



(19) **United States**

(12) **Patent Application Publication**  
**Wells**

(10) **Pub. No.: US 2005/0127121 A1**

(43) **Pub. Date: Jun. 16, 2005**

(54) **QUICK RELEASE HOLSTER**

(57) **ABSTRACT**

(76) Inventor: **George Wells, Atlanta, GA (US)**

Correspondence Address:  
**Philip H. Burrus, IV**  
**460 Grant Street**  
**Atlanta, GA 30312 (US)**

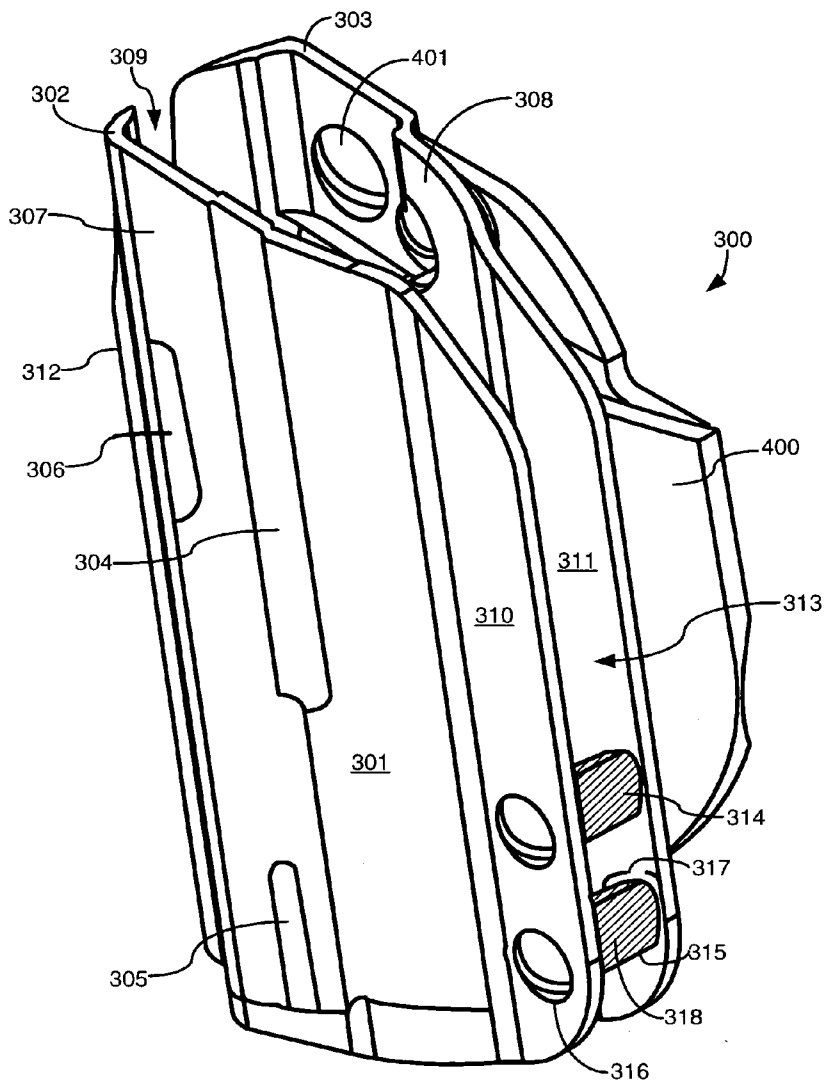
(21) Appl. No.: **10/735,932**

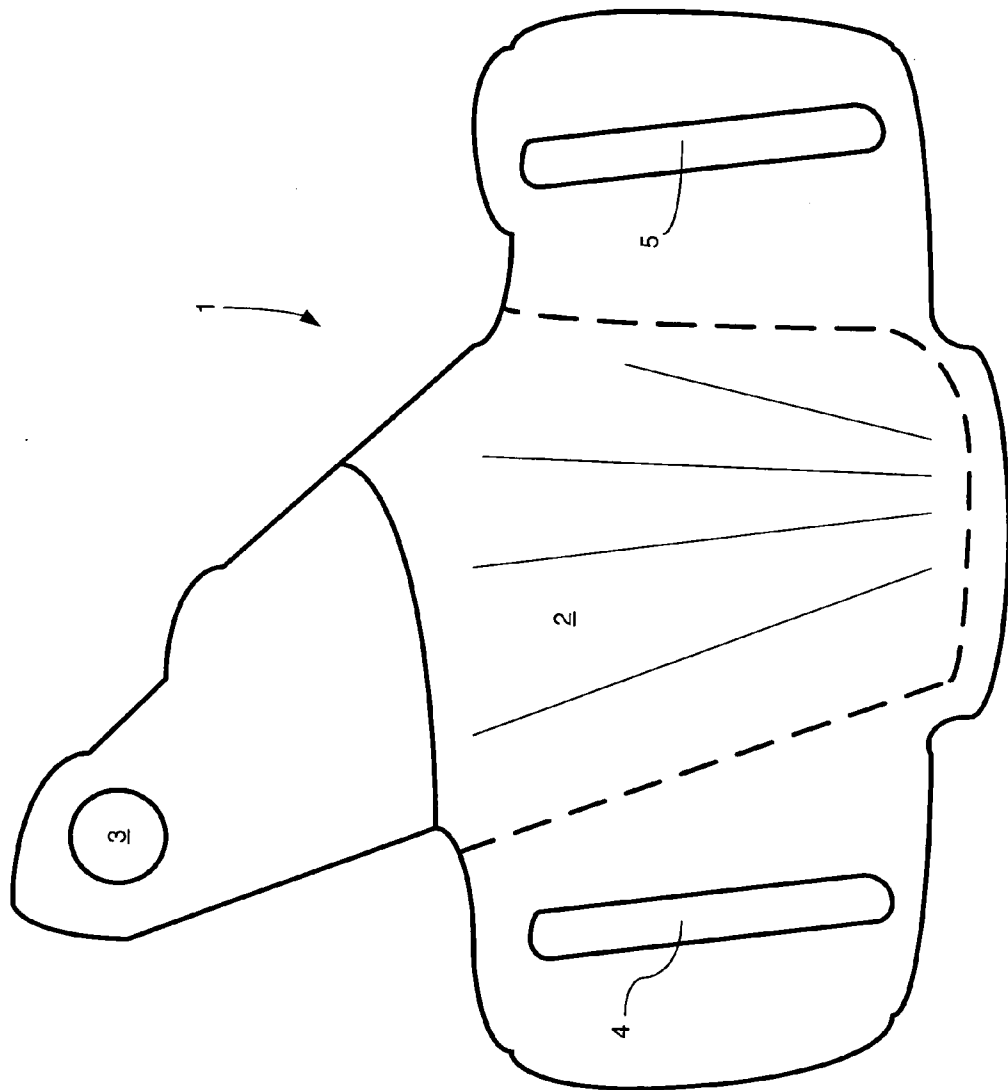
(22) Filed: **Dec. 15, 2003**

A quick release holster includes a holding member for receiving an object like a firearm. A paddle is coupled to the planar member for insertion inside a user's trousers. A retaining member extends from the holding member towards the paddle. The holding member, paddle and retaining member