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(54) **ID Badge Holder**

(57) An apparatus for holding an ID badge includes a first portion. The apparatus includes a second portion which detachably connects with the first portion. The apparatus includes a first tile attached to the first portion having a clamp assembly that fixes to an object. The apparatus comprises a second tile attached to the sec-

ond portion which holds the ID badge. A method for holding an ID badge. The method includes the steps of attaching a clamp assembly of a first tile of a first portion to an object. There is the step of detaching a second portion from the first portion. The second portion has a second tile attached to the second portion which holds the ID badge.

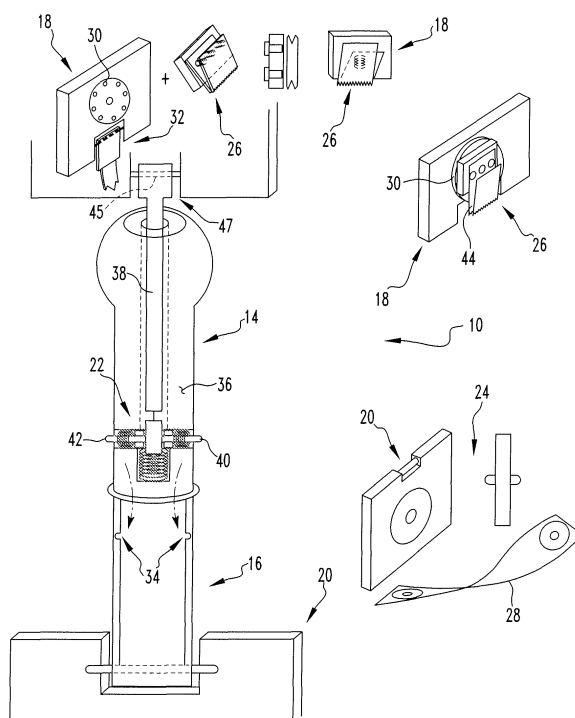


FIG. 2

Description

FIELD OF THE INVENTION

[0001] The present invention is related to holding an ID badge where the portion which holds the ID badge is able to separate from another portion which attaches to an object. More specifically, the present invention is related to holding an ID badge where the portion which holds the ID badge is able to separate from another portion which attaches to an object and the other portion has a clamp assembly which is used to place the other portion in a desired position relative to the object.

BACKGROUND OF THE INVENTION

[0002] Identity badges have a critical role in many institutions but remain essential for security in a hospital setting, school, military environment, or other secure work places. Identity badges serve many supplemental functions. Some are embedded with a metallic strip feature or RFID capability. These secondary features have multiple purposes such as allowing for use with time clock machines and providing access to secure work areas.

[0003] The most commonly used identity badge clip is the clip/swivel design. This ubiquitous device has a clear plastic loop that snaps together to hold the identity badge with a spring-loaded clip with metal jaws at the opposite end. Unfortunately, this model is inherently flawed. The default position on this device is such that the clip opens its mouth facing upwards. Because the clip is intended to attach to one's breast pocket, logically, the mouth of the clip should be facing downwards. As such, badges routinely, but inadvertently, flip over. As a result, identity badges utilizing this conventional clip mechanism are often turned over obscuring the face of the identity card, undermining the primary purpose of the clip, namely, displaying one's identity.

[0004] There are other mechanisms for displaying identity badges such as a clip which incorporates a retractable string feature. This item has the benefit of allowing the user pull the badge away from himself in order to swipe his card.

However, these devices usually flip over freely and do not reliably display the face of the identity badge. Many utilize a lanyard to display their identity badge. This permits one's badge to freely turn over but, moreover, can interfere with work related activities as the item is unsecured. In certain work environments, this presents a potential hazard for the wearer.

[0005] An ideal badge clip would incorporate the following features:

1. allow for easy and simple attachment
2. reliably display one's badge (prevent flipping over)
3. enable one to detach the badge seamlessly for the purpose of swiping when necessary
4. avoid hazards of wearing an unsecured item

BRIEF SUMMARY OF THE INVENTION

[0006] The present invention pertains to an apparatus for holding an ID badge. The apparatus comprises a first portion. The apparatus comprises a second portion which detachably connects with the first portion. The apparatus comprises a first tile attached to the first portion having a clamp assembly that fixes to an object. The apparatus comprises a second tile attached to the second portion which holds the ID badge.

