elevated, perspective view of the present invention shown on a male user;

[0017] FIG. 4 is an enlarged, perspective view of the present invention;

[0018] FIG. 5 is an elevated, perspective view of the present invention with the first wing folded;

[0019] FIG. 6 is an enlarged, perspective view of the present invention with the adhesive strip removed;

[0020] FIG. 7 is a perspective view of the second wing folded into place;

[0021] FIG. 8 is an enlarged, perspective view of corners being upturned to enclose the male genitalia;

[0022] FIG. 9 is an elevated, perspective view of the adhesive strip being removed so as to be applied to a garment;

[0023] FIG. 10 is an elevated, perspective view of the pouch adhered to an undergarment;

[0024] FIG. 11 is an enlarged, perspective view partially in shadow showing the pouch in place inside an undergarment;

[0025] FIG. 12 is a first cross sectional view of the pad in the pouch configuration;

[0026] FIG. 13 is a second cross sectional view of the pad in the pouch configuration; and

[0027] FIGS. 14-23 illustrate an alternate way of wearing the pad of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0028] FIG. 1 illustrates a plan view of a first preferred embodiment of the present invention, comprising a pad 12 generally formed by a base 24 and first and second wings 14, 16.

[0029] The pad 12 is formed by enclosing fluid absorbent material between an fluid impervious outer lining 18 and a soft fluid transmissive inner lining 20. The outer lining 18 may be made of a polyethylene film or other low cost, bio-compatible material to seal in the urine and prevent leakage outside of the trap. The inner lining 20 that bears against the user's skin may be made of polypropylene or suitable non-abrasive, non-toxic material that transmits fluid while largely staying relatively fluid free at the surface. The absorbent center 22 may contain wood pulp and super-absorbent polymers such as sodium polyacrylate. Sodium polyacrylate is effective in wicking away fluid from the skin through the inner lining 20, and can soak up to 30 times its weight in urine. The absorbent center is bordered around its edges by adhering the inner lining 20 and outer lining 18, and the matching of the two mating linings 18,20 can be arranged to give the pad a rounded shape in the undeformed condition. That is, a shallow "bowl" or saucer is created by the fit of the two mating edges such that the edges of the pad are raised with respect to the base 24. The base 24 is particularly padded at this middle portion, which is where the introduction of urine is expected in most cases.

[0030] As further seen in FIG. 1, a first wing 14 extends outwardly from a crease 30. The first wing 14 includes an outer side edge 32, an inner side edge 34, and a distal edge 36. The side edges 32,34 are substantially parallel, and the distal edge substantially perpendicular thereto, such that right angles α, β are formed. A generally triangular portion 36 of the inner edge 34 is removed at the juncture 38 of the first and second wings 14, 16, creating half of a void 42 through which the penis 76 is inserted.

[0031] A second wing 16, which in a preferred embodiment has a length that is approximately one half a length of the first wing 14, protrudes from a crease 52 and includes an inner side edge 46, outer side edge 48, and distal edge 50. As with the first wing, the inner side edge 46 and outer side edge 48 are substantially parallel, but the distal edge 50 forms an acute angle ν with the outer side edge 48 and an obtuse angle σ with the inner side edge 46. A triangular portion 54 of the inner

edge 46 is removed at the juncture 38 of the first and second wings 14, 16, creating the other half of the void 42, which is thusly formed in a shape of a diamond based on the two triangular resections 36, 54 on the inner edges 34, 46.

[0032] FIG. 2 illustrates a rear view of the pad 12, including a peel away adhesive strip 70 that can be used to secure the pad to the patient or a waistband of the patient. A second adhesive strip 72 is used to hold the pad in a pouch, or folded position to envelope the patient's genitalia 76.

[0033] FIGS. 3-13 illustrate a first method for how the pad 12 encloses the male organ and creates a cocoon-like wrap around the organ to collect any urine and prevent leakage. With the patient 80 preferably standing or lying on his back, the pad 12 is placed on the user's thighs with the first wing 14 on the upper right thigh/abdomen and the second wing 16 over the user's left thigh/abdomen. The user's penis 76 is placed in the void 42 between the first and second wings 14, 16 so that the base of the penis is at the juncture 38 and the head of the penis is in the central portion, or base 24 of the pad 12 (FIG. 4). The first wing 14 is then folded along crease 30 over the top of the penis such that the inner side edge 34 is approximately along crease 52 (FIGS. 4, 5). The placement of the first wing 14 in this position covers the penis 76, and exposes the adhesive strip 72 adjacent the second wing 16. The protective cover is removed from the adhesive strip 72 (FIG. 6), and the second wing 16 is then folded at crease 52 over the first wing 14 such that the distal edge 50 is approximately parallel to and adjacent to the side outer edge 32 of the first wing 14 (FIG. 7). This configuration encloses the penis 76 in the void 42 and creates a leak-proof pouch over the penis. The first and second wings 14, 16 overlap and cooperate to form a "V" over the penis (FIG. 8), and the corners 64 can then be folded over the "V" in the direction of arrow 300 (FIG. 8) to close the pouch like an envelope, eliminating any opportunity for urine to escape during urination. A double layer of protection created by the wings 14, 16 (FIGS. 12 and 13) reduce the opportunity for leakage and create a drier, more moisture-free environment for the user 80.

[0034] As shown in FIGS. 9-11, the urine trap 12 can be placed inside a diaper or underpants 90 of a patient 80 without the need to fully undress the patient. If the patient should have incontinence while wearing the urine trap, it can be removed easily and replaced by a new pad with minimal jostling or movement of the patient. The larger adhesive strip 70 can be placed on the backside of the pad to secure the pad to the patient's waistband 92 of his pants or underwear 90 to maintain the urine trap in position. Alternatively, a plurality of adhesive strips can be secured to the back side or front side of the urine trap to secure it to a gown or other more loose-fitting clothing.

[0035] The unique shape of the first and second wings have multiple benefits over the existing prior art. First, the wings minimize the amount of material needed to establish a secure and reliable pouch, and eliminate excess flaps that can catch on garments and inadvertently open the pouch. For example, the inner side edge 46 of the second wing 16 aligns with the base of the first wing 14 at the crease 30 when the second wing 16 is folded over the first wing 14. Similarly, the inner side edge 34 of the first wing 14 aligns perfectly with the base of the second wing 16 at the crease 52 when the first wing 14 is folded over the penis. The alignment of the inner edges against the opposite crease maximizes the volume of the pouch and eliminates excess wing material bunching up or contacting the penis. The novel shape aligns the edges of the

wings to ends of the pouch itself, creating a perfectly formed and reliable pouch with no excess material. Second, cut-outs 36, 54 form a more comfortable opening through which the wearer's penis is secured, reducing chaffing and skin irritation. By eliminating all excess material, the user can wear the urine trap under regular clothes as well without large, bulky bulges that can be created by traditional diapers. A taped border may extend along the wings from the respective creases to ensure that the edges mate more smoothly and prevent gaps that can cause leakage.

[0036] In an alternative embodiment as shown in FIGS. 14-23, the pouch can be applied and worn in a reverse manner. Advantages may be seen in this configuration depending on whether the user is prone or ambulatory. The adhesive strip may be secured to the user 80 in this embodiment, wear only a gown or other loose fitting clothing are worn and there is nothing else to which one can apply the adhesive strip.

[0037] The foregoing description is intended to be illustrative and not exclusive. That is, there are many variations and modifications that can be made to the foregoing descriptions and preferred embodiments that would be readily apparent to one of ordinary skill in the art, and the present invention is intended to include all such modifications and variations. Such modifications may include choice of materials, overall dimensions of the embodiment, etc. Accordingly, the scope of the present invention should not be limited to any specific embodiment, illustration, or description herein, but rather the scope of the invention should be determined by the appended claims using the plain and ordinary meaning of the words used therein.

I Claim:

1. A urine trap for a male, comprising:

an inner fluid transmissive layer, an absorbent layer, and a fluid impermeable layer cooperating to form a pad, the pad including:

a main absorbent region and first and second wings defining a gap between a portion of the first and second wings; the first wing separated from the main absorbent region by a first crease, the first wing having an outer side edge, an inner side edge, and a distal edge, the inner side edge having a triangular cut-out therealong, the outer side edge and the distal edge forming an angle α that is substantially 90° and the inner side edge and the distal edge forming an angle β that is substantially 90°; the first wing further comprising an adhesive sticker on an opposite side to the fluid transmissive layer;

the second wing separated from the main absorbent region by a second crease, the second wing having an outer side edge, an inner side edge, and a distal edge, the inner side edge having a triangular cut-out therealong adjacent the triangular cut-out of the inner side edge of the first wing and cooperating therewith to form a polygonal opening, the outer side edge and the distal edge forming an angle γ that is acute and the inner side edge and the distal edge forming an angle that is obtuse;

the trap formed when the first wing is folded about the first crease so as to align the inner side edge of the first wing along the second crease, and the second wing folded over the first wing so that the distal edge of the second wing is substantially aligned with the outer side edge of the first wing and the inner side edge of the second wing is substantially aligned with the first crease, thereby closing the polygonal opening, the adhesive sticker on

the first wing engaging the mating surface of the second wing to close the trap with a double layer of the first and second wings.

2. The urine trap of claim 1, further comprising a second adhesive strip on an opposite side of the main absorbent region's fluid impermeable layer.

3. The urine trap of claim 1, wherein a border from the first crease to the second crease along a perimeter of the first and second wings include a taped border.

4. The urine trap of claim 1, wherein a length of the first wing is approximately twice the length of the second wing.

5. The urine trap of claim 1, wherein an adhesive strip secures the urine trap directly to a user.

* * * * *

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PCT Intl. Appl. No. PCT/US2017/025121
Atty. Docket No.: EZMPI-96882
21 September 2018

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE – RECEIVING OFFICE
PCT INTERNATIONAL APPLICATION

In re the application of:

EZ MALE PADS, INCORPORATED

Int'l. Application No.: PCT/US2017/025121

Int'l. Filing Date: 30 March 2017

Based on US Priorities:
SN 15/087,557 – filed 09 April 2017

For: URINE ABSORBENT PAD

Authorized Officer: Agnes Wittmann-Regis

E-Mail: pct.team6@wipo.int

Fax No.: 41-22 338 70 10

Client ID/Matter No.: EZMPI-96882

Date: 21 September 2018

REQUEST TO CORRECT PCT APPLICATION FORM PCT/RO/101
PCT RULE 92bis. 1(a)(i) and (a)(ii)

Authorized Officer: Agnes Wittmann-Regis
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Dear Authorized Officers:

A review of the record in the PCT Request, reflects an error in how the name

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34, Chemin des Colombettes
1211 Geneva 20, Switzerland
E-Mail: pct.Team8@wipo.int

cc: USRO
Authorized Officer
Fax: 571.273.8300

Dear Authorized Officers:

A review of the record in the PCT Request, reflects an error in how the name of applicant was submitted. In the Request 101 a typo appears on II Applicant: EZ MALE INCORPORATED. The correct name of the corporation is **EZ MALE PADS, INCORPORATED**. As evidence, we submit a copy of the U. S. recorded assignment on the priority claimed at the PCT international application in reference. Assignors are the inventors for the U. S. application and all successor applications, including the instant PCT international application.

A corrected page 1/4 of the Request 101 is attached. The International Bureau of WIPO is respectfully requested to record the corrected Pages 1/4 of the Form PCT/RO/101 – Request.

PCT Intl. Appl. No. PCT/US2017/025121
Atty. Docket No.: EZMPI-96882
21 September 2018

Please provide us with Form PCT/IB/306 confirming recordation of this change in The International Bureau of WIPO to submit to the national phase applications.

Favorable reconsideration of the application is respectfully requested on a priority basis.

Respectfully submitted,

FULWIDER PATTON LLP



By: _____
Michael J. Moffatt, Esq.
Registration No. 39,304

JWP/sc

Attachment: Corrected Pages 1/4 of Form PCT/RO/101 – Request

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1030938.1

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Authorized Officer
Fax: 571.273.8300

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A review of the record in the PCT Request, reflects an error in how the name

EZMPI-96882

REPLACEMENT SHEET

1/4

PCT REQUEST

Original (for SUBMISSION)

0	For receiving Office use only	
0-1	International Application No.	PCT/US17/25121
0-2	International Filing Date	30 MAR 2017 (30-03-17)
0-3	Name of receiving Office and "PCT International Application"	RO/US
0-4	Form PCT/RO/101 PCT Request	
0-4-1	Prepared Using	PCT-SAFE [EFS-Web mode] Version 3.51.077.253 MT/FOP 20170401/0.20.5.24
0-5	Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	United States Patent and Trademark Office (USPTO) (RO/US)
0-7	Applicant's or agent's file reference	EZMPI-96882
I	Title of Invention	URINE ABSORBENT PAD
II	Applicant	
II-1	This person is	Applicant only
II-2	Applicant for	All designated States
II-4	Name	EZ MALE PADS, INCORPORATED
II-5	Address	555 E. Ocean Boulevard, Suite 430 Long Beach, California 90802 United States of America
II-6	State of nationality	US
II-7	State of residence	US
II-8	Telephone No.	(562) 435-2422
III-1	Applicant and/or inventor	
III-1-1	This person is	Inventor only
III-1-3	Inventor for	All designated States
III-1-4	Name (LAST, First)	LUMAQUE-STEEMAN, Lorna Mateo
III-1-5	Address	13036 Pan Am Blvd. Moreno Valley, California 92553 United States of America



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

APRIL 1, 2016

PTAS

FULWIDER PATTON LLP
HOWARD HUGHES CENTER
6060 CENTER DRIVE, TENTH FLOOR
LOS ANGELES, CA 90045

503763995

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 03/31/2016

REEL/FRAME: 038164/0880
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: EZMPI-95517

ASSIGNOR:
LUMAQUE-STEEMAN, LORNA MATEO

DOC DATE: 03/29/2016

ASSIGNOR:
JOHNSON, WADE C

DOC DATE: 03/29/2016

ASSIGNEE:
EZ MALE PADS, INCORPORATED
555 E. OCEAN BOULEVARD, SUITE 430
LONG BEACH, CALIFORNIA 90802

APPLICATION NUMBER: 15087557
PATENT NUMBER:
TITLE: URINE ABSORBENT PAD

FILING DATE:
ISSUE DATE:

ASSIGNMENT RECORDATION BRANCH
PUBLIC RECORDS DIVISION

ASSIGNMENT

This Assignment made by Lorna Mateo Lumaque-Steeman of Moreno Valley, California and Wade C. Johnson of Long Beach, California, Assignors, to EZ Male Pads, Incorporated, a California corporation, Assignee, having a place of business at 555 E. Ocean Boulevard, Suite 430, Long Beach, California 90802.

WHEREAS, Assignors have invented a new and useful URINE ABSORBENT PAD for which an application for United States Letters Patent is filed herewith, said application being a continuation-in-part of U.S. Serial No. 14/673,549, filed March 30, 2015, which claims priority from U.S. Serial No. 61/998,947, filed on July 14, 2014; and

WHEREAS, Assignors believe themselves to be the original and first inventors of the invention disclosed and claimed in said application for Letters Patent; and

WHEREAS, Assignee desires to acquire by formal, recordable assignment the entire right, title and interest in and to said invention, said application, and any Letters Patent that may be granted for said invention in the United States and throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors hereby sell, assign and transfer to Assignee, the entire right, title and interest in and to said invention, said application, and any Letters Patent that may be granted for said invention in the United States and throughout the world, including the right to file foreign applications directly in the name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties or otherwise.

Further, Assignors agree that, upon request and without further compensation, but at no expense to Assignors, they and their legal representative(s) and assigns will do all lawful acts,

including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing or enforcing Letters Patent in the United States and throughout the world for said invention, and for perfecting, recording or maintaining the title of Assignee, its successors and assigns, to said invention, said application, and any Letters Patent granted for said invention in the United States and throughout the world.

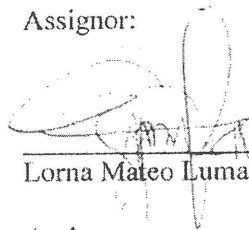
Assignors represent and warrant that they have not granted and will not grant to others any rights inconsistent with the rights granted herein.

Assignors authorize and request the Commissioner of Patents and Trademarks of the United States and of all foreign countries to issue any Letters Patent granted for said invention, whether on said application or on any subsequently filed division, continuation, continuation-in-part or reissue application, to Assignee, its successors and assigns, as the assignee of the entire interest in said invention.

IN WITNESS WHEREOF, Assignors have executed this Assignment on the date written herein below.

Date: March 29, 2016

Assignor:



Lorna Mateo Lumaque-Steeman

Assignor:

Date: _____, 2016

Wade C. Johnson

including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing or enforcing Letters Patent in the United States and throughout the world for said invention, and for perfecting, recording or maintaining the title of Assignee, its successors and assigns, to said invention, said application, and any Letters Patent granted for said invention in the United States and throughout the world.

Assignors represent and warrant that they have not granted and will not grant to others any rights inconsistent with the rights granted herein.

Assignors authorize and request the Commissioner of Patents and Trademarks of the United States and of all foreign countries to issue any Letters Patent granted for said invention, whether on said application or on any subsequently filed division, continuation, continuation-in-part or reissue application, to Assignee, its successors and assigns, as the assignee of the entire interest in said invention.

IN WITNESS WHEREOF, Assignors have executed this Assignment on the date written herein below.

