



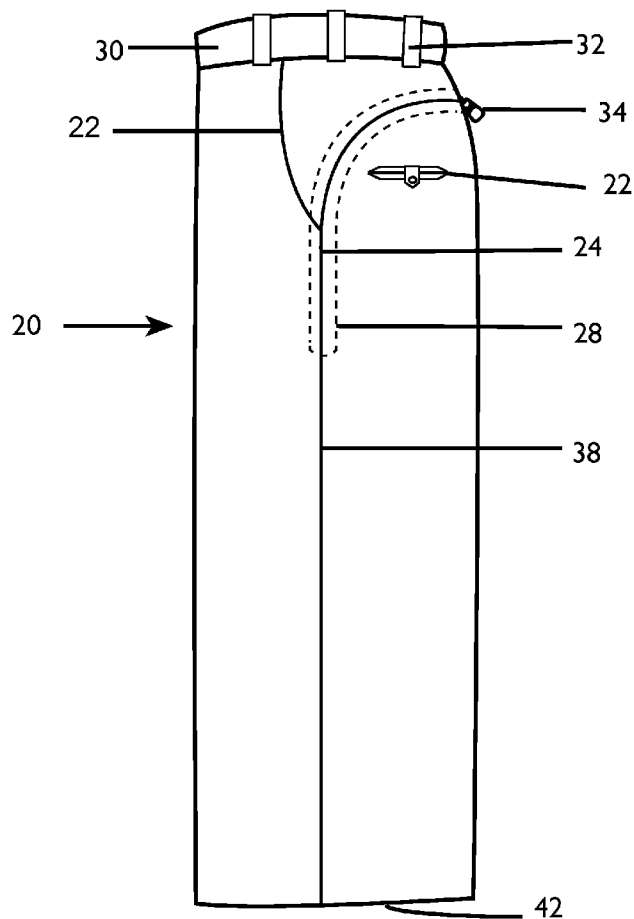
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(19) **United States**(12) **Patent Application Publication**
Bishop et al.(10) **Pub. No.: US 2014/0304894 A1**(43) **Pub. Date: Oct. 16, 2014**(54) **REAR ACCESS PANTS**(71) Applicants: **Marilyn Yvette Bishop**, Chicago, IL
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(57)

ABSTRACT

Uniform pants are disclosed. The pants are well suited for all wearers of pants particularly persons in law enforcement, the military, security, construction and the like as well as medical patients and senior citizens who desire easy, convenient, safe, and sanitary access when attending to restroom needs. The pants comprise: (a) a waistband; (b) two leg members extending from the waistband; c) a primary fastener member positioned at a predetermined point beneath the waistband, extending across the rear of the pants to and then within the outer seam of each leg member to a predetermined point, wherein the positioning of the fastener member(s) creates a camber; when open forms a rear (d) drop seat flap; and (e) a secondary fastener member positioned beneath the full length of the primary fastener member to be utilized during a possible impairment of the primary fastener member. Fastener member(s) can consist of a plurality of zippers, hooks, snaps, buttons, and hook and loop fasteners. Additionally, the inclusion of a (f) concealing outer flap atop the full length of the primary fastener member is utilized with visible type fastener members to maintain a professional appearance.



