MODULAR STORAGE CONTAINER

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ABSTRACT

A modular storage container includes a base and a lid with a candle disposed on said lid. Specifically, a cradle of the lid is dimensioned and configured to receive the candle. Vents and voids are provided in the lid to help dissipate heat from a live candle. A post may be removably disposed on an underside of the lid to receive interior inserts such as a basket, jewelry holder or medication vial holder. The container may be used as a canister when the post and interior inserts are absent. A cover may be used and disposed over the lid to trap a candle between the cover and the lid. The base of the container has an interior wall and an exterior wall defining a compartment in which graphics may be disposed.
Fig. 4
MODULAR STORAGE CONTAINER

PRIORITY AND RELATED APPLICATION


FIELD OF THE INVENTION

[0002] The present invention relates to storage containers. Specifically, the present invention relates to modular storage containers having dual functions.

BACKGROUND OF THE INVENTION

[0003] Storage containers exist for a variety of objects and come in a variety of shapes and sizes. The options available in the realm of storage containers for personal hygiene products are practical but insipid. For instance, containers used to hold flushable wipes or hemorrhoid pads are white or colored plastic tubs having a lid. Such containers are easily recognizable these days especially when located in the bathroom. Containers for dentures, retainers likewise are stored in standard issued vessels that are also easily recognizable in the public.

[0004] What is desired is a discreet container with lid that can store a broad range of personal hygiene and related personal use products. A container is also desired that allows a user to position the container for convenient usage in plain view, while disguising the personal nature of the contents within the container. A container is further desired that has a modular attachment system of interchangeable elements or exterior inserts on an exterior of the lid which includes a wide variety of externally visible elements such as faux-candles, live candles, LED candles, and memobilia inserts. It is also desired that a container with lid include interior inserts for elements that suspend on an underside of the lid into the storage container. Such interior inserts include, but are not limited to a two-stage, drop-down denture storage basket that suspends dental appliances discreetly within the container with or without solution, a two-stage drop-down jewelry holder that suspends jewelry discreetly within the container with or without solution, and a multi-cavity pill dispenser that organizes and suspends pills discreetly down within the interior of the container. It is further desired that an exterior portion of the storage container accept a variety of printed or dimensional over-wraps that conform to the exterior of the storage base, and change the overall look of the individual product.

BRIEF SUMMARY OF THE INVENTION

[0005] A modular storage container provides a dual purpose container for discreetly storing items therein and publicly displaying or serving as a candle. The modular storage container includes a base and a lid with a candle insert disposed on said lid. A candle in the lid is dimensioned and configured to receive the candle insert. A cover may be employed with the container to extinguish a live candle flame and retain or trap the candle between the lid and the cover.

[0006] On an underside of the lid is a removably attachable post that may extend down and into the compartment when the lid is positioned over the base. When the post is not employed the container may be used as a generic canister. When the post is used interchangeable inserts may be removably attached to a second end of the post. The interior insert includes a basket, a jewelry holder or medication vial holder. The base of the container includes a two-part assembly having an interior wall and an exterior frosted wall. The two walls are lockable and are disposed a distance from one another to define a chamber. A graphic sleeve may be shrink-wrapped and disposed in the chamber and locked between the two walls protected from environmental elements and everyday wear and tear.

BRIEF DESCRIPTION OF THE DRAWING

[0007] FIG. 1A is an exploded view of the modular storage container of the present invention showing an exterior insert, a lid, and a base.

[0008] FIG. 1B is an open view of an alternate embodiment of the modular storage container of the present invention showing a lid, and a base.

[0009] FIG. 2A is a perspective view of a wax candle insert of the present invention.

[0010] FIG. 2B is a side view of FIG. 2A.

[0011] FIG. 3 is a perspective view of an empty base of a wax candle insert of the present invention.

[0012] FIG. 4 is an exploded view of the modular storage container of the present invention showing a plurality of exterior inserts.

[0013] FIG. 5A is an exploded view of an alternate embodiment of the modular storage container of the present invention showing an interior insert in an extended position.

[0014] FIG. 5B is a view the interior insert shown in FIG. 5A in a retracted position.

[0015] FIG. 6 shows the base of FIG. 1A with a sleeve able to be disposed on the exterior of the base.