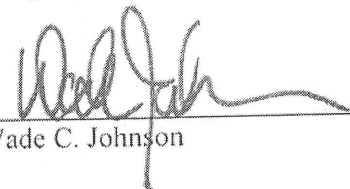
Assignor:

Date: _____, 2016

Lorna Mateo Lumaque-Steeman

Assignor:

Date: 3-29, 2016



Wade C. Johnson

15/087,557 URINE ABSORBENT PAD

EZMPI-95517 09-21-
2018::15:20:53**Patent Assignment Abstract of Title****Total Assignments: 1****Application #:** 15087557**Filing Dt:** 03/31/2016**Patent #:** NONE**Issue Dt:****PCT #:** NONE**Intl Reg #:****Publication #:** US20160278991**Pub Dt:** 09/29/2016**Inventors:** Lorna Mateo Lumaque-Steeman, Wade C. Johnson**Title:** URINE ABSORBENT PAD**Assignment: 1****Reel/Frame:** 038164 / 0880**Received:** 03/31/2016**Recorded:** 03/31/2016**Mailed:** 04/01/2016**Pages:** 5**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).**Assignors:** LUMAQUE-STEEMAN, LORNA MATEO
JOHNSON, WADE C**Exec Dt:** 03/29/2016**Exec Dt:** 03/29/2016**Assignee:** EZ MALE PADS, INCORPORATED
555 E. OCEAN BOULEVARD, SUITE 430
LONG BEACH, CALIFORNIA 90802**Correspondent:** FULWIDER PATTON LLP
HOWARD HUGHES CENTER
6060 CENTER DRIVE, TENTH FLOOR
LOS ANGELES, CA 90045

Search Results as of: 09/21/2018 15:20:41 PM

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Electronic Acknowledgement Receipt

EFS ID:	25365471
Application Number:	15087557
International Application Number:	
Confirmation Number:	7247
Title of Invention:	URINE ABSORBENT PAD
First Named Inventor/Applicant Name:	Lorna Mateo Lumaque-Steeman
Customer Number:	24201
Filer:	Laverne D. Schooley/Robert Fiore
Filer Authorized By:	Laverne D. Schooley
Attorney Docket Number:	EZMPI-95517
Receipt Date:	31-MAR-2016
Filing Date:	
Time Stamp:	17:44:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 730
RAM confirmation Number	4872
Deposit Account	062425
Authorized User	FULWIDER PATTON LLP
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Application Data Sheet	95517_ADS.pdf	1823237	no	8
			11a26c9797bc3eda41cf331d53b54b2f139dbf34		
Warnings:					
Information:					
2	Oath or Declaration filed	95517_Signed_Declarations.pdf	956438	no	4
			c63007a7c035e1d335bd0f006032897df59f2bcc		
Warnings:					
Information:					
3		95517_Specification.pdf	154299	yes	19
			11a591c345ef7e785a97fb0a0d6580bc24817c9c		
	Multipart Description/PDF files in .zip description				
	Document Description	Start	End		
	Specification	1	14		
	Claims	15	18		
	Abstract	19	19		
Warnings:					
Information:					
4	Drawings-only black and white line drawings	95517_Final_Drawings.pdf	343908	no	23
			437aa388881776fcc3c611ffb82df374602f82c		
Warnings:					
Information:					
5	Information Disclosure Statement (IDS) Form (SB08)	95517_IDS.pdf	612572	no	4
			e4fe180e6b3a0f295bb6349906dcf9140a93c6c7		
Warnings:					
Information:					
6	Other Reference-Patent/App/Search documents	95517_NPL_Ref_ISR_WO_2015175822.pdf	1025621	no	5
			8aa893cc1fdc1c29dcfc727325c8dbbfbfed57fa		

Warnings:					
Information:					
7	Fee Worksheet (SB06)	fee-info.pdf	35134	no	2
			531184b99a67943b99af6c2e88ddd989bb8 fea4c		
Warnings:					
Information:					
Total Files Size (in bytes):				4951209	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

15/087,557 URINE ABSORBENT PAD

EZMPI-95517

09-21-
2018::15:20:53

Patent Assignment Abstract of Title

Total Assignments: 1**Application #:** 15087557**Filing Dt:** 03/31/2016**Patent #:** NONE**Issue Dt:****PCT #:** NONE**Intl Reg #:****Publication #:** US20160278991**Pub Dt:** 09/29/2016**Inventors:** Lorna Mateo Lumaque-Steeman, Wade C. Johnson**Title:** URINE ABSORBENT PAD**Assignment: 1****Reel/Frame:** 038164 / 0880**Received:** 03/31/2016**Recorded:** 03/31/2016**Mailed:** 04/01/2016**Pages:** 5**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).**Assignors:** LUMAQUE-STEEMAN, LORNA MATEO
JOHNSON, WADE C**Exec Dt:** 03/29/2016**Exec Dt:** 03/29/2016**Assignee:** EZ MALE PADS, INCORPORATED
555 E. OCEAN BOULEVARD, SUITE 430
LONG BEACH, CALIFORNIA 90802**Correspondent:** FULWIDER PATTON LLP
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6060 CENTER DRIVE, TENTH FLOOR
LOS ANGELES, CA 90045

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If you have any comments or questions concerning the data displayed, contact OPR / Assignments at 571-272-3350

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ADVANCE E-MAIL

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING SUBMISSION,
OBTENTION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

MICHAEL J. MOFFATT
Fulwider Patton LLP
6100 Center Drive
Ste. 1200
Los Angeles, California 90045
ÉTATS-UNIS D'AMÉRIQUE

Date of mailing (day/month/year) 24 April 2017 (24.04.2017)	
Applicant's or agent's file reference EZMPI-96882	IMPORTANT NOTIFICATION
International application No. PCT/US2017/025121	International filing date (day/month/year) 30 March 2017 (30.03.2017)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 31 March 2016 (31.03.2016)
Applicant EZ MALE INCORPORATED	

The applicant is hereby notified of the date of receipt (or of obtaining by the International Bureau) of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to the date of receipt, **the priority document concerned was submitted or transmitted to or obtained by the International Bureau in compliance with Rule 17.1(a), (b) or (b-bis)**. This Form replaces any previously issued notification concerning submission, transmittal or obtaining of priority documents.

Priority datePriority application No.Country or regional Office
or PCT receiving OfficeDate of receipt
of priority document

31 March 2016 (31.03.2016)

15/087,557

US

09 April 2017 (09.04.2017)

The letters "NR" denote a priority document which, on the date of mailing of this Form, had not yet been received or obtained by the International Bureau in compliance with Rule 17.1(a), (b) or (b-bis). Where the applicant has failed to either submit, request to prepare and transmit, or to request the International Bureau to obtain the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

An asterisk "*" next to a date of receipt, denotes a priority document submitted or transmitted to or obtained by the International Bureau but not in compliance with Rule 17.1(a), (b) or (b-bis) (the priority document was received after the time limit prescribed in Rule 17.1(a); the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b) or the request to the International Bureau to obtain the priority document was made after the applicable time limit under Rule 17.1(b-bis)). Even though the priority document was not furnished in compliance with Rule 17.1(a), (b) or (b-bis), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as the priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

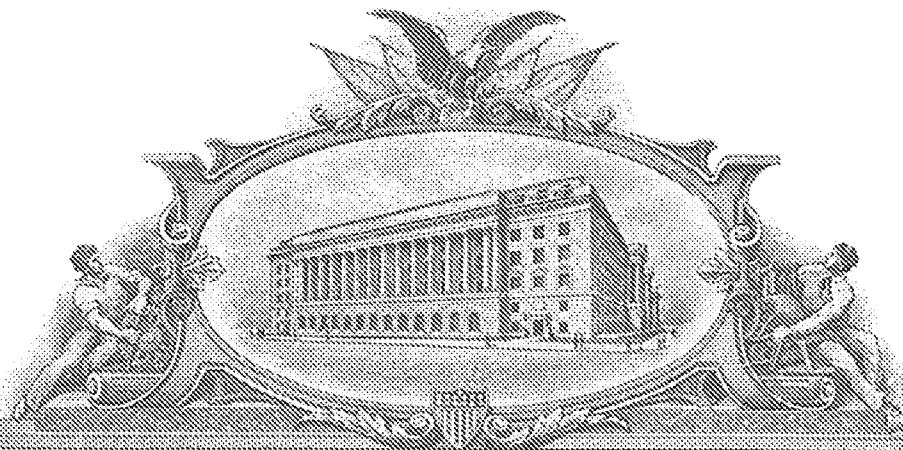
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 89 70	Authorized officer Agnès Wittmann-Regis e-mail pct.team6@wipo.int Telephone No. +41 22 338 74 06
---	---

DOCUMENT MADE AVAILABLE UNDER THE PATENT COOPERATION TREATY (PCT)

International application number:	PCT/US2017/025121
International filing date:	30 March 2017 (30.03.2017)
Document type:	Certified copy of priority document
Document details:	Country/Office: US
	Number: 15/087,557
	Filing date: 31 March 2016 (31.03.2016)
Date of receipt at the International Bureau:	09 April 2017 (09.04.2017)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a),(b) or (b-bis)

846330



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

April 08, 2017

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.

APPLICATION NUMBER: *15/087,557*

FILING DATE: *March 31, 2016*

RELATED PCT APPLICATION NUMBER: *PCT/US17/25121*

THE COUNTRY CODE AND NUMBER OF YOUR PRIORITY APPLICATION, TO BE USED FOR FILING ABROAD UNDER THE PARIS CONVENTION, IS *US15/087,557*



Certified by

Michelle K. Lee

Under Secretary of Commerce
for Intellectual Property
and Director of the United States
Patent and Trademark Office

Electronic Acknowledgement Receipt

EFS ID:	25365471
Application Number:	15087557
International Application Number:	
Confirmation Number:	7247
Title of Invention:	URINE ABSORBENT PAD
First Named Inventor/Applicant Name:	Lorna Mateo Lumaque-Steeman
Customer Number:	24201
Filer:	Laverne D. Schooley/Robert Fiore
Filer Authorized By:	Laverne D. Schooley
Attorney Docket Number:	EZMPI-95517
Receipt Date:	31-MAR-2016
Filing Date:	
Time Stamp:	17:44:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 730
RAM confirmation Number	4872
Deposit Account	062425
Authorized User	FULWIDER PATTON LLP
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Application Data Sheet	95517_ADS.pdf	1823237	no	8
			11a26c9797bc3eda41cf331d53b54b2f139dbf34		
Warnings:					
Information:					
2	Oath or Declaration filed	95517_Signed_Declarations.pdf	956438	no	4
			c63007a7c035e1d335bd0f006032897df59f2bccc		
Warnings:					
Information:					
3		95517_Specification.pdf	154299	yes	19
			11a591c345ef7e785a97fb0a0d65803c24817c9c		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	14	
	Claims		15	18	
	Abstract		19	19	
Warnings:					
Information:					
4	Drawings-only black and white line drawings	95517_Final_Drawings.pdf	343908	no	23
			437aa388881776fcc3c611fba82df374602f82c		
Warnings:					
Information:					
5	Information Disclosure Statement (IDS) Form (SB08)	95517_IDS.pdf	612572	no	4
			e4fe180e6b3a0f295bb6349906dcf9140a93c6c7		
Warnings:					
Information:					
6	Other Reference-Patent/App/Search documents	95517_NPL_Ref_ISR_WO_2015175822.pdf	1025621	no	5
			8aa893cc1fdc1c29dcfc727325c8dbbfbed57fa		

Warnings:					
Information:					
7	Fee Worksheet (SB06)	fee-info.pdf	35134	no	2
			531184-b99a67943b99af6c2e88ddd989bb8fe4c		
Warnings:					
Information:					
Total Files Size (in bytes):			4951209		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	EZMPI-95517
		Application Number	
Title of Invention	URINE ABSORBENT PAD		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

Secrecy Order 37 CFR 5.2:

☐	Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)
--------------------------	---

Inventor Information:

Inventor	1				Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Lorna	Mateo	Lumaque-Steeman			
Residence Information (Select One) • US Residency Non US Residency Active US Military Service						
City	Moreno Valley	State/Province	CA	Country of Residence	US	
Mailing Address of Inventor:						
Address 1	13036 Pan Am Blvd.					
Address 2						
City	Moreno Valley	State/Province	CA			
Postal Code	92553	Country i	US			
Inventor	2				Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Wade	C.	Johnson			
Residence Information (Select One) • US Residency Non US Residency Active US Military Service						
City	Long Beach	State/Province	CA	Country of Residence	US	
Mailing Address of Inventor:						
Address 1	5903 East Seaside Walk					
Address 2						
City	Long Beach	State/Province	CA			
Postal Code	90803	Country i	US			
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.						

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).
--

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	EZMPI-95517
		Application Number	
Title of Invention	URINE ABSORBENT PAD		

☐ An Address is being provided for the correspondence information of this application.

Customer Number	24201		
Email Address	docketfla@fulpat.com	Add Email	Remove Email

Application Information:

Title of the Invention	URINE ABSORBENT PAD		
Attorney Docket Number	EZMPI-95517	Small Entity Status Claimed ☒	
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	20	Suggested Figure for Publication (if any)	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:
☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	☒ Customer Number	☐ US Patent Practitioner	☐ Limited Recognition (37 CFR 11.9)
Customer Number	24201		

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	EZMPI-95517
		Application Number	
Title of Invention	URINE ABSORBENT PAD		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending			Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)	
	Continuation in part of	14/673549	2015-03-30	
Prior Application Status	Expired			Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)	
14/673549	Claims benefit of provisional	61/998947	2014-07-14	
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button.				Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ⁱ (if applicable)	Remove
Additional Foreign Priority Data may be generated within this form by selecting the Add button.				Add

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013. ☐ NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.
--

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	EZMPI-95517
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Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	EZMPI-95517
		Application Number	
Title of Invention	URINE ABSORBENT PAD		

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant	1 Remove		
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section. Clear			
☒ Assignee	Legal Representative under 35 U.S.C. 117		Joint Inventor
Person to whom the inventor is obligated to assign.		Person who shows sufficient proprietary interest	
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:			
Name of the Deceased or Legally Incapacitated Inventor:			
If the Applicant is an Organization check here. ☒			
Organization Name	EZ Male Pads, Inc.		
Mailing Address Information For Applicant:			
Address 1	555 E. Ocean Blvd., Suite 430		
Address 2			
City	Long Beach	State/Province	CA
Country	US	Postal Code	90802
Phone Number		Fax Number	
Email Address			
Additional Applicant Data may be generated within this form by selecting the Add button. Add			

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	EZMPI-95517
		Application Number	
Title of Invention	URINE ABSORBENT PAD		

Assignee	1
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Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

Remove

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

Prefix	Given Name	Middle Name	Family Name	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1				
Address 2				
City		State/Province		
Country i		Postal Code		
Phone Number		Fax Number		
Email Address				

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.

Add

Signature:

Remove

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the **INITIAL** filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/vernschooley/		Date (YYYY-MM-DD)	2016-03-31
First Name	Vern	Last Name	Schooley	Registration Number
				24649

Additional Signature may be generated within this form by selecting the Add button.

Add

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	EZMPI-95517
		Application Number	
Title of Invention	URINE ABSORBENT PAD		

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of
Invention

URINE ABSORBENT PAD

As the below named inventor, I hereby declare that:

This declaration
is directed to:



The attached application, or



United States application or PCT international application number _____

filed on _____

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Lorna Mateo Lumaque-Steeman

Date (Optional): 3/29/2014

Signature: [Signature]

Note: An application data sheet (PTO/SB/14 or equivalent), including naming this entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

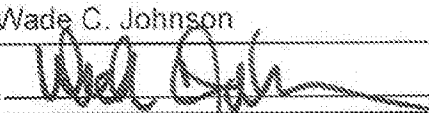
Privacy Act Statement

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4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	URINE ABSORBENT PAD	
As the below named inventor, I hereby declare that: This declaration is directed to: ☒ The attached application, or ☐ United States application or PCT international application number _____ filed on _____ The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. WARNING: Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.		
LEGAL NAME OF INVENTOR		
Inventor:	Wade C. Johnson	Date (Optional): _____
Signature:		
Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.		

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.31 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-6199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

URINE ABSORBENT PAD

CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of U.S. Patent Application No. 14/673,549 filed March 30, 2015, which claims priority from U.S. Provisional Patent Application No. 61/998,947, filed July 14, 2014, the contents of both of which are incorporated by reference herein in their entirety.

BACKGROUND

[0002] The present invention relates generally to adult incontinence, and more particularly to a urine absorbent pad designed for a male that provides an easy and convenient manner to more safely replace soiled protective wear than the prior art.

[0003] Urinary incontinence (UI) is defined as the involuntary loss of urine. In both men and women, age is a consistently reported risk factor for UI; however, it is not considered a normal consequence of aging. Overall, UI affects up to 30% of community dwelling older adults and more than 50% of nursing home residents. Despite its high prevalence, up to one-half of cases may not be reported because individuals with UI may not seek medical intervention. Embarrassment and the perception that UI is an expected consequence of aging are common factors in the failure to seek a solution or treatment. That reluctance is particularly strong in men, who often deem the problem to be associated with a loss of masculinity.

[0004] Urinary incontinence is categorized according to pathophysiology and clinical presentation. The four main categories are (1) stress urinary incontinence (SUI), (2) urge urinary incontinence (UUI), (3) overflow incontinence, and (4) functional incontinence. Mixed types of incontinence are common and may complicate diagnosis and treatment because of overlapping symptoms. Studies have found that UI significantly affects psychological well-being and health care-related quality of life. Urinary incontinence may impair sexual function, restrict activities, interfere with interpersonal relationships, decrease self-esteem, increase caregiver burden, increase financial burden, and cause anxiety or depression. It is a common precipitant of institutionalization in older adults.

[0005] Because of current demographic trends, UI is an increasingly common medical and socioeconomic problem. One place where the issue arises with great propensity is nursing homes, where older patients often suffer moderate to severe UI due to a variety of physiological conditions. In men, incontinence is often related to prostate problems or treatments that become exacerbated in the elderly. Certain medical conditions, particularly those affecting the brain or nervous system, such as Alzheimer's, Parkinson's, Dementia, Multiple Sclerosis and brain damage, can also lead to incontinence. This is due to the nerve passageways from the brain becoming damaged. The result can be either an overactive bladder (the need to go often and frequently) or an under-active bladder (ineffective emptying leading to leakage). Diabetes and or a stroke can also bring on incontinence.