[0007] The present invention pertains to a method for holding an ID badge. The method comprises the steps of attaching a clamp assembly of a first tile of a first portion to an object. There is the step of detaching a second portion from the first portion. The second portion has a second tile attached to the second portion which holds the ID badge.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

[0008] In the accompanying drawings, the preferred embodiment of the invention and preferred methods of practicing the invention are illustrated in which:

[0009] Figure 1 is a schematic representation of the apparatus of the present invention.

[0010] Figure 2 is a schematic representation of the apparatus with exploded views of the first and second tiles.

[0011] Figure 3 is a schematic representation of the first tile in a locked state.

[0012] Figure 4 is a schematic representation of the first tile in an unlocked state.

DETAILED DESCRIPTION OF THE INVENTION

[0013] Referring now to the drawings wherein like reference numerals refer to similar or identical parts throughout the several views, and more specifically to figure 1 and figure 2 thereof, there is shown an apparatus 10 for holding an ID badge 12. The apparatus 10 comprises a first portion 14. The apparatus 10 comprises a second portion 16 which detachably connects with the first portion 14. The apparatus 10 comprises a first tile 18 attached to the first portion 14 having a clamp assembly 26 that fixes to an object. The object can be a shirt or coat pocket, or a belt or a strap, for example. The apparatus 10 comprises a second tile 20 attached to the second portion 16 which holds the ID badge 12.

[0014] The apparatus 10 preferably includes an attachment assembly 22 connected with the first and second portion 16 which allows the first and second portions 14, 16 to detachably connect with each other. The apparatus 10 preferably includes a holder 24 that connects with the second tile 20 to hold the ID badge 12 to the second tile 20. Preferably, the clamp assembly 26 is rotatably attached to the first tile 18. The holder 24 preferably includes a strap 28 that connects with the second

tile 20 to hold the ID badge 12 to the second tile 20.

[0015] Preferably, the clamp assembly 26 has a pivot mechanism 30 and a clamp 44 attached to the pivot mechanism 30. The clamp assembly 26 preferably includes a lock mechanism 32 attached to the pivot mechanism 30 to fix the pivot mechanism 30 in a desired position. Preferably, the second portion 16 includes a groove 34 and the attachment assembly 22 includes a spring-loaded mechanism 36 which, when depressed, retracts from the groove 34 to release the second portion 16 from the first portion 14. The spring-loaded mechanism 36 preferably includes a central spring-loaded piston 38 disposed lengthwise in the first portion 14, a first laterally spring-loaded rod 40 and a second laterally spring-loaded rod 42 disposed in the first portion 14 which retract when the central spring-loaded piston 38 is depressed.

[0016] The present invention pertains to a method for holding an ID badge 12. The method comprises the steps of attaching a clamp assembly 26 of a first tile 18 of a first portion 14 to an object. There is the step of detaching a second portion 16 from the first portion 14. The second portion 16 has a second tile 20 attached to the second portion 16 which holds the ID badge 12.

[0017] Preferably, there is the step of reattaching the first portion 14 with the second portion 16. The reattaching step preferably includes the step of connecting the first portion 14 and the second portion 16 with an attachment assembly 22 connected with the first and second portions 14, 16 which allows the first and second portions 14, 16 to detachably connect with each other. Preferably, there is the step of holding the ID badge 12 to the second tile 20 with a holder 24 that connects with the second tile 20.

[0018] There is preferably the step of rotating the clamp assembly 26 relative to the first tile 18. Preferably, the holding step includes the step of connecting a strap 28 of the holder 24 with the second tile 20 to hold the ID badge 12 to the second tile 20. The rotating step preferably includes the step of pivoting a pivot mechanism 30 of the clamp assembly 26 to a desired position. Preferably, the attaching step includes the step of attaching a clamp of the clamp assembly 26 attached to the pivot mechanism 30 to the object.