form a closed loop, as the paddle is preloaded in a cantilever fashion against the retaining member. The retaining member is essentially perpendicular with the holding member, and includes a frictional component, like a rubber grommet for example. To put the holster on, the user slides a portion of the paddle inside the trousers, and then gently pulls on the holding member to separate the retaining member from the paddle. The invention offers advantages over the prior art in that the retaining member is on the outside of the user's trousers, thereby enabling the user to put on and take off the holster without undoing the belt.

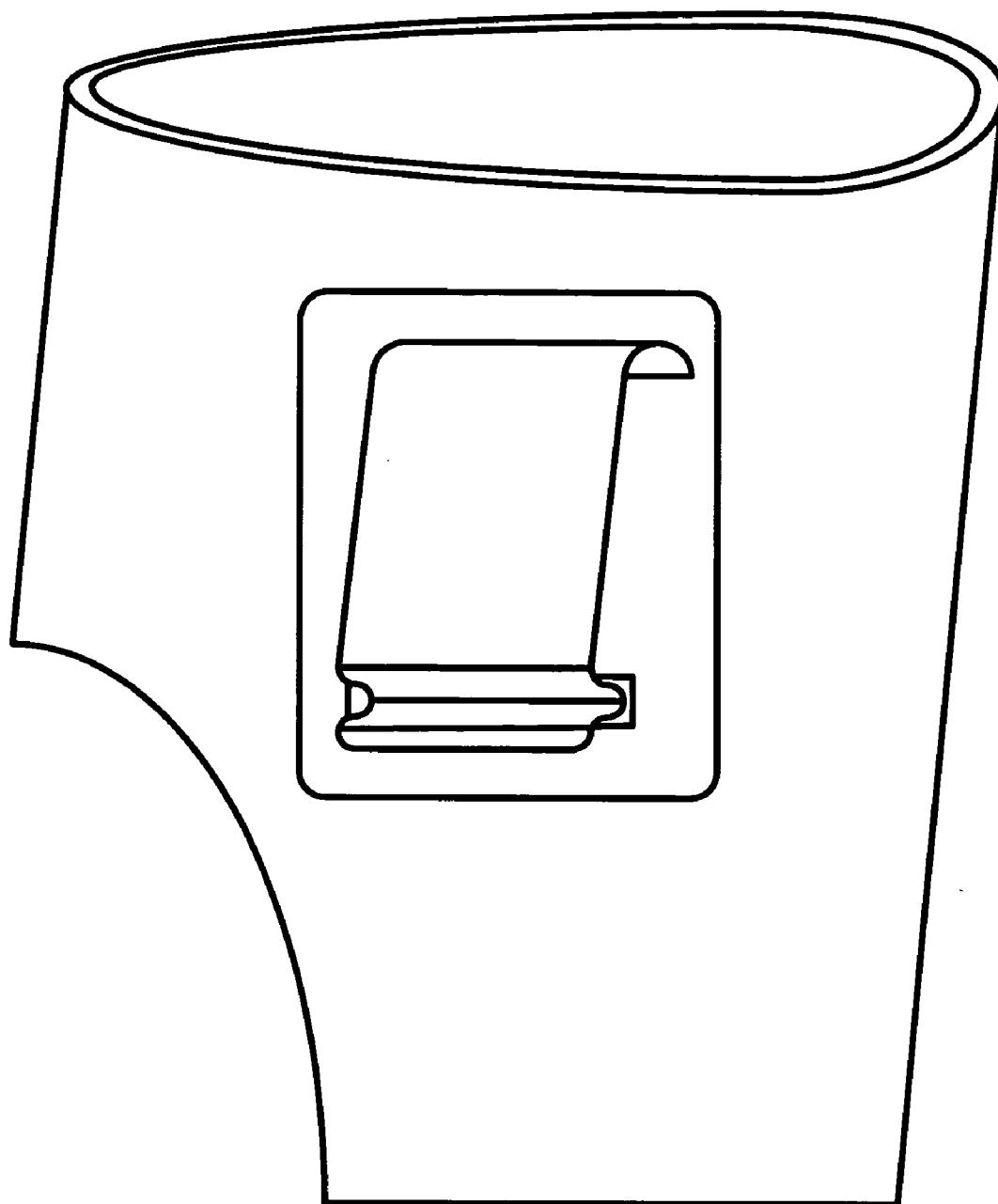
**Publication Classification**

(51) **Int. Cl.<sup>7</sup> ..... F41C 33/00**  
(52) **U.S. Cl. .... 224/193; 224/912**

