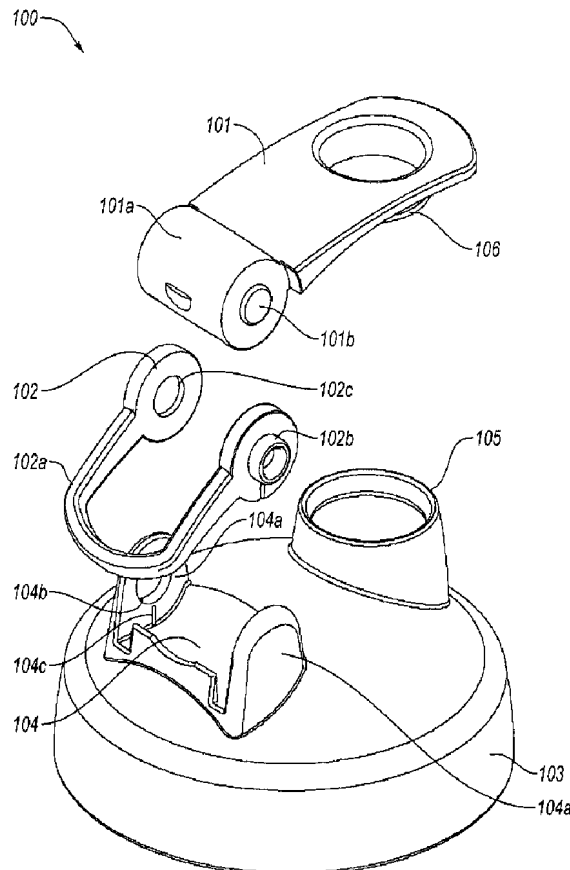




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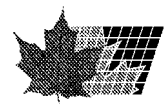
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(57) Abrégé/Abstract:

The present invention is directed to a container lid that includes a handle and a flip top that are each independently pivotable along the same axis. The handle can be secured to the container lid between a mount on the lid and the flip top.



**ABSTRACT**

The present invention is directed to a container lid that includes a handle and a flip top that are each independently pivotable along the same axis. The handle can be secured to the container lid between a mount on the lid and the flip top.

**CONTAINER LID HAVING INDEPENDENTLY  
PIVOTING FLIP TOP AND HANDLE**

**CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] Not Applicable.

**BACKGROUND**

[0002] Many containers such as bottles include lids having integrated handles. Some containers can also employ a flip top to facilitate quick access to the contents of the container. When including a handle on such lids, there is a trade-off between positioning the handle in a convenient and efficient location, and minimizing the risk that the flip top will be opened unintentionally due to forces on the handle.

**BRIEF SUMMARY**

[0003] The present invention is directed to a container lid that includes a handle and a flip top that are each independently pivotable along the same axis. In this manner, the container lid increases the efficiency of using a container to carry, store, or consume contents.

[0004] In one embodiment, a lid for a container comprises a lid base having an opening for dispensing contents of the container, and a mount. The lid also comprises a handle, and a flip top for sealing the opening. The flip top includes a flip top pivot that is positioned between the handle when the handle is inserted into the mount. The handle and the flip top are each independently pivotable within the mount.

[0005] In another embodiment, a container comprises a bottle and a lid for sealing an opening of the bottle. The lid comprises a lid base having an opening for dispensing contents of the bottle, and a mount. The lid further comprises a handle, and a flip top for sealing the opening. The flip top includes a flip top pivot that is positioned between the handle when the handle is inserted into the mount. The handle and the flip top each are independently pivotable within the mount.

**[0006]** In another embodiment, a container comprises a bottle, and a lid that connects to the top of the bottle to seal the bottle. The lid comprises a lid base that includes an opening for dispensing contents of the bottle, and a mount that secures a handle and a flip top to the lid base. The handle includes a handle pivot on both sides which insert into openings on posts of the mount, the flip top includes a flip top pivot having a protrusion on both sides that insert into opening on each side of the handle to secure the handle between the flip top and the mount. The flip top remains independently pivotable within the openings in the handle, and the handle remains independently pivotable within the openings in the posts.

