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# (54) TOTE CLIP AND ASSEMBLY

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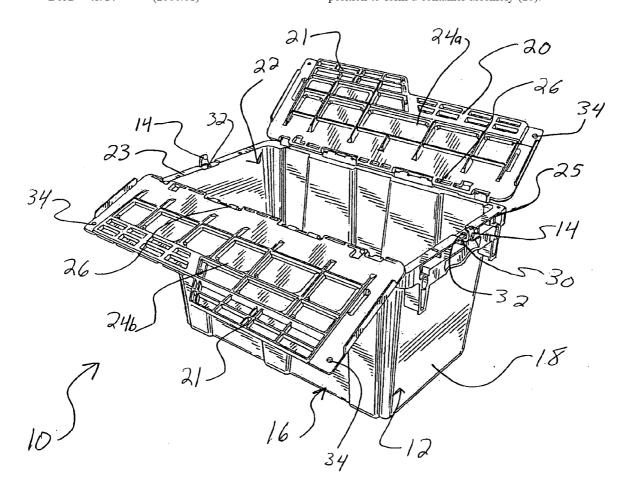
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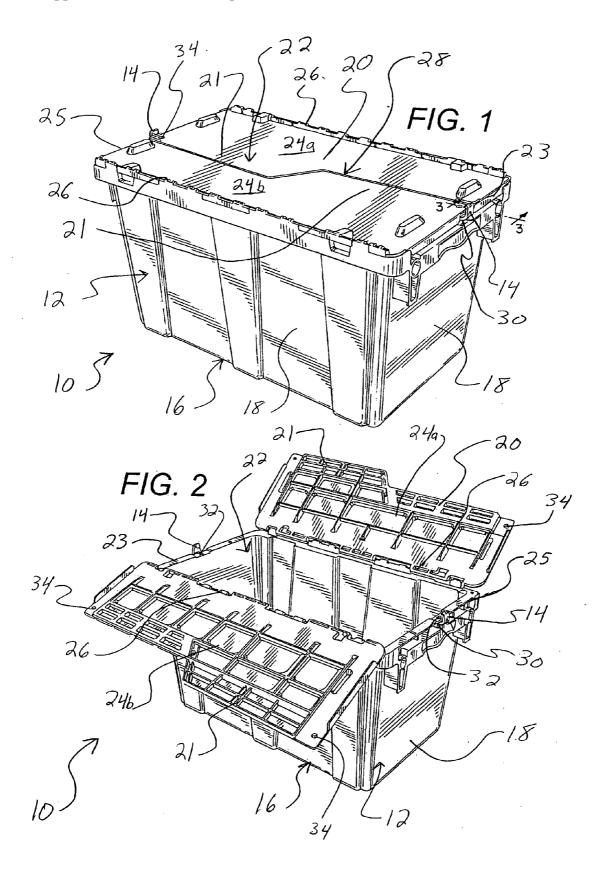
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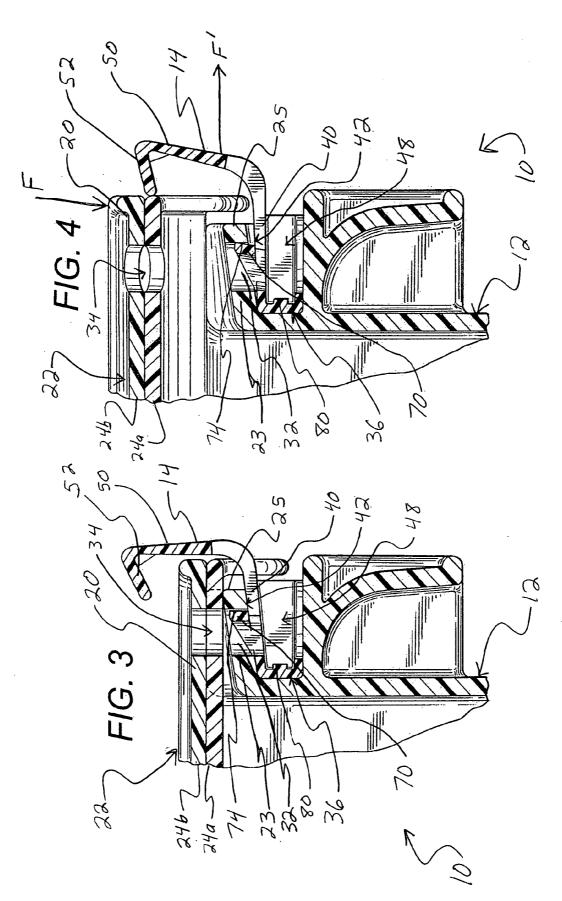
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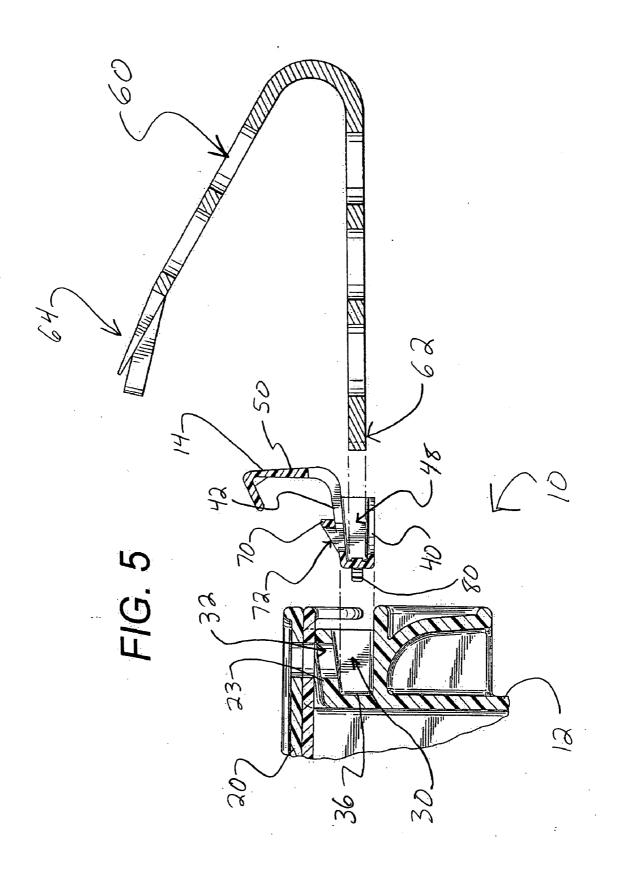
#### (57)ABSTRACT