[0019] There is preferably the step of fixing the pivot mechanism 30 in a desired position with a lock mechanism 32 of the clamp mechanism attached to the pivot mechanism 30. Preferably, the detaching step includes the step of depressing a spring-loaded mechanism 36 of the attachment assembly 22 which then retracts from a groove 34 of the second portion 16 to release the second portion 16 from the first portion 14. The detaching step preferably includes the step of retracting a central spring-loaded piston 38 disposed lengthwise in the first portion 14, a first laterally spring-loaded rod 40 and a second laterally spring-loaded rod 42 disposed in the first portion 14 of the spring-loaded mechanism 36.

[0020] In the operation of the invention, the pull apart

badge 12 clip comprises multiple parts. The main cylindrical unit which comes apart at the center after pressing upon a central spring-loaded piston 38 on a first portion 14 of the apparatus 10 causes two spring-loaded pistons 38 to retract inward away from the grooved lip in a second portion 16 of the cylindrical unit.

[0021] The first portion 14 of the cylindrical unit has a hollow core with a central piston 38 as indicated above. The center piston is spring-loaded within and defaults to keep the central piston 38 pushing in an upward direction. When the central piston 38 is pressed down upon against the tension of the spring element, the lateral spring-loaded pistons 40, 42 collapse medially (against their spring-loaded tension). This action causes the lateral pistons 40, 42 to retract away from the groove 34 within the second portion 16 of the apparatus 10 thereby freeing the upper and lower parts of the cylindrical unit thereby permitting their separation.

[0022] The first portion 14 of the apparatus 10 has a first tile 18 associated with it, as shown in figures 3 and 4. The central piston 38 in the first portion 14 of the apparatus 10 has a horizontal hole which allows for a rod 45 to pass through. This rod 45 is a feature of the first tile 18 built into the notch 47 at the lower aspect of the tile. The first tile 18 has eight pivot indentations 46 in the surface of the first tile 18 which are arranged in a circle. At the center of this circle is a center shaft 48 which holds the pivot mechanism 30 to the first tile 18. The pivot mechanism 30 has two very short spring-loaded top rods 50, 52 (default to pushing outwards). These two top rods 50, 52 are 180° from one another and built into the pivot mechanism 30 which is a small rectangular flat shaped tile attached to the first tile 18 via the center shaft 48. The interaction between the pivot mechanism 30 with the two spring-loaded rods 50, 52 in conjunction with the grooved pivot indentations 46 on the first tile 18 keep the pivot mechanism 30 in secure position. Rotating the pivot mechanism 30 with manual force in clockwise or counterclockwise direction causes the two pivot rods 50, 52 to retract against the force of their spring-loaded force until the pivot rods 50, 52 extend into the next pivot indentations. As such, the pivot mechanisms 30 can be placed into nine different positions. Figure 3 shows the first tile in a locked state and figure 4 shows the first tile in an unlocked state.

[0023] The pivot mechanism 30 has a spring-loaded clamp 44 attached to its back side. The metal clamp 44 has a clamp spring-loaded mechanism 54 similar to other identity badge 12 clips keeping it in a default position with the two jaws closed at one end and open at the opposite end. The pivot mechanism 30 allows the clamp 44 to attach to one's clothing and remain stable in that position depending on the preference of the user.

[0024] The second portion 16 of the apparatus 10 has a horizontal pin running through it which is a part of the second tile 20 running across the top of the second tile 20 in a notch. The second tile 20 has snap features (male) on the anterior and posterior aspects of the second tile

20 to which a plastic strip with female snap features attaches after looping through the opening at the top of one's identity badge 12.

