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Other: **None**

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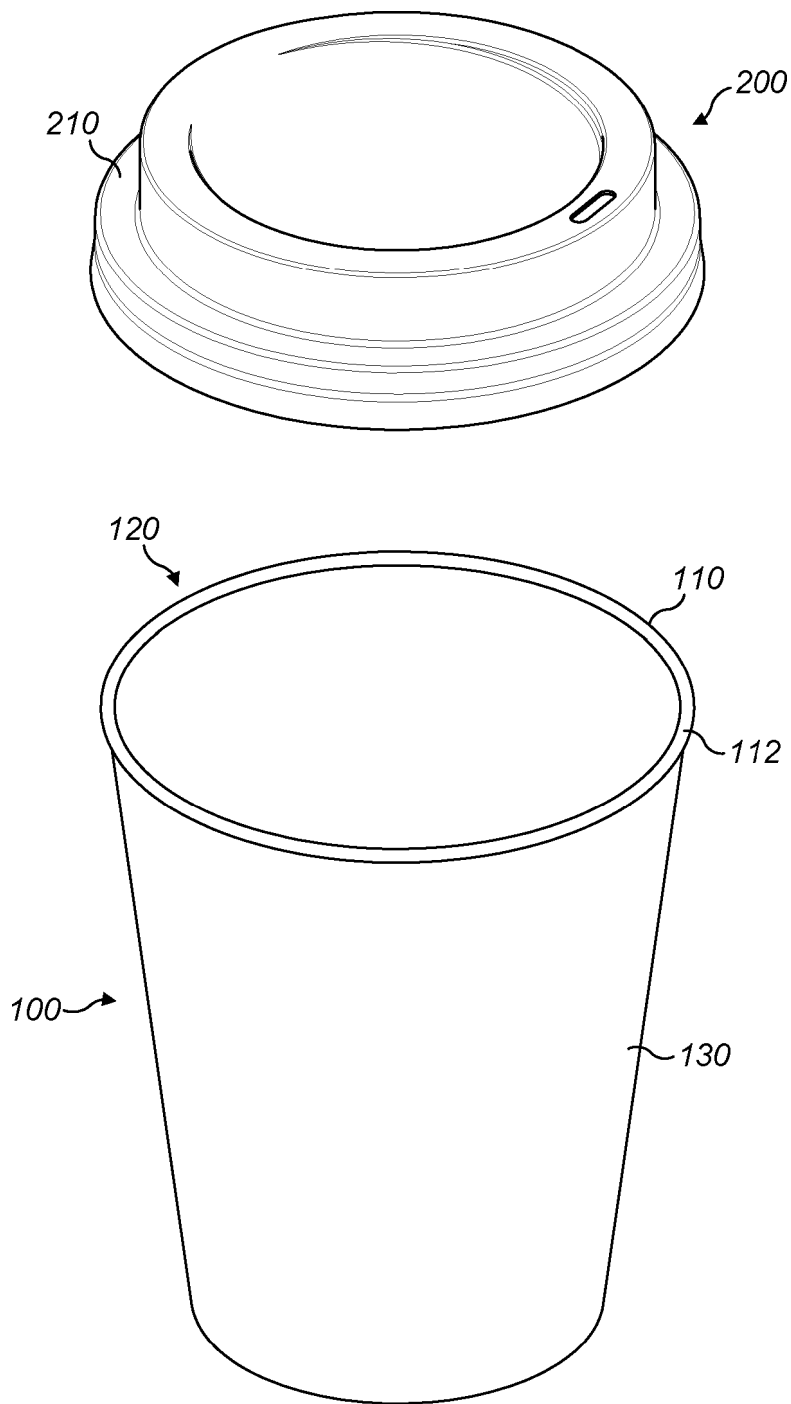