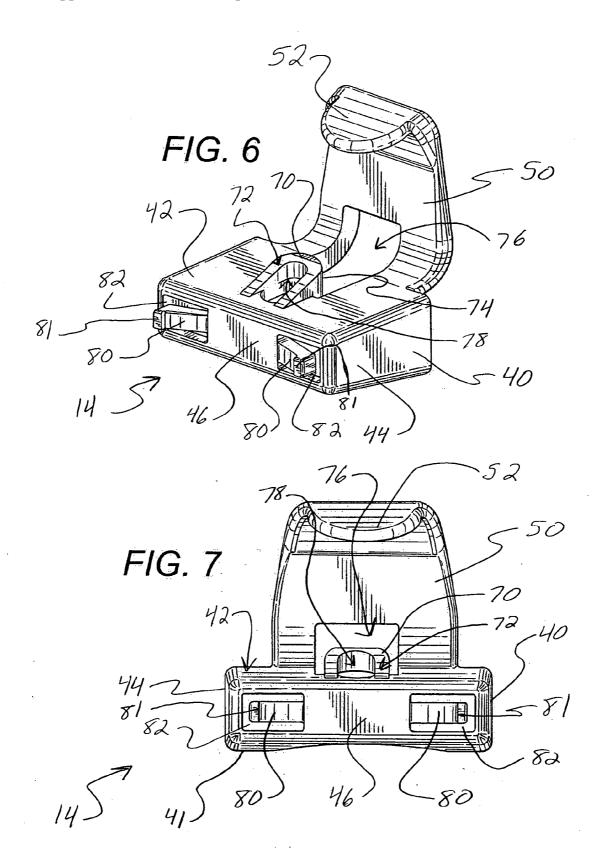
A clip (14), designed for use with a container (12) having a lid (20) movable between an open position and a closed position, includes a base (40) adapted to be inserted into a cavity (30) in the container (12) and a resilient arm (50) extending from the base (40). The base (40) has a projection extending therefrom, adapted to be received in an aperture (32) in the container (12) to affix the base (40) to the container (12). The arm (50) is adapted to temporarily deflect in response to a closure force upon the lid (20) to permit the lid (20) to move from the open position to the closed position. The arm (50) is further adapted to retain the lid (20) in the closed position. The clip (14) is used with a container (12) having a bottom (16), four sidewalls (18), and a lid (20) movable between an open position and a closed position to form a container assembly (10).