[0025] The apparatus 10 utilizes and builds upon a pull apart key chain design. These key chains are simple cylindrical structures with key chain rings at both ends. They incorporate a spring-loaded push button at one end which allows one to part with half the key chain device but just as easily reattach the two parts and form a single unit. A model which modifies both the upper and lower aspects of the design (where the key rings are typically placed), by specifically placing small tiles with a small cut out notch at one side of each tile would expose a horizontal bar in the notch of the tiles. The bar would pass through the existing perpendicular holes in both the bottom and top of the pull apart key cylinder. The upper tile would incorporate a metal spring clamp mechanism attached to the posterior aspect of the superior tile, with the mouth of the clamp facing downwards. The metal clamp on the superior tile would pivot and lock in the up, down, or side positions. The lower tile has a horizontal bar exposed in the notch of the upper end of the inferior tile which passes through the lower cylindrical unit horizontally. Additionally, two male snaps would be incorporated onto both the anterior and posterior faces of this tile. This would allow for a plastic connector with female snaps at both ends to snap on to the anterior and posterior faces of the inferior tile. Prior to attaching the ends of the plastic piece to the inferior tile one would feed the plastic strip through the notch in one's identity badge 12.

[0026] When necessary, the user can pull apart the upper and lower parts of the apparatus 10 by depressing the spring-loaded cylinder feature (utilized in the standard pull apart key chain model) encompassed by a smaller vertical cylinder encased within the upper cylinder. After depressing the spring-loaded cylindrical button a resulting retraction of bilateral horizontal pivots disengages, allowing for separation of the upper and lower poles of the badge 12 clip.

[0027] This design would preferably be made smaller than the traditional pull apart key chain (which is typically 3 ½ inches in length). To be more compatible and unobtrusive, this pull apart key chain should be approximately 1 ½ inches in length. The first tile 18 would measure approximately ½ inch high by ½ inch wide and 1/8 inch in depth. The entire cylindrical badge 12 clip would measure approximately ¾ inch in length, and the bottom square would be ¼ inch high x ½ inch wide x 1/8 inch in depth.

[0028] Although the invention has been described in detail in the foregoing embodiments for the purpose of illustration, it is to be understood that such detail is solely for that purpose and that variations can be made therein by those skilled in the art without departing from the spirit and scope of the invention except as it may be described by the following claims.

Claims

1. An apparatus for holding an ID badge comprising:
 - a first portion;
 - a second portion which detachably connects with the first portion;
 - a first tile attached to the first portion having a clamp assembly that fixes to an object; and
 - a second tile attached to the second portion which holds the ID badge.
2. An apparatus as described in claim 1 wherein the clamp assembly is rotatably attached to the first tile.
3. An apparatus as described in any one of the preceding claims including a holder that connects with the second tile to hold the ID badge to the second tile.
4. An apparatus as described in Claim 3 wherein the holder includes a strap that connects with the second tile to hold the ID badge to the second tile.
5. An apparatus as described in any one of the preceding claims wherein the clamp assembly has a pivot mechanism and a clamp attached to the pivot mechanism.
6. An apparatus as described in Claim 5 wherein the clamp assembly includes a lock mechanism attached to the pivot mechanism to fix the pivot mechanism in a desired position.
7. An apparatus as described in any one of the preceding claims including an attachment assembly connected with the first and second portions which allows the first and second portions to detachably connect with each other.
8. An apparatus as described in Claim 7 wherein the second portion includes a groove and the attachment assembly includes a spring-loaded mechanism which, when depressed, retracts from the groove to release the second portion from the first portion.
9. An apparatus as described in Claim 8 wherein the spring-loaded mechanism includes a central spring-loaded piston disposed lengthwise in the first portion, a first laterally spring-loaded rod and a second laterally spring-loaded rod disposed in the first portion which retract when the central spring-loaded piston is depressed.
10. A method for holding an ID badge comprising the steps of:
 - attaching a clamp assembly of a first tile of a first portion to an object; and

detaching a second portion from the first portion, the second portion having a second tile attached to the second portion which holds the ID badge.