FIG. 1

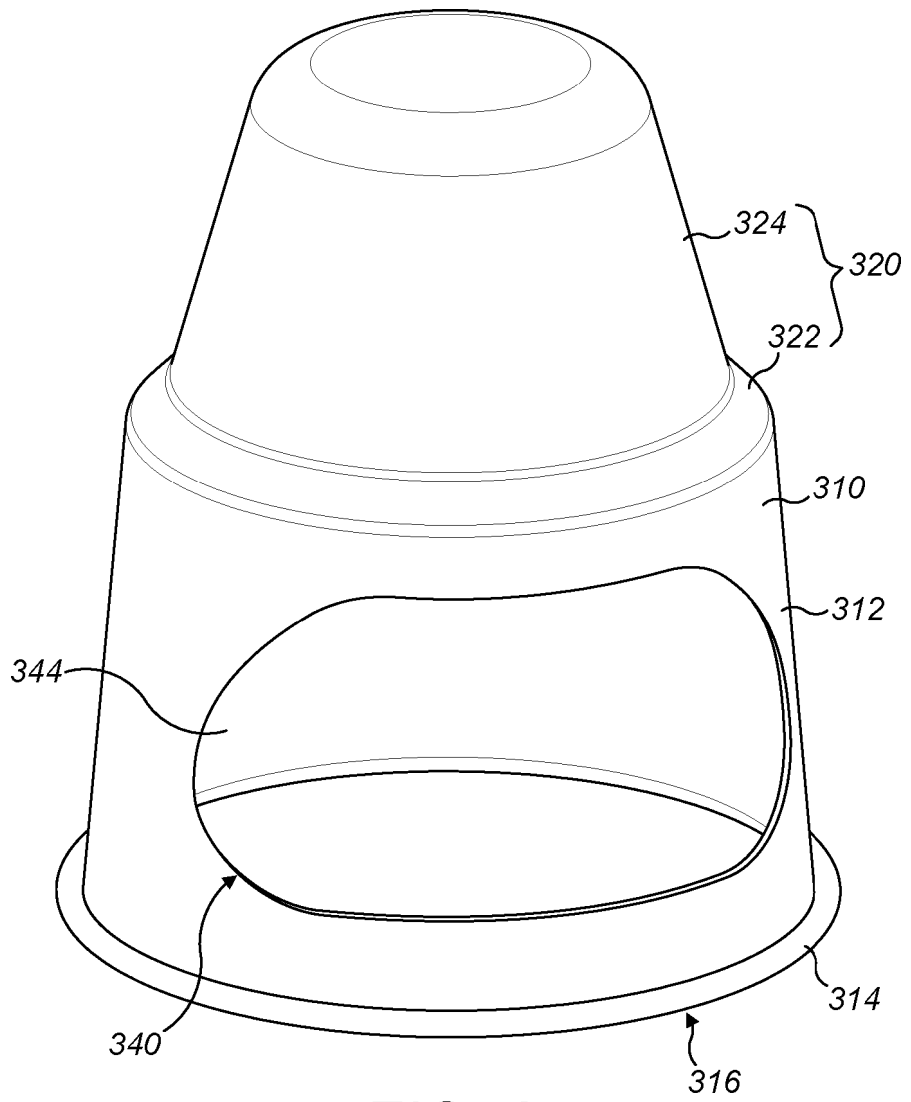


FIG. 2

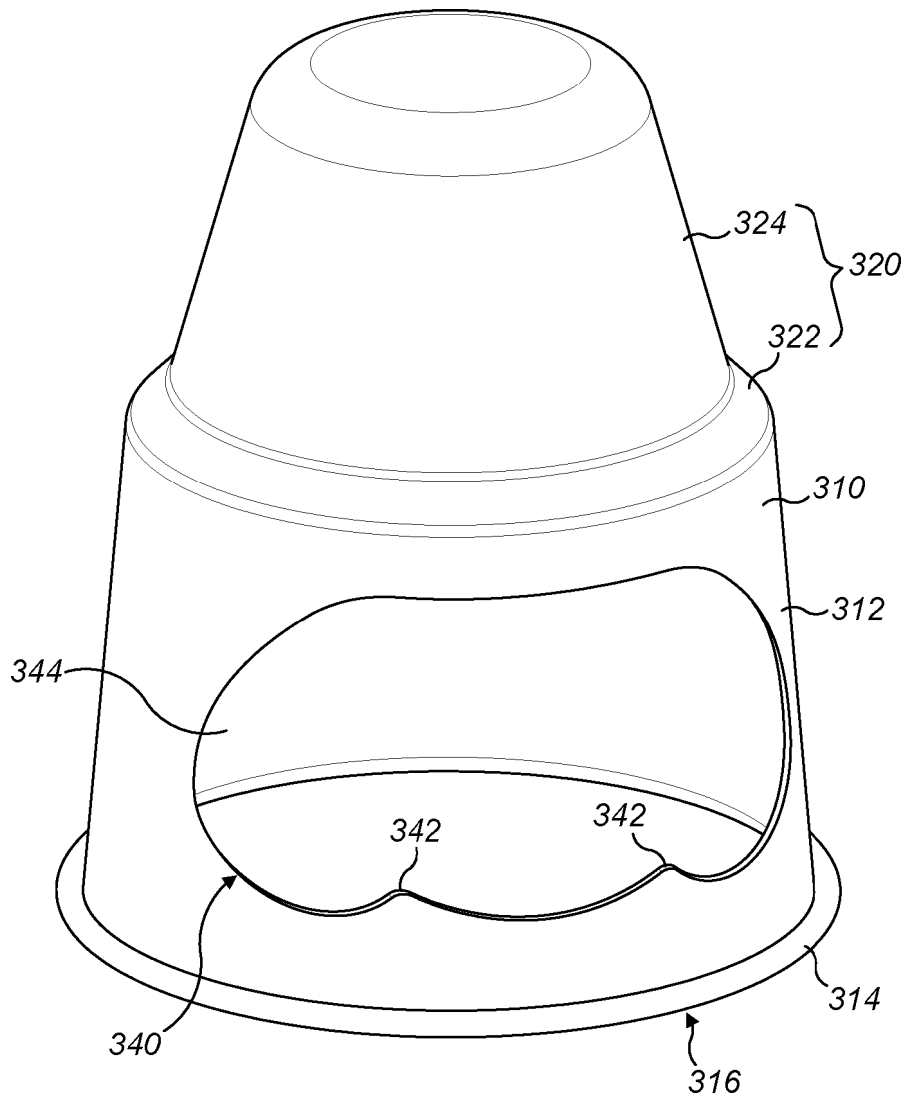


FIG. 3

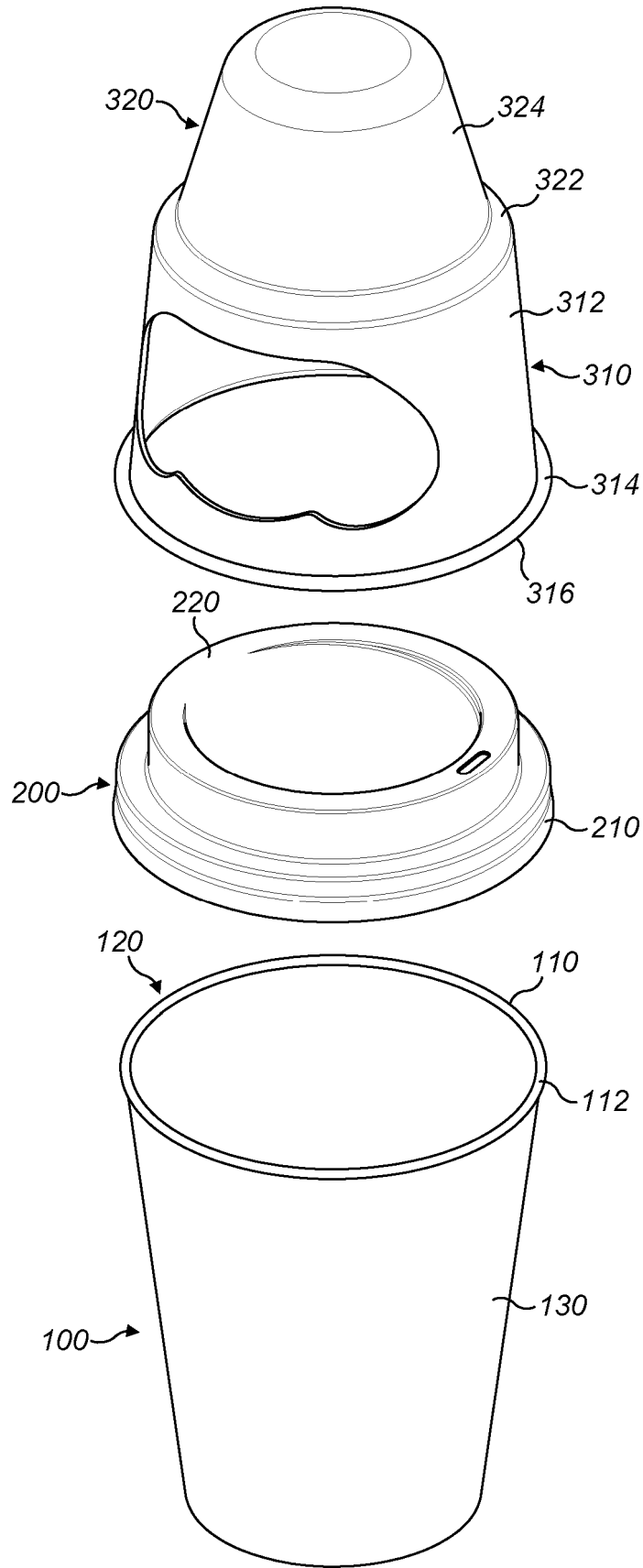


FIG. 4