**[0006a]** In another embodiment, a lid for a container comprises: a lid base having an opening for dispensing contents of the container; a mount comprising a first post and a second post; a handle comprising a first end with a first handle pivot and a second end with a second handle pivot; and a flip top for sealing the opening, the flip top comprising an elongated body with a first end for opening the flip top and a second end including a flip top pivot. The flip top pivot is disposed between and engages the first end of the handle and the second end of the handle. The first handle pivot is connected to a first receiving portion of the first post of the mount. The first handle pivot comprising a first protrusion that extends into the first receiving portion of the first post of the mount. The second handle pivot is connected to a second receiving portion of the second post of the mount. The second handle pivot comprising a second protrusion that extends into the second receiving portion of the second post of the mount. The first end of the handle is sandwiched between a first end of the flip top pivot and the first post of the mount and the second end of the handle is sandwiched

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between a second end of the flip top pivot and the second post of the mount. A first protrusion on the first end of the flip top pivot extends into a first opening in the first end of the handle and a second protrusion on the second end of the flip top pivot extends into a second opening in the second end of the handle. The handle and the flip top are each independently pivotable relative to the lid, and the handle and the flip top are each independently movable about a common axis.

**[0006b]** In another embodiment, a container comprises: a bottle; and a lid for sealing an opening of the bottle. The lid comprising: a lid base having an opening for dispensing contents of the bottle; a handle comprising a first end with a first handle pivot and a second end with a second handle pivot; and a flip top for sealing the opening in the lid base. The flip top including a flip top pivot comprising: a first protrusion that is disposed in a first receiving portion of the first end of the handle; and a second protrusion that is disposed in a second receiving portion of the second end of the handle, wherein the first and second protrusions extend from the flip top pivot away from each other; and a mount connecting the handle and the flip top to the lid base. The mount comprising: a first post including a first receiving portion, the first handle pivot disposed in the first receiving portion of the first post; and a second post including a second receiving portion, the second handle pivot disposed in the second receiving portion of the second post; wherein the handle and the flip top are each independently pivotable within the mount.

**[0006c]** In another embodiment, a container comprises: a bottle; and a lid that connects to a top of the bottle to seal the bottle. The lid comprising: a lid base comprising an opening for dispensing contents of the bottle and a mount that secures a

handle and a flip top to the lid base. The mount comprising: a first post; and a second post. The handle comprising: a loop; a first handle pivot at a first end of the loop, the first handle pivot connected to the first post of the mount and disposed between the first and second posts of the mount; and a second handle pivot at a second end of the loop, the second handle pivot connected to the second post of the mount and disposed between the first and second posts of the mount. The flip top comprising: an elongated body with a first end for opening the flip top and a second end with a flip top pivot, the flip top pivot comprising a substantially solid structure with a first end and a second end; a first protrusion extending outwardly from the first end of the flip top pivot, the first protrusion disposed in a receiving portion of the first handle pivot; and a second protrusion extending outwardly from the second end of the flip top pivot, the second protrusion disposed in a receiving portion of the second handle pivot. The flip top pivot is disposed between the first and second handle pivots of the handle. The flip top is independently pivotable relative to the handle. The handle is independently pivotable relative to the flip top.

**[0007]** The summary is provided to introduce a selection of concepts in a simplified form that are further described below in the Detailed Description. The Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used as an aid in determining the scope of the claimed subject matter.

**[0008]** Additional features and advantages of the invention will be set forth in the description which follows, and in part will be obvious from the description, or may be learned by the practice of the invention. The features and advantages of the

invention may be realized and obtained by means of the instruments and combinations particularly pointed out in the appended claims. These and other features of the present invention will become more fully apparent from the following description and appended claims, or may be learned by the practice of the invention as set forth hereinafter.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

[0009] In order to describe the manner in which the above-recited and other advantages and features of the invention can be obtained, a more particular description of the invention briefly described above will be rendered by reference to specific embodiments thereof which are illustrated in the appended drawings. Understanding that these drawings depict only typical embodiments of the invention and are not therefore to be considered to be

limiting of its scope, the invention will be described and explained with additional specificity and detail through the use of the accompanying drawings in which:

[0010] Figure 1 illustrates an exploded view of an exemplary container lid according to one or more embodiments of the present invention;

[0011] Figure 2 illustrates the assembled container lid of Figure 1;

[0012] Figures 3-4 illustrate the container lid of Figure 1 when attached to a bottle; and

[0013] Figure 5 illustrates a locking slot for maintaining the position of the handle of the container lid of Figure 1.