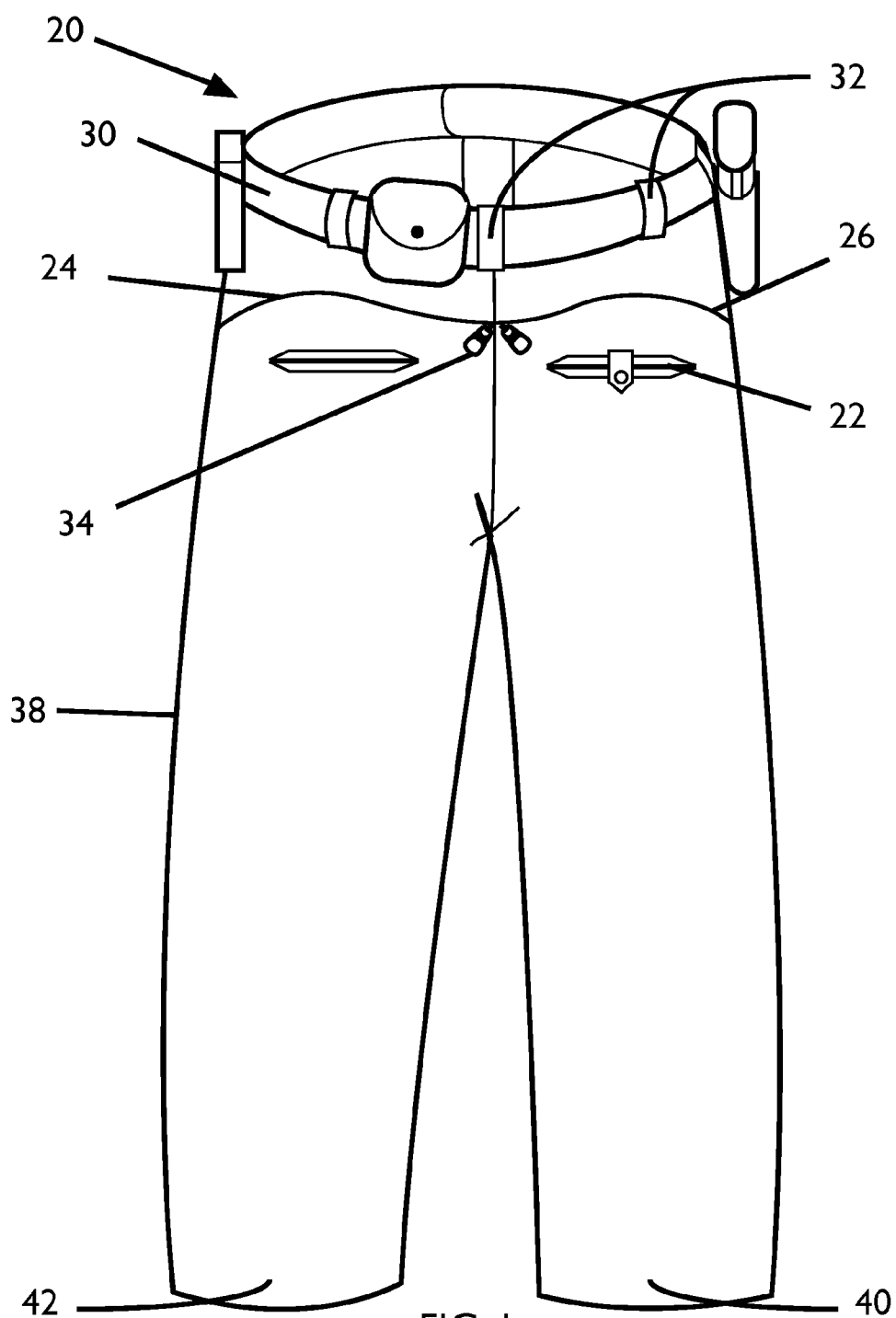


FIG. I

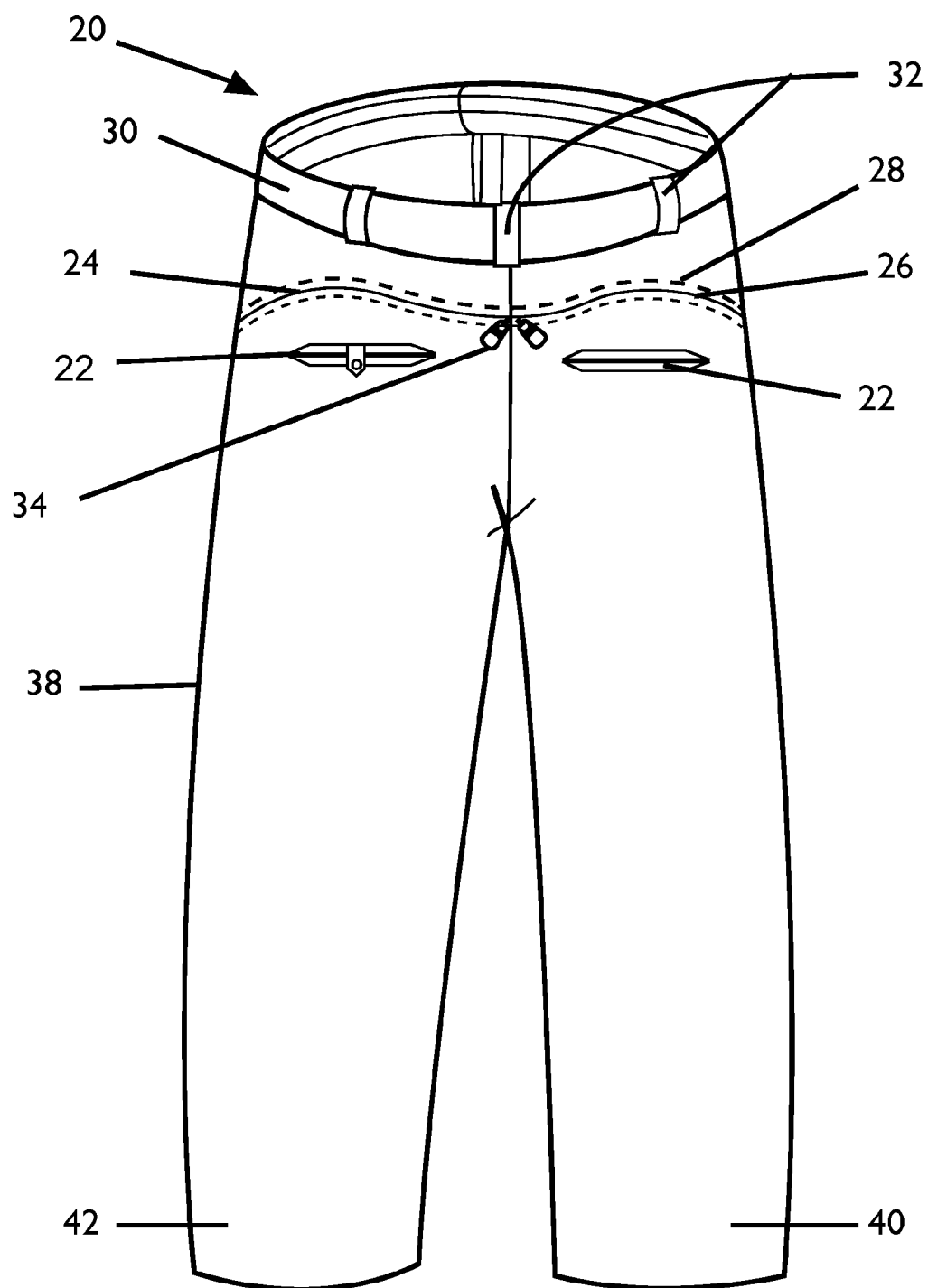


FIG. 2

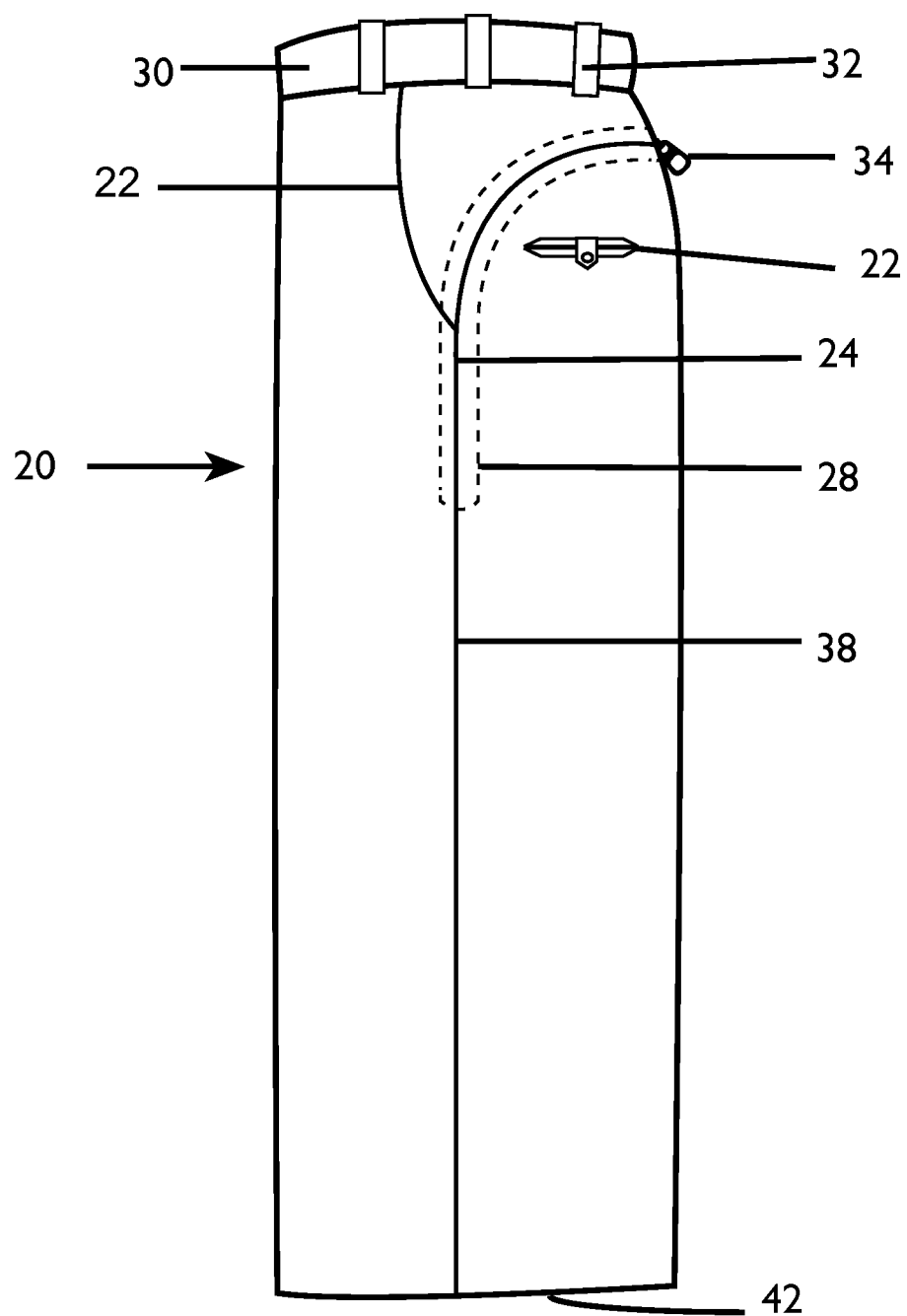


FIG. 3

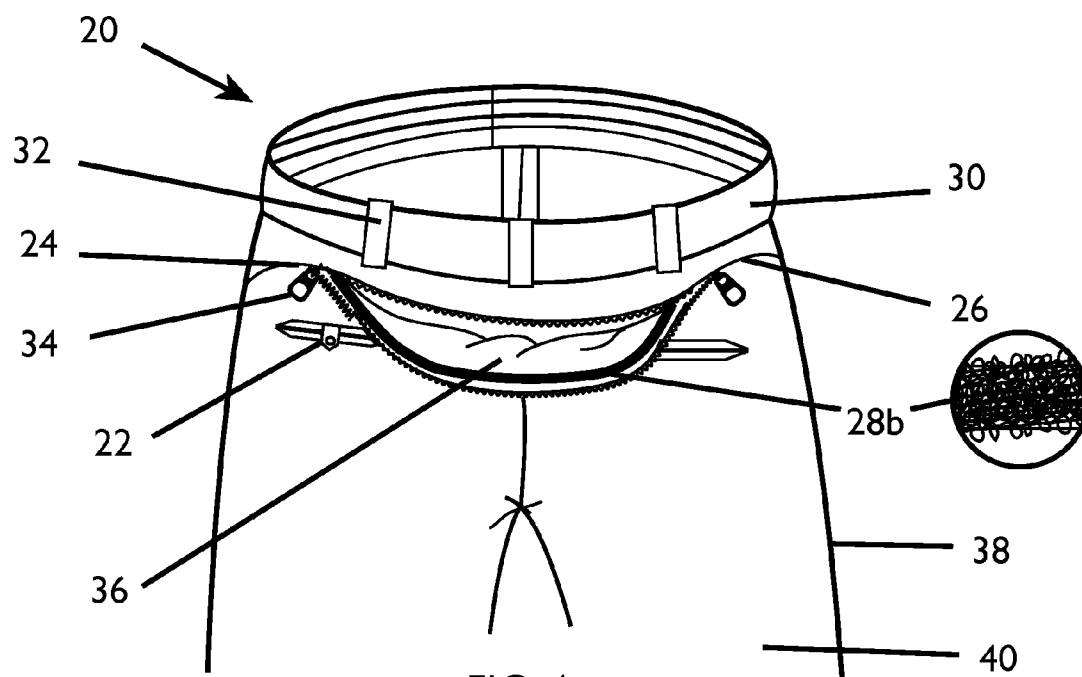


FIG. 4

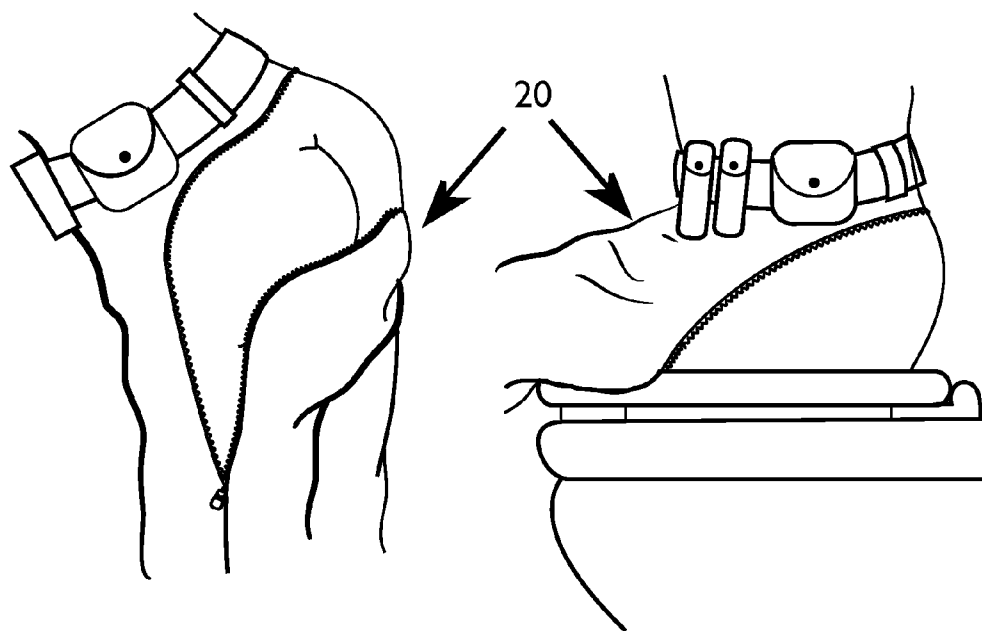


FIG. 5

FIG. 6

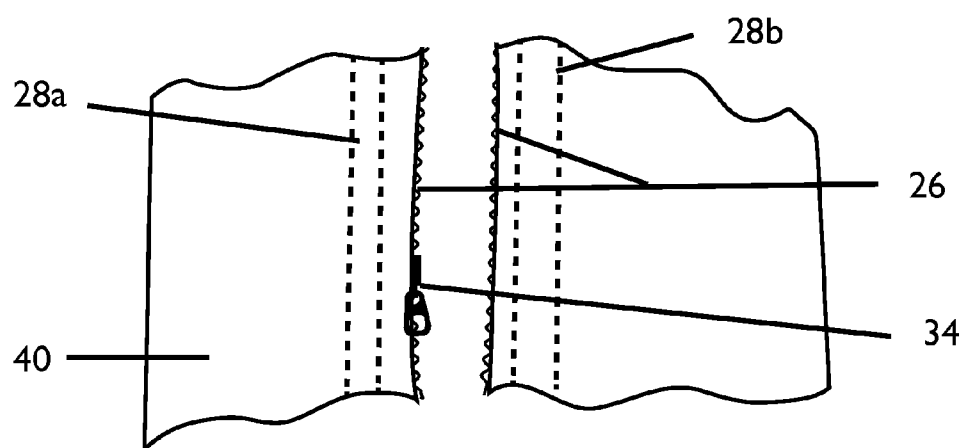


FIG 7

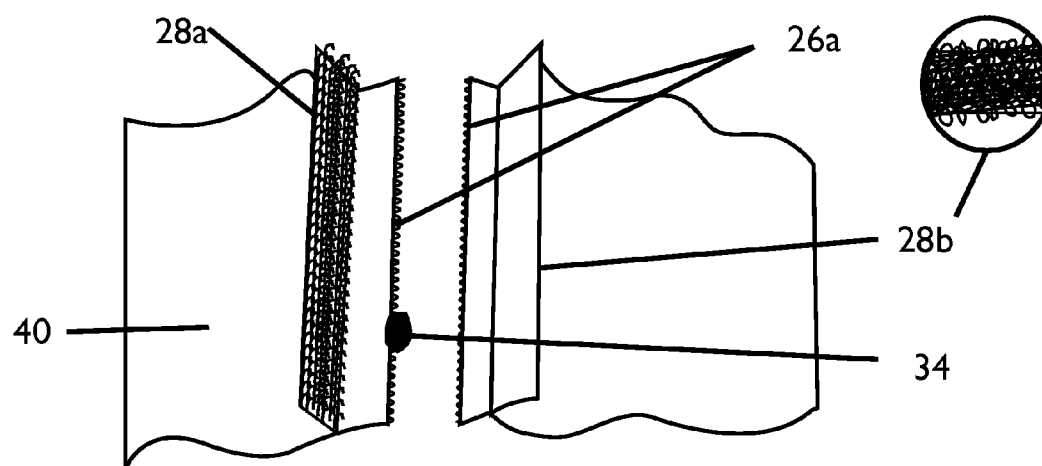


FIG 8

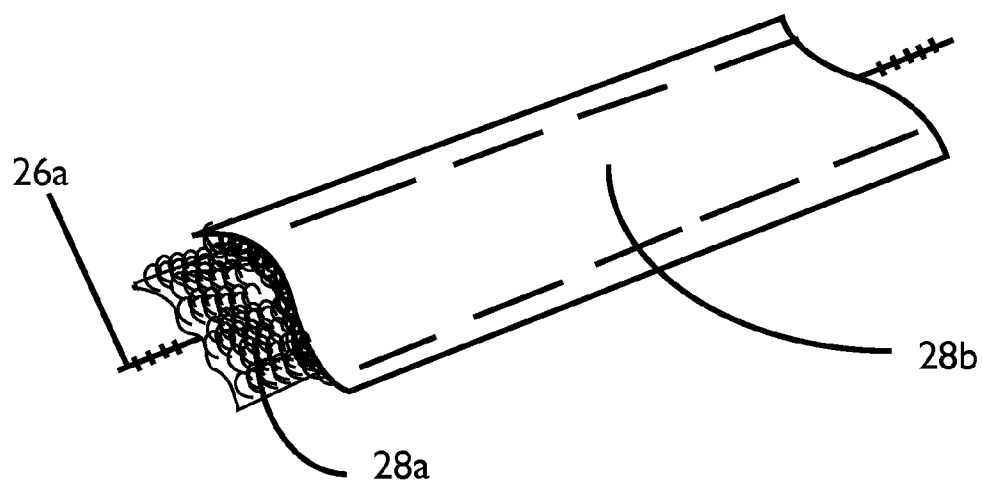


FIG. 9

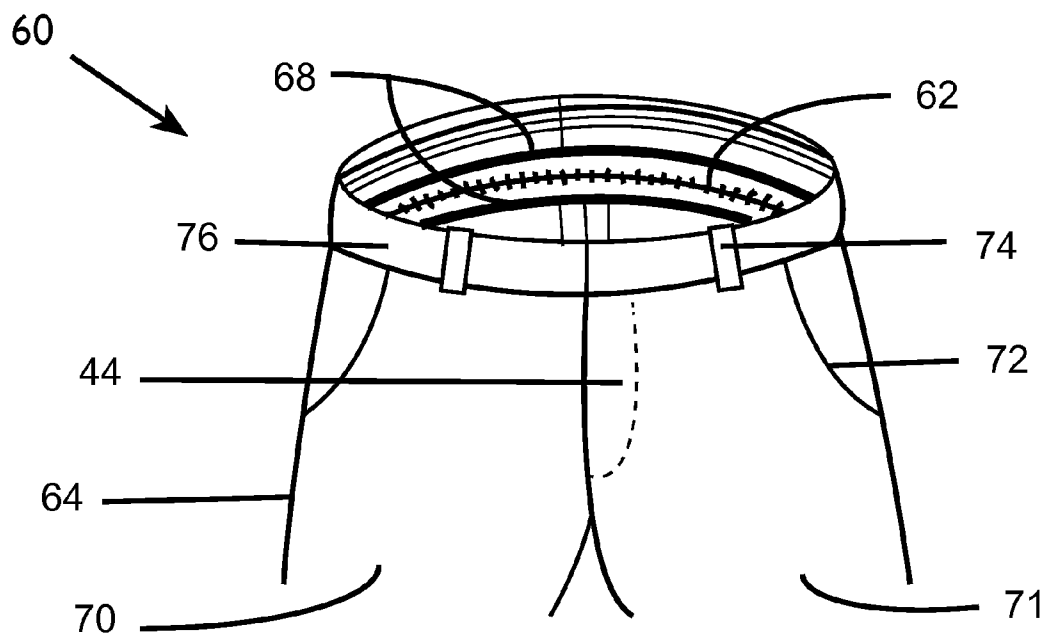


FIG. 10

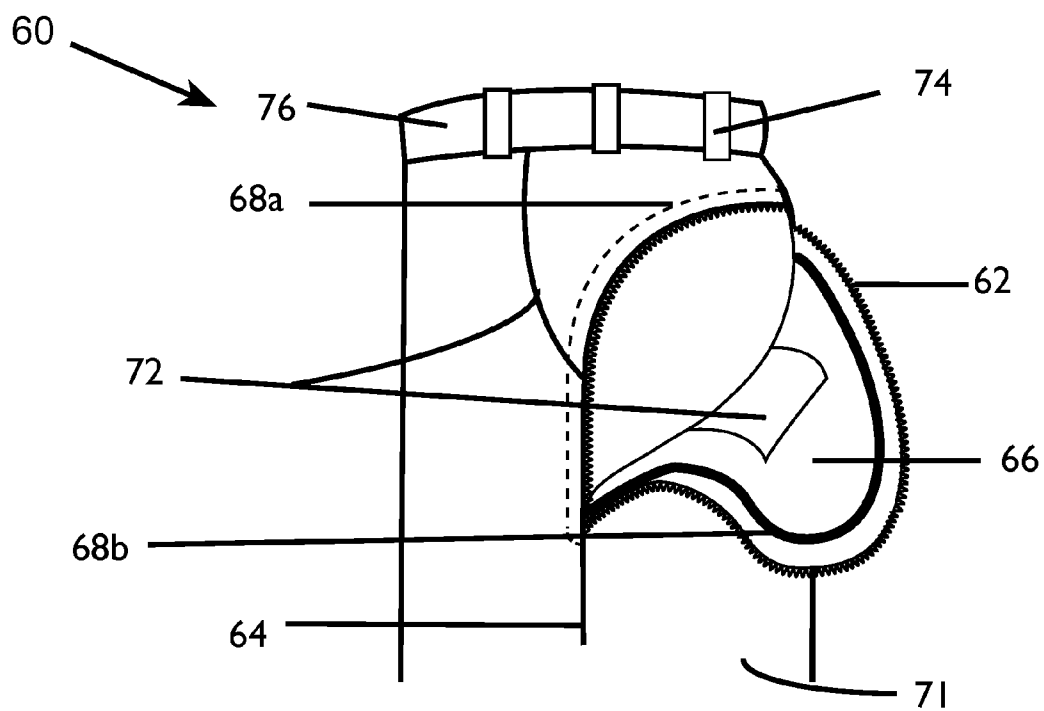


FIG. 11

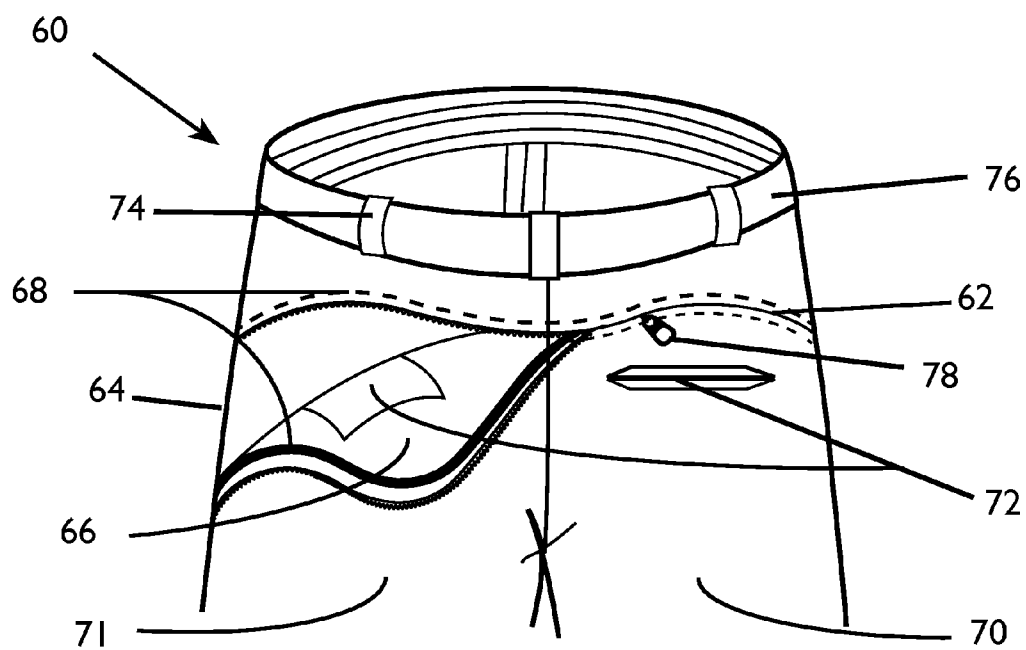


FIG. 12

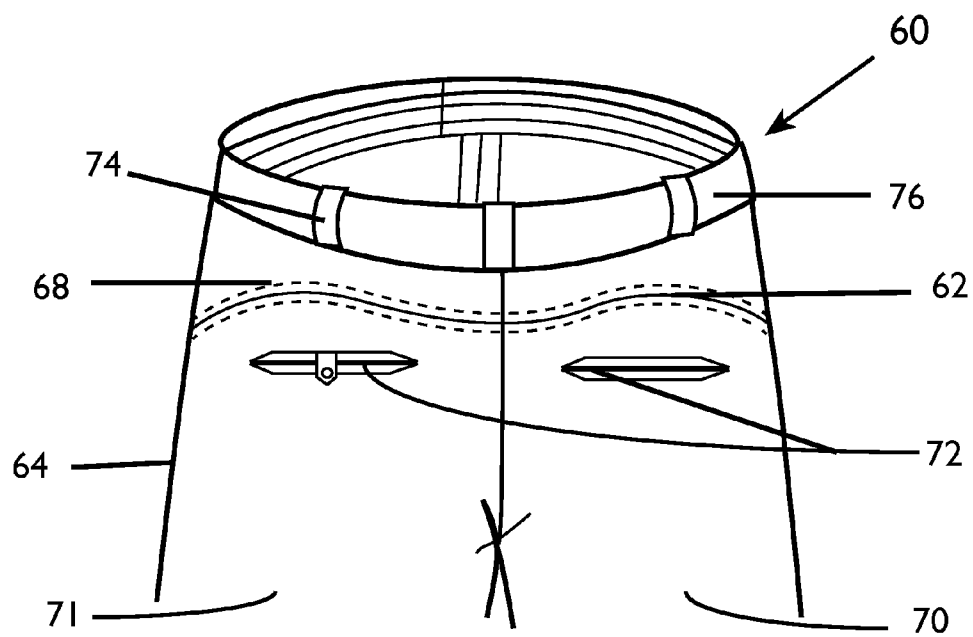


FIG. 13

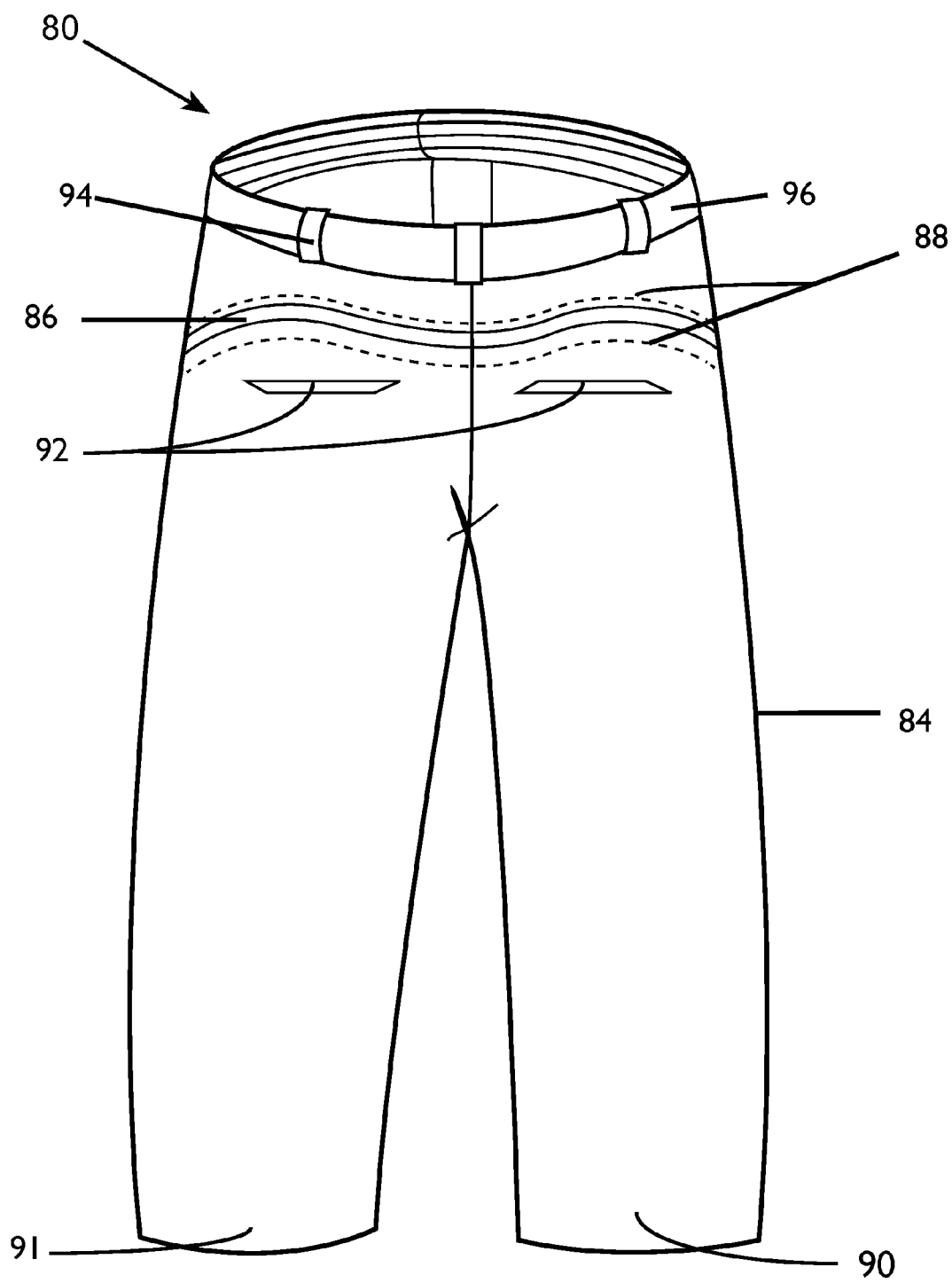


FIG. 14

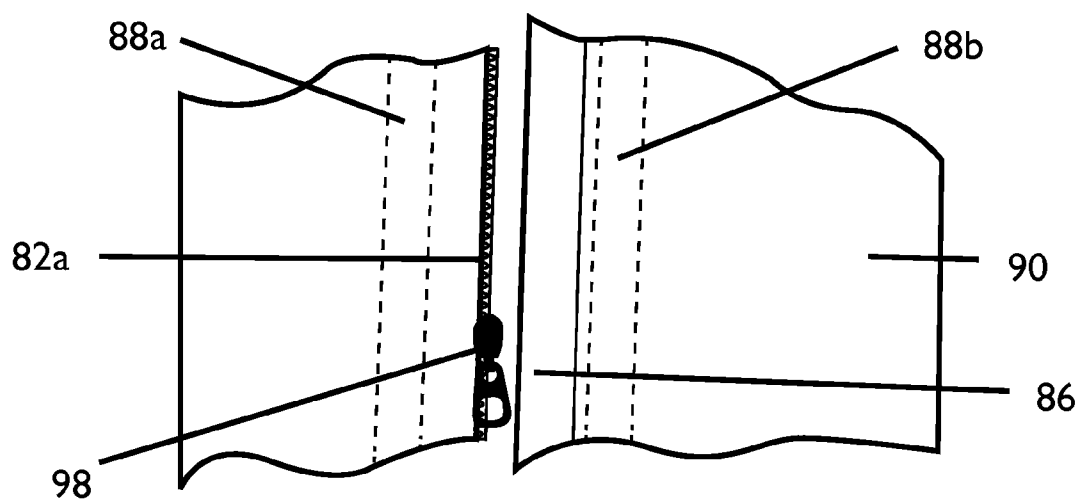


FIG. 15

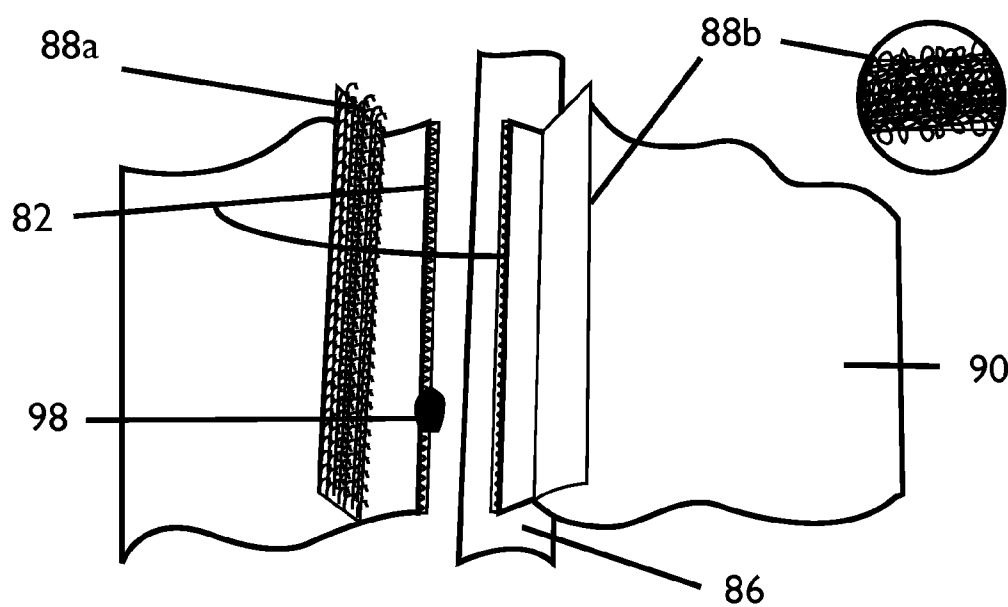


FIG. 16

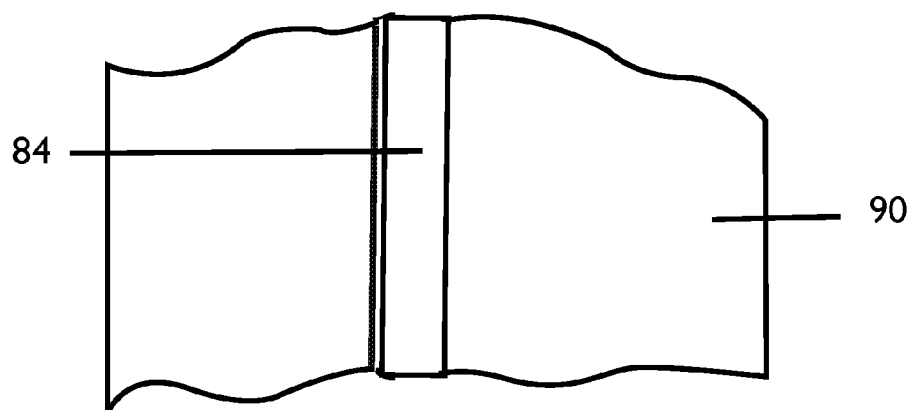


FIG. 17

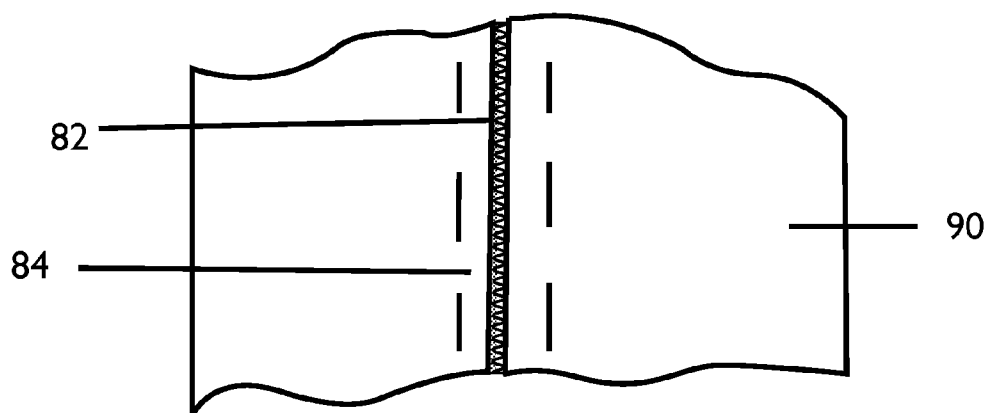


FIG. 18

REAR ACCESS PANTS**CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING COMPACT DISK APPENDIX

[0003] Not Applicable

BACKGROUND

[0004] 1. Prior Art

[0005] The following is a tabulation of some prior art that presently appears relevant:

U.S. Patents			
Patent Number	Kind Code	Issue Date	Patentee
2,923,009	A	1960 Feb. 2	Cookman
D410689	S	1999 Jun. 8	Slokevage
6,477,711	B1	2002 Nov. 12	Freeman
U.S. Patent Application Publications			
Publication Nr.	Kind Code	Publ. Date	Applicant
20090235431	A1	2009 Sep. 24	Bevy

[0006] 2. Background of the Invention

[0007] This invention relates generally to pants that are designed to provide easy and convenient access to the wearer during restroom usage. More particularly, this invention relates to pants designed to provide an easy, convenient, sanitary and safe way for wearers of heavy equipment or objects worn about the waistband, particularly weapons, to attend to restroom needs, especially persons in law enforcement, military, security and the like.