[0006] With aging, bladder capacity decreases, ability to inhibit urination declines, involuntary bladder contractions (detrusor overactivity) occur more often, and bladder contractility is impaired. Thus, voiding becomes more difficult to postpone and tends to be incomplete. Postvoid residual volume increases in as much as ≤ 100 mL (normal < 50 mL). A weakening of the endopelvic fascia often results as well. In men, the tendency for the prostate to enlarge with age causes the partial obstruction of the urethra, leading to incomplete bladder emptying and strain on the detrusor muscle. These changes occur in many normal, continent elderly males and may facilitate incontinence but do not cause it.

[0007] One challenge associated with male incontinence is the necessity for changing clothing, bedding, and other items that may become soiled due to an incontinence patient. When a disabled patient has voided his urine, the caregiver(s) must remove the patient's clothing and bedding while the patient is in a prone position. This can be challenging to the caregiver(s), who must lift the patient to remove the clothing and bedding while simultaneously trying to extract the soiled garments and sheets, blankets, etc. If the patient is large or overweight, the problem becomes magnified even greater. The task is thus labor intensive and time consuming, and can result in injury to the care giver(s) from reaching over the bed in an awkward position to hoist the patient, particularly when multiplied by changes every five or six hours, or in the case of facilities offering extraordinary care, every two hours or so. Additionally, adult diapers are typically relatively large and bulky to cover the patient's groin and anal area, thus adding to the bulk for supply and disposal of some four to ten diapers a day.

[0008] Elderly patients and residents of nursing homes who are immobile or have reduced mobility are at high risk for developing pressure ulcers (bed sores). This condition is exacerbated if the patient is incontinent because the moisture from urine causes the surface of the skin to become irritated and infected. For this reason, it is important to prevent urine from migrating to extended areas of the skin and from remaining in contact with any part of the skin for any extended period of time, and that it be removed as soon as possible.

[0009] The U.S. Census Bureau estimates there are 76.4 million baby boomers, and the oldest of this generation, which includes those born between 1946 and 1964, are over 65 years old. For many of these people, adult diapers are a way to ameliorate the effects of moderate to severe incontinence. Adult diapers are a \$7 billion global market, and sales have grown more than 8 percent over the past five years due to this increasing number of baby boomers entering their 70s and 80s. This trend appears to be rising as the stigma of wearing protective undergarments becomes less and the popularity of these products grow.

[0010] Frequently two or more caregivers will be assigned to the changing task each time the diaper is soiled. The task itself can be quite time consuming, particularly if fecal matter has migrated from the anal area due to defecation and propagated by urine saturated in an outer diaper.

[0011]

For males, particularly invalid males, diapers can be an unsatisfactory solution for several reasons. First, the previously raised issue that, once soiled, the patient must be changed like an infant by a caregiver who may not have the strength to lift a full grown adult male. Changing a diaper can lead to the patient being moved in positions that may strain or injure the patient, particularly when moved by a caregiver with inadequate strength to properly maneuver a full grown adult male. Second, unlike females where the origin and direction of the urine stream is fairly predictable, males tend to urinate from different positions, angles, and directions, and this inconsistency leads to leakage. This is especially true when the patient is lying on his back and suffers incontinence, because a gap in the top of the diaper at the patient's stomach can provide an opening where urine can leak outside of the diaper, leading to the issues raised above.

Patients who go frequently can get ignored because of the challenges in changing the patient, leading to health issues as well.

[0012] Efforts have been made to devise an absorbent pad to cover the penis. One such device is in the form of an elongated rectangular pad foldable along a centrally transverse fold line and configured on one end with a U-shaped opening to receive a penis to be positioned between the two halves. A device of this type is shown in U.S. Patent No. 6,129,719 to Nozaki. Such devices, while effective to absorb some of the urine released, suffer the shortcoming that the device is relatively bulky, is inconvenient to apply and fails to securely entrap the penis to protect against release of urine outside the pad.

[0013]

[0014] The art is in need of a simple, cost effective device that is directed to the problem of male incontinence, and can reduce the opportunity for leakage as well as the frequency and extent to which a patient must be moved for a change after an incontinent event has occurred. The present invention is directed to this objective.

SUMMARY OF THE INVENTION

[0015] In one aspect, the present invention is directed to a disposable urine trap in the form of a foldable pad that envelops the male genitalia and closes around the penis to form a barrier to prevent urine from escaping the trap. The pad includes an asymmetric pair of wings that are separated by a void attached to the main body of the pad. The first wing is preferably rectangular in that the distal angles are substantially right angles with parallel side edges and a perpendicular distal edge, and has a length that exceeds a length of a second wing, which is terminates so that the distal edge of the second wing is angled to form an obtuse and an acute angle with respect to its generally parallel sides. The void between the two wings may be formed by eliminating a triangular component from each inner side of the first and second wings to establish a "kite" or "diamond"-shaped void in the pad. The void in the pad may receive the patient's penis at its base such that the penis extends over the widest and thickest portion of the pad and the head of the penis occupies the middle area of the pad. Once the pad is arranged so that the penis is laid over the pad through the void, the first wing is folded over the top of the penis along a crease where the void lies to overlay the penis and sandwich the penis between the

pad and the first wing. The angle that the first wing protrudes away from the pad is selected so that the inner side edge of the first wing aligns with a proximal edge of the second wing when folded over penis as described above. The folding of the first wing closes the void so that the void now encircles the base of the penis as the penis lays on the pad. Once the inner side edge of the first wing is placed against the proximal edge of the second wing, the second wing is then folded over the first wing such that the distal edge of the first wing and the distal edge of the second wing are substantially orthogonal. The asymmetric nature of the first and second wings allow the configuration described above, such that the wings cooperate to overlay the penis can capture the penis between the two wings and the thick portion of the pad. An adhesive strip on the opposite side of the first wing attaches to the second wing and secures the urine trap in the closed configuration. The corners of the pad can then be folded over the outer side edges of the adjacent first and second wings to close the trap and envelope the penis inside the pad.

[0016] In another aspect, the urine trap is formed with a larger main absorbent region and distally projecting, flanking, first and second absorbent wings to be folded cooperating to form therebetween a gap terminating in a closed extremity defining an opening. The first wing is constructed to be folded proximally and laterally inwardly preferably over the main absorbent region to cover a wearer's penis projecting through the opening and overlapping the main absorbent region. The second wing is constructed to be folded proximally and laterally inwardly over such first wing to cooperate therewith in trapping the penis between the first wing and main absorbent region.

[0017] In a still further aspect, the main absorbent region is formed with a rounded proximal edge of a predetermined contour and the first wing is constructed with a distal edge formed with a complementary predetermined contour such that, when folded on the main region, the contours may be aligned.

[0018] In another aspect, the urine trap is formed with a large main absorbent region and distally projecting, flanking first and second absorbent wings cooperating to form therebetween a gap terminating in a closed extremity defining an opening. The first wing is constructed to be folded proximally and laterally inwardly over the main absorbent region to have a wearer's penis

projecting through the opening and overlapping the main absorbent region. The second wing is constructed to be folded

[0019] A benefit of the present invention is that it can be placed inside an undergarment such as an over-diaper. If a male patient should urinate in the urine trap with the patient on his back, a caregiver can simply remove the urine trap from the diaper or undergarment without the need to undress, change the over-diaper, or move the patient. A new urine trap can be placed on the patient with little or no disturbance to the patient and without rolling the patient over, lifting the patient, or undressing the patient. Moreover, the configuration of the urine trap minimizes any opportunity for leakage at the patient's waistline where most diapers can leak for male wearers. The way the wings of the present invention fold diagonally over one another to envelope the penis and isolate it and incoming urine from the abdomen, eliminating any gaps and serves to simplify changing and protect the patient's skin.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020] FIG. 1 is a top view of a first preferred embodiment of the present invention;

[0021] FIG. 2 is a bottom view of a the embodiment of FIG. 1;

[0022] FIG. 3 is an elevated, perspective view of the present invention shown on a male user;

[0023] FIG. 4 is an enlarged, perspective view of the present invention;

[0024] FIG. 5 is an elevated, perspective view of the present invention with the first wing folded;

[0025] FIG. 6 is an enlarged, perspective view of the present invention with the adhesive strip removed;

[0026] FIG. 7 is a perspective view of the second wing folded into place;

[0027] FIG. 8 is an enlarged, perspective view of corners being upturned to enclose the male genitalia;

[0028] FIG. 9 is an elevated, perspective view of the adhesive strip being removed so as to be applied to a garment;

[0029] FIG. 10 is an elevated, perspective view of the pouch adhered to an undergarment;

[0030] FIG. 11 is an enlarged, perspective view partially in shadow showing the pouch in place inside an undergarment;

[0031] FIG. 12 is a first cross sectional view of the pad in the pouch configuration;

[0032] FIG. 13 is a second cross sectional view of the pad in the pouch configuration;

[0033] FIGS. 14 – 23 illustrate an alternate way of wearing the pad of the present invention;

[0034] FIG. 24 is a planform view of an alternate embodiment of the pad of the present invention;

[0035] FIG. 25 is an elevated perspective view of the embodiment of FIG. 24 on a patient;

[0036] FIG. 26 is plan view of a further embodiment of the pad device of the present invention; and

[0037] FIG. 27 is an elevated perspective view of the embodiment shown in FIG. 26.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0038] Figure 1 illustrates a plan view of a first preferred embodiment of the present invention, comprising a pad 12 generally formed by a base 24 and first and second wings 14, 16. The pad 12 is formed by enclosing fluid absorbent material between an fluid impervious outer lining 18 and a soft fluid transmissive inner lining 20. The outer lining 18 may be made of a polyethylene film or other low cost, biocompatible material to seal in the urine and prevent leakage outside of the trap. The inner lining 20 that bear's against the user's skin may be made of polypropylene or suitable non-abrasive, non-toxic material that transmits fluid while largely staying relatively fluid free at the surface. The absorbent center 22 may contain wood pulp and super-absorbent polymers such as sodium polyacrylate. Sodium polyacrylate is effective in wicking away fluid from the skin through the inner lining 20, and can soak up to 30 times its

weight in urine. The absorbent center is bordered around its edges by adhering the inner lining 20 and outer lining 18, and the matching of the two mating linings 18,20 can be arranged to give the pad a rounded shape 64 in the undeformed condition. That is, a shallow, conically shaped "bowl" or saucer is created by the fit of the two mating edges such that the edges of the pad are raised with respect to the base 24. The main region of base 24 is particularly padded at this middle portion, which is where the introduction of urine is expected in most cases.

[0039] As further seen in Figure 1, the first wing 14 extends outwardly from an imaginary fold line 30. The first wing 14 includes an outer side edge 32, an inner side edge 34, and a distal edge 36. The side edges 32,34 are substantially parallel, and the distal edge substantially perpendicular thereto, such that right angles α , β are formed. A generally triangular portion 36 of the inner edge 34 is removed at the juncture 38 of the first and second wings 14, 16, creating half of a void 42 through which the penis 76 is inserted.

[0040] The second wing 16, which in a preferred embodiment has a length that is approximately one half a length of the first wing 14, protrudes from an imaginary fold line 52 and includes an inner side edge 46, outer side edge 48, and distal edge 50. As with the first wing, the inner side edge 46 and outer side edge 48 are substantially parallel, but the distal edge 50 forms an acute angle ν with the outer side edge 48 and an obtuse angle σ with the inner side edge 46. A triangular portion 54 of the inner edge 46 is removed at the juncture 38 of the first and second wings 14, 16, creating the other half of the void 42, which is thusly formed in a shape of a diamond based on the two triangular resections 36,54 on the inner edges 34, 46.

[0041] Figure 2 illustrates a rear view of the pad 12, including a peel away adhesive strip 70 that can be used to secure the pad to the patient or a waistband of the patient. A second adhesive strip 72 is used to hold the pad in a pouch, or folded position to envelope the patient's genitalia 76.

[0042] Figures 3 - 13 illustrate a first method for how the pad 12 encloses the male organ and creates a cocoon-like wrap around the organ to collect any urine and prevent leakage. With the patient 80 preferably standing or lying on his back, the pad 12 is placed on the user's thighs with the first wing 14 on the upper right thigh/abdomen and the second wing 16 over the user's left thigh/abdomen. The user's penis 76 is placed in the void 42 between the first and second wings

14,16 so that the base of the penis is at the juncture 38 and the head of the penis is on the main region, or base 24 of the pad 12 (Figure 4). The first wing 14 is then folded inwardly diagonally along the fold line 30 over the top of the penis such that the inner side edge 34 is approximately along fold line 52 (Figures 4, 5). The placement of the first wing 14 in this position covers the penis 76, and exposes the adhesive strip 72 adjacent the second wing 16. The protective cover is removed from the adhesive strip 72 (Figure 6), and the second wing 16 is then folded at fold line 52 over the first wing 14 such that the distal edge 50 is approximately parallel to and adjacent to the side outer edge 32 of the first wing 14 (Figure 7). This configuration encloses the penis 76 in the void 42 and creates a leak-proof pouch over the penis. The first and second wings 14, 16 overlap diagonally and cooperate to form a "V" shape over the penis (Figure 8), angling diagonally toward the respective opposite corner 64 in the direction of arrow 300 (Figure 8) to close the pouch like an envelope, eliminating any opportunity for urine to escape during urination. A double layer of protection created by the wings 14, 16 (Figures 12 and 13) reduces the opportunity for leakage and creates a drier, more moisture-free environment for the user 80.

[0043] As shown in Figures 9 – 11, the urine trap 12 can be placed inside a diaper or underpants 90 of a patient 80 without the need to fully undress the patient. If the patient should have incontinence while wearing the urine trap, a caretaker can efficiently and quickly remove the soiled pad to be replaced by a new pad with minimal jostling or movement of the patient. That is, with the patient on his back, the caretaker may easily draw the front of the undergarment down to expose the trap and then lift the wings 16 and 14 so the soiled pad may be withdrawn for disposal, all without lifting or maneuvering the weight of the patient. The caretaker may then select a replacement pad and apply to be held in place by a larger adhesive strip 70 placed on the backside of the pad to secure the pad to the patient's waistband 92 of his undergarment such as his outer diaper, pants or underwear 90 to maintain the urine trap in position. Alternatively, a plurality of adhesive strips can be secured to the back side or front side of the urine trap to secure it to a gown or other more loose-fitting clothing.

[0044] The unique shape, configuration and positioning of the first and second wings have multiple benefits over the existing prior art. First, the wings minimize the amount of material needed to establish a secure and reliable pouch, and eliminate excess flaps that can catch on garments and inadvertently open the pouch. For example, the inner side edge 46 of the second

wing 16 aligns with the base of the first wing 14 at the fold line 30 when the second wing 16 is folded over the first wing 14. Similarly, the inner side edge 34 of the first wing 14 aligns perfectly with the base of the second wing 16 at the fold line 52 when the first wing 14 is folded over the penis. The alignment of the inner edges against the opposite crease maximizes the volume of the pouch and eliminates excess wing material bunching up or contacting the penis. The novel shape aligns the edges of the wings to ends of the pouch itself, creating a perfectly formed and reliable pouch with no excess material. Second, cut-outs 36, 54 form a more comfortable opening through which the wearer's penis is secured, reducing chaffing and skin irritation. By eliminating all excess material, the user can wear the urine trap under street clothes as well without large, bulky bulges that can be created by traditional diapers. A taped border may extend along the wings from the respective creases to ensure that the edges mate more smoothly and prevent gaps that can cause leakage.

[0045] In an alternative embodiment as shown in Figures 14 – 23, the pouch can be applied and worn in a reverse manner. Advantages may be seen in this configuration depending on whether the user is prone or ambulatory. The adhesive strip may be secured to the user 80 in this embodiment, wear only a gown or other loose fitting clothing are worn and there is nothing else to which one can apply the adhesive strip.

[0046] Figures 24 and 25 illustrate yet another embodiment 112 of a urinary pad that also includes an inner fluid transmissive layer, an absorbent layer, and a fluid impermeable layer cooperating to form a pad as previously discussed above. The pad 112 has a different shape that includes a main absorbent region 124 and first and second wings 114, 116 defining a gap 142 between a portion of the first and second wings. The main absorbent region 124 is configured with a predetermined curved contour which in the preferred embodiment defines a substantially circular perimeter 125 extending from a rounded registration edge 150 in the upper left quadrant and curves around to the upper right quadrant to define the free edge 151 of the second wing 116 to then turn inwardly and downwardly to define an inwardly and downwardly angled edge 147. The first wing 114 is trapezoidal shaped with the outer side registration edge 149 and the distal edge 153 formed at an angle α that is approximately 105° , and the distal edge 153 and the inner edge 155 formed an included angle β that is substantially 90° . The second wing 116 includes an inner side edge 158, and a side edge 161, the inner side 158 substantially parallel to the inner

edge 155 of the first wing 114, the outer side edge 147 and the side edge 161 forming an angle ν that is substantially 90° and the inner side edge 158 and the side edge 161 forming an angle θ that is substantially 135° , the second wing 116 extending distally beyond the distal edge 153 of the first wing 114.

[0047] The inner edges 155 and 158 of the wings cooperate to form an elongated gap 142 originating at a closed end to define an opening 156 and projects axially therefrom. Referring to Fig. 24B, the second wing 116 may thus be folded proximally and inwardly over the main absorbent region 124 sufficiently far to align the curved distal edge 151 with the curved registration edge 150 so those edges are somewhat congruent causing the absorbent layer of the periphery of the wing 116 to be protected from the patient's skin by the marginal edge of the main absorbent region. Thus, liquid distributed in the absorbent layer of the wing 116 will be physically blocked from direct contact with the patient's abdomen.