### **DETAILED DESCRIPTION**

[0014] The present invention is directed to a container lid that includes a handle and a flip top that are each independently pivotable along the same axis. In this manner, the container lid increases the efficiency of using a container to carry, store, or consume contents.

[0015] In one embodiment, a lid for a container comprises a lid base having an opening for dispensing contents of the container, and a mount. The lid also comprises a handle, and a flip top for sealing the opening. The flip top includes a flip top pivot that is positioned between the handle when the handle is inserted into the mount. The handle and the flip top are each independently pivotable within the mount.

[0016] In another embodiment, a container comprises a bottle and a lid for sealing an opening of the bottle. The lid comprises a lid base having an opening for dispensing contents of the bottle, and a mount. The lid further comprises a handle, and a flip top for sealing the opening. The flip top includes a flip top pivot that is positioned between the handle when the handle is inserted into the mount. The handle and the flip top each are independently pivotable within the mount.



[0017] In another embodiment, a container comprises a bottle, and a lid that connects to the top of the bottle to seal the bottle. The lid comprises a lid base that includes an opening for dispensing contents of the bottle, and a mount that secures a handle and a flip top to the lid base. The handle includes a handle pivot on both sides which insert into openings on posts of the mount, and the flip top includes a flip top pivot having a protrusion on both sides that insert into openings on each side of the handle to secure the handle between the flip top and the mount. The flip top remains independently pivotable within the openings in the handle, and the handle remains independently pivotable within the openings in the posts.

[0018] Figure 1 illustrates an exploded view of an exemplary container lid 100 according to one or more embodiments of the invention. Lid 100 comprises a base 103 having a spout (or opening) 105 and a mount 104. A pivoting handle 102 and flip top 101 connect to mount 104 as is shown in Figure 2.

[0019] Lid 100 can be attached to a container such as a bottle to seal the container. Although the Figures illustrate that spout 105 is sealed by pressing the protrusion in flip top 101 into spout 105, other means of sealing a spout or opening in the lid using a flip top can equally be employed (e.g. a flip top that extends around a spout, a flip top that clips to base 103, etc.).

[0020] Flip top 101 includes a flip top pivot 101a having a protrusion 101b on each side. Handle 102 includes a loop 102a and a handle pivot 102b on each side. Flip top 101 and handle 102 are mounted within mount 104 such that flip top 101 and handle 102 can each independently pivot. Although the Figures illustrate a handle having a round loop, loops of other shapes could also be used. Further, handle 102 can also be formed in a shape other than a loop as long as the handle includes handle pivots 102b on both sides (e.g. a hook, a clip, etc.).

**[0021]** As shown in Figure 1, mount 104 includes posts 104a positioned on opposite sides of the mount. Each of posts 104a includes an opening 104b (only visible on one side) for receiving a corresponding handle pivot 102b.

**[0022]** As shown in Figure 2, handle 102 is attached to mount 104 by inserting handle pivots 102b into openings 104b. With handle 102 attached to mount 104, flip top pivot 101a can be inserted between handle 102 such that protrusions 101b insert into openings 102c.

**[0023]** In this manner, flip top 101 and handle 102 are securely attached to the lid while enabling flip top 101 and handle 102 to remain independently pivotable. For example, while flip top 101 remains inserted into spout 105, handle 102 can be freely pivoted around the axis of mount 104. Similarly, flip top 101 can be pivoted around the axis of mount 104 without pivoting handle 102.

**[0024]** This configuration facilitates the storage and handling of a container having lid 100. Figures 3 and 4 illustrate an exemplary bottle on which lid 100 can be used. Such bottles can be used to store, carry, and/or mix ingredients of a beverage or other food product. The position of handle 102 facilitates carrying a container while minimizing the likelihood that flip top 101 will separate from spout 105 inadvertently. Also, because handle 102 can be pivoted independently from flip top 101, use of a container is further facilitated.

**[0025]** In some embodiments, such as is shown in Figure 5, handle 102 can include grooves 103c that interlock with corresponding rails 104c in mount 104. When handle 102 is pivoted downward to the orientation shown in Figure 2, rails 104c are positioned within grooves 103c thereby holding handle 102 in the orientation. Maintaining the position of handle 102 can be desirable in many situations such as when drinking a beverage through spout 105. Of course, more than one set of rails and grooves could be configured on handle 102 and mount 104 to provide more than one locking position for handle 102.