[0016] FIG. 7A is a perspective view of an alternate embodiment of the modular storage container of the present invention.

[0017] FIG. 7B is an exploded view of FIG. 7A.

[0018] FIG. 8A is cross-sectional view of the snuffer, the candle insert and the lid taken along line 8A-8A of FIG. 7A.

[0019] FIG. 8B is a top plan view of the lid of the alternate embodiment shown in FIG. 7A.

[0020] FIG. 8C is an exploded view of the lid, the post and interchangeable interior inserts of the container shown in FIG. 7A.
FIG. 9 is cross-sectional view of the base taken along line 9-9 of FIG. 7B.

DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawings wherein like numbers represent like elements. FIG. 1A shows a modular storage container 100 having a base 150, a lid 130 and an wax candle exterior insert 110 which is one embodiment of a number of exterior inserts 180, see FIG. 4. The base 150 has an open end 152 to permit access to a compartment 154 therein. The base 150 may have a grooved area 156 for receiving lid 130. Alternatively, the lid 130 can be press-fit to the base 150, as shown in FIG. 1A, screwed on to the base 150 or hinged to the base, see FIG. 1B. The lid 130 has a top exterior side defining a cradle 132 and an underside 134. The cradle 132 is dimensioned and configured to receive the exterior insert 110 while the underside 134 receives interior inserts. See FIG. 4. The lid 130 helps create a modular attachment system of interchangeable elements via the lid using the exterior inserts 110. The lid 130 can incorporate a wide variety of exterior inserts 180 including, but not limited to faux-candles, live candles, LED candles, and memorabilia inserts.

The exterior insert 110 shown in FIG. 1A is embodied as a wax candle insert 110. FIGS. 2A-C provide closer looks at the wax candle insert 110. The wax candle insert has an angled lead-in base 112 having an inner surface 116 opposite an outer surface 114. The inner surface is concave and the outer surface is convex. Disposed about the convex exterior 114 are legs 118 that support the base 112 on any surface and when within the cradle 132 of the lid 110. Wax is disposed within the concave inner surface 116 with a wick 122 being disposed in a central portion of said concave inner surface 116. FIG. 3 shows the lead-in base 112 without wax providing a better understanding of the concave inner surface 116 and how the wick 122 may be insertable therein during manufacturing. Here the wick 122 is positioned in a centermost portion of the base 112 and held in place with tabs located therein subsequently wax may be poured in the base 112. The angled lead-in shape of the base 112 permits melted wax to be directed along the sides of the concave inner surface 116 toward the central portion of said concave inner surface 116 as the wick 122 burns. This arrangement provides the benefit of extending the life of the wax candle insert 110. The wax candle insert 110 is just one example of exterior inserts 180 available for use in the present invention. FIG. 4 shows a number of exterior inserts 180 which may include and are not limited to a faux candle insert, an LED candle insert 126, a memorabilia insert 128 or a perfumed solid insert 124.

The underside 134 of the lid 130 has provisions to allow for a series of interior inserts 140 to hold elements and suspend the elements below the lid 130 and into the storage base 150 when the lid is placed on the base 150. See FIG. 5A-5B. The interior insert 140 is fixedly or removably attached to the underside 134 and has a stem 142 and a platform 144. The platform 144 provides a resting surface for any item and the stem 142 extends the platform 144 of the interior insert 140 down away from the lid 130 at a distance. The interior insert 140 permits a user to conceal any item from public view when the lid 130 is placed over the open end 152 of the base 150 and the interior insert 140 is disposed within the interior compartment 154 of the base 150.

The platform 144 of the interior insert 140 may include but is not limited to a two-stage, drop-down holder that suspends items within the base. For instance, the platform 144 may be a two-stage, drop-down holder being a denture storage basket, as shown in FIGS. 5A-5B, a jewelry holder, or a multi-cavity pill dispenser. FIG. 5A shows the dental basket in an extended position, while FIG. 5B shows the basket in a retracted position. The dental basket embodiment of the platform 144 is shown having an upper denture support 146 having a series of raised ridges and a lower denture support 148. The items held by the interior insert 140 within the base 150 may be held with or without a liquid solution. When the items are exposed to a solution, the platform 144 may include vents to allow the item held by the interior insert 140 to be easily submerged in solution.