[0048] Figure 25 illustrates one example of a patient wearing the embodiment of Figure 24. The adhesive tape strips are substantially located as with the embodiment of Figures 14 – 23 although not shown for simplicity in Figures 24 – 25.

[0049] As will be appreciated by those skilled in the art, when laid flat as shown in Fig. 24, the wings 114 and 116 will be disposed in the same plane as the main absorbent region 124. Then, when placed on the abdomen of the patient, as shown in Fig. 25, the absorbent region 124 will typically lie directly on the abdomen with the penis projected through the opening 156 so the wing 116 may be raised from the distal outer edge 151 to fold over the main region 124 so that the registration edges 147 and 150 are aligned in somewhat congruent fashion, as shown in Fig. 25. The adhesive tape strip on the impermeable side of the wing 147 will thus be exposed. Then, the distal end of the first wing 114 may be folded proximally and laterally inwardly to a position overlying the wing 116 to cooperate therewith to form a double layer of absorbent material over the penis as it extends through the opening 156 to overlie the main region. In this arrangement, the penis will remain comfortably projecting through the open opening 156 but trapped in the trap created between the respective wings 114 and 116 and main absorbent region 124 to thereby contain and absorb any urine released.

[0050] As shown, the first wing 114 is formed with an area at least 20% as great as the main absorbent region 124. In practice, we prefer to configure the second wing 116 with at least 85% of the area of the main absorbent region and preferably 90% as shown. In the preferred embodiment, we configure the absorbent region with an area of 130 square inches and the wing 116 substantially the same or slightly less.

[0051] In practice, we have constructed the registration edges 150 and distal edge 151 with a continuous, common radius of curvature to thus induce the care giver to align these edges when dressing the patient. In other embodiments, such edges may be formed with other configurations of curved registration edges to induce registration. In practice we form these edges with a radius of curvature of 12 inches but understand that, depending on the patient, a radius of curvature of between 6 and 14 inches will suffice.

[0052] Referring to Figs. 26A-26C, in a further embodiment of the trap of the present invention, we incorporate a pad with a rounded peripheral edge to define a sector of a circle of approximately 300 degrees. The pad includes a central main absorbent section 224, a first wing 214 and a second wing 216, the wings being foldable along respective imaginary fold lines 218 and 220 to fold the wing 216 over on the main absorbent section 224. In this construction, for an adult male, we selected a radius of eight inches for the outside periphery 226 of the pad. It should be understood that a radius of between 6 inches and 14 inches will also suffice for different sizes of the pads of the present invention.

[0053] We have discovered that the area of the second wing should be at least 50% of the area of the main region and preferably about 90 % to 100% of that area to create an effective trap. In one preferred embodiment we form the main region with an area of about 130 square inches and the second wing with about the same area to provide maximum absorption for minimum bulk.

[0054] In practice it will be appreciated that the subject pad is formed with a central U-shaped opening 255 by means of laterally spaced-apart edges 242 of the respective wings 214 and 216 to thus provide an opening for access of the patient's penis to be positioned in the opening 256 when the wings are folded over the main absorbent region 224.

[0055] It will be appreciated that when the second wing 216 is folded on the fold line 220, the circular peripheral, distal edge 232 thereof will be disposed in overlying relationship in proximity with the registration edge 234 of the main region, to dispose the terminal edge 238 generally along the fold line 218. This then places the wing 216 in covering relationship over the patient's penis as projected through the opening 256 to overlie the main absorbent region 224 to thus be disposed in a favorable location so the first wing 214 may be folded along the imaginary line 218 to overlie the edge of the wing 216 and, to be held in position by the patient's undergarment or adhesive tape attached to one or the other of the wings.

[0056] From the foregoing it will be apparent to those of skill in the art that with the construction of the pad of the present invention, the imaginary fold lines 218 and 220 are merely markers for convenience of explanation indicating where in may be desirable to make a fold. In some embodiments, the fold lines 218 and 220 are marked by indicia or other markers to help guide the caretaker. In practice, however, we have found that with the particular shape of the pads described hereinabove, the desirable fold lines are intuitive to the caretaker so that the folds may be made to position the wings in a somewhat conical configuration cooperating with the main region 224 for entrapping the penis within the opening 256 to maximize the comfort of the patient and minimize the opportunity for leakage stemming from any openings which might otherwise be left even with the trap closed. We formed the opening to remain open and not press on the penis.

[0057] By forming the distal edge of the second wing with a curve of approximating the shape of that of the periphery of the main absorbent region at the registration edge, as in this case, the same radius of curvature, the care taker is induced to substantially align those edges when forming the trap so as to leave no portion of the absorbent layer of the first wing exposed to the patient's skin to thus provide a barrier against urine making direct contact with the skin.

[0058] As will be appreciated by those of skill, the pads of the present invention are relatively small, with a high capacity for moisture absorption, and configured to form an envelope around the penis so that urine projected even by stream from the penis will be captured within the trap to escape therefrom and consequent contact with the patient's abdomen and consequent irritation to the skin. Additionally, it will be appreciated that the pads of the present invention serve to

encapsulate the penis and maintain it isolated from the patient's anal area to thus protect against migration of feces and the like which may otherwise exist in the anal area and be conveyed to the patient's abdomen.

[0059] The trap is convenient to replace in the patient's undergarment, provides maximum absorption and highly effective protection with a minimum of bulk and cost of manufacture, as well as reducing the bulk of waste on disposal.

[0060] The foregoing description is intended to be illustrative and not exclusive. That is, there are many variations and modifications that can be made to the foregoing descriptions and preferred embodiments that would be readily apparent to one of ordinary skill in the art, and the present invention is intended to include all such modifications and variations. Such modifications may include choice of materials, overall dimensions of the embodiment, etc. Accordingly, the scope of the present invention should not be limited to any specific embodiment, illustration, or description herein, but rather the scope of the invention should be determined by the appended claims using the plain and ordinary meaning of the words used therein.

I Claim:

1. A urine trap for a male, comprising:

an inner fluid transmissive layer, an absorbent layer, and a fluid impermeable layer cooperating to form a pad, the pad including:

a main absorbent region formed on a first side with a main region registration edge and the first and second wings projecting from a second side opposite the first side to cooperate in defining a gap;

the first wing having a trapezoidal shape having an outer side edge, an inner side edge, and a distal edge, the inner side edge having a triangular cut-out therealong, the outer side edge and the distal edge cooperating to form an obtuse angle α that is substantially 105° and the inner side edge and the distal edge forming an angle β that is substantially 90° ; and

the second wing having an outer side edge, an inner side edge, and a distal edge, the inner side edge substantially parallel to the inner side edge of the first wing, the outer side edge and the distal edge cooperating to form an angle γ that is substantially 90° and the inner side edge and the distal edge cooperating to form an angle θ that is substantially 135° , the second wing extending distally beyond the extended plane of the distal edge of the first wing;

whereby the first wing may be folded on the main region to register the distal edges with the main region's edge.

2. The urine trap of Claim 1, further comprising an adhesive strip on the side of the main absorbent region opposite the fluid impermeable layer.

3. The urine trap of Claim 1 that includes:

an adhesive strip on the impermeable layer of the pad.

4. The urine trap of Claim 1 wherein:

the main absorbent region is formed with a substantially circular perimeter extending between the first and second wings.

5. The urine trap of Claim 1 wherein:

the main absorbent region is formed with the main region's edge of a predetermined circular contour; and

the first wing is constructed with the distal edge formed with the predetermined contour so that the first wing may be folded on the main absorbent region to dispose the distal edge congruent with the main region's edge.

6. The urine trap of Claim 5 wherein:

the main region's edge and distal edge are formed with the same radius of curvature.

7. The urine trap of Claim 6 wherein:

the radius of curvature is circular.

8. The urine trap of Claim 1 wherein:

the main absorbent region is configured with a predetermined area; and

the second wing is constructed with an area at least 50% of the predetermined area.

9. The urine trap of Claim 8 wherein:

the second wing is constructed with an area substantially 90% the predetermined area.

10. A urine trap apparatus for a male patient, comprising:

an inner fluid transmissive layer, an absorbent layer, and a fluid impermeable layer cooperating to form a pad, the pad including:

a main absorbent region formed with a first side having a main region registration edge toward one lateral side formed with a predetermined contour and elongated first and second flanking wings projecting distally from a second side opposite the first side and cooperating to define there between a gap and an opening; and

the second wing disposed the lateral side opposite the one lateral side and formed with a distal edge of substantially the same shape as the predetermined contour, the second wing of a sufficient length to be folded on the main absorbent region and extend to the registration edge to disposed in alignment with the main region registration edge, whereby the main absorbent region may be placed on the abdomen of the patient with his penis projecting through the opening to overlies the main absorbent region of the first wing folded once to overlies the penis and main absorbent region with the distal edge aligned with the registration edge.

11. The urine trap of claim 10 wherein:

the second wing is longer than the first wing.

12. The urine trap of claim 10 that includes:

an adhesive sticker between the first and second wings.

13. The urine trap of claim 10 wherein:
the main absorbent region is formed with a predetermined area; and
the first wing is formed with an area at least 50% of predetermined area.
14. The urine trap of claim 11 wherein:
the second wing is formed with an area substantially 100% of the predetermined area.
15. The urine trap of claim 10 wherein:
the absorbent regions of the wings are constructed to form the opening to remain in its open position as the first wing is folded over on the absorbent region to avoid placing pressure on the penis.
16. The urine trap of claim 10 wherein:
the registration edge and distal edge are both formed with a continuous radius of curvature.
17. The urine trap of claim 10 wherein:
the registration edge and distal edge are formed with the same radius of curvature.

URINE ABSORBENT PAD

ABSTRACT OF THE DISCLOSURE

A disposable urine trap in the form of a foldable pad that envelops the male genitalia and closes around the organ to form a barrier that prevents urine from escaping the trap. The pad includes an asymmetric pair of wings that are separated by a gap and attached to the main body of the pad. The first wing is preferably trapezoidal and a second wing having an extending distal edge.