**[0026]** As stated above, lid 100 can be assembled by first inserting handle pivots 102b into openings 104b in mount 104. Handle 102 can be manufactured from materials that are sufficiently flexible to allow handle pivots 102b to be inserted into openings 104b (e.g. by squeezing handle pivots 102b together). Because handle 102 can be squeezed together, handle pivots 102b can therefore have a substantial length for insertion into openings 104b.

**[0027]** To retain handle pivots 102b within openings 104b, flip top pivot 101a is then pressed into handle 102 to insert protrusions 101b within openings 102c. In this way, handle 102 is secured between flip top pivot 101a and posts 104a (i.e. flip top pivot 101a prevents handle 102 from being squeezed together) to allow handle 102 to support the weight of a container on which lid 100 is used.

**[0028]** Lid 100 can be manufactured from materials that are sufficiently flexible to allow posts 104a to deflect slightly when flip top pivot 101a is inserted, but sufficiently rigid to prevent handle 102 and flip top 101 from being removed from mount 104 without significant force.

**[0029]** In other words, while flip top pivot 101a is inserted between handle 102, handle 102 cannot be squeezed sufficiently to remove handle pivots 102b from openings 104b. Further, mount 104 can be sufficiently rigid such that flip top 101 cannot be removed without great force, thereby preventing the inadvertent removal of handle 102 even when substantial force is applied to handle 102 (e.g. when handle 102 supports a full container during rugged activities). In this manner, flip top 101, handle 102, and lid base 103 can be manufactured as separate components and easily assembled, thus simplifying the manufacture of lids 100.

**[0030]** The present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described embodiments are to be considered in all respects only as illustrative and not restrictive. The scope of the invention

is, therefore, indicated by the appended claims rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope.

What is claimed is:

1. A lid for a container comprising:
  - a lid base having an opening for dispensing contents of the container;
  - a mount comprising a first post and a second post;
  - a handle comprising a first end with a first handle pivot and a second end with a second handle pivot; and
  - a flip top for sealing the opening, the flip top comprising an elongated body with a first end for opening the flip top and a second end including a flip top pivot,
    - wherein:
      - the flip top pivot is disposed between and engages the first end of the handle and the second end of the handle,
      - the first handle pivot is connected to a first receiving portion of the first post of the mount, the first handle pivot comprising a first protrusion that extends into the first receiving portion of the first post of the mount,
      - the second handle pivot is connected to a second receiving portion of the second post of the mount, the second handle pivot comprising a second protrusion that extends into the second receiving portion of the second post of the mount,
      - the first end of the handle is sandwiched between a first end of the flip top pivot and the first post of the mount and the second end of the handle is sandwiched between a second end of the flip top pivot and the second post of the mount,
      - a first protrusion on the first end of the flip top pivot extends into a first opening in the first end of the handle and a second protrusion on the second end of the flip top pivot extends into a second opening in the second end of the handle,
      - the handle and the flip top are each independently pivotable relative to the lid, and
      - the handle and the flip top are each independently movable about a common axis.
2. The lid of claim 1, wherein the first and second protrusions of the first and second handle pivots comprise cylindrical protrusions that extend in opposite directions.

3. The lid of claim 1, wherein the first protrusion on the first end of the flip top pivot is inserted into the first opening in the first end of the handle and the second protrusion on the second end of the flip top pivot is inserted into the second opening in the second end of the handle.

4. The lid of claim 3, wherein the first and second ends of the handle deflect inwardly to allow the first and second protrusions of the first and second handle pivots to be inserted into the first and second receiving portions in the first and second posts of the mount.

5. The lid of claim 1, wherein the handle comprises a loop, the first opening in the first end of the handle and the second opening in the second end of the handle comprise circular openings, and the first and second protrusions on the first and second ends of the flip top pivot comprise coaxial cylindrical protrusions that extend from the flip top pivot in opposite directions.

6. The lid of claim 1, wherein the handle is pivotable around an axis of the mount; and wherein the flip top is pivotable around the axis of the mount.

7. The lid of claim 1, wherein the flip top pivot comprises an at least substantially solid body and prevents the first and second ends of the handle from being squeezed together.

8. The lid of claim 1, wherein the mount includes at least one rail over which a groove in the handle is positioned to hold the handle in a particular orientation relative to the mount.