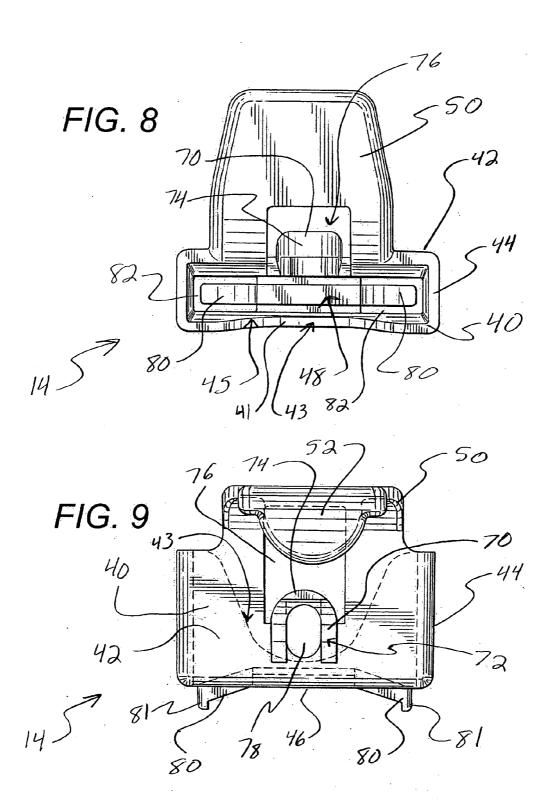












### TOTE CLIP AND ASSEMBLY

### TECHNICAL FIELD

[0001] The invention relates generally to reusable, reclosable tote containers and, more specifically, to a device suitable for securing the closed lid of a tote container.

### BACKGROUND OF THE INVENTION

[0002] A variety of different containers are used in the retail and shipping industries to contain goods being shipped or stored. Many such containers are also suitable for personal use, as well as use by a number of other industries. Plastic containers with reclosable, hinged lids are a common type of such containers. While some containers have built-in mechanisms for closing or sealing the lid onto the container, a great deal of the containers do not. Containers without closure mechanisms are more susceptible to stored items being unlawfully removed from the containers, sometimes referred to as "shrinkage." Many containers have lids that are designed to be closed by a padlock, cable tie, push pin, strap, or other relatively permanent locking mechanism. While these mechanisms are secure, they often take considerable time and conscious effort to use, particularly when the containers are to be reopened. Thus, a need exists for an easy and quick way of repeatedly opening and closing these containers, as well as other containers that are not designed with a built-in closing mechanism.

[0003] The present invention is provided to solve the problems discussed above and other problems, and to provide advantages and aspects not provided by prior closure devices of this type. A full discussion of the features and advantages of the present invention is deferred to the following detailed description, which proceeds with reference to the accompanying drawings.

### SUMMARY OF THE INVENTION

[0004] The present invention provides a clip for use with a container having a lid movable between an open position and a closed position. The clip includes a base adapted to engage a portion of the container to affix the base to the container and a resilient arm extending from the base. The arm is adapted to retain the lid in the closed position and is operative in response to a closure force upon the lid.

[0005] According to one aspect of the invention, the arm of the clip operates by temporarily deflecting outwardly in response to the closure force upon the lid to permit the lid to move from the open position to the closed position.

[0006] According to another aspect of the invention, the arm has a tab thereon, and the tab is adapted to absorb a portion of the closure force to operate the arm. The tab is angled downward and adapted to transfer a portion of the closure force into an outward force on the arm to deflect the arm. In a preferred embodiment, the tab is adapted to retain the lid in the closed position.

[0007] According to another aspect of the invention, the arm has a first position of minimum deflection and a second position of maximum deflection. The arm is adapted to be in the second position when the closure force upon the lid is at a maximum, and the arm is adapted to be in the first position when no closure force is exerted upon the lid.

[0008] According to another aspect of the invention, the base has a projection thereon, and the projection is adapted to be received in an aperture in the container to affix the base to the container.

[0009] According to another aspect of the invention, the base is adapted to be inserted into a cavity in the container, and the projection has an angled surface adapted to facilitate insertion of the base into the cavity. The base also has an angled surface adapted to facilitate insertion of the base into the cavity and a hollow adapted to receive a tool for insertion and removal of the base from the cavity. Further, according to a further aspect of the invention, the base has a protrusion adapted to abut an inner surface of the cavity to secure the base within the cavity.

[0010] The present invention also provides a container assembly including a container having a bottom, a sidewall, and a lid movable between an open position and a closed position, and a clip affixed to the container. The clip includes a base and a resilient arm extending from the base. The base engages a portion of the container to affix the clip to the container, and the arm temporarily deflects in response to a closure force upon the lid to permit the lid to move from the open position to the closed position, retaining the lid in the closed position.

[0011] According to another aspect of the invention, the arm has a first position of minimum deflection and a second position of maximum deflection, and the closure force upon the lid is at a maximum when the arm is in the second position, and the arm is in the first position when no closure force is exerted upon the lid.

[0012] According to another aspect of the invention, the container has a cavity, and the base is received in the cavity.