The exterior surface of the base 150 may be embellished, accept a variety of printed or dimensional over-wraps that conform to the exterior of the base 150 or retain graphics for advertisements, amusement, etc. purposes. FIG. 6 shows a graphic sleeve 190 that may be disposed on the exterior of the base 150. The embellishing of the exterior of the base 150 allows a user to change the overall look of the modular storage container 100 for reasons of product differentiation.

Referring now to FIG. 7A and 7B, an alternative modular storage container embodiment 1000 is shown. The container 1000 has a snuffer or cover 1050, a wax candle exterior insert 1100, a lid 1300, a post 1352, interchangeable interior inserts 1358 and base 1500. The cover 1050, candle 1100, lid 1300 and base 1500 are portions of the container 1000 that are visible to the public. The cover 1050 is a circular disc 1052 having a metal disc 1054 disposed in the center of the cover 1050 and a return leg 1056. The return leg 1056 depends from the underside of the cover 1050 and is disposed a distance from the edge of the disc thereby defining a lip 1058 on the cover 1050.

The cover 1050 is dimensioned and configured to rest over the lid 1300. Specifically, the return leg 1056 has a diameter that is slightly smaller than a diameter of lid 1300. When the user places the cover 1050 on the lid 1300, the leg 1056 nests or is press-fit to and thus is secured in the lid 1300 with the lip 1058 of the cover 1050 resting on the lid 1300. See FIG. 8A. Between the cover 1050 and the lid 1300 is the wax candle exterior insert 1100. When the cover 1050 is secured to the lid 1300 the user is provided with a number of advantages. For instance, when the candle 1100 is disposed in the lid 1300, the cover 1050 traps the candle 1100 in the lid 1300. With the cover 1050 trapping the candle 1100 in the lid 1300 a user can safely move the candle 1100 and any molten wax will not spill out of the container 1000. The metal disc 1054 disposed in the center of the cover 1050 provides a further safety advantage as it protects the cover 1050 from fire damage when the cover 1050 is used to extinguish a live flame. In some embodiments, the metal disc 1054 may be permanently fixed to the center of the cover 1050.

Referring still to FIG. 8A, the candle 1100 may be disposed in a contoured or curved shape cup 1120 that has a top 1122, a bottom 1124, and arced sides 1123 disposed between the top 1122 and bottom 1124. The top 1122 has a full width and the bottom 1124 has a narrow width. The cup 1120 of candle 1100 sits directly in the lid 1300, specifically, the cup 1120 sits in a cradle 1320 of the lid 1300, which is dimensioned and configured to the bottom 1124 and a portion of the arced sides 1123 of the cup 1120 of the candle 1100. The top 1122 of the candle 1120 has a diameter that is smaller than the diameter of the lid 1300 thereby defining an air passage 1323. The air passage 1323 will allow heat from a burning candle 1100 to dissipate up out of the cradle 1320.
an alternative embodiment, the top 1122 may have a diameter that is slightly smaller than the diameter of the lid 1300 so that the candle 1100 may be secured into the lid 1300 by press fitting and notched openings may be strategically placed around the top 1122 to define air passages. In some embodiments, the candle 1100 may forgo the cup 1120 and may itself be contoured or curve shaped as mentioned above. Candle 1100 is contrasted to the beveled or angle shaped wax candle insert 110 as shown in FIGS. 1A, 2A-3 and 4.

[0030] The exterior of the lid 1300, as shown in FIGS. 8A to 8C, includes the cradle 1320 as well as voids 1325, vents 1327, openings 1302, and post opening 1304. The cradle 1320 is disposed in the center of the lid 1300 and surrounded by vents 1327 and voids 1325. The cradle 1320 has a foundation 1333 and curved wall 1335. As mentioned above, the cradle 1320 is dimensioned and configured to match the candle 1100 thus the foundation 1333 matches the base 1124 of the candle 1100 and the curved wall 1335 matches a portion of the arced sides 1123. The vents 1327 provide open areas to allow heat that accumulates in the base 1500 to dissipate up and out of the vents 1327. The openings 1302 and post opening 1304 are disposed in the cradle 1320. Looking still in the cradle 1320 are recessed channel 1306 and beveled ramp 1308 that surround the post opening 1304.