9. The lid of claim 8, wherein the at least one rail includes a first rail on an inside of the first post; and wherein the groove is positioned on a surface of the first end of the handle that faces the inside of the first post.

10. The lid of claim 8, wherein the at least one rail includes multiple rails on an inside of the first post; and

wherein the handle includes multiple grooves positioned on a surface of the first end of the handle that faces the inside of the first post.

11. The lid of claim 1, wherein the opening in the lid base is a spout into which a downwardly extending protrusion of the flip top is inserted to seal the opening.

12. A container comprising:

a bottle; and

a lid for sealing an opening of the bottle, the lid comprising:

a lid base having an opening for dispensing contents of the bottle;

a handle comprising a first end with a first handle pivot and a second end with a second handle pivot; and

a flip top for sealing the opening in the lid base, the flip top including a flip top pivot comprising:

a first protrusion that is disposed in a first receiving portion of the first end of the handle;

and

a second protrusion that is disposed in a second receiving portion of the second end of the handle, wherein the first and second protrusions extend from the flip top pivot away from each other; and

a mount connecting the handle and the flip top to the lid base, the mount comprising:

a first post including a first receiving portion, the first handle pivot disposed in the first receiving portion of the first post; and

a second post including a second receiving portion, the second handle pivot disposed in the second receiving portion of the second post;

wherein the handle and the flip top are each independently pivotable within the mount.

13. The container of claim 12, wherein the flip top pivot comprises an at least substantially solid structure that prevents the first and second ends of the handle from being squeezed together.

14. The container of claim 12, wherein the handle supports a weight of the container and allows the container to be carried without creating an opening force on the flip top.
15. The container of claim 14, wherein the first and second ends of the handle deflect inwardly to allow the first and second handle pivots to be inserted into the first and second receiving portions in the first and second posts of the mount.
16. The container of claim 12, wherein the handle comprises a loop.
17. The container of claim 12, wherein the handle is pivotable about an axis of the mount;  
and  
wherein the flip top is pivotable about the same axis of the mount.
18. The container of claim 17, wherein the flip top pivot comprises a substantially solid body with the first protrusion on a first end of the body and the second protrusion on a second end of the body.
19. The container of claim 12, wherein the first post of the mount includes at least one rail and the first end of the handle includes at least one groove.
20. A container comprising:
  - a bottle; and
  - a lid that connects to a top of the bottle to seal the bottle, the lid comprising:
    - a lid base comprising an opening for dispensing contents of the bottle and a mount that secures a handle and a flip top to the lid base;
    - the mount comprising:
      - a first post; and
      - a second post;
    - the handle comprising:
      - a loop;



a first handle pivot at a first end of the loop, the first handle pivot connected to the first post of the mount and disposed between the first and second posts of the mount; and

a second handle pivot at a second end of the loop, the second handle pivot connected to the second post of the mount and disposed between the first and second posts of the mount; and

the flip top comprising:

an elongated body with a first end for opening the flip top and a second end with a flip top pivot, the flip top pivot comprising a substantially solid structure with a first end and a second end;

a first protrusion extending outwardly from the first end of the flip top pivot, the first protrusion disposed in a receiving portion of the first handle pivot; and

a second protrusion extending outwardly from the second end of the flip top pivot, the second protrusion disposed in a receiving portion of the second handle pivot;

wherein the flip top pivot is disposed between the first and second handle pivots of the handle;

wherein the flip top is independently pivotable relative to the handle; and

wherein the handle is independently pivotable relative to the flip top.