11. A method as described in Claim 10 including the step of reattaching the first portion with the second portion. 5
12. A method as described in Claim 11 wherein the reattaching step including the step of connecting the first portion and the second portion with an attachment assembly connected with the first and second portions which allows the first and second portions to detachably connect with each other. 10
13. A method as described in any one of claims 10 to 12 including the step of holding the ID badge to the second tile with a holder that connects with the second tile. 15
14. A method as described in Claim 13 wherein the holding step includes the step of connecting a strap of the holder with the second tile to hold the ID badge to the second tile. 20
15. A method as described in any one of claims 10 to 14 including the step of rotating the clamp assembly relative to the first tile. 25
16. A method as described in Claim 15 wherein the rotating step includes the step of pivoting a pivot mechanism of the clamp assembly to a desired position. 30
17. A method as described in Claim 16 wherein the attaching step includes the step of attaching a clamp of the clamp assembly attached to the pivot mechanism to the object. 35

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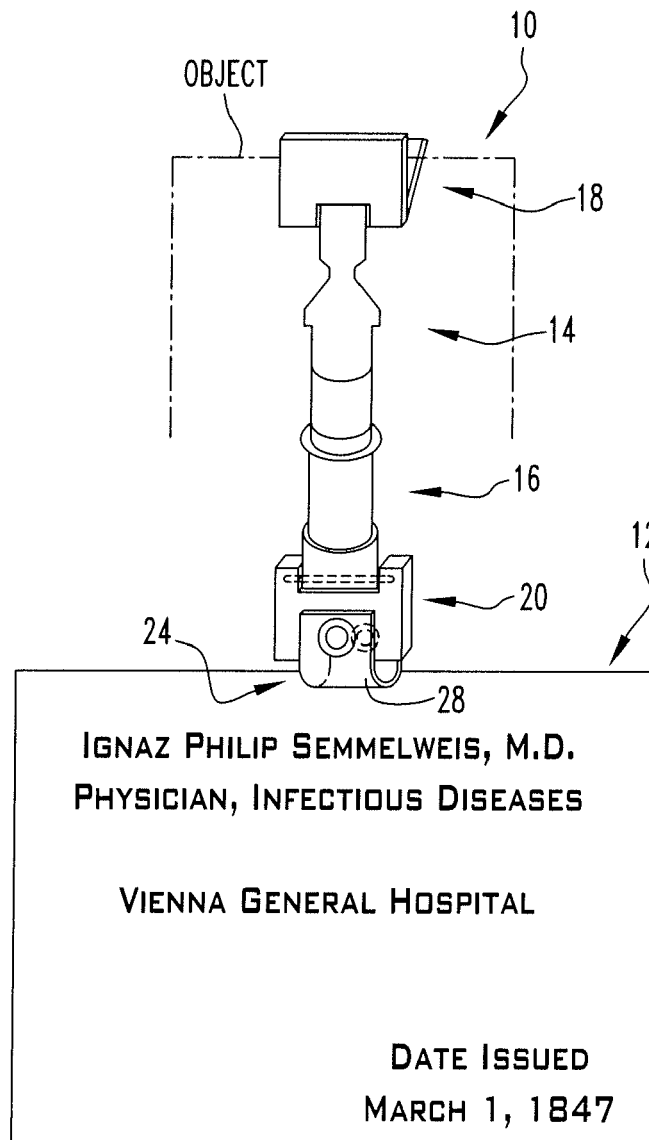