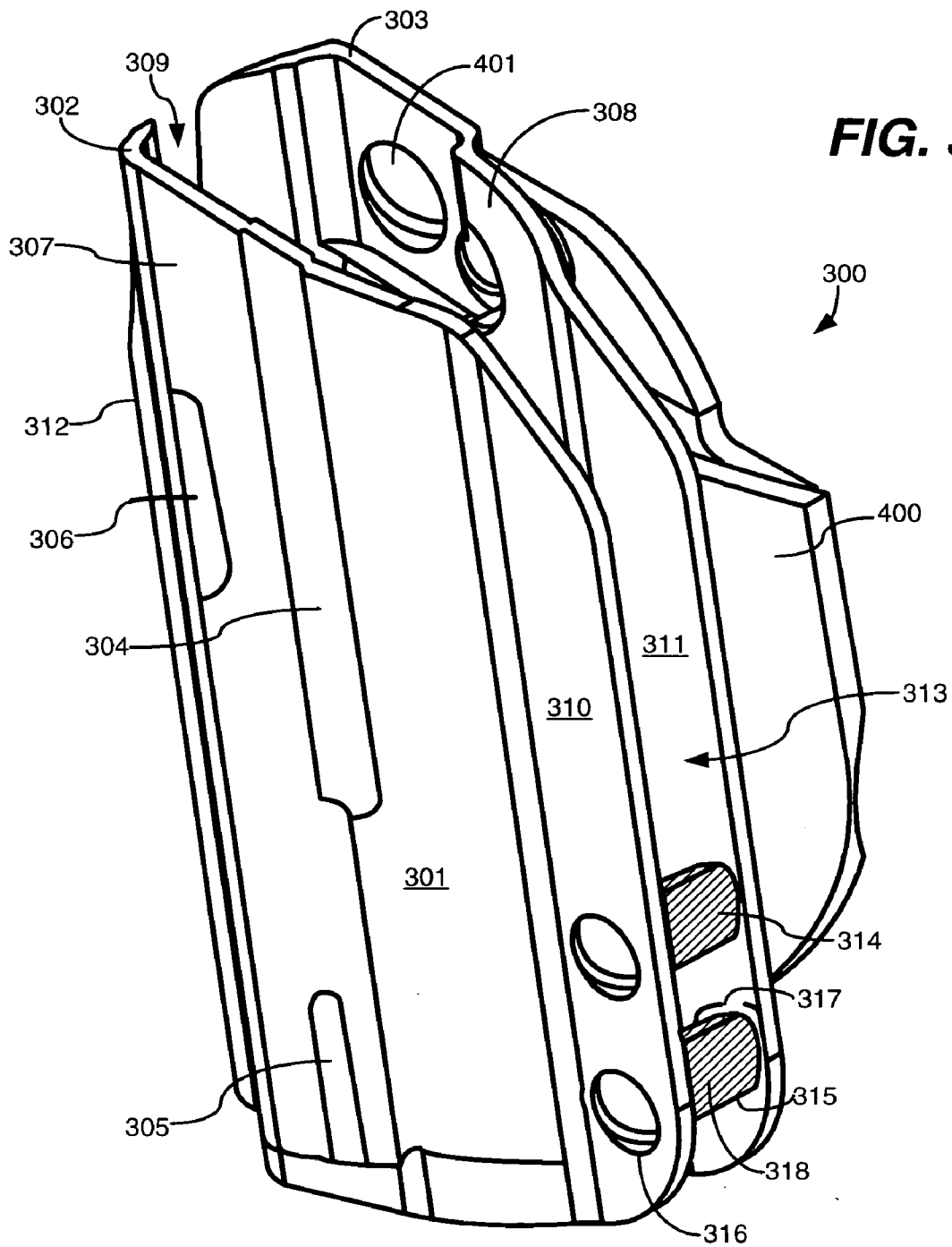




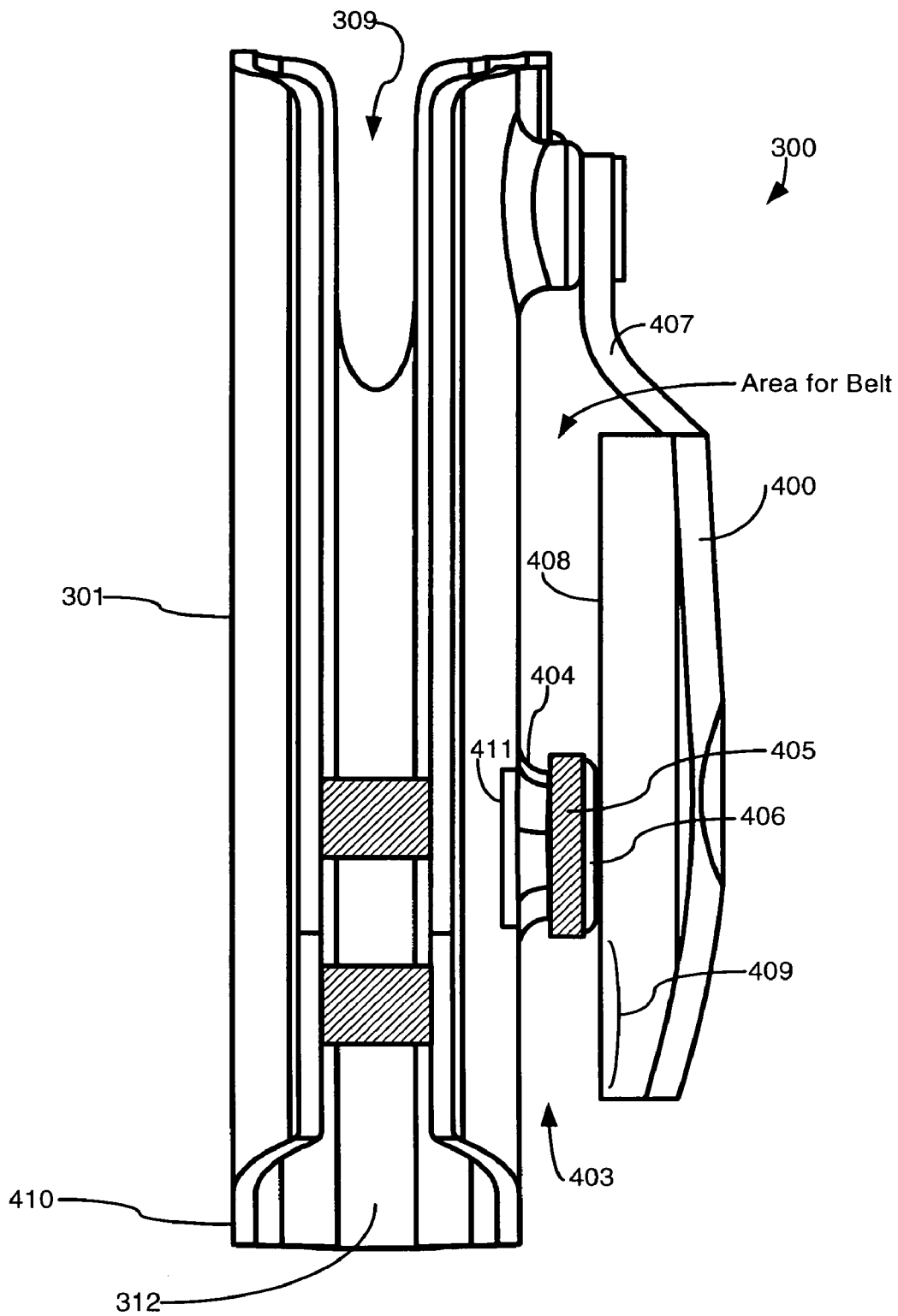
**FIG. 1**  
**Prior Art**



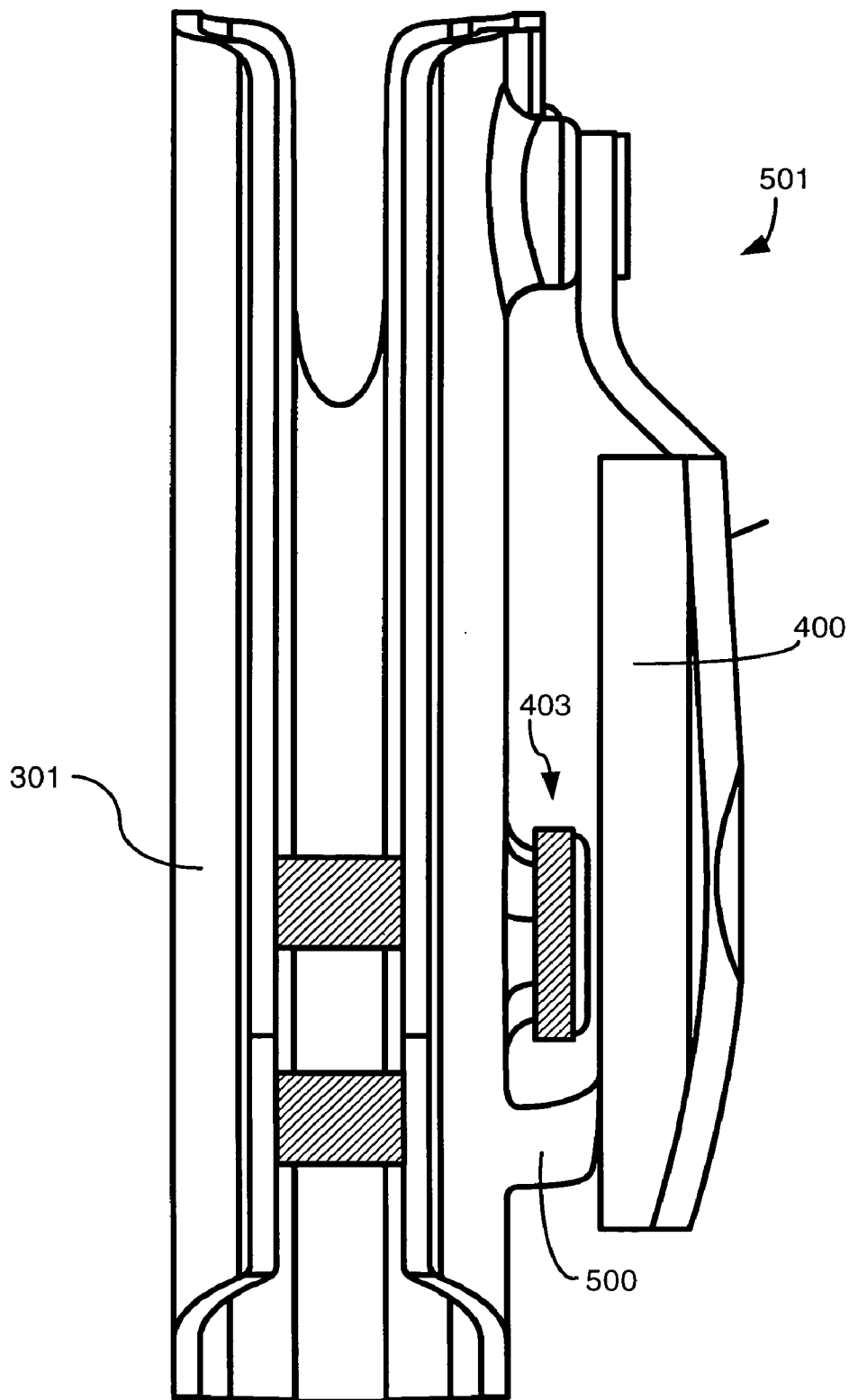
***FIG. 2***  
***Prior Art***