REPLACEMENT SHEET

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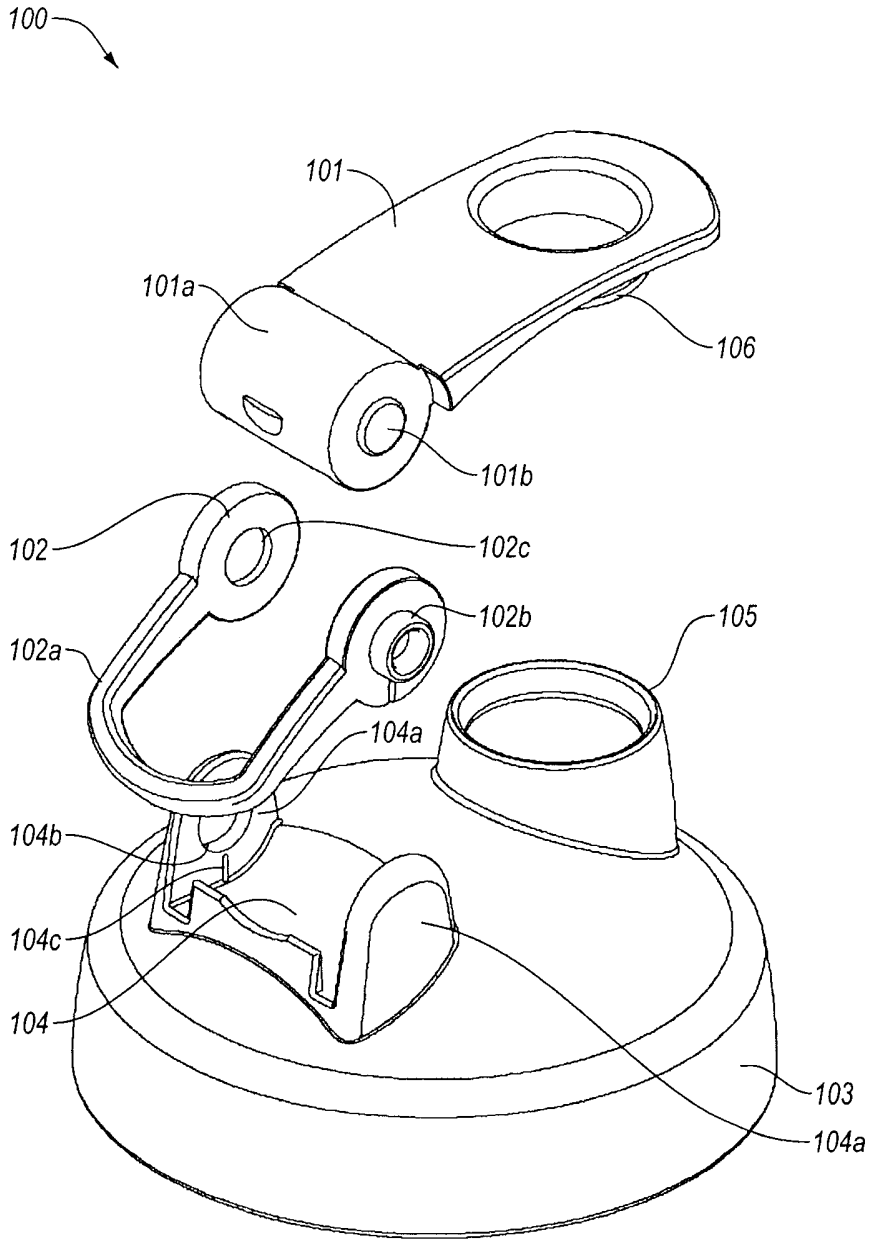
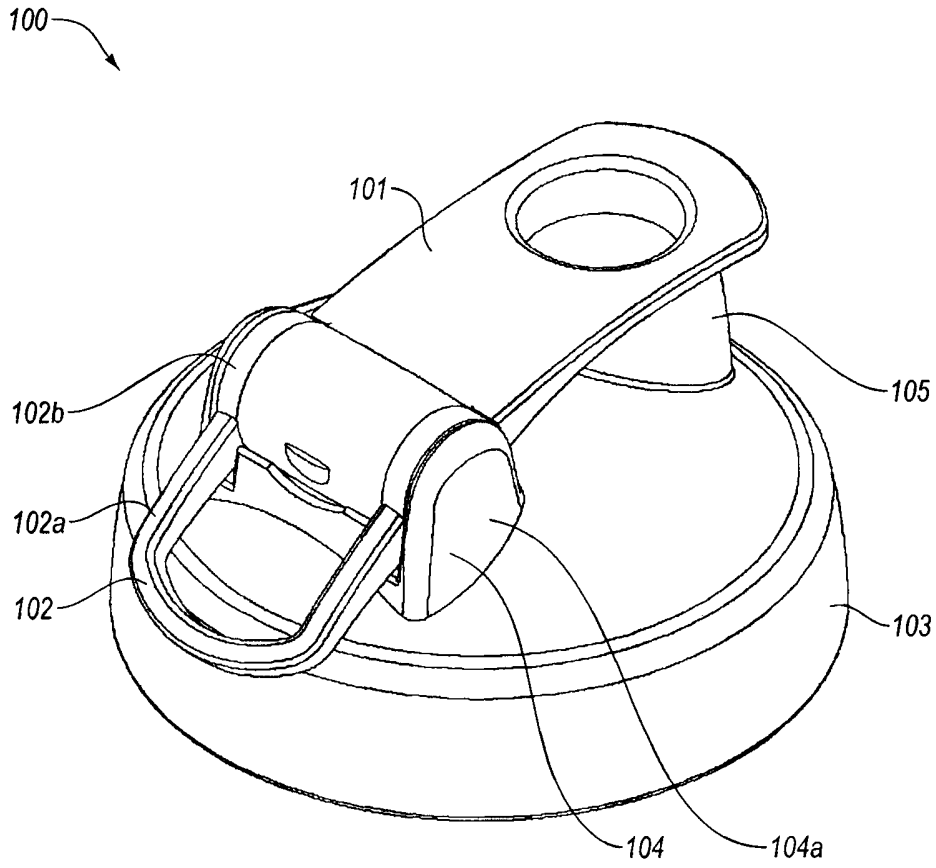