[0008] In professions such as law enforcement, police officers are required to wear uniforms and carry standard equipment. The equipment is typically secured to the waist by means of a belt, belt loops and belt keepers. Such equipment typically includes a radio, weapon, ammunition clips, handcuffs, baton and pepper spray. Other professions such as military, firefighters, security personnel, electricians, and construction workers wear uniforms and have heavy equipment or objects also attached about the waist.

[0009] For wearers of uniform pants, particularly police officers, it is extremely burdensome to remove and replace the equipment worn attached about the waistband of the pants when attending to restroom needs. The current design of uniform pants have a short frontal opening which in general are not well suited for restroom usage for all wearers, more particularly women, wherein the pants must be lowered below the waist during every restroom usage. When attending to restroom needs the wearer either completely remove the belt with the equipment attached and lay it somewhere inside the restroom stall or lower the pants while keeping the belt

and equipment attached, resulting in the pants and equipment resting around the feet on the floor of the restroom stall.

[0010] These options are undesirable for officers for several reasons. First and foremost, removing the equipment in either manner presents critical safety issues. The officer is tactically disadvantaged during an emergency situation when the weapon is displaced from the waist. Pants lowered down about the feet, with or without the equipment attached, cause the feet and legs to have limited movement, wherein the response time of the officer in an emergency situation is seriously delayed; and also creates an unsanitary condition. Either option places the equipment, in particular the weapon, within reach of someone in the next stall or outside the stall. Secondly, when the equipment remains attached to the pants it becomes very difficult for the officer to fasten the pants while trying to steady the equipment about the waist.

[0011] Because of the difficulties, inconvenience and safety issues associated with removing and replacing the equipment about the waistband of pants, police officers frequently postpone restroom usage. The prolonged and repeated delay of restroom usage can result in serious health problems. Female officers are at a greater risk of developing urinary tract infections and other related serious medical complications. Furthermore, these medical problems, if persisting, often lead to increased work absence.

[0012] Prior art disclosed various pants assembly with a drop seat. Known prior arts includes U.S. Pat. Nos. 2,923,009; 5,896,581; 6,477,711; and Des. 410,689; 505,535. While these fulfill their respective, particular objectives, disadvantages for uniform pants still exist. The various pants assembly that currently exist to address the need for easy and safe access during restroom usage do not address the need for a pants assembly, whereby the waistband remains in place and is comprised of a primary fastener member and a secondary fastener member which can be utilized during possible impairments of the primary fastener member.

ADVANTAGES