[0013] According to another aspect of the invention, the base has a projection thereon and the container has an aperture located proximate the cavity. When the base is received in the cavity, the projection is received in the aperture to affix the base to the container.

[0014] According to another aspect of the invention, the projection has a hole therethrough, and the assembly is adapted to receive a locking mechanism extending through the hole and the aperture to secure the lid in the closed position.

[0015] According to another aspect of the invention, the container has a rim extending around a top edge of the container, the cavity located below the rim and the aperture extending through the rim.

[0016] According to another aspect of the invention, the base has a protrusion abutting an inner surface of the cavity to secure the base within the cavity.

[0017] According to another aspect of the invention, the arm temporarily deflects in response to an outward force upon the arm to permit the lid to move from the closed position to the open position.

[0018] According to another aspect of the invention, the lid is a two-piece lid having a closure seam proximate a center line of the container.

[0019] According to another aspect of the invention, the container assembly has a second clip affixed to the container opposite the first clip. The second clip includes a base and

a resilient arm extending from the base. The base engages a portion of the container to affix the second clip to the container, and the arm temporarily deflects in response to a closure force upon the lid to permit the lid to move from the open position to the closed position, retaining the lid in the closed position.

[0020] Other features and advantages of the invention will be apparent from the following specification taken in conjunction with the following drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0021] To understand the present invention, it will now be described by way of example, with reference to the accompanying drawings in which:

[0022] FIG. 1 is a perspective view of one embodiment of a container assembly of the present invention, in a closed position;

[0023] FIG. 2 is a perspective view of the container assembly of FIG. 1, in an open position;

[0024] FIG. 3 is a partial cross section view of the container assembly of FIG. 1, in the closed position, taken along lines 3-3 of FIG. 2, with a clip of the present invention affixed thereto;

[0025] FIG. 4 is a partial cross section view of the container assembly and clip of FIG. 3, in a partially-closed position;

[0026] FIG. 5 is an exploded partial cross section view of the container assembly and clip of FIG. 3, in a closed position, showing an insertion/removal tool of the present invention;

[0027] FIG. 6 is a perspective view of one embodiment of the clip of the present invention;

[0028] FIG. 7 is a front elevation view of the clip of FIG. 6:

[0029] FIG. 8 is a rear elevation view of the clip of FIG. 6; and,

[0030] FIG. 9 is a top view of the clip of FIG. 6.

# DETAILED DESCRIPTION

[0031] While this invention is susceptible of embodiments in many different forms, there are shown in the drawings and will herein be described in detail preferred embodiments of the invention with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the broad aspect of the invention to the embodiments illustrated.

[0032] Referring in detail to the FIGS., and initially to FIGS. 1 and 2, a container assembly 10 is shown, including a reclosable container 12 and two clips 14 on opposite sides of the container 12. As shown in FIGS. I and 2, the preferred container 12 has a bottom or base 16, four side walls 18, and a lid 20. The clip 14 is affixed to the container 12 to retain the lid 20 in the closed position.

[0033] The preferred container 12 is illustrated in FIGS. 1-5, and has a rectangular base 16, two pairs of opposed, inclined side walls 18, an open rectangular top 22, and a two-piece, hinged reclosable lid 20 on the top 22 of the

container 12. The container is preferably constructed of a plastic or composite material, but the present invention functions suitably with containers made from any known material.

[0034] As stated above and illustrated in FIGS. 1 and 2, the base 16 of the container 12 is preferably rectangular. Alternately, the base 16 may be square or any other suitable shape. The top 22 is preferably shaped similarly to the base, and is also preferably rectangular, but, in other embodiments, may be square or any other suitable shape, and may be differently shaped than the base 16. The preferred side walls 18 angle outwardly from the base 16 to the top 22 of the container, to facilitate loading and unloading of articles into and out of the container 12. The container 12 preferably has four side walls 18, arranged in two opposing pairs. However, the side walls 18 may be shaped or arranged differently, and may be present in a different number, particularly if the base 16 of the container has a different shape. For example, a container with a hexagonal base and top may have six side walls, and a container with a circular base and top may have one cylindrically or frustoconically shaped side wall. In still other embodiments, the container may not have a discernable base and side walls, for example, if the container is shaped like a cone, bowl, or pyramid. In any event, the shape of the container is not considered a primary feature of the present invention, and a variety of known containers may benefit from the present invention.

[0035] As shown in FIGS. 1-2, the lid 20 is preferably of a two-piece design, with each piece 24 connected to the top of the container 12 by a hinge 26, and is movable between an open position (illustrated in FIG. 2) and a closed position (illustrated in FIG. 1). In other words, the preferred lid 20 has a first lid member 24a and a second lid member 24b that close together to form the lid 20. The preferred hinge 26 design allows each lid piece 24 a wide range of motion to provide adequate opening for loading the container 12. In other embodiments, the lid may not be hinged and may be opened and closed by any known means.