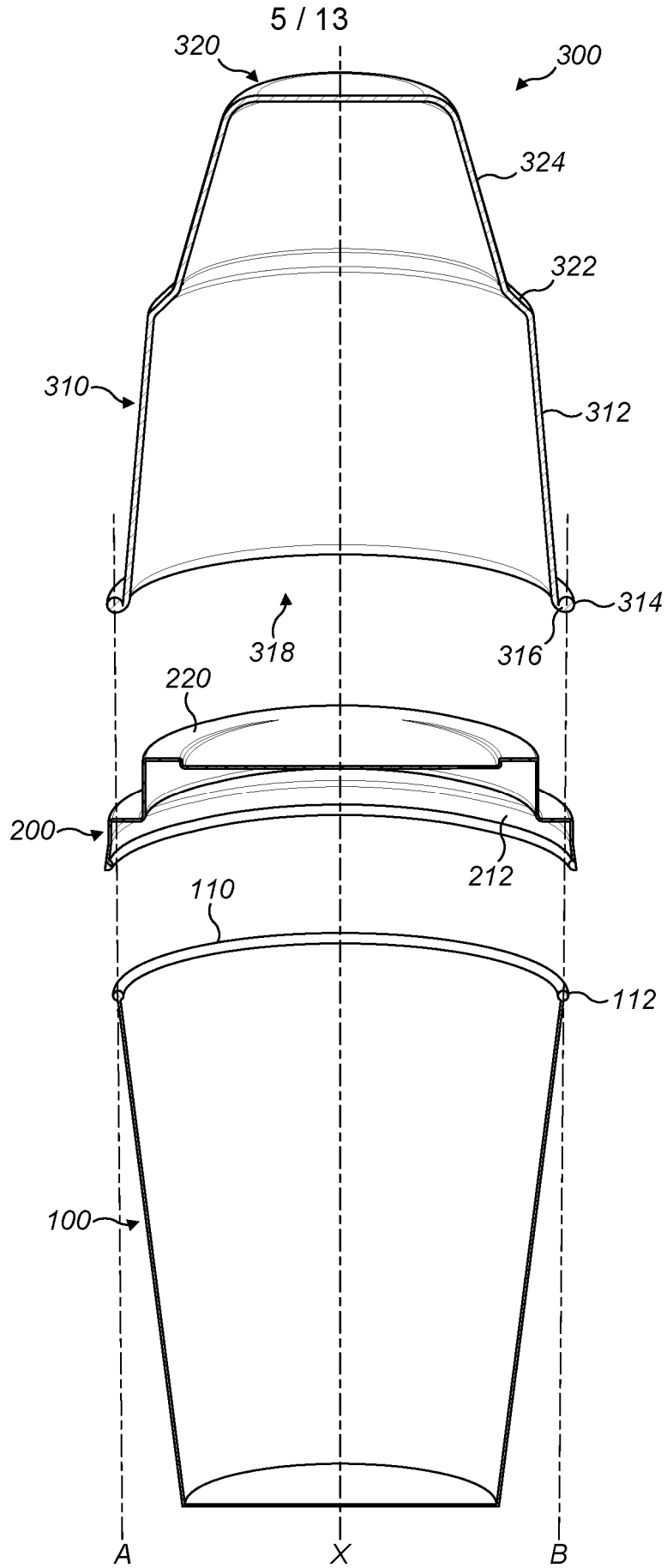


FIG. 5

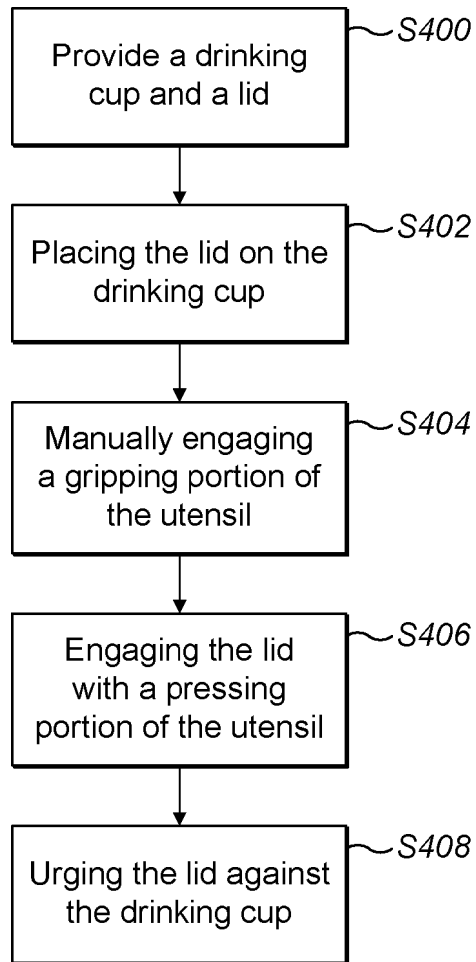


FIG. 6

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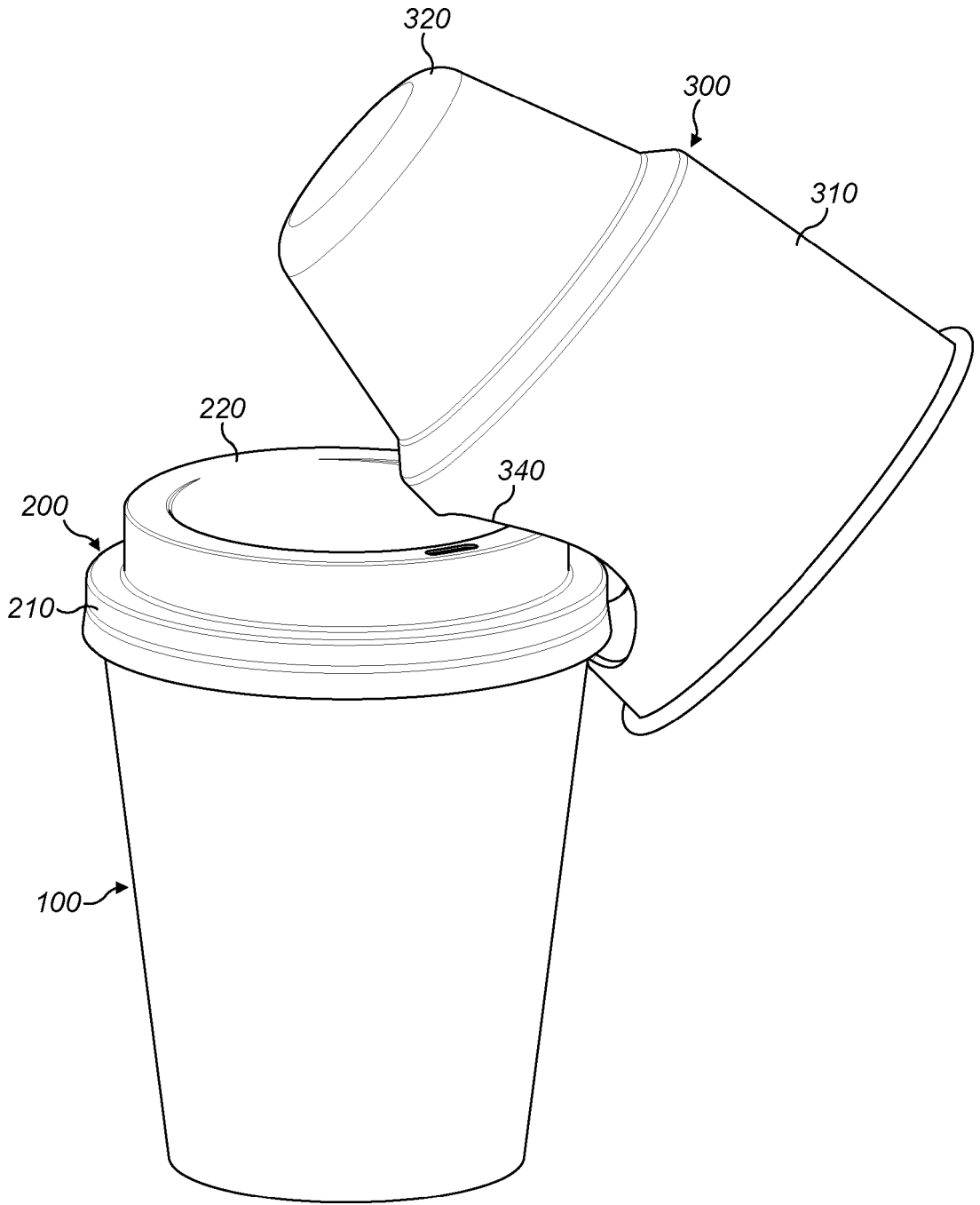