[0031] The openings 1302 are areas through which a user may insert an object to push the candle 1100 out of the lid 1300 and replace it with a new candle 1100. The post opening 1304 is centered in the lid 1300 and is designed to receive the post 1352. The post 1352 has a first end 1354 and a second end 1356. The first end 1354 is received in the opening 1304 and may be press fit, screw fit or “twist-lock” fit to the lid 1300. In the “twist-lock” fit, the first end 1354 of the post 1352 includes flanges 1353 that engage the post opening 1304 in the lid 1300 and overrides two beveled ramps 1308 to allow engagement or disengagement of the post 1352. The second end 1356 of the post 1352 receives interchangeable interior inserts 1358. The post 1352 is detachable from the lid 1300 to allow a user to elect whether or not to use any inserts 1358 or use the container 1000 as a generic canister. In one embodiment the post 1352 may be telescopic.

[0032] As mentioned above, when the post 1352 is employed, it is used to receive the interior inserts 1358 such as but not limited to a basket 1360, a medication vial holder 1370 and a jewelry padding tray 1380. Each insert 1358 may have a slot 1390 to readily engage and disengage the post 1352. The basket 1360 may be a filigree basket that is used to hold and clean jewelry, dental appliances and other articles. The medication vial holder insert 1370 may hold a number of medication vials such as three standard vials. When using the medicine vial holder insert 1370, the telescopic feature of the post 1352 provides clearance for the tops of the standard vials so that the standard medicine vials can be placed in the medicine vial holder insert 1370 without obstruction from the lid 1300. The jewelry tray 1380 includes ring or jewelry slots 1382 to secure jewelry when placed on the tray 1380. In one embodiment the post 1352 may be designed with the basket 1360 attached to the second end 1356 of the post 1352 so that the medication vial holder 1370 and the jewelry padding tray 1380 may selectively be slid on to the post 1352 and placed on top of the basket 1360. When the inserts 1358 are used, the user is able to store or hold items discreetly within the container 1000.

[0033] FIG. 9 shows a partial cross sectional view of the base 1500 of the container 1000. The base 1500 includes an interior wall 1520 and an exterior wall 1541. The interior wall 1520 is spaced a distance from the exterior wall 1541 and defines a chamber. The interior wall further circumscribes the compartment 1540 of the base. In one embodiment the exterior wall 1541 is be clear. In another embodiment the exterior wall 1541 is embellished such as being frosted, smoke colored, etc. The two walls 1520 and 1541 are designed to be able to be locked together. Trapped between the interior wall 1520 and the exterior wall 1541 is a digitally printed shrink-wrapped sleeve 1560. When both walls 1520 and 1541 are assembled and locked in place an obscured visual of the digitally printed shrink-wrapped sleeve is perceived. Thus this assembly of the interior wall 1520, the sleeve 1560 and frosted exterior wall 1541 provides a presentation where the graphics become integral with the entire container 1000 that cannot be affected by heat, water or harmed by scratches. This assembly is contrasted from traditional methods of embellishment where embellishments are provided on a surface of an article which is susceptible to scratches from everyday use and environmental elements such as heat and water.

[0034] The present invention as described above provides a discreet storage container for a broad range of personal hygiene and related personal use products. The unique configuration of the invention allows the user to position the product for convenient usage in plain view, while disguising the personal nature of the contents within the container. While the present invention has been described in conjunction with specific embodiments, those of normal skill in the art will appreciate the modifications and variations can be made without departing from the scope and the spirit of the present invention. Such modifications and variations are envisioned to be within the scope of the appended claims.

1. A discreet storage unit comprising:
   a base, said base having a compartment and an open end;
   a lid, said lid having an exterior side and an underside, said exterior side defining a cradle, said cradle having curved walls and a foundation, said lid being dimensioned and configured to cover said open end of said base in a first position and expose said open end in a second position;
   and
   said cradle, said cradle having a top, a bottom and arced sides, said cradle being dimensioned and configured to be releasably held in said cradle of said lid.

2. The storage unit of claim 1, wherein said curved walls of said cradle are dimensioned and configured to provide a portion of the arced sides of the container and the foundation of said cradle is dimensioned and configured to nest within the exterior side of the lid in a first position and expose the exterior side of the lid in a second position.