[0013] The present invention substantially depart from the conventional concepts and prior arts. Several advantages of one or more aspects are that the pants assembly allows the waistband of pants to remain in place during restroom usage, whereby equipment and weapons worn about the waist remain tactically in place. Other advantages of one or more aspects are that the need to lower the pants are eliminated when the primary fastener member is in full open position, whereby a drop seat flap is formed providing easy access to the genital and buttocks of the wearer. Another advantage of one or more aspects of the pants is a secondary fastener member which can be utilized to close the drop seat opening during possible impairments of the primary fastener member. These and other advantages of one or more aspects will become apparent from a consideration of the ensuing detailed description and accompanying drawings.

[0014] There, thus, remains a need for an improved pants assembly that provides safe, sanitary and easy access for the wearer during restroom usage that is well suited for wearers of heavy equipment or objects about the waist.

SUMMARY OF THE INVENTION

[0015] The present invention address the need for a pants assembly that allows all wearer(s) of pants, particularly the wearer(s) of heavy equipment or objects about the waist easy,

convenient, sanitary and safe access during restroom usage. One of more aspects are that the pants assembly allows the waistband to remain in place during restroom usage, providing a tactical advantage to wearers of heavy equipment or objects, more particularly weapons; eliminates the need to lower the pants; and provide a secondary fastener member to be utilized during possible impairments of the primary fastener member. The construction of the pants assembly also maintains the professional appearance of uniform pants. Uniform pants are disclosed, however, the present invention is inclusive of all pants.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] FIG. 1 is a perspective view of a first embodiment of the present invention with two zippers;