FIG. 1

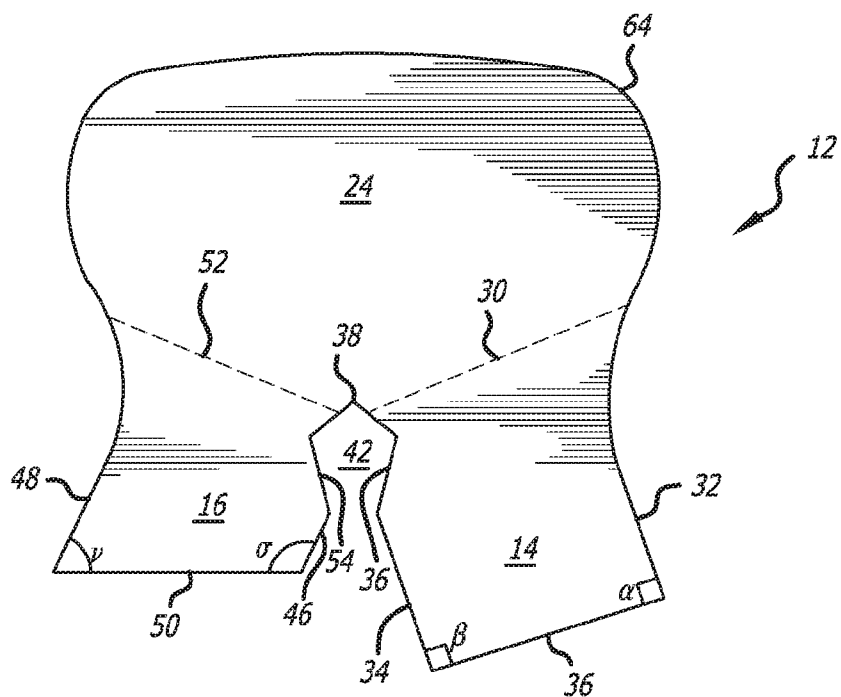


FIG. 2

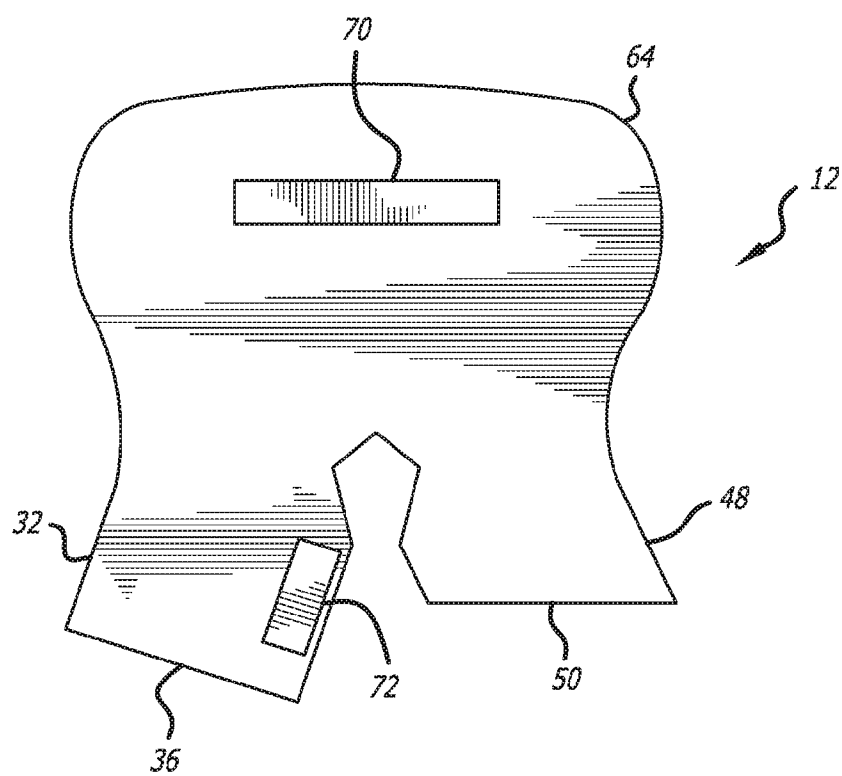


FIG. 3

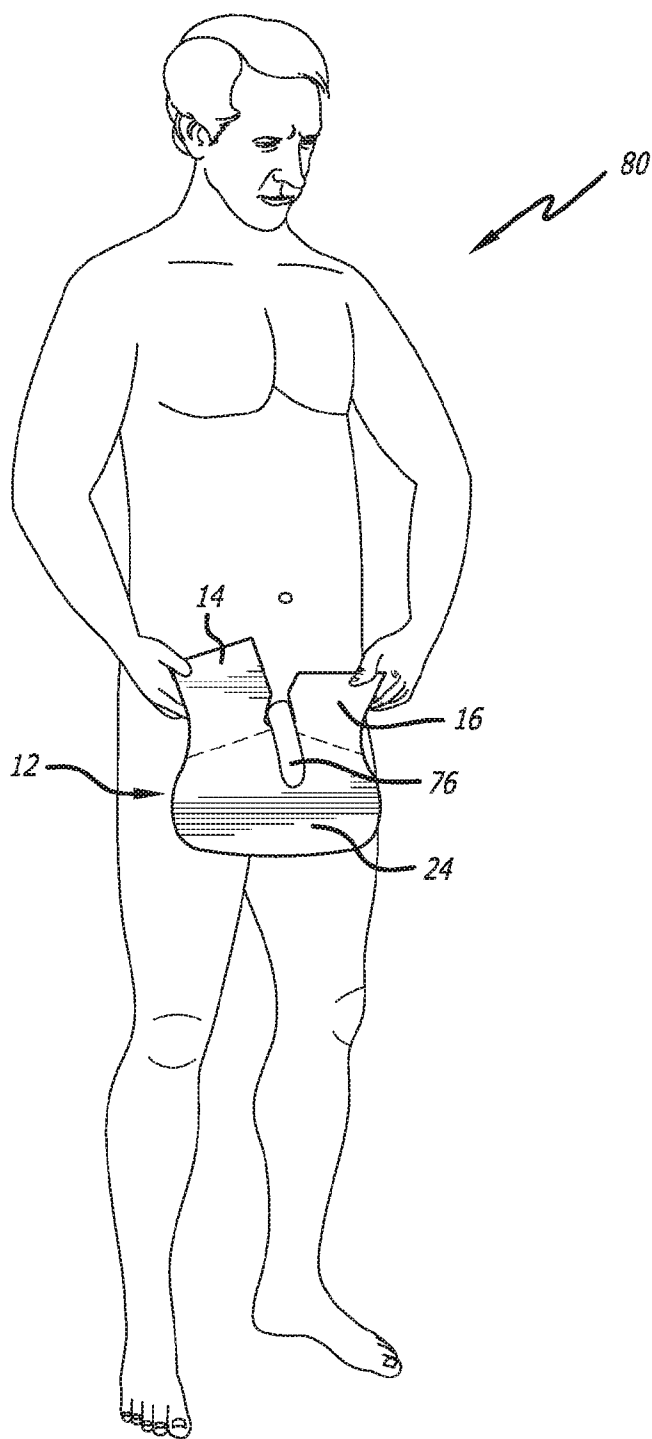


FIG. 4

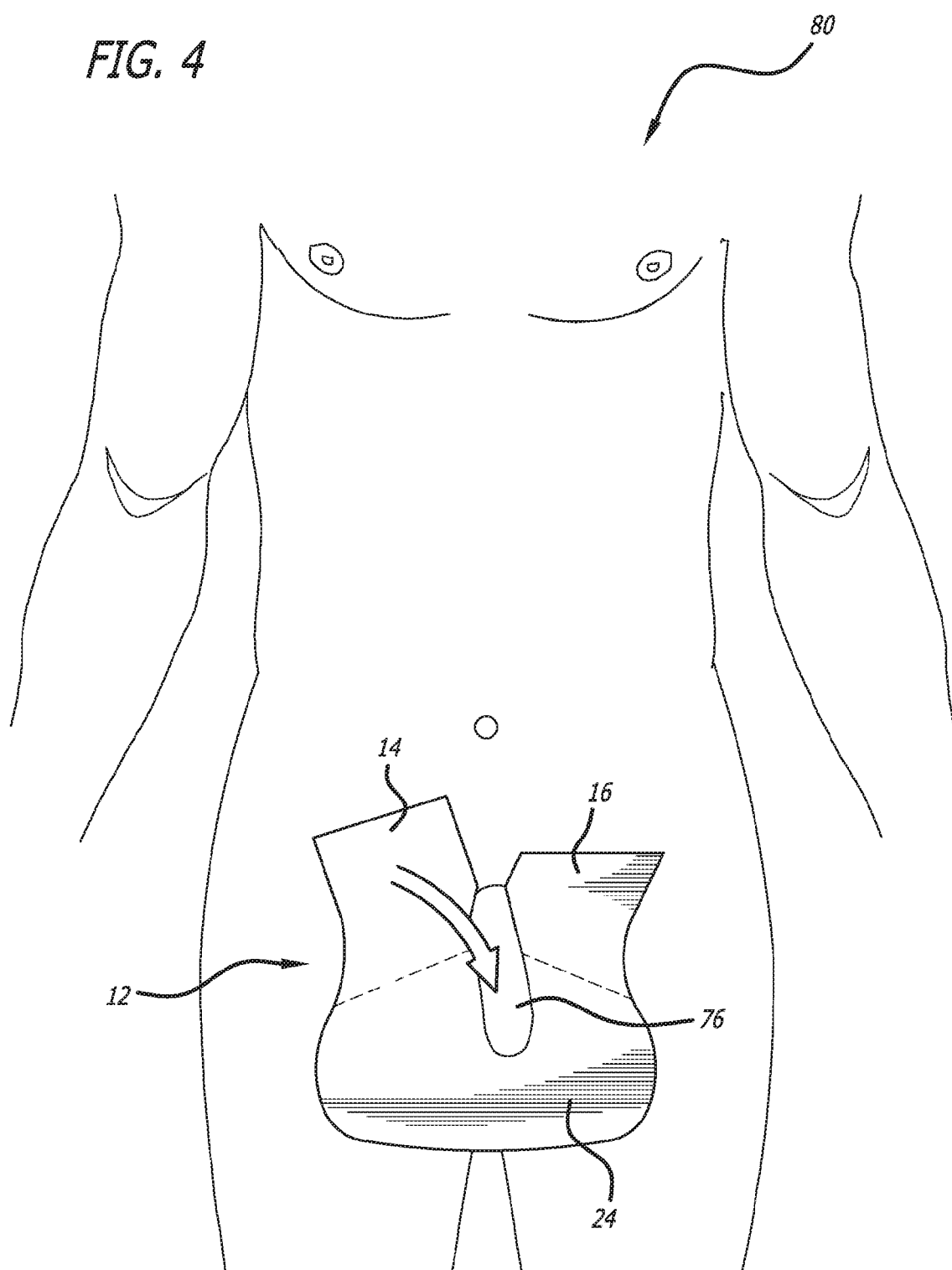


FIG. 5

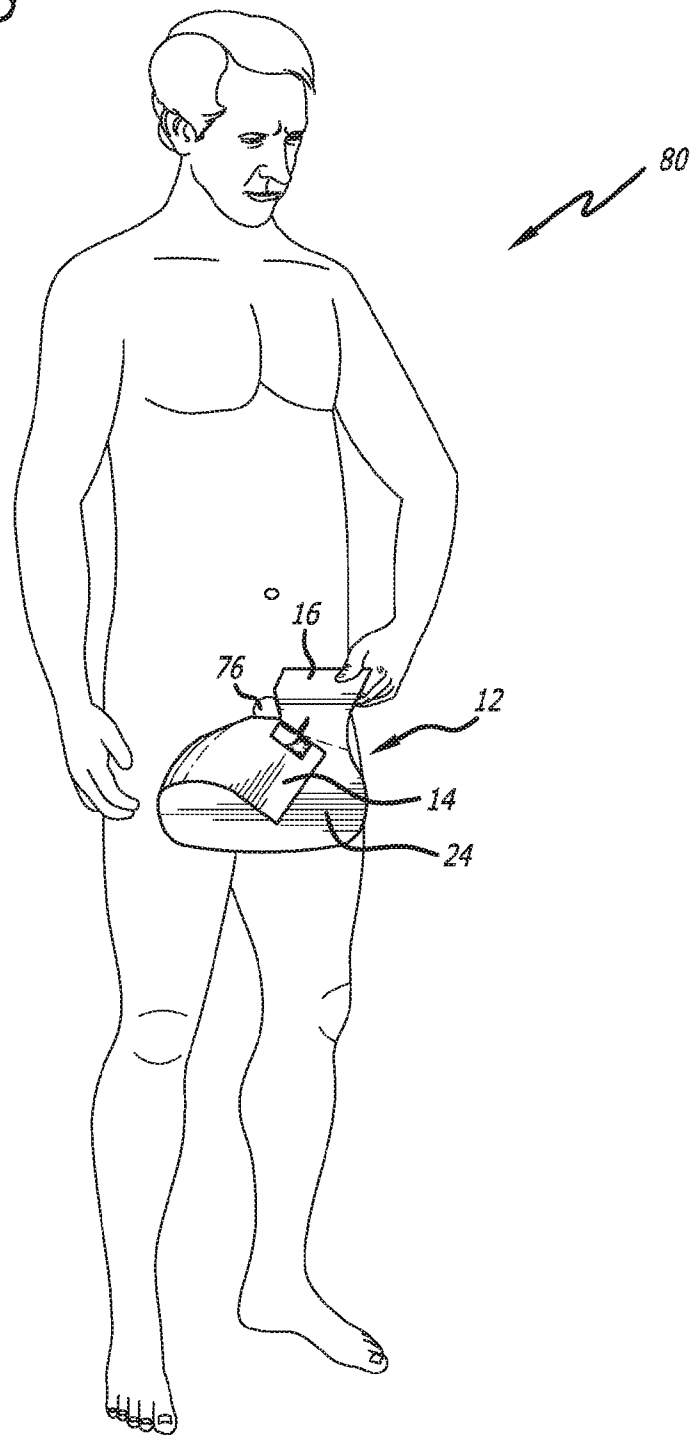


FIG. 6

