CONTAINER WITH ATTACHED LID

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ABSTRACT

A container includes a base and a pair of opposed side walls extending upward from the base. The pair of opposed side walls include a first side wall and a second side wall. The first side wall includes a lip at an upper portion thereof. A first lid is pivotably connected to the first side wall. The first lid can be selectively snap-fit connected to the lip of the first side wall to retain the first lid in an open position.
CONTAINER WITH ATTACHED LID

[0001] This application claims priority to U.S. Provisional Application Ser. No. 61/483,414 filed May 6, 2011.

BACKGROUND

[0002] Attached lid containers include a base with side walls and end walls projecting upward. A pair of lids are hingedly connected to upper edges of the side walls. The lids have leaves that interlock with one another to close the opening to the container.

[0003] For some applications, it is necessary to wash the containers in an automated washing system. The containers are washed with the lids open. The containers may be washed and/or dried in an inverted orientation, with the lids extended outward from the walls of the container, where water or other cleaning fluids may pool on the lids.

SUMMARY

[0004] A container includes a base and a pair of opposed side walls extending upward from the base. The pair of opposed side walls include a first side wall and a second side wall. The first side wall includes a lip at an upper portion thereof.

[0005] A first lid is pivotably connected to the first side wall. The first lid can be selectively snap-fit connected to the lip of the first side wall to retain the first lid in an open position.

[0006] In one example embodiment, the lid includes an upward projection that includes an interlocking feature that can be selectively snap-fit behind the lip.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a perspective view of a container according to one embodiment of the present invention.

[0008] FIG. 2 is an enlarged view of one corner of the container of FIG. 1.

[0009] FIG. 4 is a top view of the corner of FIG. 2.

[0010] FIG. 5 is a bottom perspective view of the corner of FIG. 1 with the lid moved to an open position.

[0011] FIG. 6 shows the corner of FIG. 5 with the lid moved to a secured, open position.

[0012] FIG. 6 is an enlarged view of the corner of the container of FIG. 5.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] A storage container 10 according to one embodiment of the present invention is illustrated in FIGS. 1-6. Referring to FIG. 1, the storage container 10 includes a base 12 and a pair of opposed side walls 14 and a pair of opposed end walls 16 extending upwardly from the periphery of the base 12. The walls 14, 16 are tapered down to the base 12, such that identical containers 10 can be nested within one another.

[0014] Lids 18 are hingedly connected to upper edges of the side walls 14. A flange or lip 22 protrudes outward and then downward from the upper edge of the side walls 14 and the end walls 16. Over the side walls 14, the lip 22 includes a plurality of hinge receivers 24 formed therein. The hinge receivers 24 hingedly retain hinge members 26 formed integrally with the lids 18.

[0015] The inner edge of each lid 18 includes a plurality of interlocking lower leaves (not visible) and upper leaves 30. The lids 18 can be pivoted away from one another to provide access to the storage container 10. Each end wall 16 includes a handle 38. The hinge receivers 24 and hinge members 26 project upward relative to the major surfaces of the lids 18. End projections 32 also project upward relative to the major surfaces of the lids 18. The end projections 32 are aligned over the end walls 16. This provides for stable stacking of identical containers 10, as the base 12 of the container 10 fits between the hinge receivers 24, hinge members 26 and end projections 32 around the upper periphery of the container 10. What has been described so far is typical for an attached-lid container of this type.

[0016] FIG. 2 is an enlarged view and FIG. 3 is a top view of one corner of one of the lids 18. The other corners may be the same. An interlocking feature 40 projects laterally from the end projection 32. The interlocking feature 40 may be generally cylindrical with a somewhat rounded end, as shown. An opening 42 through the lid 18 may be useful in molding the interlocking feature 40, so that it can be cored from the other side of the lid 18.

[0017] As shown in FIG. 4, when the lid 18 is pivoted open to the downward, open position, the lid 18 eventually contacts the lip 22 of the container 10. In particular, the interlocking feature 40 contacts the bottom edge of the lip 22. With additional force on the lid 18, the interlocking feature 40 can be snapped past the lip 22, as shown in FIG. 5.

[0018] FIG. 6 is an enlarged view of the lip 22 and lid 18 of FIG. 5. As can be seen in FIG. 6, the interlocking feature 40 is interlocked behind the lip 22 of the container 10. The lid 18 is retained in a position roughly parallel to the side wall 14, away from its closed position over the opening to the container, with the upper surface of the lid 18 facing the outer surface of the side wall 14. In this position, the container 10 can be inverted for washing and the lids 18 will stay in the downward, open position adjacent the side walls 14. After washing, the lids 18 can be closed again by moving the lids 18 until the interlocking features 40 are snapped past the lip 22.

[0019] In accordance with the provisions of the patent statutes and jurisprudence, exemplary configurations described above are considered to represent a preferred embodiment of the invention. However, it should be noted that the invention can be practiced otherwise than as specifically illustrated and described without departing from its spirit or scope.

What is claimed is:

1. A container comprising:
   a base;
   a pair of opposed side walls extending upward from the base, the pair of opposed side walls including a first side wall and a second side wall, the first side wall including a lip at an upper portion thereof;
   a pair of opposed end walls extending upward from the base; and
   a first lid pivotably connected to the first side wall, wherein the first lid can be selectively snap-fit connected to the lip of the first side wall to retain the first lid in an open position.

2. The container of claim 1 wherein the first lid includes an interlocking feature that selectively snap-fits behind the lip of the first side wall.
3. The container of claim 2 wherein the lip protrudes outward and then downward from an upper edge of the first side wall.

4. The container of claim 1 wherein the first lid includes a projection upward from an upper surface of the first lid, the projection capably of being selectively snap-fit connected to the lip of the first side wall.

5. The container of claim 1 further including a second lid pivotably connected to the second side wall, wherein the second lid can be selectively snap-fit connected to a lip of the second side wall to retain the second lid in an open position.

6. The container of claim 1 wherein the first lid is pivotably connected to the first side wall by a hinge projecting upward relative to an upper surface of the first lid.

7. A container comprising:
   
a pair of opposed side walls extending upward from the base, the pair of opposed side walls including a first side wall and a second side wall, the first side wall and the second side wall including a lip at an upper portion thereof;

   a pair of opposed end walls extending upward from the base; and

   a first lid pivotably connected to an upper edge of the first side wall and a second lid pivotably connected to an upper edge of the second side wall, the first lid and the second lid each including a projection upward from an upper surface thereof, each projection including interlocking feature that selectively snap-fits behind the lip of the first side wall.

8. The container of claim 7 wherein the first lid is pivotably connected to the first side wall by a hinge projecting upward relative to an upper surface of the first lid.

9. The container of claim 7 wherein the first lid includes a plurality of leaves interlocking with a plurality of leaves on the second lid when the first lid and the second lid are in a closed position over an opening to the container.

10. The container of claim 7 wherein the lip protrudes outward and then downward from the upper portion.

11. The container of claim 7 wherein the side walls and the end walls are tapered down to the base, such that an identical container could be nested therein.

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