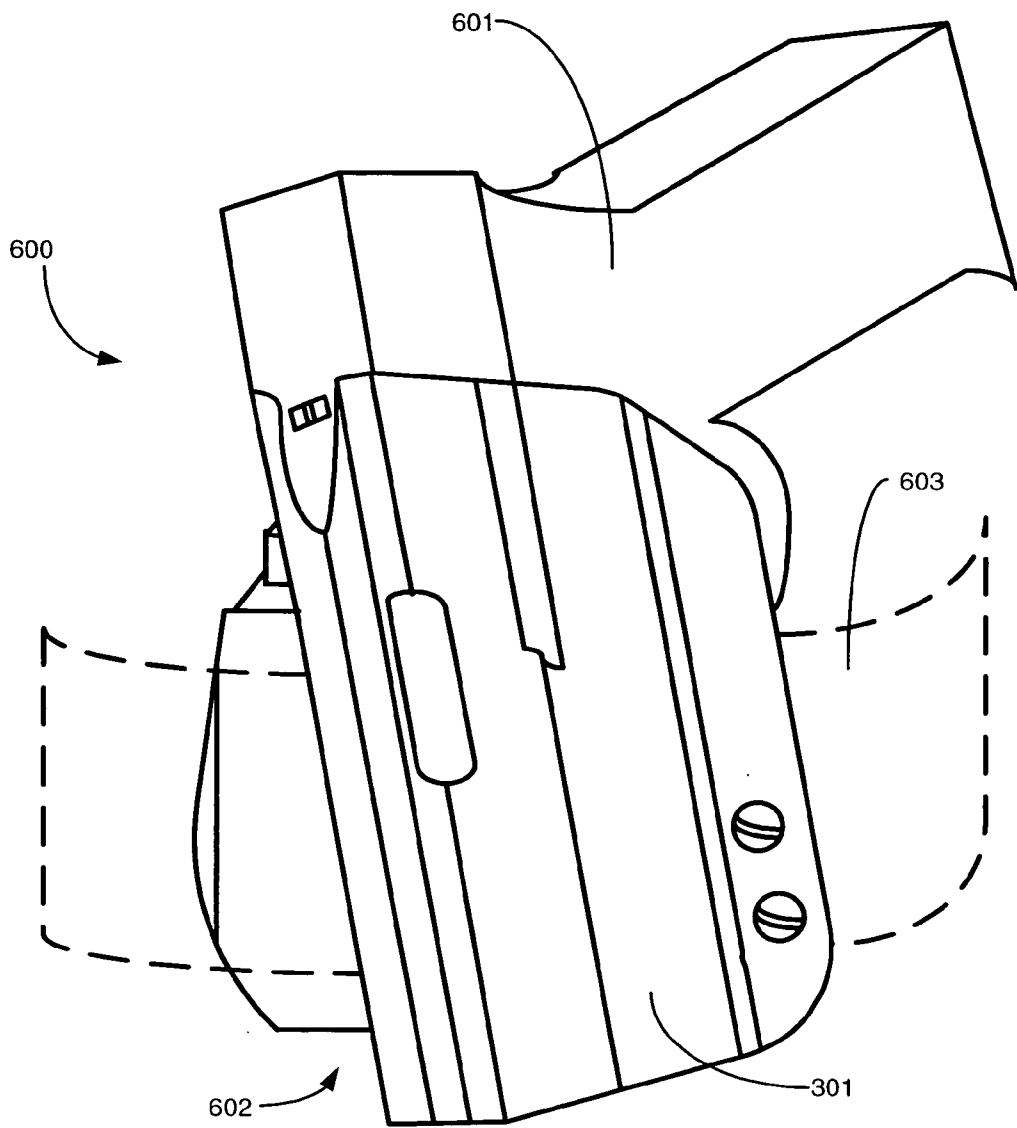
**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**

## QUICK RELEASE HOLSTER

### TECHNICAL FIELD

[0001] This invention relates generally to holsters having clips for accommodating a belt, and more specifically to a holster for a firearm or other object that has a quick release mechanism so as to be easily coupled to, and decoupled from, a belt.