Fig. 1

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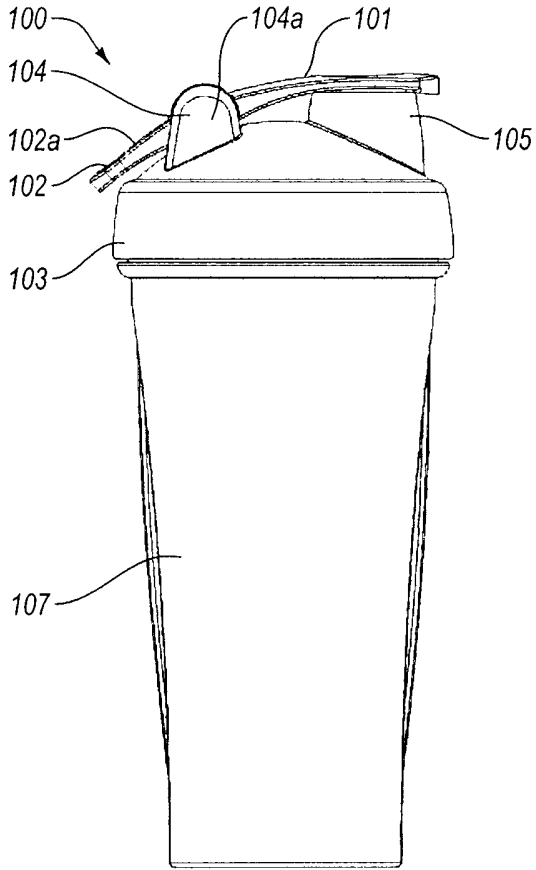
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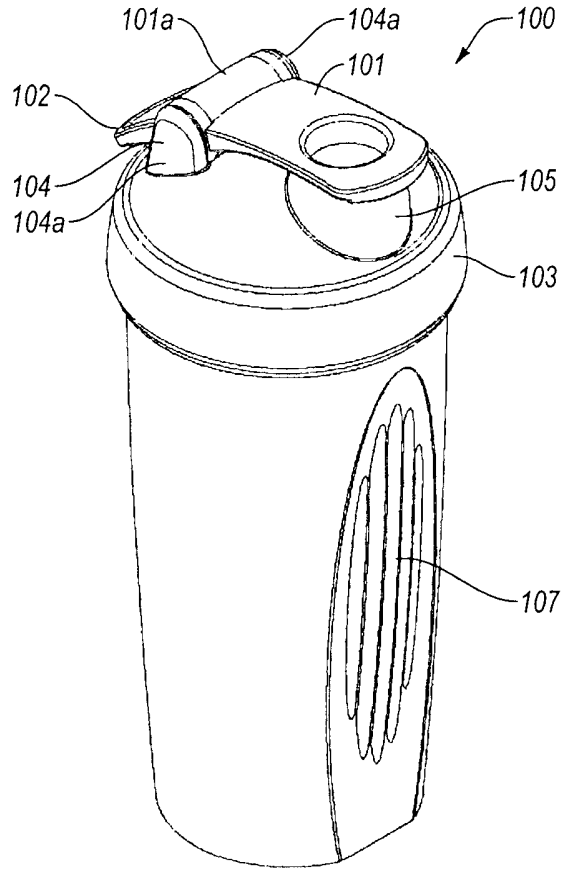
**Fig. 2**