 [0017] FIG. 2 is a perspective view of FIG. 1 with closed primary and secondary fastener members
 [0018] FIG. 3 is a side view of FIG. 2;
 [0019] FIG. 4 is a rear view of FIG. 1 with fastener members partially open;
 [0020] FIG. 5 is a side view of FIG. 1 while standing;
 [0021] FIG. 6 is a side view of FIG. 1 while seated;
 [0022] FIG. 7 is a fragmented exterior view of open fastener members of FIG. 2;
 [0023] FIG. 8 is a fragmented interior view of open fastener members of FIG. 2;
 [0024] FIG. 9 is a fragmented interior view of closed secondary fastener member;
 [0025] FIG. 10 is a perspective front view of another embodiment of the present invention with one continuous zipper;
 [0026] FIG. 11 is a side view of FIG. 10 with fastener member partially open;
 [0027] FIG. 12 is a rear view of FIG. 10 with fastener member partially open;
 [0028] FIG. 13 is a rear view of FIG. 10 with fastener member closed;
 [0029] FIG. 14 is a perspective view of an alternate embodiment of the present invention with a visible zipper and concealing outer flap;
 [0030] FIG. 15 is a fragmented exterior view of open fastener member and concealing outer flap of FIG. 14;
 [0031] FIG. 16 is a fragmented interior view of open fastener member and concealing outer flap of FIG. 14;
 [0032] FIG. 17 is a fragmented exterior view of closed fastener member and concealing outer flap of FIG. 14; and
 [0033] FIG. 18 is a fragmented interior view of closed fastener member and concealing outer flap of FIG. 14.