[0036] The two lid pieces 24a,24b are preferably shaped similarly such that the pieces 24a,24b form a closure seam 26 proximate a center line of the container 12 when the lid is in the closed position. As shown in FIGS. 1 and 2, each of the lid pieces 24 has a flap 21 on one side that overlaps a portion of the opposing piece 24. These flaps 21 create an interlocking structure along the closure seam 26 that enhances the security of the closure. Alternately, one piece 24 may completely overlap the other piece 24 to create a secure closure. In other embodiments, the lid pieces may not overlap at all. Still further, the lid 20 may not be a two-piece design, and may be a single piece, closable by a single hinge or other known means, or may have multiple pieces. In yet another embodiment, the lid 20 may have one or more fixed pieces and one or more movable pieces. For example, half the lid 20 may be fixed to the top of the container and the other half may be moveable to close the lid, abutting the fixed piece.

[0037] As shown in FIGS. 1-5, the container 12 preferably has a rim 23 around the edge 25 of the top 22 of the container 12, extending outwardly from the container 12. Additionally, as best illustrated in FIGS. 3-5, the preferred embodiment has two cavities 30 on opposing sides of the container 12, located under the rim 23. These cavities 30 are designed to

receive the clip 14, as described below. The rim 23 preferably has a notch or aperture 32 extending therethrough, into the cavity 30. In this embodiment, the lid 20 also has two holes 34 therethrough positioned so each hole 34 is aligned with one of the apertures 32 when the lid is in the closed position, creating a passage from the top 22 of the container 12 through the rim 23 and into the cavity 30. A locking mechanism (not shown), such as a cable tie, padlock, push pin, strap, or other known locking mechanism, may be inserted through this passage to more permanently seal the lid in the closed position. In other embodiments, the container may not have a rim 23 or cavities 30, or may have a differently configured rim 23 and/or cavities 30.

[0038] The preferred embodiment of the clip 14 of the present invention is shown in FIGS. 6-9 and generally includes a base 40 and an arm 50 extending from the base 40. The base 40 is adapted to be affixed to the container 12, preferably by inserting the base 40 into one of the cavities 30 on the container 12. When the clip 14 is affixed to the container 12, the arm 50 is operative in response to a closure force (F) upon the lid 20 to allow the lid 20 to move to the closed position. Further, the arm 50 is adapted to releasably retain the lid 20 in the closed position. The preferred clip 14 is made of plastic and can be quickly and cheaply molded. However, any of a variety of other known materials may function suitably with the clip 14 of the present invention. It is further understood that the clip 14 can be considered to include an arm 50 that is operative as generally described above. The arm 50 has a portion that is adapted to be affixed to the container 12. In a preferred embodiment, the portion that is affixed to the container 12 is defined by the base 40.

[0039] As illustrated in FIGS. 3-9, the preferred base 40 is formed of a top surface 42, two side surfaces 44, a front surface 46, a bottom surface 41, with an open back 45 and a hollow interior 48. As described below, this hollow 48 advantageously receives a tool 60 for insertion and removal of the base 40 from the cavity 30. The hollow construction also allows the base 40, or portions thereof, room to flex if necessary. However, the clip 14 may alternately have a solid construction. The bottom surface 41 of the base 40 preferably contains a trough 43 that facilitates insertion and removal of the tool 60 from the hollow 48. In other embodiments, this trough 43 may not be present.

[0040] The preferred base 40 has a wedge-shaped design. In other words, the base 40 has an angled top surface 42 adapted to facilitate insertion of the base 40 into the cavity 30. As illustrated in FIGS. 3-4, the angled surface 42 is preferably the top surface 42 of the base 40. The front surface 46 of the base 40 preferably has two protrusions 80 thereon adapted to abut an inner surface 36 of the cavity 30 to secure the base 40 within the cavity 30. In the preferred embodiment, illustrated in FIGS. 6 and 7, these protrusions 80 are formed by two resilient tongues 80, each surrounded by a window 82 to allow the tongues 80 to flex inward. A peg 81 preferably extends from a distal end of each tongue 80. However, many alternate embodiments are possible. The clip 14 may have a different number of protrusions, or the protrusions 80 may be formed or constructed differently, and may not have a surrounding window 82 to allow flexing. Further, the clip 14 may have not protrusions 80, or a protrusion 80 may be located elsewhere on the clip 14. Still further, the container 12 may contain a similar protruding structure adapted to abut the base 40 and accomplish the same function.