REPLACEMENT SHEET

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**Fig. 3**



**Fig. 4**

REPLACEMENT SHEET

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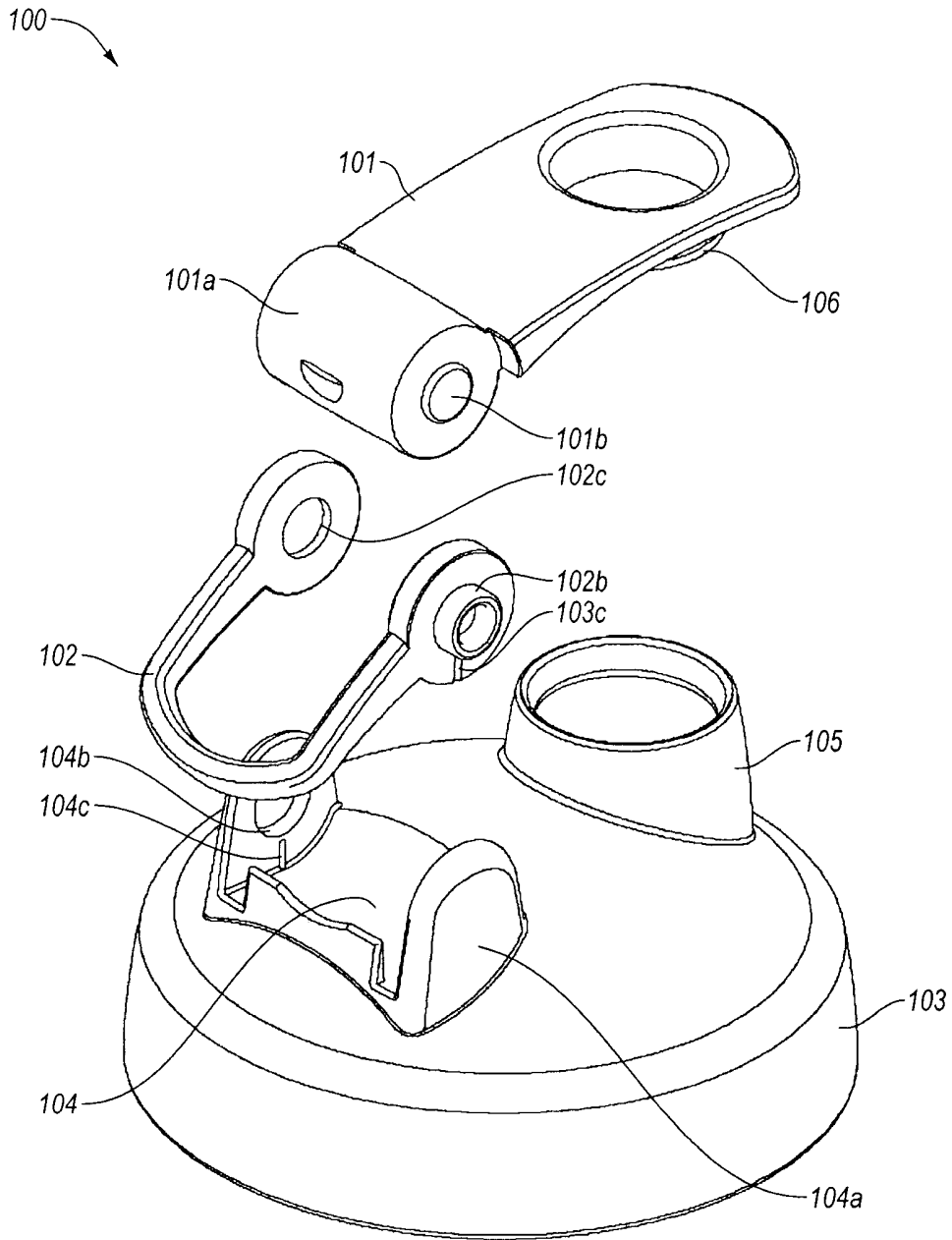


Fig. 5

100