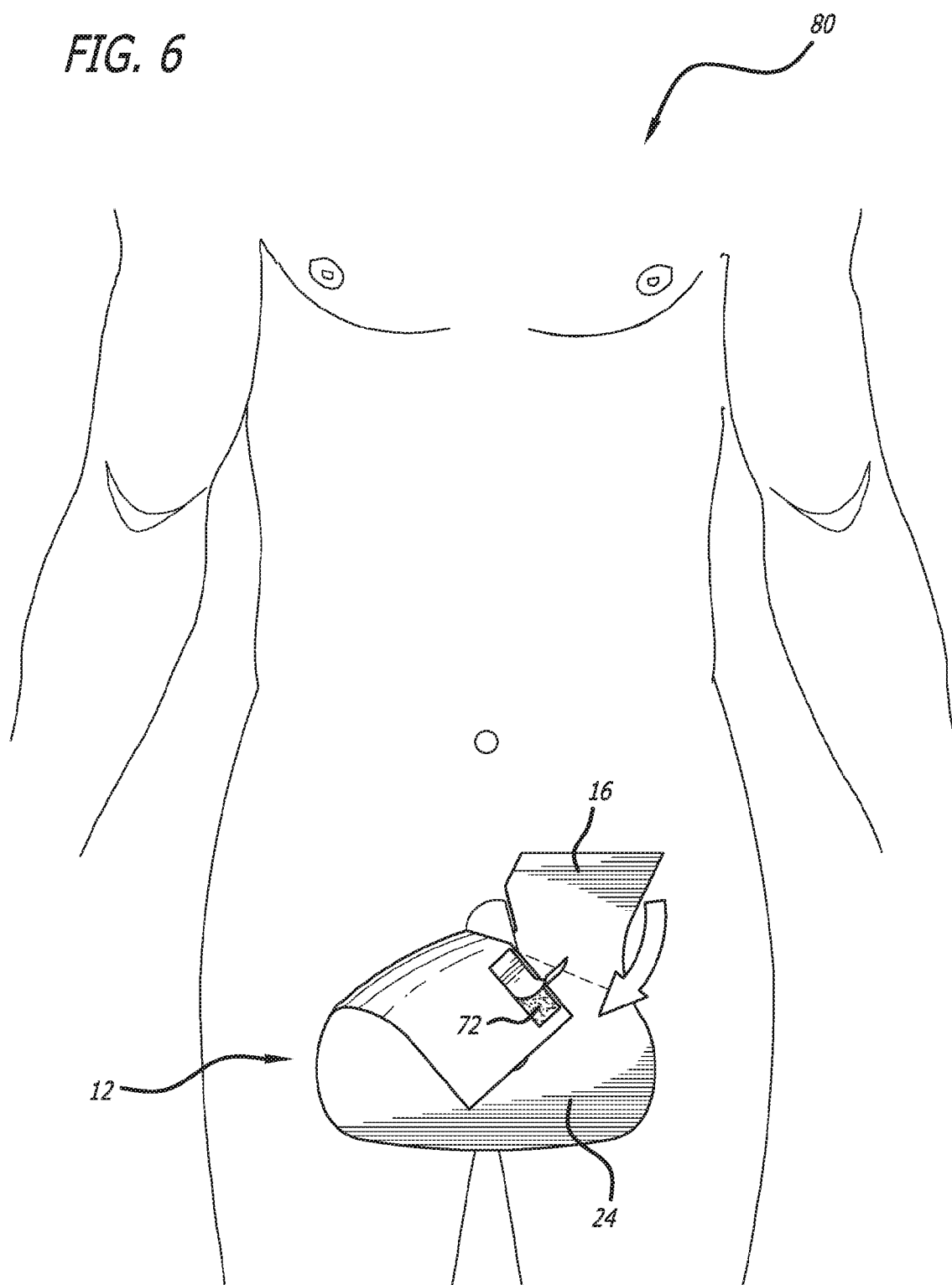


FIG. 7

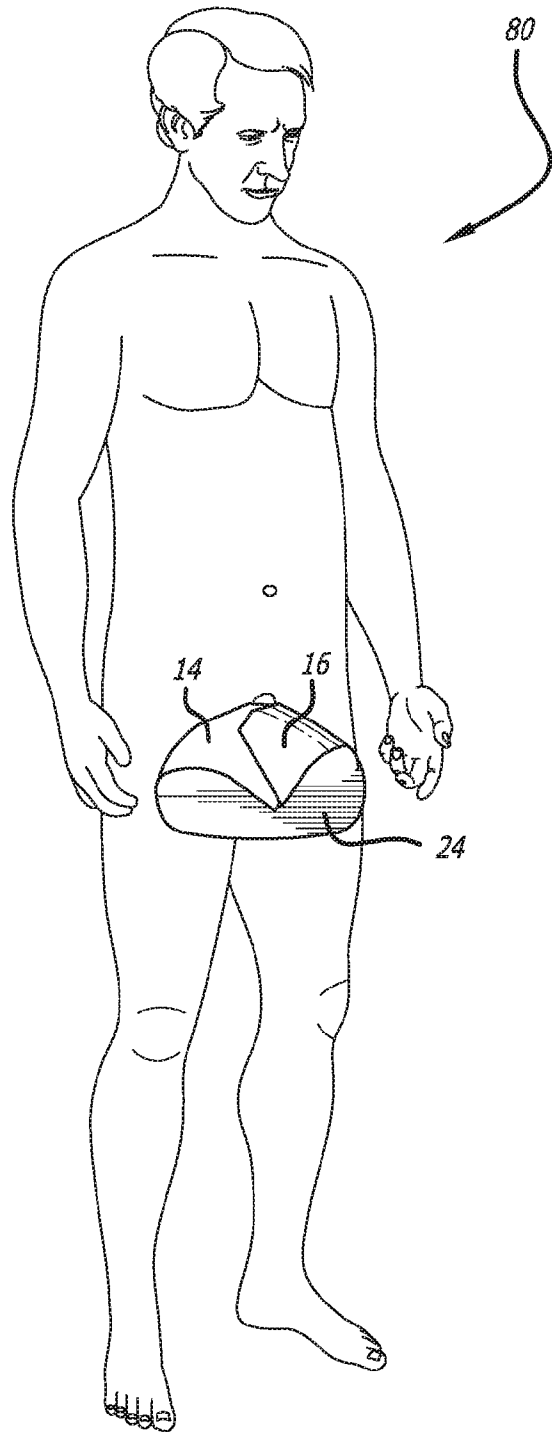


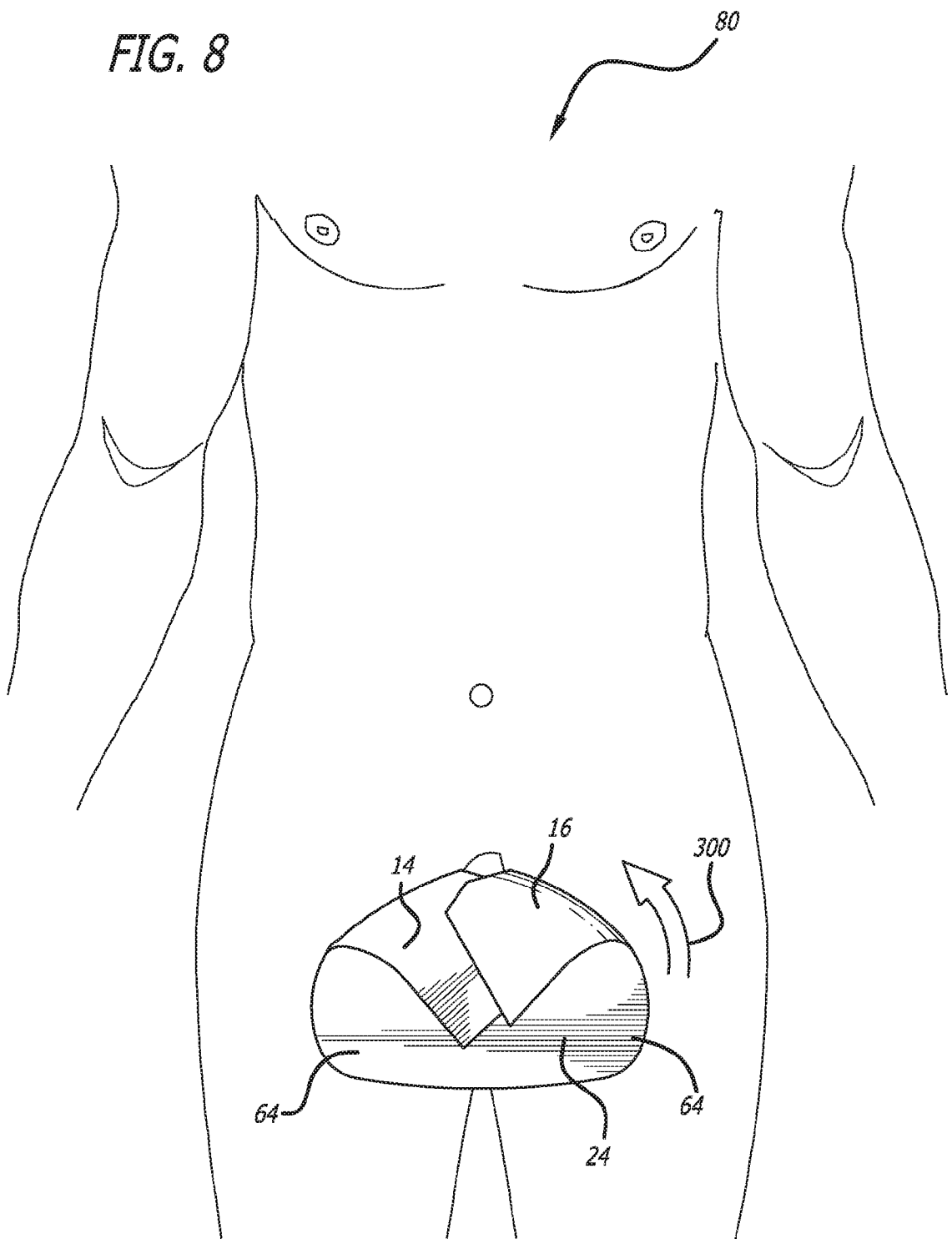
FIG. 8

FIG. 9

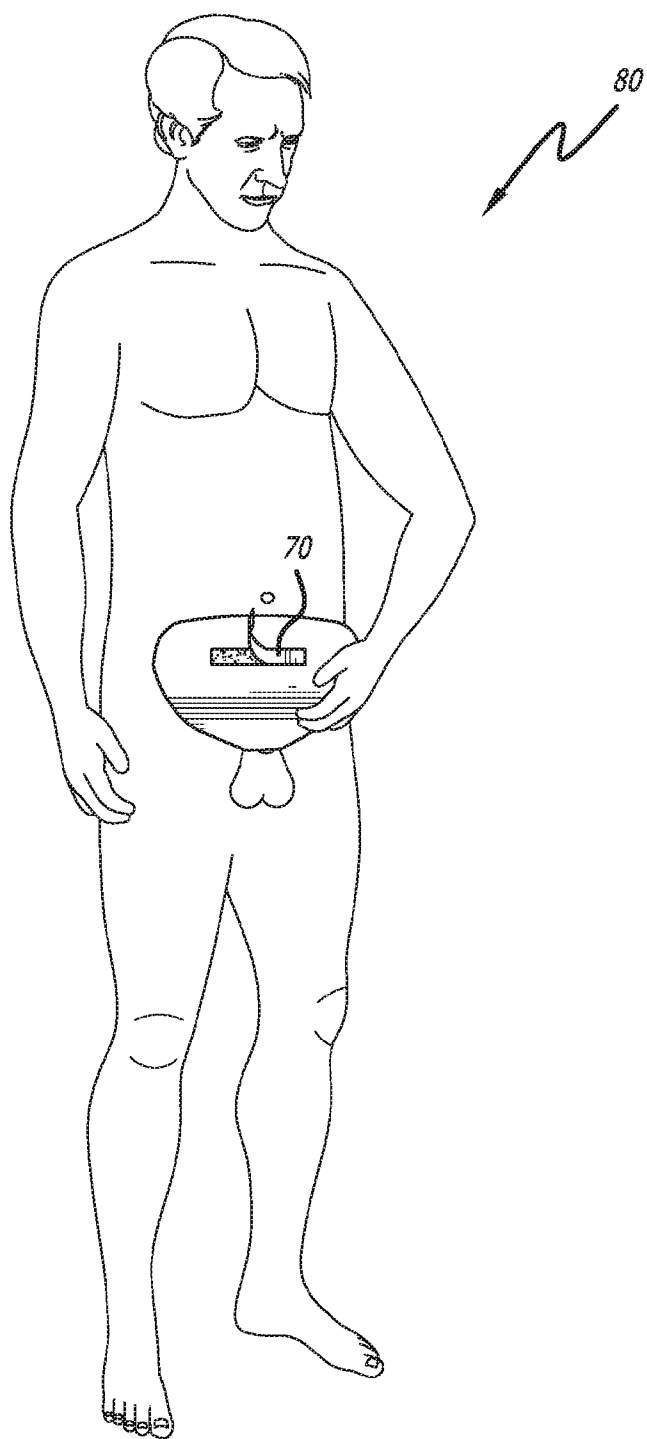


FIG. 10

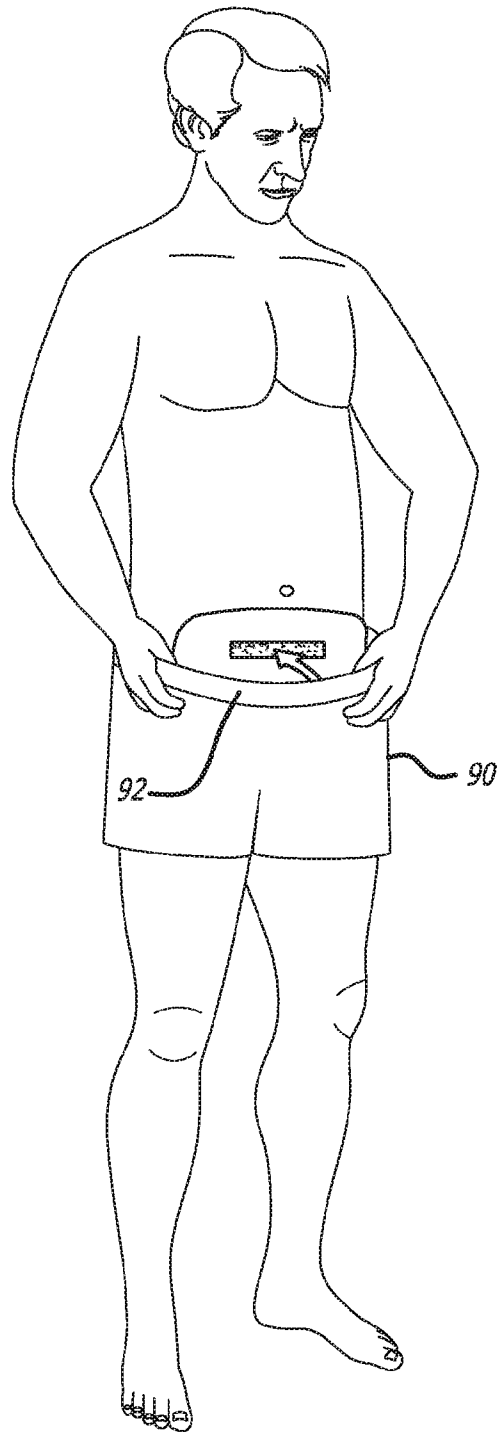
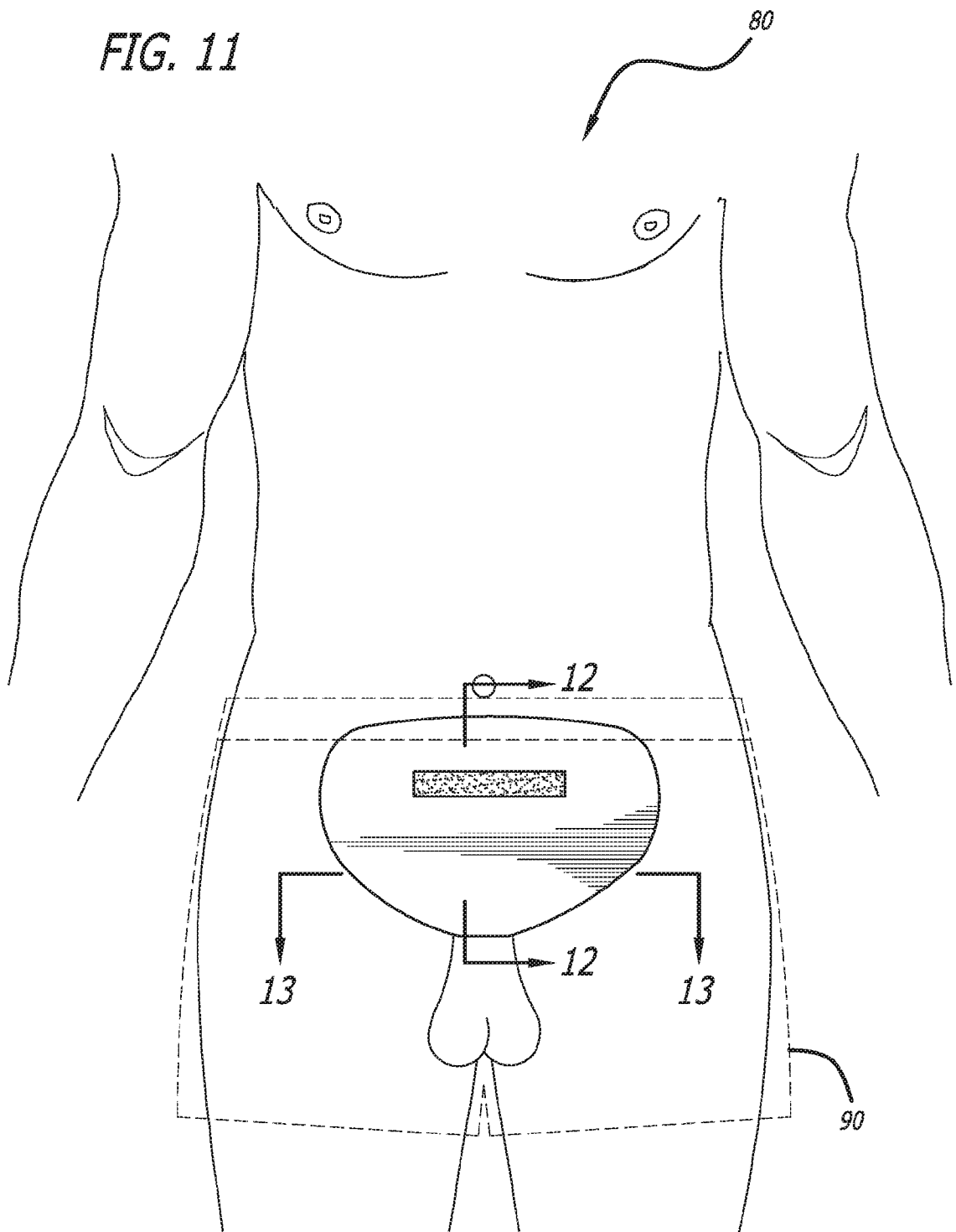