REFERENCE NUMERALS

[0034] 20 Pants
 [0035] 22 Pockets
 [0036] 24 Left primary fastener member
 [0037] 26 Right primary fastener member
 [0038] 26a Invisible zipper
 [0039] 28 Secondary fastener member
 [0040] 28a Secondary fastener member (strip with hooks)
 [0041] 28b Secondary fastener member (strip with loops)
 [0042] 30 Waistband
 [0043] 32 Belt loops
 [0044] 34 Zipper slide with pull
 [0045] 36 Drop seat flap
 [0046] 38 Outer seam

[0047] 40 Leg member (right)
 [0048] 42 Leg member (left)
 [0049] 44 Front fastener member
 [0050] 60 Uniform pants
 [0051] 62 One continuous primary fastener member
 [0052] 64 Outer seam
 [0053] 66 Drop seat flap
 [0054] 68 Secondary fastener member
 [0055] 68a Secondary fastener member (strip with hooks)
 [0056] 68b Secondary fastener member (strip with loops)
 [0057] 70 Leg member (right)
 [0058] 71 Leg member (left)
 [0059] 72 Pockets
 [0060] 74 Belt loops
 [0061] 76 Waistband
 [0062] 78 Zipper slide with pull
 [0063] 80 Uniform pants
 [0064] 82 Visible primary fastener member
 [0065] 82a Visible zipper
 [0066] 84 Outer seam
 [0067] 86 Concealing outer flap
 [0068] 88 Secondary fastener member
 [0069] 88a Secondary fastener member (strip with hooks)
 [0070] 88b Secondary fastener member (strip with loops)
 [0071] 90 Leg member (right)
 [0072] 91 Leg member (left)
 [0073] 92 Pockets
 [0074] 94 Belt loops
 [0075] 96 Waistband
 [0076] 98 Zipper slide with pull

DETAILED DESCRIPTION OF INVENTION

[0077] Referring to the present invention in more detail in FIGS. 1 through 18, the pants also known as MYB Pants™ are indicated generally at 20. Similar or identical elements are given consistent identifying numerals throughout the various drawing figures.

[0078] Uniform pants disclosed. One embodiment is illustrated in FIGS. 1-9. The pants 20 comprise: a waistband 30; two leg members 40 and 42 extending from waistband 30 downwardly; two primary fastener members 24 and 26 positioned at a predetermined point beneath the waistband 30 on the rear of the pants 20, wherein both fastener members begin at the center of the rear and extend outwardly to the outer seam 38 of each leg member 24 and 26 respectively, then downwardly within the outer seam 38 of each leg member 24 and 26 ending at a predetermined point; a drop seat flap 36 is formed when the primary fastener members 24 and 26 are in full open position; and a secondary fastener member 28 positioned beneath the full length of the primary fastener members 24 and 26 as shown in FIGS. 1-6.

[0079] The primary fastener member 24 and 26 can be a visible 82a or invisible 26a zipper having separable halves each formed of a chain of teeth on a cloth, fabric strip, or ribbon. One half is provided with a zipper slide with pull 34 that interlock and engage the other half, in a manner which allows the wearer(s) to open and close the pants 20 as shown in FIGS. 7-8. FIG. 9 illustrates a secondary fastener member 28 positioned beneath the full length of the primary fastener members 24 and 26 comprised of two strips 28a and 28b, a hook and loop type fastener.

Operation FIGS. 1-9

[0080] The primary fastener members 24 and 26 of the pants 20 is comprised of two zippers beginning in the center of the rear of the pants 20, wherein the fastener members begin at a predetermined point below the waistband 30 and end at a predetermined point within the outer seam 38 of each leg member 40 and 42, respectively. Each zipper slide with pull 34 beginning in the center rear of pants 20 is slid from the center position outwardly into the outer seam 38 of each leg member 40 and 42, then downward within the outer seams 38 ending at a predetermined point on each leg member 40 and 42, respectively; the movement of the zipper slide with pull 34 of each zipper outward from the center of the rear of the pants cause the teeth of the zippers to separate, forming two halves when open as shown in FIG. 4; whereby, in full open position results in the formation of a drop seat flap 36; the formation of the drop seat flap 36 provide the wearer easy access to the genital and buttocks during restroom usage as shown in FIGS. 5-6. The reverse movement of the zipper slide with pull 34 of each zipper closes the teeth of the zippers wherein, the closure of the primary fastener members 24 and 26 forms a camber on the rear of the pants 20 as shown in FIGS. 1-3.

[0081] Beneath the full length of the primary fastener members 24 and 26 is a secondary fastener member 28; a hook and loop type fastener comprised of two strips: one with hooks and one with loops as shown in FIG. 7. The strip with hooks 28a is positioned at a predetermined point beneath the upper half of the primary fastener members 24 and 26 with the hooks faced outward away from the body. The strip with the loops 28b is positioned at a predetermined point beneath the lower half of the primary fastener members 24 and 26 with the loops faced inward toward the body. The underside of the strip with loops 28b provide a protective layer beneath the primary fastener members 24 and 26 to assist in smooth operation of the zipper slide with pull 34.

[0082] To close the secondary fastener member 28 the strip with hooks 28a is lifted and placed atop the strip with loops 28b, whereby the two strips are adjoined, closing the opening as shown in FIG. 9. To open the secondary fastener member 28 the strip with hooks 28a and the strip with loops 28b are pulled apart separating the two halves as shown in FIG. 8.

[0083] The pants 20, constructed of any type and weight of fabric, may include a plurality of belt loops 32 spaced apart and along the length of the waistband 30 as shown in FIGS. 1-6. The belt loops 32 are typically used to secure a belt that may be used to carry heavy equipment or objects. The pants 20 may further include a front fastener member 44 and pockets 22 as shown in FIG. 10. Fastener members constructed of strong, durable, heavy duty material may consist of a plurality of zippers, buttons, snaps, hooks, etc.

[0084] In this first embodiment an invisible zipper 26a is used which means that the teeth of the zipper are directed inward. Thus, the invisible zipper 26a is not visible to the eye when viewing the outside of the pants 20. An invisible zipper 26a is used to maintain the professional appearance of the pants 20. This is an important feature for uniform pants 60.

[0085] Another embodiment is illustrated in FIGS. 10-13. The pants 60 comprise: a waistband 76; two leg members 70 and 71 extending from waistband 76 downwardly; one continuous primary fastener member 62, wherein the fastener member begin at a predetermined point within the outer seam 64 of one leg member 70 or 71 (either side) and extend upwardly to a predetermined point beneath the waistband 76

then across the rear of the pants 60 to the opposite leg member 70 or 71 outer seam 64, then downwardly within the outer seam 64 ending at a predetermined point; a drop seat flap 66 is formed when the primary fastener member 62 is in full open position; and a secondary fastener member 68 positioned beneath the full length of the primary fastener member 62, a hook and loop type fastener comprised of two strips 68a and 68b.

[0086] The primary fastener member 62 can be a visible 82a or invisible 26a zipper having separable halves each formed of a chain of teeth on a cloth, fabric strip, or ribbon. One half is provided with a slide with pull 78 that interlock and engage the other half, in a manner which allows the wearer(s) to open and close the pants 60. FIGS. 5-6 illustrates this embodiment with the primary fastener member 62 in full open position utilized by the wearer(s) while standing (FIG. 5) and in the seated position (FIG. 6).