FIG. 7

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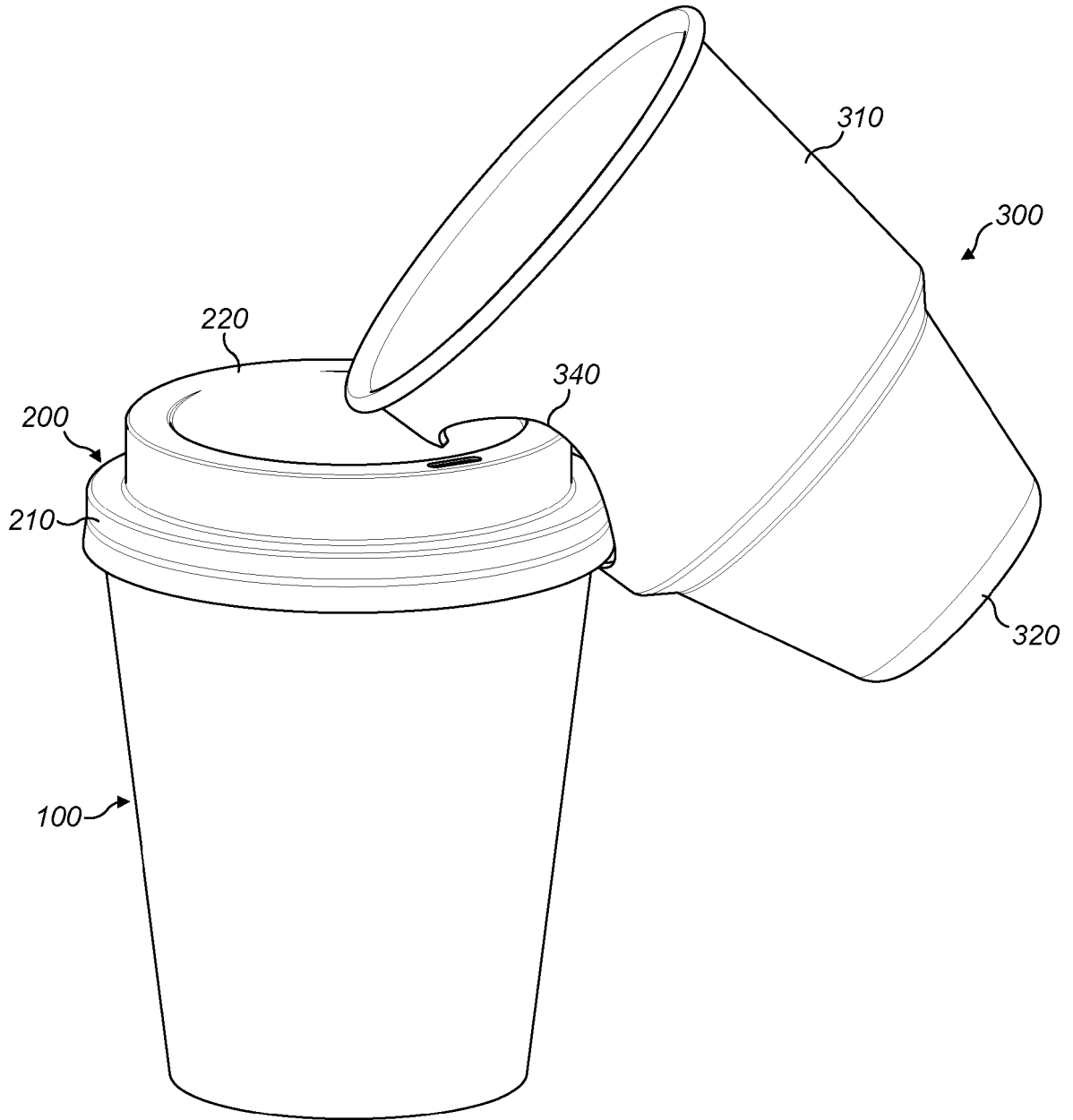


FIG. 8

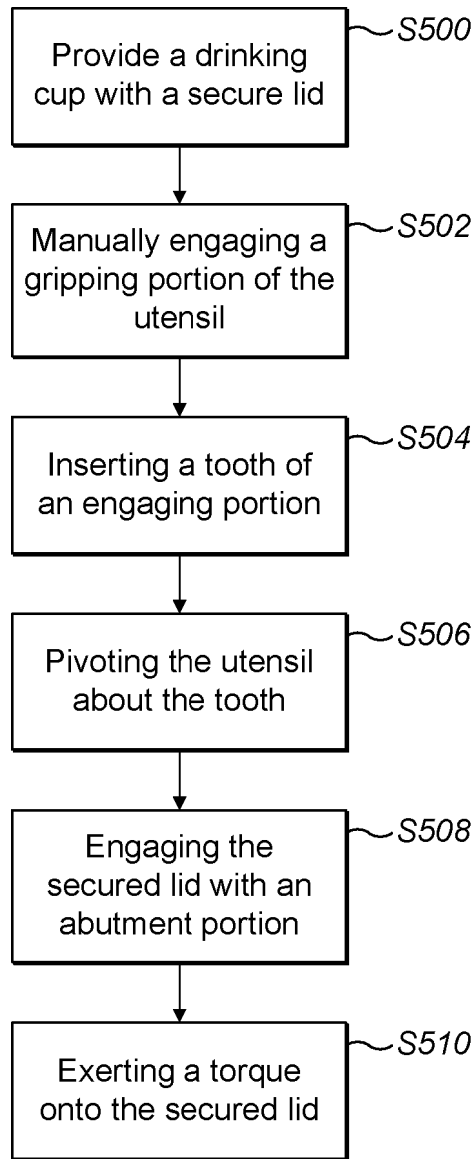


FIG. 9

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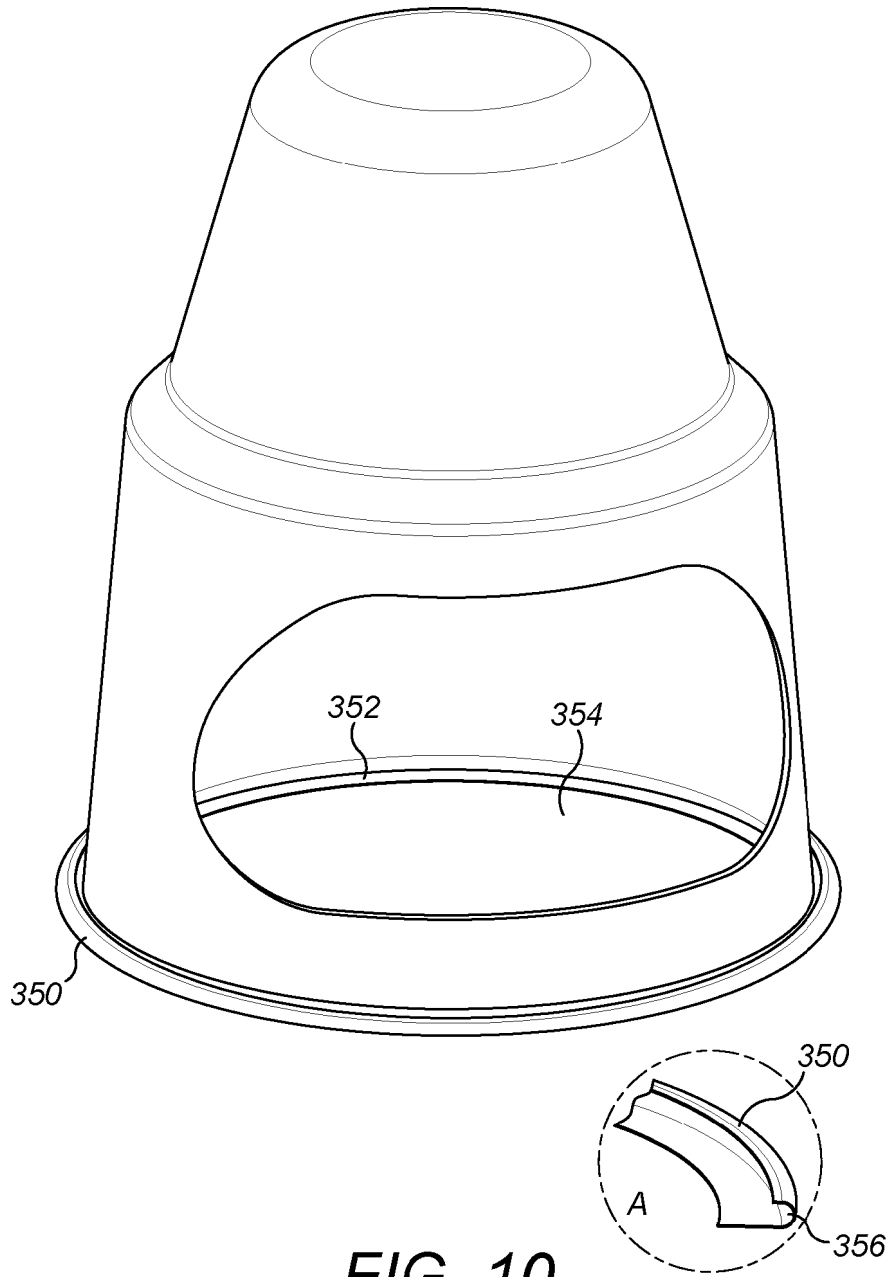