FIG. 11



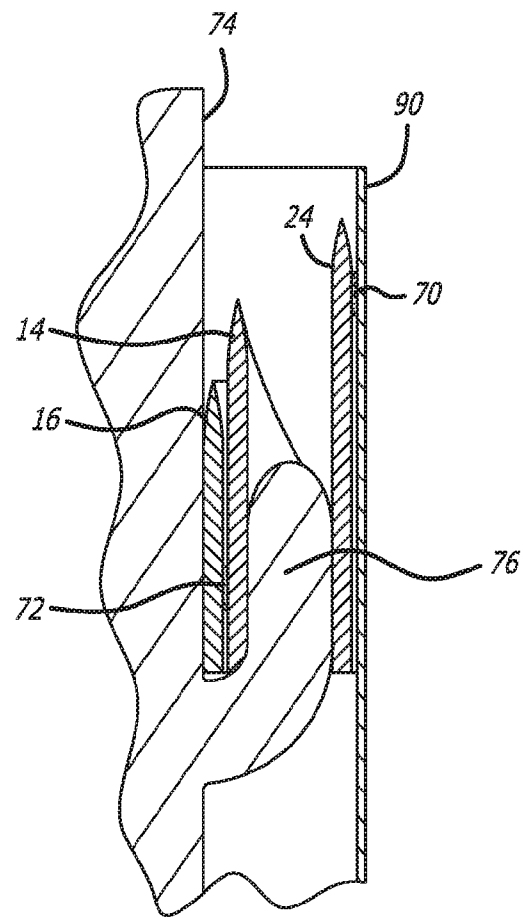


FIG. 12

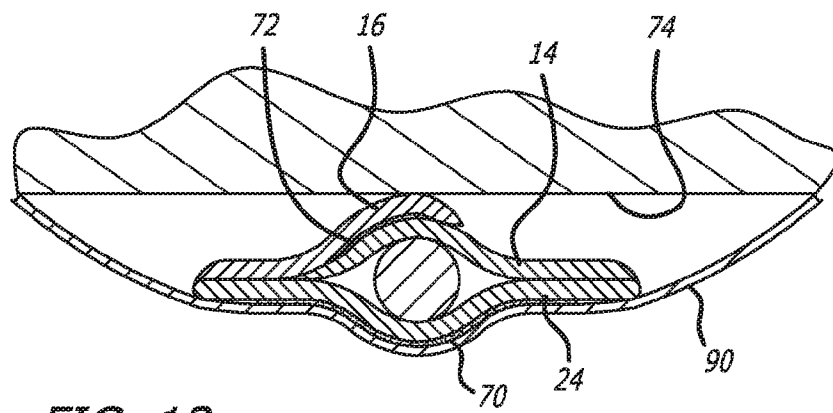


FIG. 13

FIG. 14

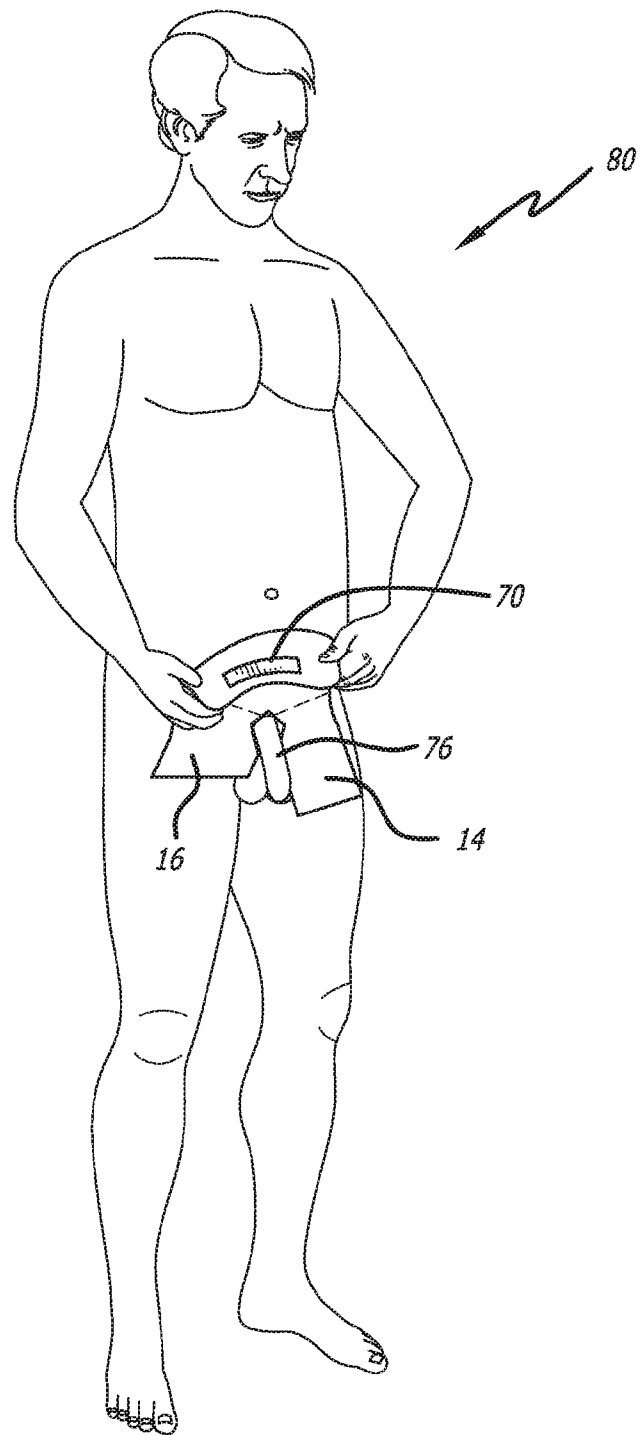


FIG. 15

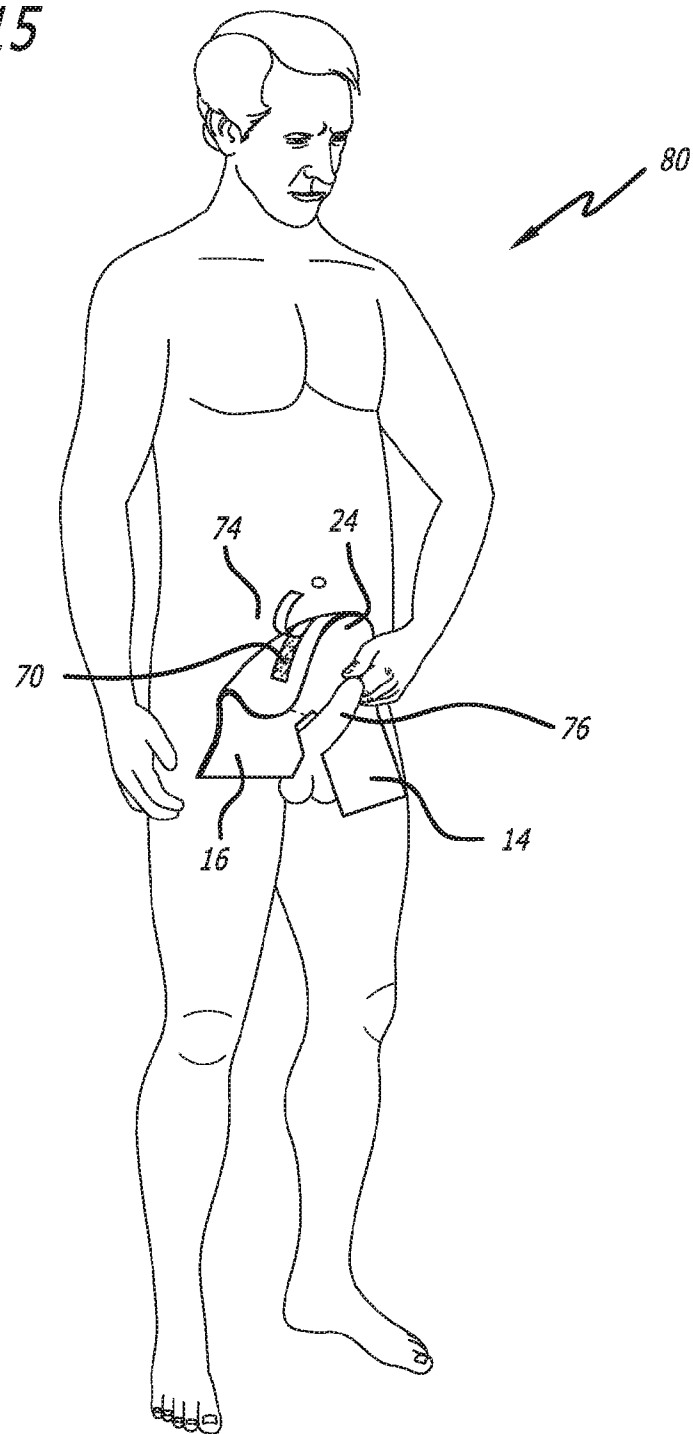


FIG. 16

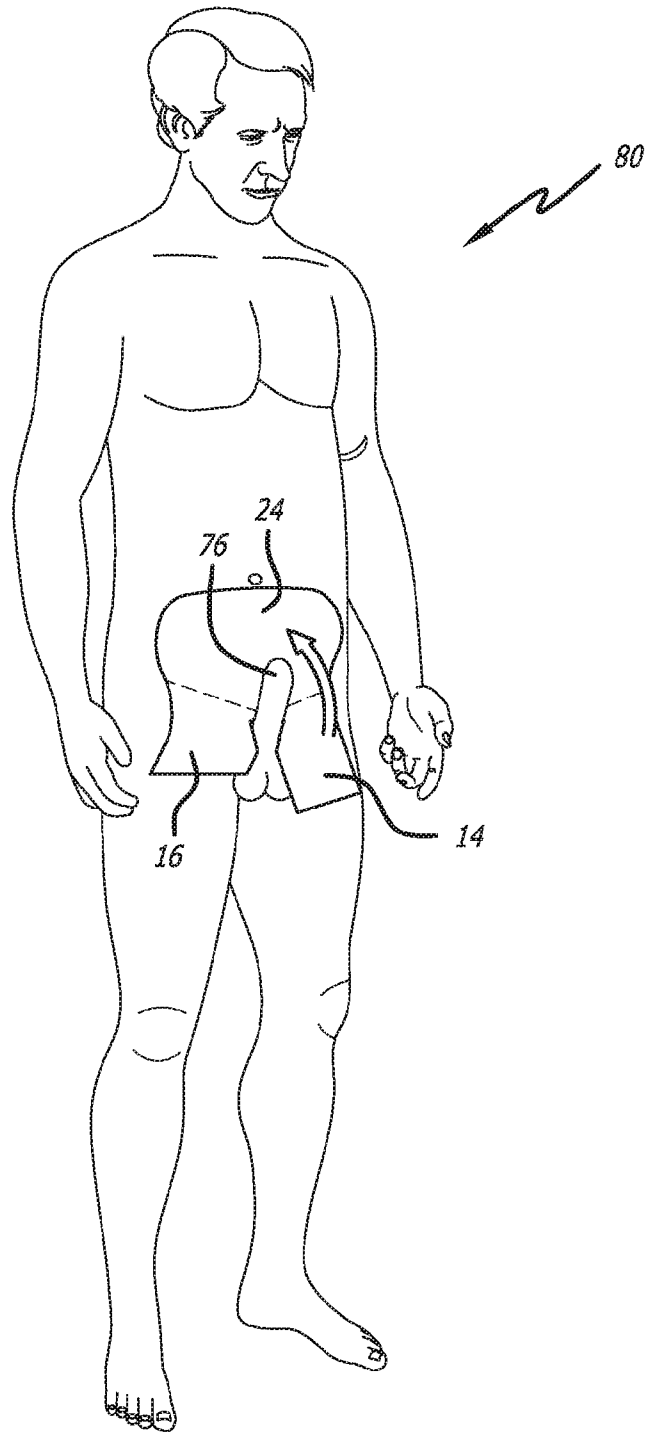


FIG. 17

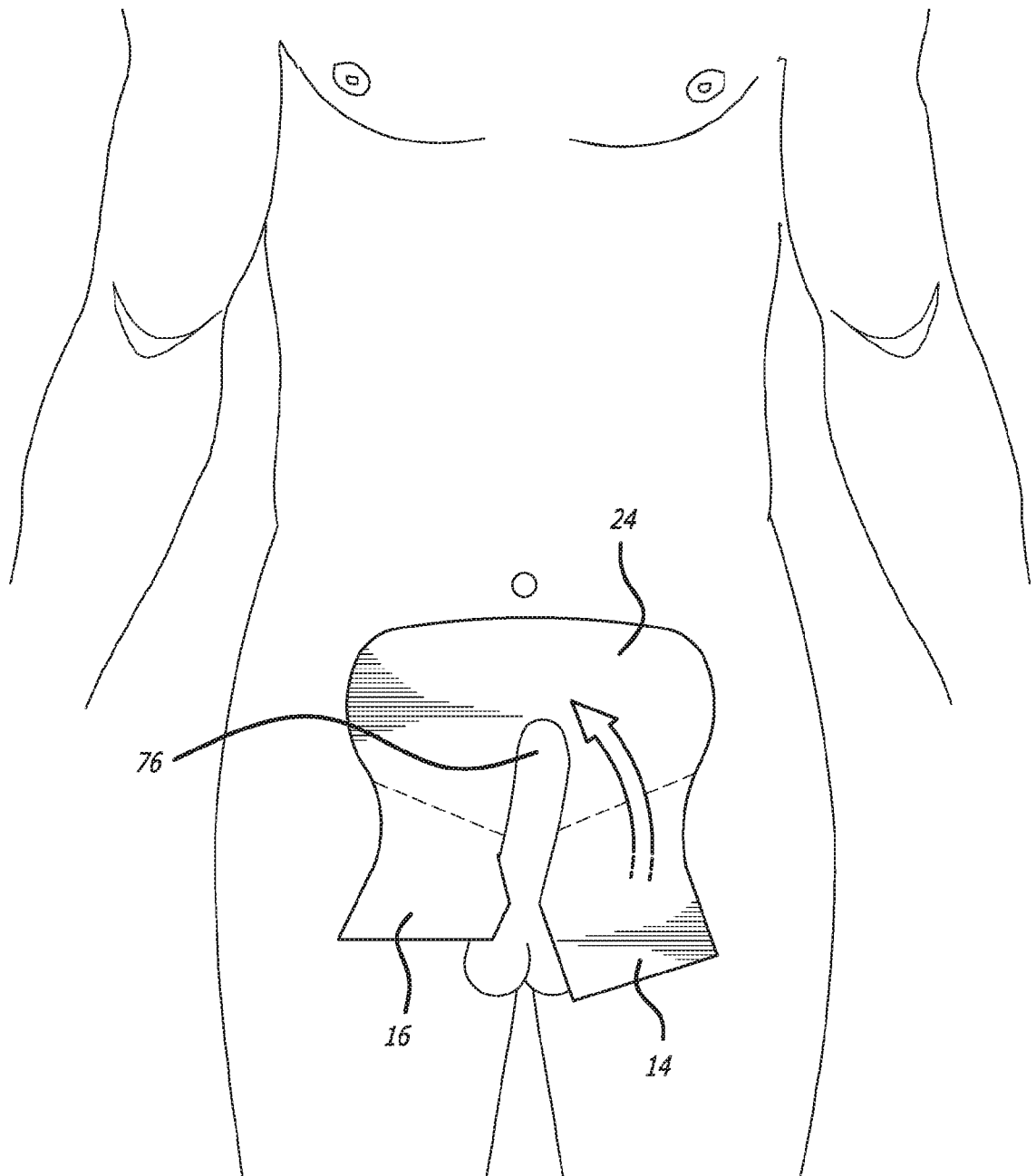


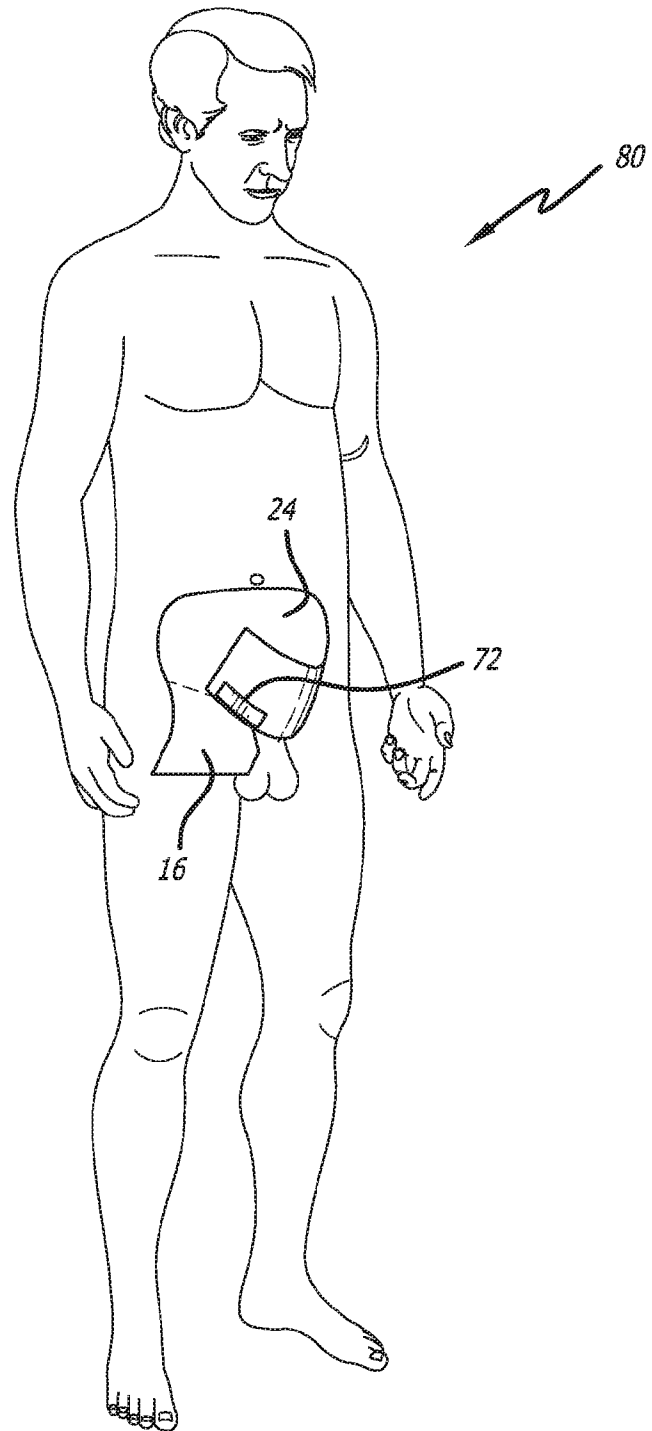
FIG. 18

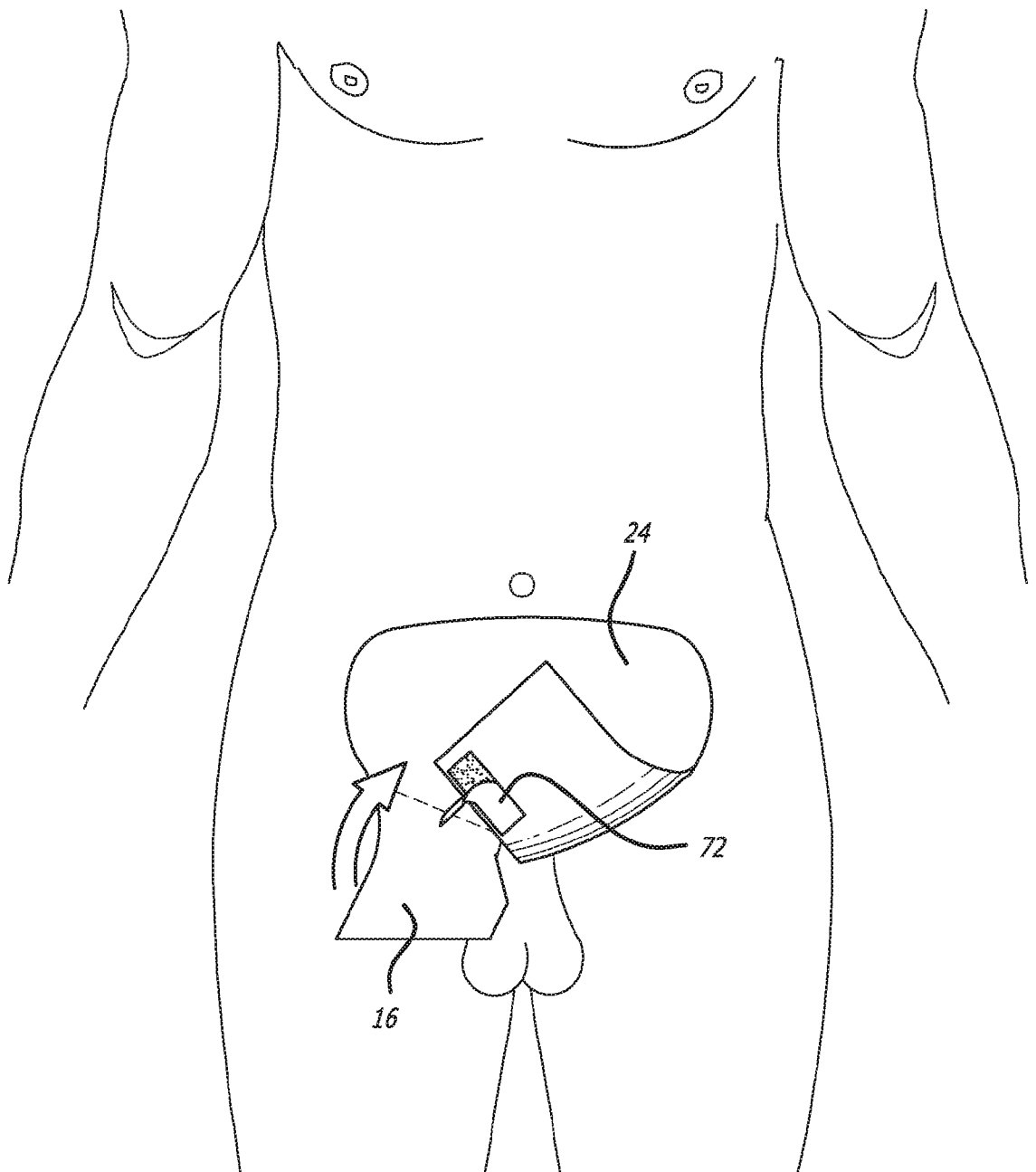
FIG. 19

FIG. 20

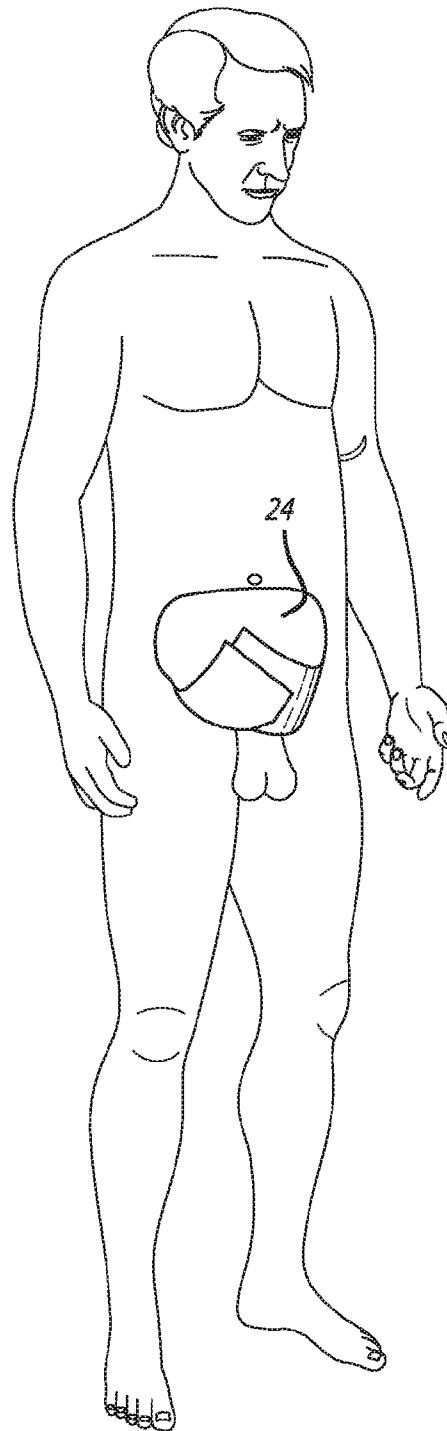
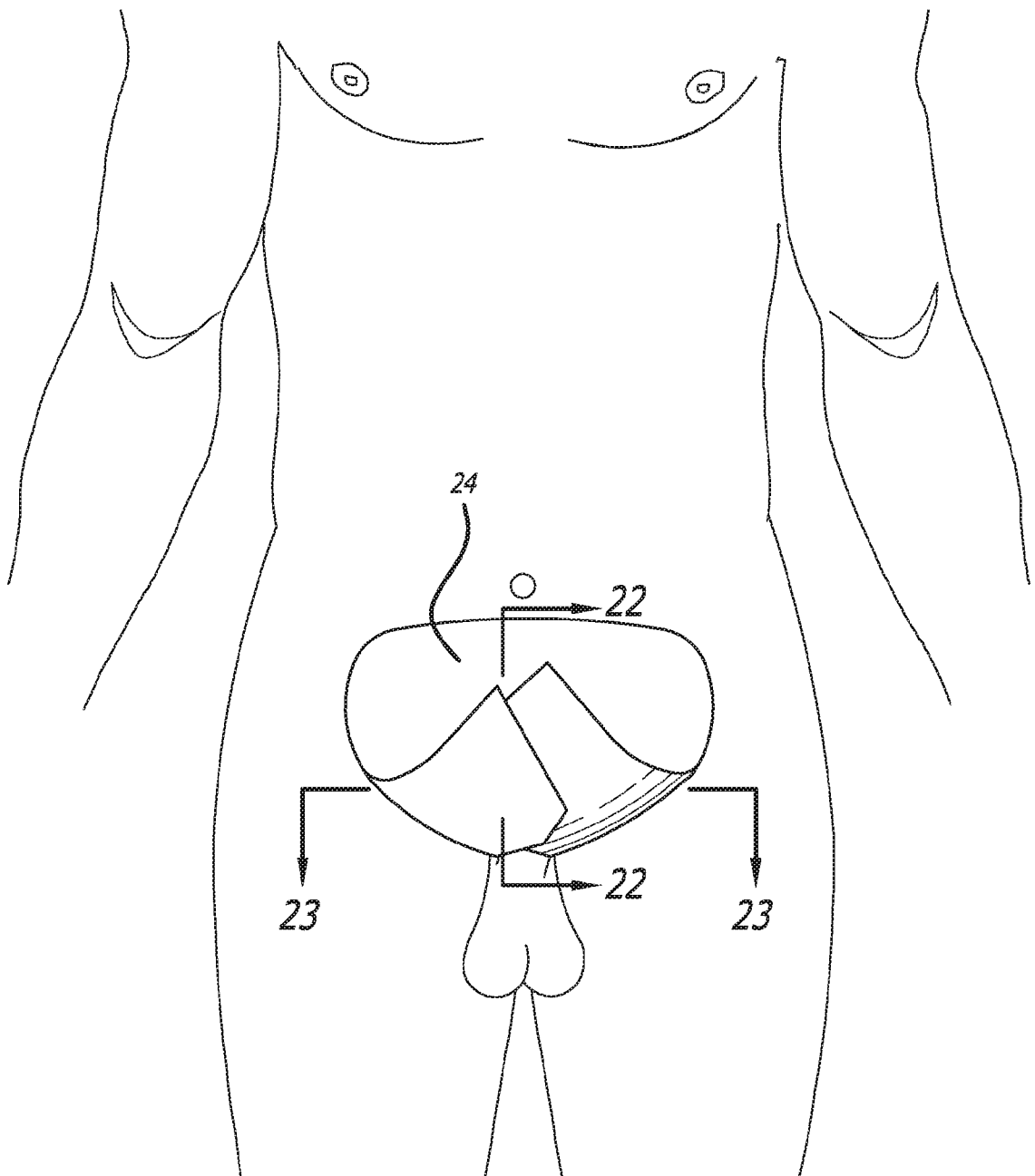