[0041] The base also preferably has a projection 70 on the top surface 42 adapted to be received in the aperture 32 in the container 12 to affix the base 40 to the container 12. As best illustrated in FIGS. 3-6, the projection 70, like the base 40, has an angled surface 72 adapted to facilitate insertion of the base into the cavity. The back edge 74 of the projection 70 is substantially vertical. As can be understood from FIG. 3, the back edge 74 engages a vertical surface of the container defined by the aperture 32. The projection 70 extends partially into a gap 76 in the clip 14, similar to the arrangement of the protrusions 80 and the windows 82, to allow the projection 70 to flex slightly. Additionally, the projection 70 preferably has a hole 78 through the center, combining with the aperture 32 to form a passage through the rim 23 of the container and the clip 14. As described above and illustrated in FIG. 3, this passage also preferably extends through the hole 34 in the lid 20 when the lid 20 is in the closed position. In alternate embodiments, the projection 70 may be structured differently or may be located elsewhere on the clip 14, with the container 12 dimensioned accordingly to cooperate with the alternate clip structure or location. Still further, the clip 14 may not have a projection, and may be affixed to the container 12 in another way, as described below.

[0042] Generally, the clip 14 is adapted to retain the lid 20 in the closed position, operative in response to a closure force (F) upon the lid 20. In the preferred embodiment, illustrated in FIGS. 3-9, the clip 14 has the resilient arm 50 extending from the base 40 that operates in response to a closure force (F) to retain the lid 20 in the closed position. The preferred arm 50 has a tab 52 thereon, and operates by temporarily deflecting outwardly in response to the closure force (F) upon the lid 20 to permit the lid 20 to move from the open position to the closed position. The tab 52 is preferably angled downward and inward from the arm 50. and functions both to retain the lid 20 in the closed position and to transfer a portion of the closure force (F) into an outward force (F') on the arm 50. The tab 52 defines a planar surface where, as can be understood from FIGS. 3 and 4, an edge of one of the lid members 24a,24b will engage and slide along the planar surface of the tab 52. The arm 50 itself preferably extends outwardly from the back of the top surface 42 of the base 40, and then curves upwardly to extend substantially vertically above the base 40. Additionally, the gap 76 in the base 40 preferably extends through the curve and partially up into the vertical portion of the arm 50. In alternate embodiments, the arm 50 may extend in a different direction, and may even be adapted to ascend through a slot in the lid 20 of the container, rather than around the outer edge 25.

[0043] Generally, two clips 14 are affixed to the container 12 to create the container assembly 10, illustrated in FIGS. 1-5. Preferably, each clip 14 is inserted into one of the cavities 30 in the container 12 to affix the clip 14 to the container 12. When the clip 14 is inserted into the cavity 30, the angled surfaces 42,72 of the base 40 and the projection 70 cause the rim 23 of the container 12 to deflect slightly to accommodate the entry of the clip 14. Once inserted, the projection 70 of the clip 14 is received in the aperture 32, securing the clip 14 in the cavity 30 and preventing it from

being removed without great effort. Additionally, the protrusions 80 on the front of the clip base 40 abut an inner surface 36 of the cavity 30 to further secure the clip 14 in the cavity 30 and to stabilize the clip 14 and limit its movement within the cavity 30. The flexibility and resilience of the preferred protrusions 80 allow them to absorb some of the forces exerted on the clip 14 and to accommodate slight variations in the depth of the cavity 30. Further, as illustrated in FIG. 3, when the lid 20 is in the closed position, the tab 52 retains the lid in the closed position by abutting the lid 20 as it is attempted to be opened.

[0044] In other embodiments, the clip 14 may be affixed to the container 12 in another way. For example, the clip 14 and the container 12 may have another cooperative structure, such as a recess on the clip 14 that cooperates with a projection on the container 12. The clip 14 may also be affixed to the container 12 by an external mechanism, such as a rivet, clamp, adhesive, or other similar mechanism. In a further embodiment, the clip 14 is integrally molded with the container 12. Still further, the clip may be affixed to the lid 20, and may retain the lid 20 in the closed position by engaging an opposing lid piece 24 or by engaging another portion of the container 12. Additionally, the clip 14, rather than the container rim 23, may be designed to flex upon insertion into the cavity 30, which would be especially beneficial when the clip 14 is to be used with a container made of a very rigid material.

[0045] A specialized tool 60 may be designed to aid in inserting and removing the clip 14 from the cavity 30. The preferred embodiment of this tool 60 is shown in FIG. 5, and includes an insertion end 62 and a removal end 64. The insertion end 62 is adapted to be received in the hollow 48 in the base 40 of the clip 14, providing improved leverage and grip upon the clip 14 during insertion. The removal end 64 is adapted to fit around the outside of the base 40 and to simultaneously pull the clip 14 outward and deflect the container rim 23 slightly upward to facilitate removal of the clip 14. Other such tools 60 may be designed for use with the preferred clip 14, and variations in the design of the clip 14 may require corresponding variations in the design of the tool 60. Additionally, the clip 14 may be designed for removal by a common tool, such as a screwdriver.