FIG. 10

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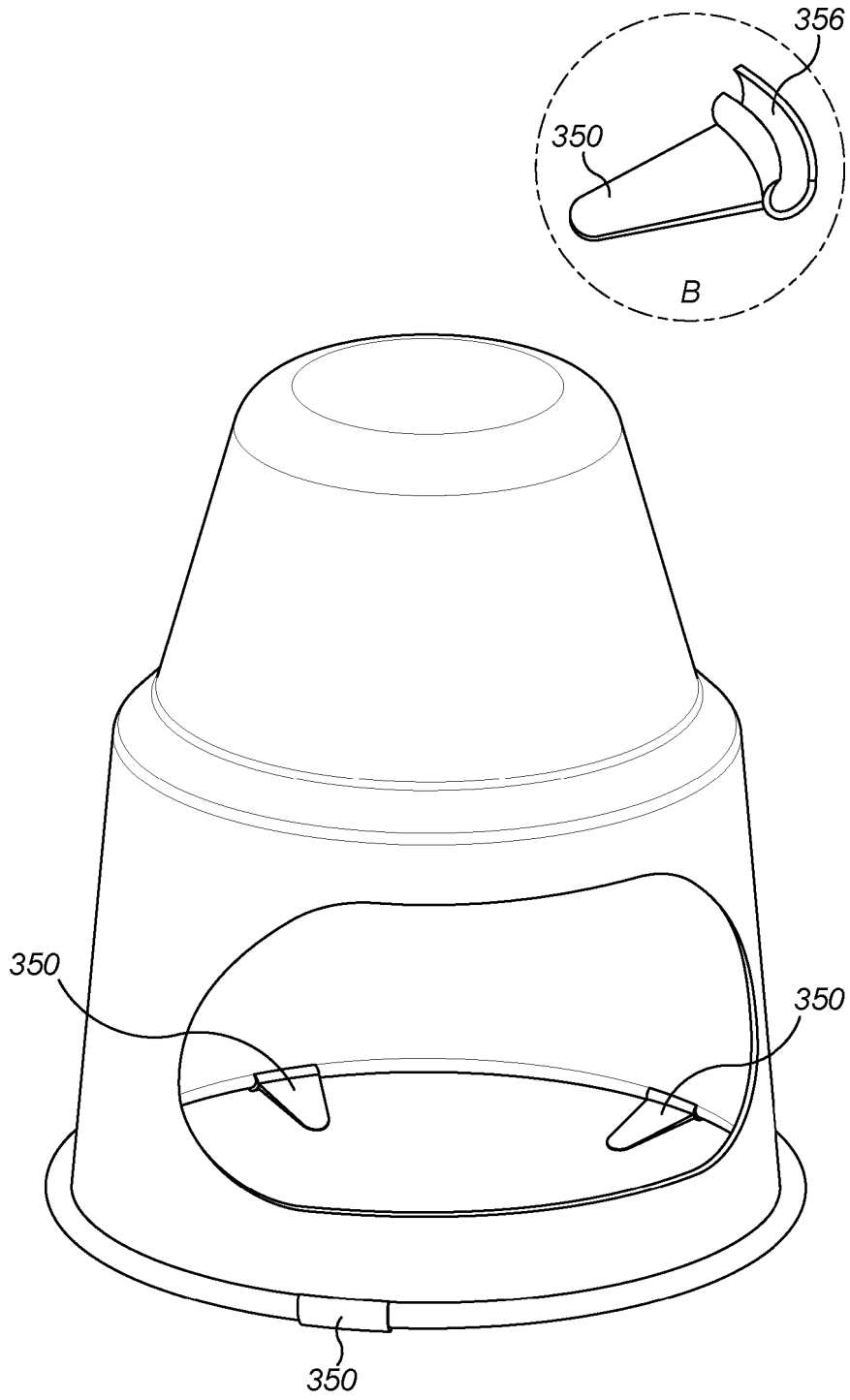