FIG. 21



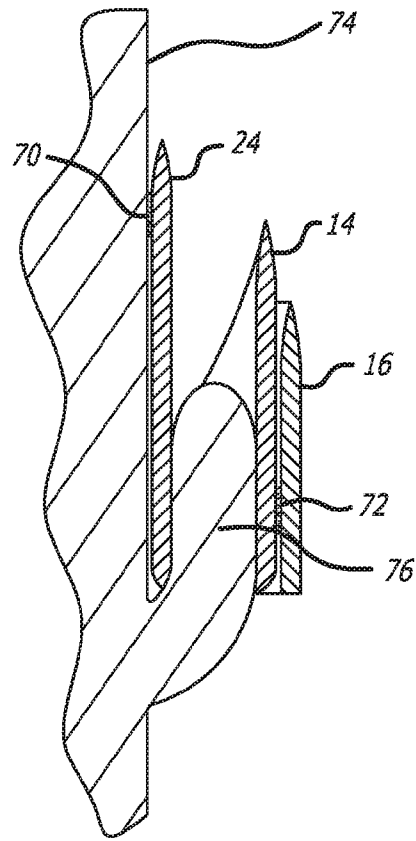


FIG. 22

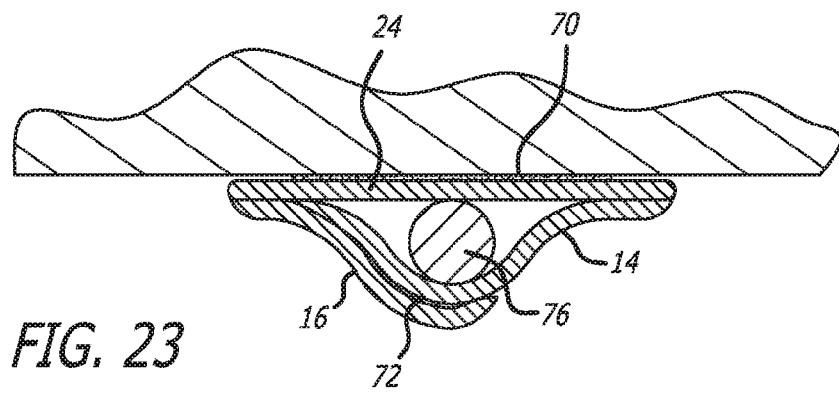


FIG. 23

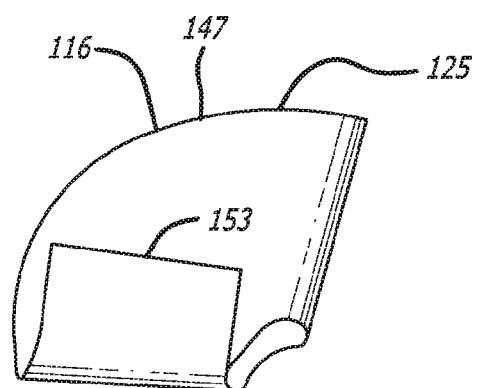
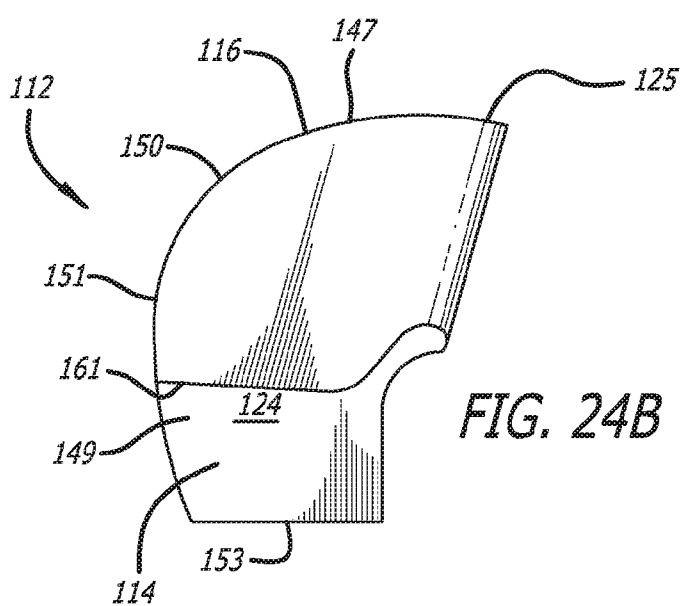
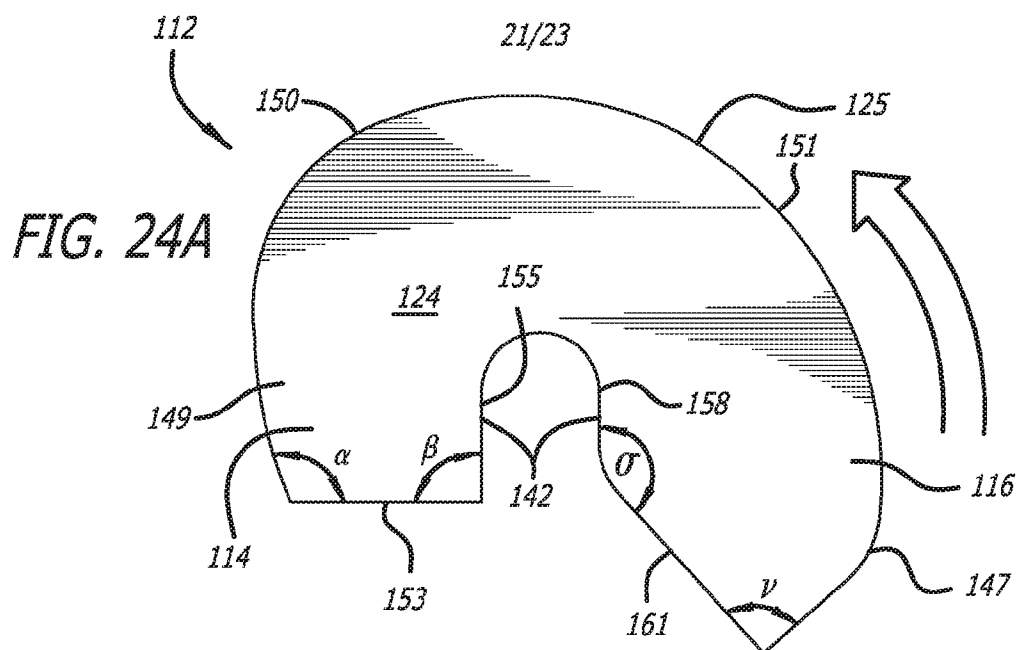
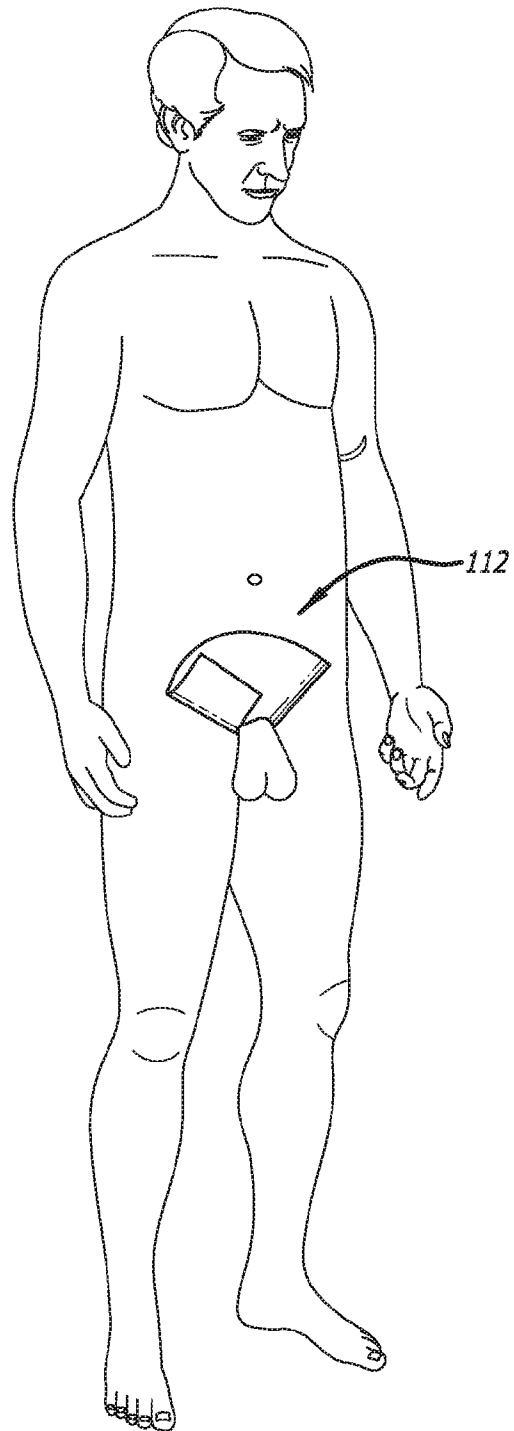
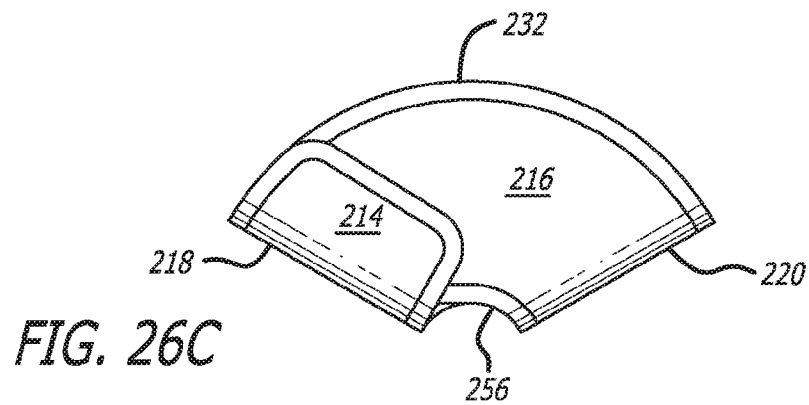
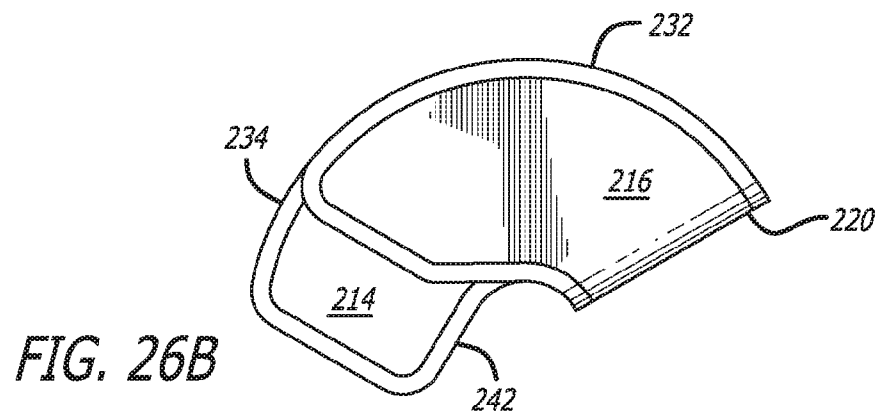
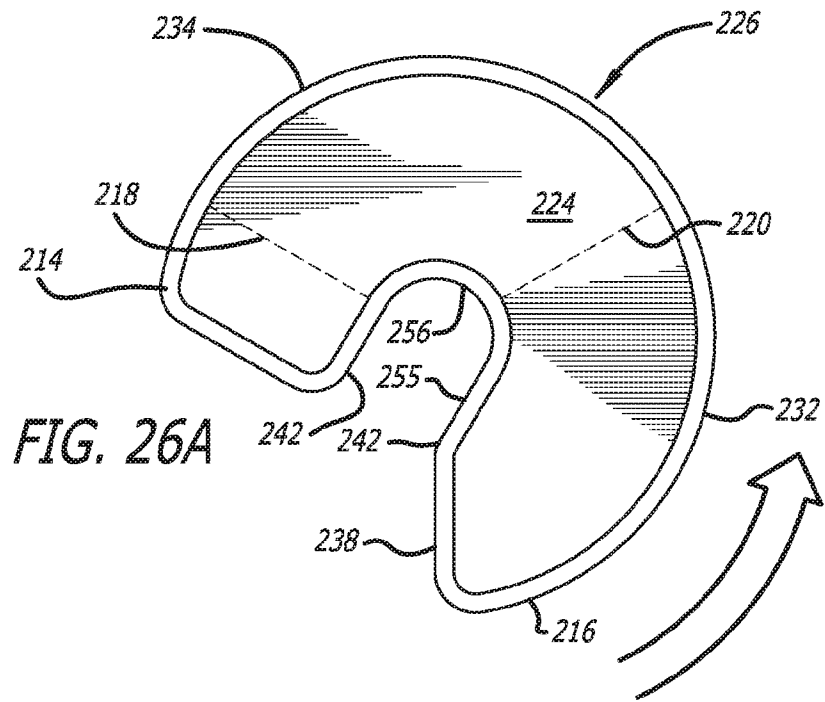


FIG. 25





PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference EZMPI-96882	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2017/025121	International filing date (day/month/year) 30 March 2017 (30-03-2017)	(Earliest) Priority Date (day/month/year) 31 March 2016 (31-03-2016)
Applicant EZ MALE INCORPORATED		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

☒

the international application in the language in which it was filed

☐

a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐

This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6b/s(a)).

c. ☐

With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐

Certain claims were found unsearchable (See Box No. II)

3. ☐

Unity of invention is lacking (see Box No. III)

4. With regard to the **title**,

☒

the text is approved as submitted by the applicant

☐

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒

the text is approved as submitted by the applicant

☐

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 26C

☒

as suggested by the applicant

☐

as selected by this Authority, because the applicant failed to suggest a figure

☐

as selected by this Authority, because this figure better characterizes the invention

b. ☐

none of the figures is to be published with the abstract

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61F13/56 A61F13/58 A61F13/471
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2016/008188 A1 (LUMAQUE-STEEMAN LORNA MATEO [US]) 14 January 2016 (2016-01-14) figures claims	1-17
A	----- JP H09 38127 A (UNI CHARM CORP) 10 February 1997 (1997-02-10) figures	1-17
A	----- US 6 129 719 A (NOZAKI SATOSHI [JP] ET AL) 10 October 2000 (2000-10-10) cited in the application claim 1 figures -----	1-17



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 May 2017

Date of mailing of the international search report

29/05/2017

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

O'Sullivan, Paul

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2016008188	A1	14-01-2016	AU	2015290215 A1	02-02-2017
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			EP	3169292 A1	24-05-2017
			US	2016008188 A1	14-01-2016
			WO	2016010617 A1	21-01-2016

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			JP	3500269 B2	23-02-2004
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			MY	118586 A	31-12-2004
			SG	71087 A1	21-03-2000
			TW	422089 U	11-02-2001
			US	6129719 A	10-10-2000

Information on Search Strategy - Pilot phase (see OJ 2015, A86)

The type of information contained in this sheet may change during the pilot for improving the usefulness of this new service.

Application Number

PCT/US2017/025121

TITLE: URINE ABSORBENT PAD

APPLICANT: EZ MALE INCORPORATED

IPC CLASSIFICATION: A61F13/56, A61F13/58, A61F13/471

EXAMINER: O'Sullivan, Paul

CONSULTED DATABASES:

CLASSIFICATION SYMBOLS DEFINING EXTENT OF THE SEARCH:

IPC:

CPC: A61F13/5616, A61F13/58, A61F13/471, A61F2013/15146

FI/F-TERMS:

KEYWORDS OR OTHER ELEMENTS FEATURING THE INVENTION:

towel?, trap?,urine?, male?,absorbent?

ADVANCE E-MAIL

From the INTERNATIONAL BUREAU

PCTNOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

To:

MICHAEL J. MOFFATT
Fulwider Patton LLP
6100 Center Drive
Ste. 1200
Los Angeles, California 90045
ÉTATS-UNIS D'AMÉRIQUE

Date of mailing (day/month/year) 25 September 2018 (25.09.2018)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference EZMPI-96882	
International application No. PCT/US2017/025121	International filing date (day/month/year) 30 March 2017 (30.03.2017)

1. The following indications appeared on record concerning: ☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative		
Name and Address EZ MALE INCORPORATED 555 E. Ocean Boulevard, Suite 430 Long Beach, California 90802 United States of America	State of Nationality US	State of Residence US
	Telephone No. (562) 435-2422	
	Facsimile No.	
	E-mail address	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: ☐ the person ☒ the name ☐ the address ☐ the nationality ☐ the residence		
Name and Address EZ MALE PADS, INCORPORATED 555 E. Ocean Boulevard, Suite 430 Long Beach, California 90802 United States of America	State of Nationality US	State of Residence US
	Telephone No. (562) 435-2422	
	Facsimile No.	
	E-mail address ☐ Notifications by e-mail authorized	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to: ☒ the receiving Office ☐ the International Preliminary Examining Authority ☒ the International Searching Authority ☒ the designated Offices concerned ☐ the Authority(ies) specified for supplementary search ☐ the elected Offices concerned ☐ other:		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 89 70	Authorized officer Daenger Frederic e-mail pct.team6@wipo.int Telephone No. +41 22 338 74 06
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