### BACKGROUND ART

[0002] Sometimes it may seem as if the world today is an unsafe place. Despite the excellent efforts of our heroic law enforcement personnel and the strict sentencing guidelines for violent criminals, terrorism, school shootings and domestic violence persist. As a result, more and more law-abiding citizens are applying for weapon permits. With proper training and faithful consideration of safety rules, many people today feel that a personal firearm offers an additional source of protection in the event that a dangerous situation arises.

[0003] Weapons, like handguns for example, are carried in several different places. For example, women who carry a purse often choose to carry a small handgun in the purse. Specialty clothing may include secret compartments specially designed for carrying weapons as well. By far the most popular way to carry a weapon is by way of a holster. This is the popular choice of law enforcement and citizenry alike.

[0004] Many holsters available on the market today may be worn on the belt. One such holster is shown in **FIG. 1**. The holster **1** includes a pocket **2** for holding a weapon, as well as a latch **3**, like a snap for example, which prevents the weapon from falling out of the holster **1**. The holster couples to a belt by way of holes **4,5**. The holes **4,5** serve as the openings of an effective tube formed by the front and rear pieces of leather. A user slips a belt through this tube while lacing the belt through the belt loops of a pair of trousers. When the belt is buckled, the holster is secured on the user's person.

[0005] The problem with this prior art holster, however, is the fact that it is difficult to get on and off. Most states that issue weapon permits place certain limitations on just when and where people may carry their weapons. For example, while carrying a weapon while walking on the street is lawful, carrying a weapon into a school, an establishment where alcoholic beverages are served, a government building or large public gathering is strictly prohibited. Additionally, some businesses prohibit firearms on the premises as well. As such, a person who carries a weapon to work must remove the weapon before entering the place of employment. The only way to get the holster of **FIG. 1** off is to unbuckle and remove one's belt. This is both cumbersome and time consuming.

[0006] One solution for this "how do I get it off the belt without unbuckling" problem is shown in **FIG. 2**. This holster includes a springy, metal clip with a notch. To attach the holster to a belt, one takes a finger and pries the clip up and slips the clip between the belt and body. The clip then springs back into place, and the holster is coupled to the belt.

[0007] This solution has two inherent problems, though. The first problem is that the notch of the clip must pass

between the user's body and the belt. As such, while the belt may not have to come completely off, one generally has to unbuckle and loosen the belt to provide enough slack to allow the notch to pass.

[0008] The second problem is that unless the area encircled by the clip, notch and holster body exactly matches the cross-sectional area of the belt, the holster can rotate about the belt. In other words, since the clip is raised off the holster by way of the notch, the holster will be able to slightly rotate on a narrow belt. Such rotation may allow a weapon to fall out of the holster, thereby potentially creating a safety hazard.

[0009] There is thus a need for an improved holster having a means of attaching to a belt that is quickly releasable without the need of unbuckling the belt.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0010] **FIG. 1** illustrates a prior art belt holster.

[0011] **FIG. 2** illustrates a prior art belt holster.

[0012] **FIG. 3** illustrates a perspective view of one preferred embodiment of a holster in accordance with the invention.

[0013] **FIG. 4** illustrates an elevation view of one preferred embodiment of a holster in accordance with the invention.

[0014] **FIG. 5** illustrates an elevation view of another preferred embodiment of a holster in accordance with the invention.

[0015] **FIG. 6** illustrates a firearm assembly in accordance with the invention.

### DETAILED DESCRIPTION OF THE INVENTION

[0016] A preferred embodiment of the invention is now described in detail. Referring to the drawings, like numbers indicate like parts throughout the views. As used in the description herein and throughout the claims, the following terms take the meanings explicitly associated herein, unless the context clearly dictates otherwise: the meaning of "a," "an," and "the" includes plural reference, the meaning of "in" includes "in" and "on."

[0017] Referring now to **FIG. 3**, illustrated therein is one preferred embodiment of a holster assembly **300** in accordance with the invention. The holster assembly **300** includes a holding member **301** that essentially forms a flexible pocket into which an object, like a handgun for example, may be placed. The holding member **301** is preferably manufactured from plastic, and may be constructed of any number of materials, including plastics like styrene, ABS, polycarbonate, ABS-polycarbonate. Other materials, including leather, cloth and vinyl may also be used. Experimental testing has shown that Kydex®, a plastic manufactured by the Kleerdex Company of Aiken, S.C., performs well in that it is flexible, resilient, durable and easily molded.

[0018] The holding member **301** is preferably formed from a single piece of plastic, either by thermal forming or injection molding. The holding member **301** includes curves



**302,303** and contours **304-306** designed to be the geometric compliment of the object that is to be placed in the holding member.

[0019] By way of example, if the object to be placed in the holding member **301** is a Model **19** pistol manufactured by the Glock Corporation, the curves **302,303** and contours **304-306** would be structured such that the inner dimensions of the holding member **301** would be complementary to the configuration of the outer sections of the Model **19** gun. For instance, contour **306** would be complimentary to the shell ejection aperture in the slide of the gun, while contour **304** would be complimentary to the slide itself.

[0020] As stated above, the holding member **301** is preferably manufactured from a single piece of material. One preferred method of manufacture of the holding member **301** is by way of thermal forming. In the thermal forming process, the plastic is heated slightly to become soft and pliable. The sides **307,308** of the holding member **301** are then molded about a positive mold having contours matching the object. Another equivalent method of manufacture is injection molding, in which the material is injected—in molten form—into a mold, the interior of which is shaped to be a positive of the object. In either case, the holding member **301** is molded such that the interior of the U-shape is such that it forms the negative image of the firearm.