FIG. 11

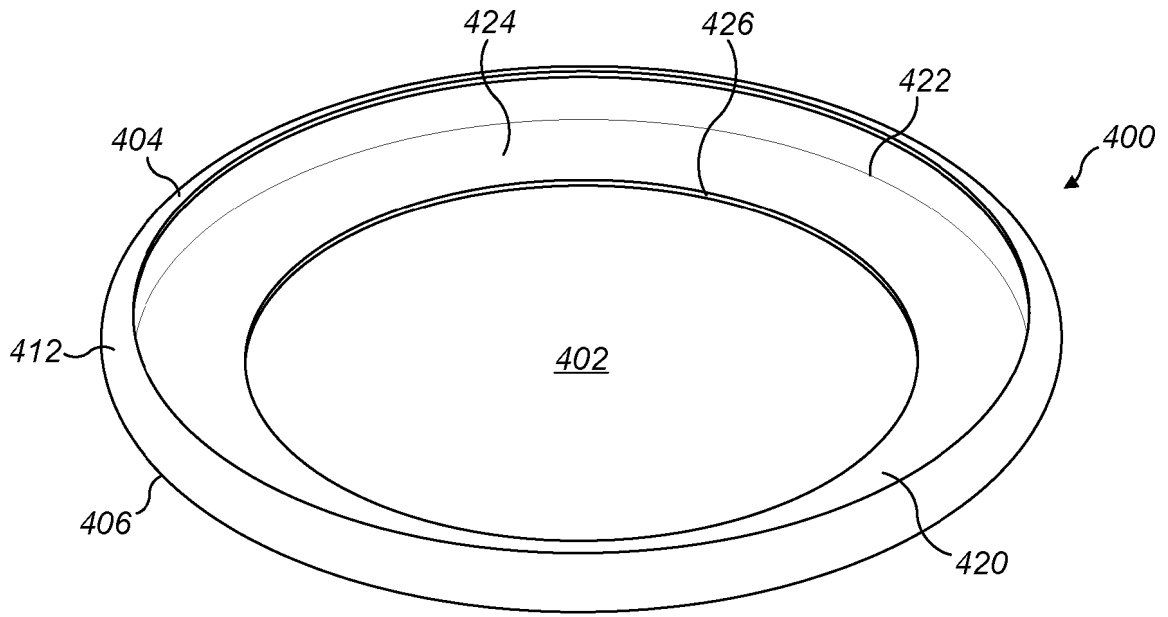


FIG. 12

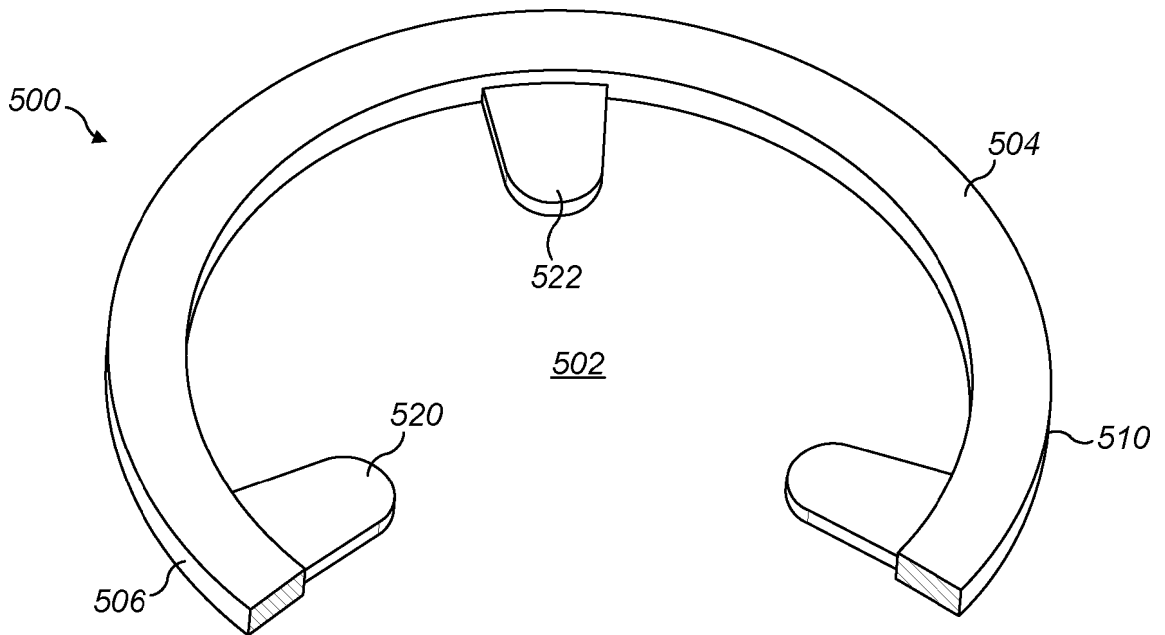


FIG. 13

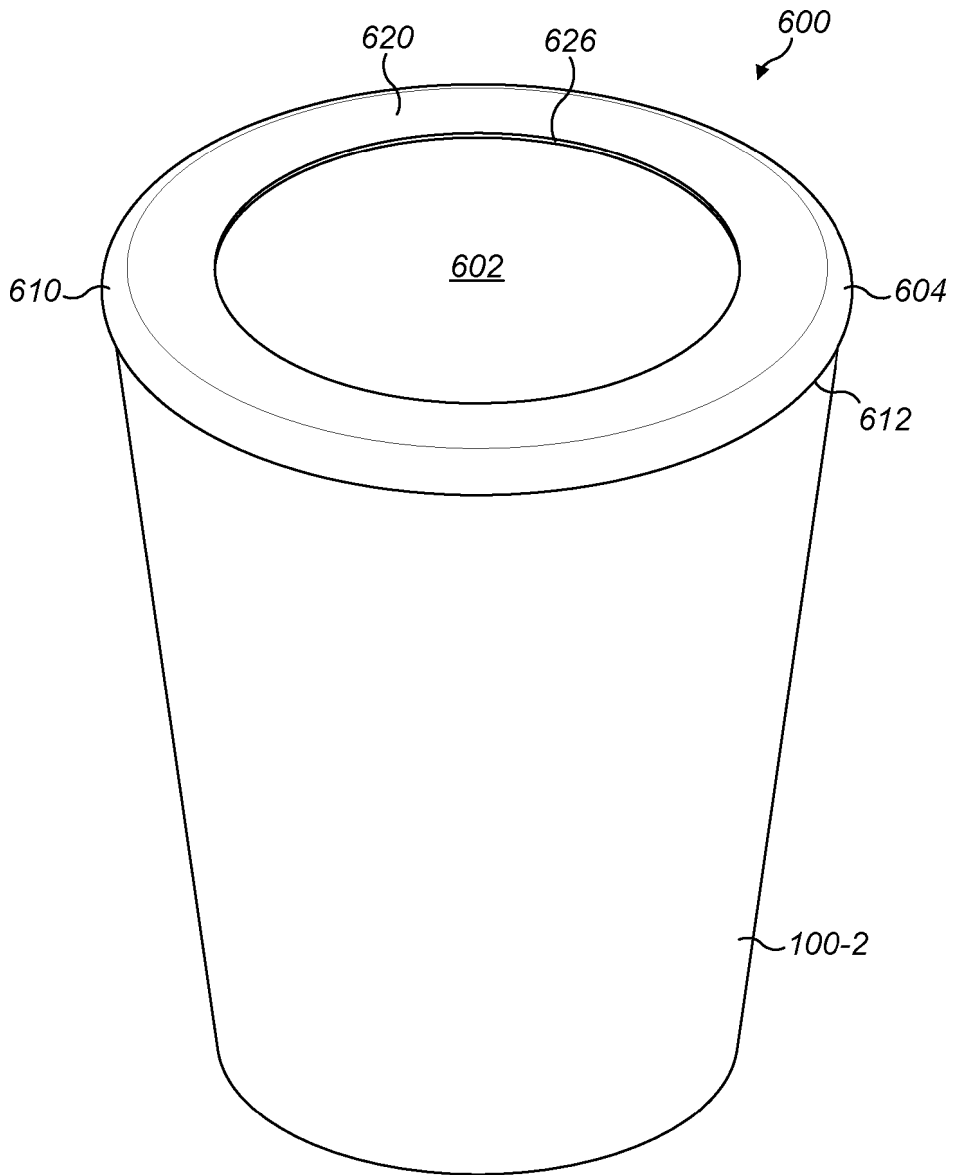


FIG. 14

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A Utensil for Attaching a Lid to a Container

FIELD

[01] The present disclosure relates in general to a utensil for securing a lid to a container and in particular to a utensil for securing a lid to a beverage container.

BACKGROUND

[02] A beverage may be served to customers in a beverage container such as disposable drinking cup. Particularly when the beverage is served hot, as coffee or hot chocolate etc. traditionally would be, a lid may be fitted to the drinking cup. Thereby, accidental spills may be reduced or entirely avoided, and a hot beverage may be kept hot for longer. Such beverage containers are known and are widely used for packaging drinks in coffee shops for consumers to take out. Furthermore, although predominantly used for beverages, similar packaging could be used elsewhere in the food and drinks industry, particularly for example, where servers are required to add the lid manually in a commercial environment, for instance when serving fresh foods such as soups or noodles.

[03] The lid is typically arranged to snap onto a rim of the drinking cup through a suitable application of force. Without an alternative to secure the lid to the drinking cup, a person may use a hand to fasten the lid to the drinking cup. For example, that person may place the lid on the drinking cup and then press down on the lid with a palm to thereby fasten the lid to the drinking cup. This, however, may be unreliable for securing the lid correctly and may be particularly unreliable where the lid is provided with an extended spout, because the lid or container may be deformed rather than reliably secured. Alternatively, a person may use individual fingers to secure the lid to the drinking cup by pressing certain parts of the lid against the drinking cup. This approach, however, may also be unreliable as securing the lid to the drinking cup in one location may inadvertently dislodge the lid from the drinking cup in another location.

[04] Therefore, it is now desired to provide a utensil for reliably securing a lid to a drinking cup. The example embodiments have been provided with a view to addressing at least some of the difficulties that are encountered with current approaches to securing lids to drinking cups whether those difficulties have been specifically mentioned above or will otherwise be appreciated from the discussion herein.

SUMMARY

[05] It is an object of the present invention to overcome at least one of the above or other disadvantages. It is an aim of the present invention to provide a utensil for securing a lid to a container. It is a further aim to provide a utensil suitable for quickly and reliably securing a lid to a container. It is a further aim to provide a utensil for hygienically handling a lid.

[06] According to an exemplary embodiment, there is provided a utensil for a lid of a container. In some examples, the container may be a disposable coffee cup and the lid may be a disposable lid arranged to fit the cup.

[07] The utensil is adapted for attaching to a lid, such that the lid may be lifted and otherwise manipulated without a need for contacting the lid directly. Suitably, the utensil comprises a resilient portion for attaching the utensil to said lid.

[08] Said lid is insertable into a passage defined by the utensil. Suitably, the resilient portion is arranged to restrict the passage. Conveniently, the resilient portion is arranged to urge said lid, when inserted into the passage, toward an opposed part of the utensil to attach to said lid. The utensil therefore provides a hygienic means for handling the lid, reducing any potential contamination from, for example, fingers contacting on the lid.

[09] The utensil is adapted for fitting the lid to the container, without a need for manual handling of the lid. Suitably, the utensil comprises a pressing portion for pressing against said lid when fitting said lid to said container.

[10] The outer portion comprises at least two pressing portions for pressing against said lid when fitting said lid to said container. Suitably, the pressing portions are formed on a perimeter enclosing the passage. The utensil therefore provides a convenient applicator to apply a pressing force on the lid in order to quickly and easily apply the lip to the container.

[11] According to one example, the utensil is generally ring-shaped or annular.

[12] Lids of various shapes and sizes are known and, suitably, the passage may have different shapes and sizes to accommodate for various lids. Accordingly, the perimeter may enclose a passage of any suitable geometric shape. In some examples, the perimeter defines a substantially circular passage. In other examples, the perimeter encloses a substantially oval passage. In yet further examples, the perimeter encloses a polygonal passage.

[13] Conveniently, the passage is restricted by the resilient portion such that the utensil may be used for manipulation of the lid. Suitably, the resilient portion extends inwardly from the outer portion and into the passage. In use, when a lid is inserted into the passage, the resilient portion is resiliently deformed. Thereby, the lid is urged against an opposed part of the utensil and, in effect, retained in place.