[0046] As described above, and illustrated in FIGS. 3-5, the clip 14 is operative in response to a closure force (F) upon the lid 20 to retain the lid 20 in the closed position. In the preferred embodiment, the clip operates by the arm 50 temporarily deflecting outwardly in response to the closure force (F) upon the lid 20 to permit the lid 20 to move from the open position to the closed position. As described above and illustrated in FIG. 4, as a closure force (F) is applied to the lid 20, the lid 20 abuts the tabs 52, imparting this force (F) to the tabs 52. The edge of the lid 20 slides along the planar surface of the tab 52. The tab 52 is preferably angled downward so that the tab 52 transfers a portion of the closure force (F) into an outward force (F') on the arms 50, causing the arms 50 to flex outwardly. The arm 50 has a first position of minimum deflection, illustrated in FIG. 3, and a second position of maximum deflection, illustrated in FIG. 4. As the arm 50 flexes outwardly, it becomes more resistant to further strain, and the force (F) required to close the lid increases incrementally. Thus, the arm 50 is in the position of minimum deflection (first position) when no closure force (F) is exerted upon the lid 20, and the closure force (F) upon the lid 20 is at a maximum when the arm is in the position of maximum deflection (second position). Generally, the point of maximum deflection of the arm 50 is reached just before the lid 20 passes completely by the tab 52, as illustrated in FIG. 4. Once the lid 20 has passed completely by the tab 52, the resilience of the arm 50 causes it to snap back to the position of minimum deflection, at which point the tab 52 overlaps the edge of the lid 20, and abuts the lid 20 as it is attempted to be opened, retaining the lid 20 in the closed position, as shown in FIG. 3. Thus, the lid 20 can be closed using only a downward force (F) upon the lid 20 wherein the clip 14 is operative in response to the force.

[0047] The lid 20 is retained in the closed position by the clips 14, but may be opened by releasing the clips 14. As described above, when the lid 20 is attempted to be opened, the clip 14 engages the lid 20 to retain it in the closed position. In the preferred embodiment, the lid members 24a,24b overlap each other at the edges, and thus, one clip 14 engages one lid member 24 and the other clip 14 engages the other lid member 24. The clip 14 illustrated in FIG. 3 engages the second lid member 24b, and the opposite clip 14 engages the first lid member 24a. In the preferred embodiment, the clips 14 are released by applying an outward force (F') on the arms 50, deflecting the arms 50 to a position where the lid 20 can pass by the tabs 52 unobstructed. Generally, the arms 50 must be deflected at least to the point of maximum deflection illustrated in FIG. 4. This deflection is preferably done manually. In other embodiments, the clip or clips may be designed to be released in other ways. For example, the clip may include a lever mechanism to release the clip 14 and allow the lid to be opened. Further, the clip 14 may be designed with a tamper-proofing mechanism that prevents the clip 14 from being released unless a specialized tool is used.

[0048] The clip 14 of the present invention is designed to be operative in response to a closure force (F) upon the lid 20 to retain the lid 20 in the closed position. In alternate embodiments, the mechanism for this operation may be different, as other such mechanisms are known in the art or can be easily derived from the disclosed preferred mechanism without departing from the scope of the invention. For example, the clip may be modified to include a more complex mechanism, for example, a ratchet mechanism or a spring mechanism.

[0049] The present invention provides many benefits. As described above, the disclosed container assembly permits the lid of the container to be closed using only a downward force upon the lid and to thereafter be retained in the closed position. This design provides quicker and easier closing of the container, and allows the lid to be closed without conscious effort by a user. This design permits the clips to be released, and the lid reopened, fairly quickly and easily as well. Another primary benefit is that the clip of the present invention may be designed to be affixed to a number of containers. Thus, a container does not need to be newly designed or modified, and a clip can be custom-designed to fit with a container that is already in use. With the clip 14 retaining the container 12 in a closed position, the chances of items falling out of the container 12 or being unlawfully removed from the container 12 is reduced.

[0050] While the specific embodiments have been illustrated and described, numerous modifications come to mind without significantly departing from the spirit of the invention, and the scope of protection is only limited by the scope of the accompanying claims.

What is claimed is:

1. A clip for use with a container having a lid movable between an open position and a closed position, the clip comprising a resilient arm having a portion that is adapted to engage a portion of the container to affix the arm to the container, the arm adapted to retain the lid in the closed position, and operative in response to a closure force upon the lid.