[0021] The holding member **301** may include a notch aperture **309** for accommodating the sight of a gun. The holding member **301** may also include first and second guard members **310,311** for preventing objects from coming into contact with trigger and trigger guard of the firearm.

[0022] The holding member **301**, being formed from a single piece of material, is folded so as to resemble a “U” shape, with the curved portion of the “U” running along the edge **312** of the holding member **301** in which the notch aperture **309** is located. The open portion **313** of the “U” runs along the rear of the holding member **301**. The open portion **313** of the “U” accommodates the trigger guard of the firearm.

[0023] The open portion of the “U” is fastened or closed by at least one fastener, e.g. **314**. The fasteners preferably comprise a screw **316** inserted into one half of the open end of the “U”, represented here by guard member **310**. A screw boss **317** is inserted into the other half of the open end of the “U”, represented here by guard member **311**. The screw **316** and boss **317** are then coupled together. A screw/boss assembly is preferred in that it is adjustable, depending upon the amount of friction desired by the user when drawing the firearm. Other means of fastening, including rivets, glues, hot melt joints, welds, adhesives, stitching, and epoxies, however, may also be substituted. Note also that the screw boss could be integral to the holding member, in that a hole and threads could be designed into the plastic of the holding member. One preferred embodiment of the holster assembly **300** includes two fasteners **314,315**, such that the upper fastener **314** may be set to one tension level, while the lower fastener **315** may be set to a second tension level.

[0024] A bracing member, e.g. **318**, is placed between the open halves of the “U”**310,311** so as to oppose the compressive forces of the screw **316** and boss **317**. The bracing member **318** is preferably constructed of a soft rubber

material so as to provide a relatively high frictional force against the open halves of the “U”**310,311**.

[0025] The holding member **301** is coupled to a planar member **400**. The planar member **400**, affectionately known as a “paddle” is designed to fit inside a user’s trousers. As such, the planar member **400** is preferably curved so as to accommodate a user’s torso. As the holding member **301** is to be worn outside the trousers, the planar member **400** is preferably curved so as to be concave with respect to the user and convex with respect to the holding member **301**.

[0026] The holding member **301** is coupled to the planar member by way of at least one fastener **401**, wherein the at least one fastener is selected from the group consisting of screws, rivets, glues, hot melt joints, welds, adhesives, stitching, and epoxies. In this exemplary embodiment, the fastener **401** comprises a screw/boss assembly, and two screws/bosses are employed. The curvature of the planar member **400**, combined with the plurality of fasteners coupling the planar member **400** to the holding member **301**, prevents the holster assembly **300** from rotating when worn by a user. This prevention of rotation, coupled with the molded shape of the holding member, ensures that the firearm stays safely within the holster, even if the user trips or falls.

[0027] Referring now to FIG. 4, illustrated therein is a rear, elevation view of the holster assembly **300**. This particular view offers a more detailed look at the planar member **400**, including its curvature. The notched aperture **309** and the closed portion of the “U”**312** may be seen as well.

[0028] The holster assembly **300** includes a retaining member **403** extending from the holding member **301** towards the planar member **400**. The retaining member **403** protrudes in a perpendicular manner from the holding member **301**, preferably at an angle between **85** and **95** degrees with respect to the holding member **301**. As such that the planar member **400**, holding member **301** and retaining member **403** form a closed loop through which a belt may be passed.

[0029] While the retaining member **403** may be as simple as a vertical protrusion extending from the holding member **301**, in the embodiment shown, the retaining member **403** comprises three sections: a base section **404**, a frictional section **405** and a coupling section **406**. The base section **404** is formed of the plastic material comprising the holding member **301**, and may include threads for receiving a screw. The base section **404** may alternatively comprise a screw boss **411** that is inserted into the holding member **301** through an aperture in the base section **404**.

[0030] The frictional section **405** is a means for creating friction between the holster assembly **300** and the user’s belt or clothing, and is preferably made from a soft rubber. The soft rubber takes the form of a grommet that encircles the retaining member **403**.

[0031] The frictional section **405**, in addition to offering compliance between the base section and the coupling section **406**, provides a frictional force that causes the holster assembly **300** to “cling” to a belt. In so doing, the frictional section **405** prevents a thief or criminal from pulling the holster assembly from a user’s personage. The frictional section **405** also prevents the holster assembly

from falling off the user's personage in the event that the user fell. The holding section **406** preferably comprises a screw, in that the screw may be adjusted relative to the base section **404**.

[0032] The planar member **400** includes a curved arm **407** disposed between the fasteners and the curved portion of the planar member. The curved arm **407** acts as a retaining mechanism in that it supplies a preloading force by way of a cantilever arm between the planar member **400** and the retaining member **403**. This preloading force ensures that the planar member **400** is securely pressing against the retaining member **403** when the holster assembly **300** is at rest.

[0033] The holster assembly **300** offers several advantages over the prior art, the foremost of which is easy coupling to a belt. As the retaining member **403** is coupled to the holding member **301**, the inner surface **408** of the planar member **400** is smooth and barb free. Notice that the planar member, looking from the top down, extends beyond the retaining member **403** at segment **409**.