[14] The resilient portion continuously extends along the perimeter. The resilient portion is a generally flat section of flexible material extending along the perimeter. A suitable choice of flexible material may be rubber or silicone or soft plastic.

[15] In examples, a plurality of resilient portions is provided. Conveniently, the plurality of resilient portions provides for an improved hold on the lid.

[16] In some examples, the plurality of resilient portions are evenly spaced along the outer portion. Thereby the hold on the lid may be further improved.

[17] In examples, the resilient portion continuously extends along the whole outer portion. Conveniently, a resilient portion extending along the whole outer portion may provide for an improved hold on the lid.

[18] The utensil comprises pressing portions for providing an applicator to apply a pressing force on the lid when fitting the lid to the container. Conveniently, the utensil comprises a plurality of pressing portions which are spaced apart such that, in use, force is exerted on the lid in spaced-apart locations.

[19] In the examples, the outer portion comprises at least three least three pressing portions.

[20] In the examples, the pressing portions are evenly spaced along the outer portion.

[21] In the examples, the utensil encloses the passage. Here, the outer portion continuously extends along the whole perimeter.

[22] The resilient portion restricts the passage enclosed by the perimeter, and is adapted for gripping the lid. Suitably, the resilient portion is resiliently deformable and configured to press against the lid in order to retain the lid in the passage.

[23] In examples, the resilient portion is resiliently compressible. Any suitable resiliently compressible material is envisaged, such as sponge.

[24] In examples, the resilient portion is resiliently flexible. Any suitable resiliently flexible material is envisaged, for example sponge, rubber, silicone or soft plastic.

[25] In examples, the outer portion is resiliently flexible and arranged to receive a support member. Conveniently, the support member is relatively rigid. In some examples, the support member is a rigid insert. Suitable material choices include stainless steel, aluminium and hard plastic.

[26] In examples, the outer portion and the resilient portion are formed integrally.

[27] In examples, the support member is readily separable from the outer portion. Conveniently, the utensil may be disassembled prior to cleaning, or for replacement of individual components.

[28] In examples, the outer portion forms a channel configured to receive the support member.

[29] In examples, the outer portion is resiliently deformable to expand an opening of the channel.

[30] In examples, the support member is a ring.

[31] .

[32] According to another exemplary embodiment, there is provided a utensil having a pressing portion and a gripping portion. The pressing portion is arranged to provide an equal pressing force about the periphery of the lid. The gripping portion is manually engageable to urge the pressing portion against the lid in order to thereby secure the lid to the beverage container. The utensil therefore provides a convenient applicator to apply an even pressing force on the lid in order to quickly and easily apply the lip to the container. Furthermore, using the utensil provides a hygienic surface in contact with the cup and lid and removes any potential contamination from, for example, fingers pressing on the lid.

[33] The utensil comprises a base forming the pressing portion. The pressing portion is arrangeable to engage the lid, and may be arrangeable to engage a particular portion of the lid. In one embodiment, the pressing portion is arranged to engage a rim of the lid. Suitably, when suitable for a circular lid, the pressing portion may extend along an arc such that, in use, the pressing portion follows the rim of the lid. Conveniently, the pressing portion may form a closed arc. That is, the pressing portion forms a closed loop. The closed loop may be generally circular or generally oval, but may also be other shapes as necessary to suit the application such as square or rectangular. Here, for instance, the pressing portion may correspond to a substantial portion of a periphery of the lid.

[34] The utensil is a hand tool. Suitably, the utensil comprises a gripping portion which a person may manually engage in order to use the utensil. The gripping portion may be a handle or may be a knob. Conveniently, the gripping portion may be generally conically shaped, for example frusto-conically. Thereby a secure and comfortable grip may be achieved.

[35] The pressing portion and the gripping portion are spatially separated. Suitably, the utensil comprises a base extending between the pressing portion and the gripping portion. The base may have a generally frusto-conical shape.

[36] The pressing portion, the base and the gripping portion may be formed integrally.

[37] The pressing portion and the gripping portion may be located at opposite ends of the base.

[38] The pressing portion may be formed by a generally planar portion of the base.

[39] The pressing portion may be arranged to extend along an arc. In an exemplary embodiment, the pressing portion extends along a closed loop.

[40] The utensil may have a shape which is generally cylindrical or generally conical.

[41] The utensil may be arranged to receive an extended spout of the lid. Suitably, the utensil may form an opening. Conveniently, the pressing portion may define the opening.

[42] In an exemplary embodiment, the utensil may further be configured for removal of a secured lid from the beverage container. Suitably, the utensil may comprise a lid remover. The lid remover comprises an engaging portion which is arrangeable to exert a torque onto the secured lid in order to thereby remove the secured lid from the beverage container. Suitably, the lid remover provides opposing edges for engaging spaced portions of the lid on alternative sides thereof. The method of removal comprise arranging one of the opposed edges to contact a top of the lid and the other edge to contact underneath the lid and applying a force to the utensil to conveniently remove the lid. The lid remover is sized to easily contact the lid. Advantageously, the a portion of the utensil is spaced from the lid remover so as to increase the leverage of the removal action. For example, the spaced portion reduces the force required to remove the lid.

[43] The lid remover is preferably an aperture. The aperture forms the opposed edges. In one embodiment, one or both edges may provide an engaging portion for contacting the underside of the lid. The engaging portion may be substantially flat, or may be curved or may comprise a tooth which is insertable, in use, between the secured lid and the beverage container. Here, the tooth may cooperate with an abutment portion of the engaging portion to exert the torque onto the secured lid.

[44] The utensil may comprise a pair of teeth.

[45] In an exemplary embodiment there is provided a utensil for securing a lid to a container. The utensil comprises a base forming a pressing portion. The utensil comprises a gripping portion which is separated from the pressing portion by the base. The gripping portion is manually engageable to urge the pressing portion against the lid in order to thereby secure the lid to the container.

[46] According to the present disclosure, there is provided a method of securing a lid to a container. The method comprises providing a container and a lid. The method comprises placing the lid on the container. The method comprises manually engaging a gripping portion of the utensil. The method comprises engaging the lid with a pressing portion of the utensil. The method comprises urging the lid against the container, thereby securing the lid to the container in an efficient, convenient and secure manner.

[47] The method of securing a lid to a beverage container may comprise urging a lip of the beverage container into a preformed recess of the lid.

[48] The method of securing a lid to a beverage container may comprise manually engaging the gripping portion with a single hand.

[49] According to the present disclosure, there is provided a method of removing a lid from a container. The method comprises providing a container with a secured lid. The method comprises manually engaging a portion of the utensil. The method comprises inserting an edge of a lid remover formed on the utensil between a secured lid and the container. The method comprises pivoting the utensil about the edge such that an opposed edge also abuts the lid. The method comprises exerting a torque onto the secured lid in order to thereby remove the lid from the container.

[50] The method of removing a secured lid from a beverage container may comprise removing a lip of a drinking cup from a preformed recess of the secured lip.

[51] The method of removing a secured lid from a beverage container may comprise manually engaging the gripping portion with a single hand.

[52] In an exemplary embodiment, the utensil may further be configured for attaching to and retaining of a lid. Suitably, the utensil comprises a lid retainer. The lid retainer is attachable to the lid and arranged to retain the lid when attached thereto. The utensil therefore provides a convenient means for retrieving the lid quickly and easily. Furthermore, a risk of contamination may be reduced when using the utensil for retrieving the lid and securing the lid to the container.

[53] The lid retainer is arranged to receive and retain the lid in a configuration in which the pressing portion faces the lid. Thereby, the utensil is configured such that, after retrieving the lid using the utensil, a retained lid is securable to the container without having to detach the utensil from the lid. Conveniently, this provides a means for outfitting the container with the lid which requires only one hand and may not require manually handling the lid or the container. That is, when the lid retainer is arranged to attach the lid to the utensil, the pressing portion is positioned in registration with the lid so that relative movement of the utensil and container creates the pressing force to fix the lid to the container.