- 2. The clip of claim 1, wherein the portion of the resilient arm is defined by a base, wherein the base is adapted to engage a portion of the container to affix the resilient arm to the container.
- 3. The clip of claim 1, wherein the arm operates by temporarily deflecting outwardly in response to the closure force upon the lid to permit the lid to move from the open position to the closed position.
- **4**. The clip of claim 3, wherein the arm has a tab thereon, the tab angled downward and adapted to transfer a portion of the closure force into an outward force on the arm to deflect the arm.
- 5. The clip of claim 3, wherein the arm has a first position of minimum deflection and a second position of maximum deflection, wherein the arm is adapted to be in the second position when the closure force upon the lid is at a maximum, and the arm is adapted to be in the first position when no closure force is exerted upon the lid.
- **6**. The clip of claim 1, wherein the arm has a tab thereon, the tab adapted to retain the lid in the closed position.
- 7. The clip of claim 5, wherein the tab is further adapted to absorb a portion of the closure force to operate the arm.
- **8**. The clip of claim 2, wherein the base has a projection thereon, the projection adapted to be received in an aperture in the container to affix the base to the container.
- **9**. The clip of claim 8, wherein the base is adapted to be inserted into a cavity in the container, and the projection has an angled surface adapted to facilitate insertion of the base into the cavity.
- 10. The clip of claim 2, wherein the base is adapted to be inserted into a cavity in the container, and the base has an angled surface adapted to facilitate insertion of the base into the cavity.
- 11. The clip of claim 2, wherein the base is adapted to be inserted into a cavity in the container, and the base has a hollow adapted to receive a tool for insertion and removal of the base from the cavity.
- 12. The clip of claim 2, wherein the base is adapted to be inserted into a cavity in the container, and the base has a protrusion adapted to abut an inner surface of the cavity to secure the base within the cavity.
- 13. A clip for use with a container having a lid movable between an open position and a closed position, the clip comprising:
  - a base adapted to be inserted into a cavity in the container, the base having a projection extending therefrom, the projection adapted to be received in an aperture in the container to affix the base to the container; and
  - a resilient arm extending from the base, the arm adapted to temporarily deflect in response to a closure force upon the lid to permit the lid to move from the open position to the closed position, the arm further adapted to retain the lid in the closed position.
- **14**. The clip of claim 13, wherein the projection has an angled surface adapted to facilitate insertion of the base into the cavity.

- 15. The clip of claim 13, wherein the arm has a tab thereon, the tab angled downward and adapted to transfer a portion of the closure force into an outward force on the arm to deflect the arm.
- **16**. The clip of claim 13, wherein the arm has a tab thereon, the tab adapted to retain the lid in the closed position.
- 17. The clip of claim 16, wherein the tab is further adapted to absorb a portion of the closure force to operate the arm.
  - 18. A container assembly comprising:
  - a container comprising a bottom, a sidewall, and a lid, the lid movable between an open position and a closed position;
  - a first clip having a base and a resilient arm extending from the base, wherein the base engages a portion of the container to affix the first clip to the container, and the arm temporarily deflects in response to a closure force upon the lid to permit the lid to move from the open position to the closed position, retaining the lid in the closed position.
- 19. The container assembly of claim 18, wherein the arm has a first position of minimum deflection and a second position of maximum deflection, wherein the closure force upon the lid is at a maximum when the arm is in the second position, and the arm is in the first position when no closure force is exerted upon the lid.
- 20. The container assembly of claim 18, wherein the container comprises a cavity, and the base is received in the cavity.
- 21. The container assembly of claim 20, wherein the base has a projection thereon and the container has an aperture located proximate the cavity, the projection received in the aperture to affix the base to the container.
- 22. The container assembly of claim 21, wherein the projection has a hole therethrough, and the assembly is adapted to receive a locking mechanism extending through the hole and the aperture to further secure the lid in the closed position.
- 23. The container assembly of claim 20, wherein the base has a protrusion abutting an inner surface of the cavity to secure the base within the cavity.
- 24. The container assembly of claim 18, wherein the arm temporarily deflects in response to an outward force upon the arm to permit the lid to move from the closed position to the open position.
- 25. The container assembly of claim 18, wherein the lid is a two-piece lid having a closure seam proximate a center line of the container when the lid is in the closed position.
- 26. The container assembly of claim 18, further comprising a second clip affixed to the container opposite the first clip, the second clip comprising a base and a resilient arm extending from the base, wherein the base engages a portion of the container to affix the second clip to the container, and the arm temporarily deflects in response to a closure force upon the lid to permit the lid to move from the open position to the closed position, retaining the lid in the closed position.
- 27. The container assembly of claim 26, wherein the lid comprises a first lid member and a second lid member, and the first clip engages the first lid member and the second clip engages the second lid member to retain the lid in the closed position.

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