[0034] To put on the holster assembly, the user simply inserts segment **409** in to the top edge of the trousers. The user then gently pulls the bottom **410** of the holding member **301** away from the planar member **400**. This causes the flexible, cantilever arm formed by the planar member **400** with respect to the holding member **301** to actuate or bend, thereby creating space between the retaining member **403** and the planar member **300**. This space allows the user to slide the holster assembly **300** down, thereby slipping the retaining member **403** over a belt. By releasing the bottom **410** of the holding member **301**, the loop formed by the holding member **301**, the retaining member **403** and the planar member **400** once again closes, thereby securely coupling the holster assembly **300** to the user. As such, a user need not unbuckle the belt to put on and take off the holster assembly **300**.

[0035] Referring now to **FIG. 5**, illustrated therein is an alternate embodiment of the invention. This embodiment is similar to that shown in **FIG. 4**, except for the fact that an added latch member **500** has been added. The latch member **500** offers a back-up mechanism to ensure that the holster assembly **501** stays coupled to the belt. The latch member **500** extends from the holding member **301** towards the planar member **400**. The latch member, however, extends slightly beyond the retaining member **403**, preferably between  $\frac{1}{128}$ <sup>th</sup> and  $\frac{1}{4}$  of an inch beyond the retaining member **403**. In the event that the retaining member **403** fails, the latch member **500** offers a secondary means of grabbing the belt of a user, thereby preventing the holster assembly **501** from decoupling from the user's personage.

[0036] Referring now to **FIG. 6**, illustrated therein is one application of a holster assembly in accordance with the invention. Shown in **FIG. 6** is a firearm assembly **600** comprising a firearm **601** and a holster **602**. The holster **601** is the holster assembly of **FIG. 3**, and includes the planar member **400**, the holding member **301** and the retaining member (shown in **FIG. 4**). As with **FIG. 4**, the retaining member extends from the holding member **301** towards the planar member **400** such that the planar member **400**, the holding member **301** and retaining member form a closed loop. A belt **603** passes through this loop, and is positioned within the space circumscribed by the planar member, the holding member and the retaining member. Note that the

holster assembly of **FIG. 5** could equally be used. If so, the holster assembly would include the latch member as described above.

[0037] While the preferred embodiments of the invention have been illustrated and described, it is clear that the invention is not so limited. Numerous modifications, changes, variations, substitutions, and equivalents will occur to those skilled in the art without departing from the spirit and scope of the present invention as defined by the following claims. For example, while the embodiments recited herein have related to firearms, it will be clear that the holster mechanism could be used to hold other objects, including cellular telephones, tools, or portable electronic devices.

What is claimed is:

1. A holster, comprising:

- a. a planar member;
- b. a holding member coupled to the planar member;
- c. a retaining member extending from the holding member towards the planar member, such that the planar member, holding member and retaining member form a closed loop; and
- d. a means for creating friction coupled to the retaining member;

wherein the planar member is preloaded so as to exert force against the retaining member.

2. The holster of claim 1, wherein the planar member is curved so as to accommodate a user's torso.

3. The holster of claim 1, wherein the planar member is coupled to the holding member by at least one fastener, wherein the at least one fastener is selected from the group consisting of screws, rivets, glues, hot melt joints, welds, adhesives, stitching, and epoxies.

4. The holster of claim 3, wherein the holding member is formed from a single piece of material folded in a U-shape so as to accommodate a firearm.

5. The holster of claim 4, wherein the holding member is constructed from a material selected from the group consisting of plastics, styrene, ABS, polycarbonates, Kydex, leather, cloth and vinyl.

6. The holster of claim 5, wherein a curved portion of the U-shape comprises a notched aperture for accommodating a sight of the firearm.

7. The holster of claim 6, wherein an open portion of the U-shape accommodates the trigger guard of the firearm.

8. The holster of claim 7, wherein the holding member is molded such that the interior of the U-shape comprises the negative image of the firearm.

9. The holster of claim 8, wherein the open portion of the U-shape is closed by at least one fastener, wherein the at least one fastener is selected from the group consisting of screws, rivets, glues, hot melt joints, welds, adhesives, stitching, and epoxies.

10. The holster of claim 1, wherein the retaining member comprises at least one screw coupled to at least one screw boss.

11. The holster of claim 1, wherein the means for creating friction comprises a rubber grommet disposed about the retaining member.

12. The holster of claim 1, wherein the retaining member extends from the holding member at an angle of between 85 and 95 degrees.

13. The holster of claim 1, wherein the planar member forms a flexible cantilever arm with respect to the holding member, such that the planar member may be separated from the retaining member by actuating the cantilever arm.

14. The holster of claim 1, further comprising a latch member extending from the holding member towards the planar member.

15. The holster of claim 14, wherein the latch member extends from the holding member between  $\frac{1}{64}$ <sup>th</sup> and  $\frac{1}{2}$  of an inch beyond the retaining member.

16. A firearm assembly, comprising:

- a. a firearm;
- b. a holster, the holster comprising:
  - i. a planar member;
  - ii. a holding member coupled to the planar member;

iii. a retaining member extending from the holding member towards the planar member, such that the planar member, holding member and retaining member form a closed loop; and

iv. a means for creating friction coupled to the retaining member;

wherein the planar member is preloaded so as to exert force against the retaining member; and

c. a belt;

wherein the belt is positioned within the space circumscribed by the planar member, the holding member and the retaining member.

17. The firearm assembly of claim 16, wherein the holster further comprises a latch member extending from the holding member towards the planar member, wherein the latch member extends from the holding member between  $\frac{1}{64}$ <sup>th</sup> and  $\frac{1}{2}$  of an inch beyond the retaining member.

\* \* \* \* \*