FIG.1

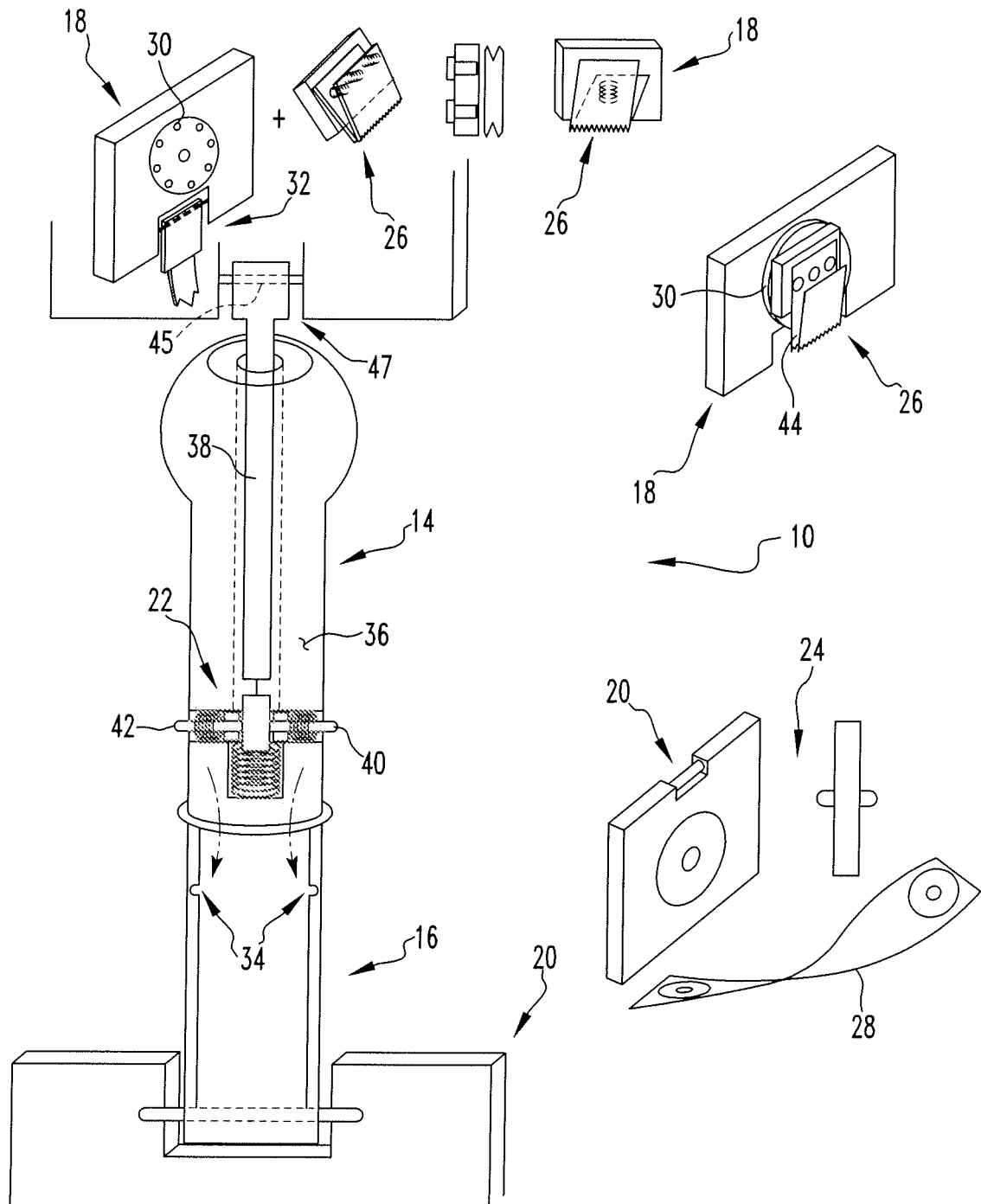


FIG. 2

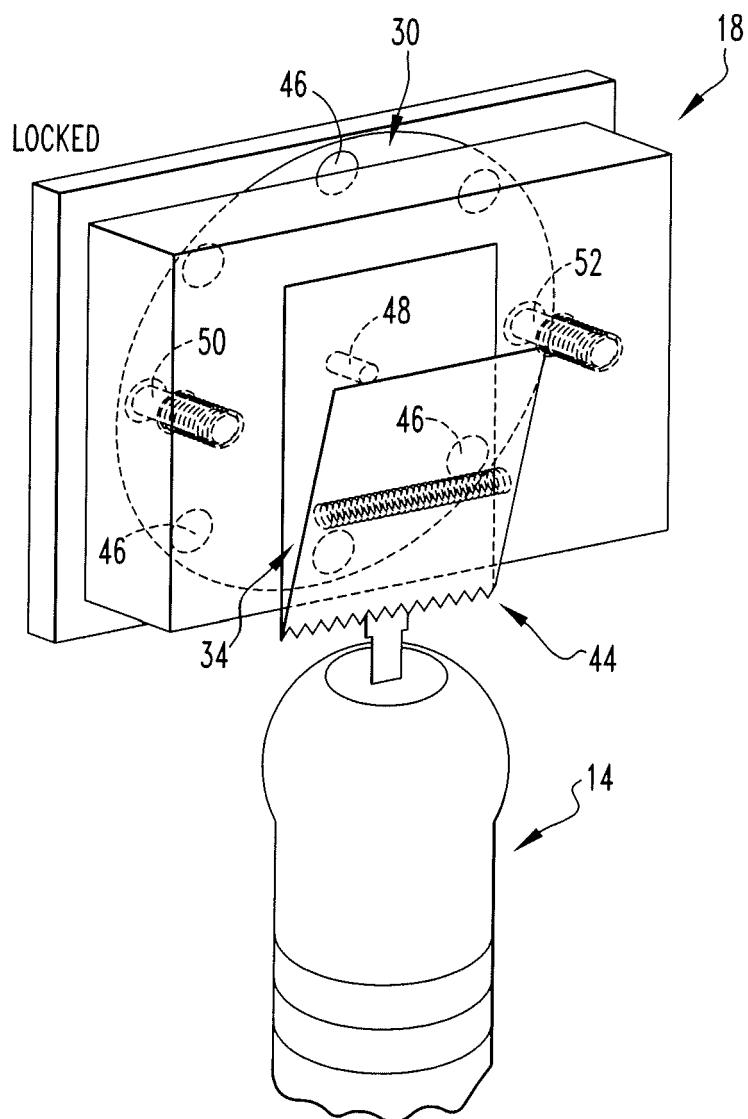