3. The storage unit of claim 1, further comprising a snuffer, said snuffer being a disc having a metal disc disposed in the center of the disc and having a leg depending from an underside of the disc, said leg of said snuffer being dimensioned and configured to nest within the exterior side of the lid in a first position and expose the exterior side of the lid in a second position.

4. The storage unit of claim 1, wherein said lid includes a post opening, vents and voids, said post opening being disposed centrally in the lid, said vents and said voids circumscribing the cradle.

5. The storage unit of claim 4, further comprising a post, said post having a first end and a second end, said first end having flanges, said first end engaging said post opening.

6. The storage unit of claim 5, wherein said second end of said post accepts interior inserts including a basket, a medication vial holder, and a jewelry tray.
7. The storage unit of claim 1, wherein said base including an interior wall and an exterior wall, said walls spaced a distance from each other and defining a chamber.

8. The storage unit of claim 7, further comprising a sleeve disposed in said chamber, wherein said sleeve is shrink-wrapped to said interior wall, wherein said exterior wall of said base being frosted.

9. The storage unit of claim 1 wherein said compartment is circumscribed by said interior wall.

10. A discreet storage unit comprising:
    a base, said base having a compartment and an open end;
    a lid, said lid having an exterior side and an underside, said exterior side defining a cradle, said cradle having curved walls and a foundation, said lid further including a post opening, vents and voids, said lid being dimensioned and configured to cover said open end of said base in a first position and expose said open end in a second position; and
    a candle, said candle having a top, a bottom and arced sides, said candle being dimensioned and configured to be releasably held in said cradle of said lid,
    wherein said curved walls of said cradle are dimensioned and configured to a portion of the arced sides of the candle and the foundation of said cradle is dimensioned and configured to the bottom of the candle.

11. The storage unit of claim 9, further comprising a snuffer, said snuffer being a disc having a metal disc disposed in the center of the disc and having a leg depending from an underside of the disc, said leg of said snuffer being dimensioned and configured to rest within the exterior side of the lid in a first position and expose the exterior side of the lid in a second position.

12. The storage unit of claim 9, wherein said post opening is disposed centrally in the lid and said vents and said voids circumscribe the cradle.

13. The storage unit of claim 11, further comprising a post, said post having a first end and a second end, said first end having flanges, said first end engaging said post opening, said second end of said post accepting interior inserts including a basket, a medication vial holder, and a jewelry tray.

14. The storage unit of claim 9, wherein said base further includes an interior wall and an exterior wall, said walls spaced a distance from each other and defining a chamber, said interior wall circumscribing said compartment.

15. The storage unit of claim 14, further comprising a sleeve disposed in said chamber, wherein said sleeve is shrink-wrapped to said interior wall, wherein said exterior wall of said base being frosted.

16. A discreet storage unit comprising:
    a base, said base having an interior wall, an exterior wall, a chamber defined between said interior wall and said exterior wall, a compartment circumscribed by said interior wall and an open end;
    a lid, said lid having an exterior side and an underside, said exterior side defining a cradle, said cradle having curved walls and a foundation, said lid further including a post opening, vents and voids, said lid being dimensioned and configured to cover said open end of said base in a first position and expose said open end in a second position;
    a candle, said candle having a top, a bottom and arced sides, said candle being dimensioned and configured to be releasably held in said cradle of said lid; and
    a post, said post having a first end and a second end, said first end having flanges, said first end engaging said post opening,
    wherein said curved walls of said cradle are dimensioned and configured to a portion of the arced sides of the candle and the foundation of said cradle is dimensioned and configured to the bottom of the candle.

17. The storage unit of claim 16, further comprising a snuffer, said snuffer being a disc having a metal disc disposed in the center of the disc and having a leg depending from an underside of the disc, said leg of said snuffer being dimensioned and configured to rest within the exterior side of the lid in a first position and expose the exterior side of the lid in a second position.

18. The storage unit of claim 16, wherein said post opening is disposed centrally in the lid and said vents and said voids circumscribe the cradle.

19. The storage unit of claim 16, wherein said second end of said post accepts interior inserts including a basket, a medication vial holder, and a jewelry tray.

20. The storage unit of claim 16, further comprising a sleeve disposed in said chamber, wherein said sleeve is shrink-wrapped to said interior wall, wherein said exterior wall of said base being frosted.

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