Operation of FIGS. 10-13

[0087] The primary fastener member 62 of the pants 60 is comprised of one continuous zipper, wherein the fastener member begin at a predetermined point within the outer seam 64 of either leg member 70 or 71 and end at a predetermined point within the outer seam of the opposite leg member 70 and 71. To open, the zipper slide with pull 78 is slid upward within the outer seam 64 of either leg member 70 or 71 to a predetermined point below the waistband 76 continuing across the rear of the pants 60 to the outer seam 64 of the opposite leg member 70 or 71 then downward within the outer seam 64 ending at a predetermined point as shown in FIG. 11-12; whereby, when in full open position results in the formation of a drop seat flap 66. The formation of the drop seat flap 66 provide the wearer easy access to the genital and buttocks during restroom usage. The reverse movement of the zipper slide with pull 78 closes the teeth of the zipper wherein, the closure of the primary fastener member 62 forms a camber on the rear of the pants 60 as shown in FIG. 13.

[0088] An alternative embodiment is illustrated in FIGS. 14-18. The pants 80 comprise: a waistband 96; two leg members 90 and 91 extending from waistband 96 downwardly; visible primary fastener member(s) 82; a concealing outer flap 86 positioned atop the full length of the visible primary fastener member(s) 82; and a secondary fastener member 88 positioned beneath the full length of the visible primary fastener member(s) 82.

Operation of FIGS. 14-18

[0089] The construction of a concealing outer flap 86 is added to the pants and is utilized to conceal from view visible type primary fastener member(s) 82 as shown in FIGS. 14 and 17. When the visible primary fastener member(s) 82 is in the closed position, the concealing outer flap 86, comprised of the material of the pants 80, lay atop the visible primary fastener member(s) 82 concealing it from view as shown in FIG. 17.

[0090] Illustrated in FIGS. 15-16 is the exterior and interior fragmented views, respectively, of one leg member 90 with visible primary fastener member(s) 82 and a secondary fastener member 88 in the open position with a concealing outer flap 86.

[0091] In this embodiment the visible primary fastener member(s) 82 is a visible zipper 82a. Opposite of an invisible zipper 26a, a visible zipper 82a display its teeth outwardly presenting an unprofessional appearance. Thus, there is a need for a concealing outer flap 86 atop the full length of the primary fastener member 82 as shown in FIG. 14.

CONCLUSION, RAMIFICATIONS, AND SCOPE

[0092] Accordingly, the reader will see that the various embodiments of the pants provide easy, sanitary, safe, and convenient access to the genital and buttocks of the wearer during restroom usage. With the design of the pants and in particular the placement and operation of the primary fastener member(s), the pants can be open in a quick and easy manner. More importantly, the design of the pants allow the waistband and any equipment attached, to remain in place during restroom usage. This feature address the equipment safety issues faced by law enforcement officers. Without this feature, the wearer would have to lower the pants down around the legs onto the floor with the equipment attached; or remove the equipment attached to the waistband prior to lowering the pants to the floor. Either option place the wearer at a tactical disadvantage when the duty belt is removed from the waist and creates a safety problem. Additionally, the pants laying around the legs onto the floor create an unsanitary condition and restrict wearers leg movement during emergency situations.

[0093] The design and function of the secondary fastener member provide an optional means to close the opening created by the primary fastener member when needed. Without this feature, in instances of impairment of the primary fastener member, the wearer will be unable to close the opening created by the primary fastener member, whereby placing the wearer in a compromised position. Thus, this feature is needed to provide confidence and assurance to the wearer during any instance of impairment of the primary fastener member.

[0094] Although the description of the various embodiments focuses on the pants worn by law enforcement officers, it is contemplated within the scope of the invention that the pants may also be worn by private security personnel, fire-fighters, construction workers, electricians, cable workers, military personnel, hunters, medical patients, fishermen, campers, hikers, injured persons, senior citizens and others who desire easy, convenient, sanitary, safe access when attending to restroom needs.

[0095] Although the description above contains many specificities, these should not be construed as limiting the scope of the embodiments but as merely providing illustrations of some of several embodiments. For example, additional embodiments can consist of short pants, capri pants, overalls, jumpsuits, etc.

[0096] Thus the scope of the embodiments should be determined by the appended claims and their legal equivalents rather than by the examples given. While the foregoing written description of the invention enables one of ordinary skilled in the art to make and use what is considered presently to be the best mode thereof, those of ordinary skilled in the art will understand and appreciate the existence of variations, combinations, and equivalents of the specific embodiment, method, and examples herein. The invention should therefore not be limited by the above described embodiment, method, and examples, but by all embodiments and methods within the scope and spirit of the invention.

I claim:

1. A pair of pants comprising:

- (a) a waistband;
- (b) two leg members extending from the waistband, each having an outer seam and inseam;
- (c) two primary fastener members positioned at a predetermined point beneath the waistband on the rear of the

pants, wherein both fastener members begin at the center of the rear and extend outwardly to the outer seam of each leg member then downwardly within the outer seam of each leg member ending at a predetermined point; and wherein the positioning of both primary fastener members creates an opening on the rear of the pants;

(d) a drop seat flap; and

(e) a secondary fastener member, wherein the secondary fastener member is positioned beneath the primary fastener members and extends the full length of the primary fastener members, whereby the wearer of the pants can have easy, convenient, sanitary, and safe access during restroom usage.

2. The pants according to claim 1, wherein the primary fastener members are two zippers.

3. The pants according to claim 2, wherein said zippers creates an opening on the rear of the pants.

4. The pants according to claim 3, wherein the opening creates a drop seat flap.

5. The pants according to claim 1, wherein the secondary fastener member is comprised of two halves.

6. The pants according to claim 5, wherein one half is hooks and one half is loops.

7. The pants according to claim 5, said halves are means for closing the opening created by the primary fastener member.

8. A pair of pants comprising:

(a) a waistband;

(b) two leg members extending from the waistband, each having an outer seam and inseam;

(c) one continuous primary fastener member positioned at a predetermined point beneath the waistband on the rear of the pants, wherein the fastener member begin at a predetermined point within the outer seam of either leg member, then continue across the rear of the pants at a predetermined point below the waistband and end at a predetermined point within the outer seam of the opposite leg member; and wherein the positioning of the primary fastener member creates an opening on the rear of the pants;

(d) a drop seat flap;

(e) a secondary fastener member, wherein the secondary fastener member is positioned beneath the primary fastener member and extends the full length of the primary fastener member; and

(f) a concealing outer flap positioned atop the primary fastener member and extends the full length of the primary fastener member.

9. The pants according to claim 8, wherein the primary fastener member is one continuous zipper.

10. The pants according to claim 9, wherein said zipper creates an opening on the rear of the pants.

11. The pants according to claim 10, wherein the opening creates a drop seat flap.

12. The pants according to claim 8, wherein the secondary fastener member is comprised of two halves.

13. The pants according to claim 12, wherein one half is hooks and one half is loops.

14. The pants according to claim 12, said halves are means for closing the opening created by the primary fastener member.

15. The pants according to claim 8, wherein the primary fastener member is a visible zipper and further including a

concealing outer flap positioned atop the primary fastener member and extends the full length of the primary fastener member.

16. A pair of law enforcement pants comprising:

- (a) a waistband;
- (b) two leg members extending from the waistband, each having an outer seam and inseam;
- (c) one continuous primary fastener member positioned at a predetermined point beneath the waistband on the rear of the pants, wherein the fastener member begin at a predetermined point within the outer seam of either leg member, then continue across the rear of the pants at a predetermined point below the waistband and end at a predetermined point within the outer seam of the opposite leg member; and wherein the positioning of the primary fastener member creates an opening on the rear of the pants;

(d) a drop seat flap; and

(e) a secondary fastener member, wherein the secondary fastener member is positioned beneath the primary fastener members and extends the full length of the primary fastener member.

17. The pants according to claim **1**, wherein the fastener members are selected from the group consisting of zippers, buttons, hooks, snaps, and hook and loop type fasteners.

18. The pants according to claim **17**, wherein the fastener member is an invisible zipper.

19. The pants according to claim **8**, wherein the fastener members are selected from the group consisting of zippers, buttons, hooks, snaps, and hook and loop type fasteners.

20. The pants according to claim **19**, wherein the fastener member is an invisible zipper.

* * * * *