FIG. 3

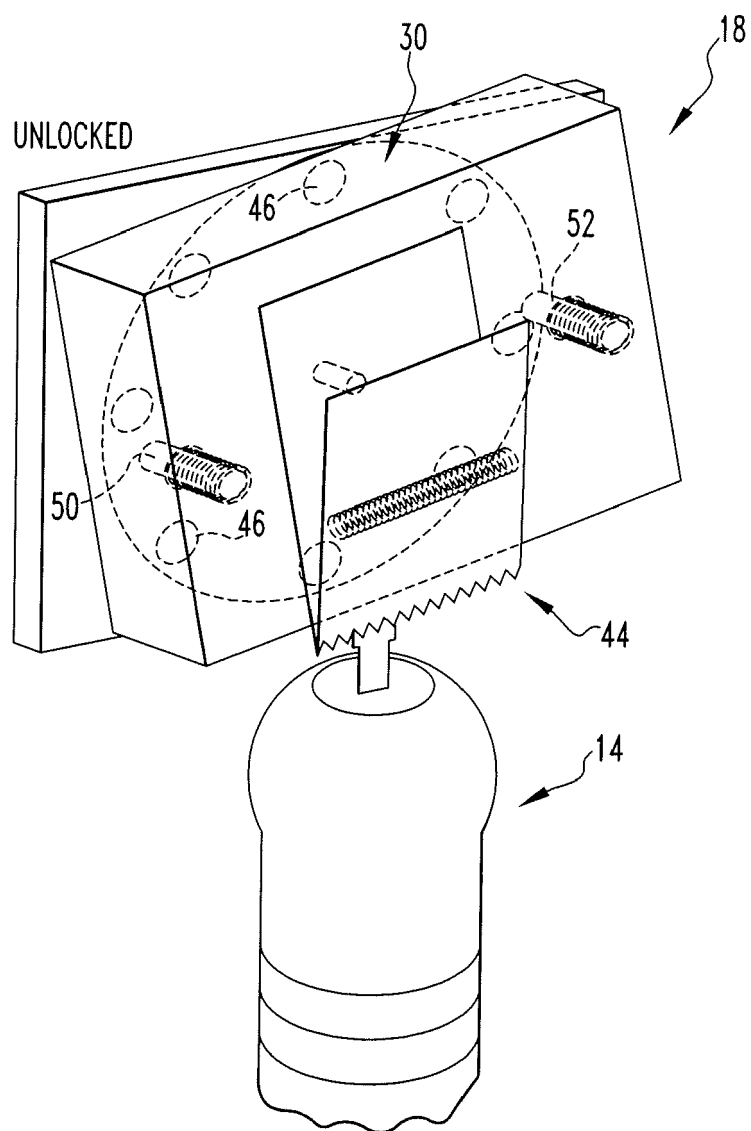


FIG. 4