[54] In the exemplary embodiments, the lid retainer attaches to the lid by an inwardly acting force along a parallel plane to a top of the lid. That is, the lid retainer fits over the lid and compresses against sides of the lid. The retaining force created by the lid retainer is suitably created by a resilient force of the lid retainer. Preferably, the lid retainer includes a portion that resiliently deforms. Here, the resilient portion has a first arrangement when the lid is not attached, wherein the deformable portion projects inwardly to create a smaller opening than the pressing portion. As the utensil is moved towards the lid so that the pressing portion contacts the lid, the resilient portion abuts the lid. Further relative movement of the utensil to press the pressing portion against the lid causes the deformable portion to deform to a second arrangement and exert the retaining force.

[55] For instance, the lid retainer may comprise a compressible portion, said compressible portion compresses against the lid and the retaining force generated by the resilient nature of the compressible portion. Alternatively the resiliently deformable portion is a flexible portion and the flexible portion flexes from the first arrangement to the second arrangement.

[56] The lid retainer is arrangeable to press against the lid and to thereby exert a retention force on the lid. Conveniently, the retention force is overcome by a combined weight of the lid and the container when the container is at least partially filled with liquid. That is, the retention force is insufficient to lift the container and the lid when the container is at least partially filled. Advantageously, thereby a convenient means for removal of the utensil from the lid may be provided. In one example, the utensil is detachable even when no liquid is present in the container.

[57] The lid retainer is secured to the base of the utensil. Preferably, the lid retainer is provided towards a first end of the base, wherein the first end corresponds to a distal end of the base. In one example, the utensil further comprises a lip which forms the pressing portion, and the lid retainer forms a channel configured to receive the lip.

[58] The lid retainer may be secured to the utensil permanently, for example using adhesive or formed integrally with the utensil. Alternatively, the lid retainer may be detachably secured to the utensil, for example fitted over a portion of the utensil.

[59] The lid retainer comprises a flexible membrane having an aperture. Suitably, the aperture is sized so as to receive the lid and arranged to press against the lid. Conveniently, the membrane is configured to frictionally retain the lid.

[60] The lid retainer may be formed integrally from silicone.

[61] In the exemplary embodiments, there is provided a utensil comprising a lid retainer. The lid retainer forms a channel configured to receive and attach to a lip of the base of the utensil. The lid retainer comprises a flexible membrane forming an aperture into which a portion of the lid is insertable, and the membrane is arranged to press against the portion of the lid.

[62] In one example, there is provided a method of securing a lid to a container using a utensil. The method comprises manually engaging a gripping portion of the utensil. Suitably, the gripping portion is shaped for a comfortable and secure grip.

[63] The method further comprises engaging the lid with a lid retainer of the utensil. This may include inserting a portion of the lid into a cavity formed by the utensil in which the lid retainer is provided.

[64] The method further comprises lifting the utensil, thereby also lifting the lid which is being retained by the lid retainer.

[65] The method further comprises locating the lid on the container using the utensil. This step may include placing a rim of the lid on a lip of the container.

[66] The method further comprises urging the lid against the container using the pressing portion of the utensil, thereby securing the lid to the container. This step may include locating the lip of the container in a recess formed by the lid.

[67] The method may further comprise partially filling the container with a fluid prior to placing the lid on the container.

BRIEF DESCRIPTION OF DRAWINGS

[68] For a better understanding of the invention, and to show how example embodiments may be carried into effect, reference will now be made to the accompanying drawings in which:

[69] Fig. 1 is a perspective view of a drinking cup and a lid;

[70] Fig. 2 is a perspective view of a utensil for securing a lid to a cup;

[71] Fig. 3 is a perspective view of an alternative embodiment of a utensil for securing a lid to a cup;

[72] Fig. 4 is a perspective view a utensil for securing a lid to a drinking cup, a lid and a drinking cup;

[73] Fig. 5 is a cross-sectional view of a utensil for securing a lid to a drinking cup, a lid and a drinking cup;

[74] Fig. 6 illustrates a method of securing a lid to a drinking cup;

[75] Fig. 7 is a perspective view of a drinking cup having a lid secured thereto and a utensil comprising a lid remover;

[76] Fig. 8 is a perspective view of a drinking cup having a lid secured thereto and a utensil comprising a lid remover being used in an alternative embodiment;

[77] Fig. 9 illustrates a method of removing a secured lid from a drinking cup;

[78] Fig. 10 illustrates a perspective view of a utensil shown with an additional lid retainer according to a first embodiment attached thereto; and

[79] Fig. 11 illustrates a perspective view of a utensil shown with an additional lid retainer according to a second embodiment attached thereto

DESCRIPTION OF EMBODIMENTS

[80] At least some of the following example embodiments provide a utensil for securing a lid to beverage container. The example device is simple and convenient for the user and readily cleanable. At least some examples may be lightweight. Many other advantages and improvements will be discussed in more detail herein.

[81] Fig. 1 shows a perspective view of an example drinking cup 100 and, separately, an example lid 200. As will be appreciated, although the examples described herein relate to applying and removing a lid to a beverage container, containers of other types of food or drink, or other contents are envisaged. The embodiments are particularly useful for use in serving environments.

[82] The drinking cup 100 is one example of a beverage container. A beverage container is configured to contain a beverage, which may be hot or cold, and may comprise an opening through which the beverage may be consumed. The beverage container may have any shape or size suitable for beverage consumption. In some examples, the beverage container may have a cross-section that is generally oval, while in other examples it may be generally rectangular. In this example, the drinking cup 100 has a generally circular cross-section.

[83] The drinking cup 100 comprises a cup rim 110 which defines an opening 120 through which the drinking cup 100 may be filled with a beverage and through which said beverage may be consumed. In this example, the drinking cup 100 is arranged for consuming a beverage contained therein either directly from the drinking cup 100 or through the lid 200. Suitably, a cup rim 110 of the drinking cup 100 and a lid rim 210 of the lid 200 are configured to cooperate to secure the lid 200 relative to the drinking cup 100. Conveniently, the cup rim 110 may form a lip 112 arranged to receive and retain the lid 200. The lip 112 extends along a radial direction with respect to the side wall 130. In this example, the lid 200 is configured to receive the lip 112 of the drinking cup 100. Suitably, the lid rim 210 forms a recess 212 arranged to receive the lip 112.

[84] Force may be required in order to secure the lid 200 to the drinking cup 100. In particular, it may require force to urge the lid 200 onto the lip 112. In this example, the lid 200 is arranged to snap onto the drinking cup 100, but in other examples the lid 200 may be arranged to fasten to the cup 100 in alternative ways requiring force to fasten the lid 200 to the drinking cup 100.

[85] Fig. 2 shows a perspective view of an example utensil 300 for securing the lid 200 to the drinking cup 100.

[86] The utensil 300 is a manual tool and its shape and configuration is chosen suitable for manual operation. Conveniently, the utensil 300 is shaped to provide a secure grip such that a user may lift, handle, operate, place or otherwise manipulate the utensil 300. In this example, the utensil 300 is lightweight to improve manual operation. Suitably, the utensil 300 is generally hollow.

[87] The utensil 300 is configured for securing the lid 200 to the beverage container 100. Suitably, the utensil 300 is arrangeable to engage the lid 200, and is manually engageable to exert a force onto the lid 200. Thereby, the lid 200 may be forced into engagement with the drinking cup 100.

[88] Through normal use, the utensil 300 may become dirtied. However, as the utensil 300 is intended for beverage preparation, strict hygiene requirements may apply. Suitably, the utensil 300 is readily cleanable, and configured to withstand repeated and thorough cleaning. Conveniently, the utensil 300 may be manufactured from a material suitable for regular cleaning. Suitable materials may include metals, such as stainless steel or aluminium, and also plastics, such as polypropylene. In another example, the utensil 300 is a disposable manual tool and a suitable choice of material may further include, for example, cardboard.

[89] The utensil 300 comprises a base 310 and a gripping portion 320. In this example, the base 310 and the gripping portion 320 are formed integrally and the utensil 300 has a generally smooth surface, further making the utensil 300 readily cleanable.

[90] In this example, the base 310 comprises a side wall 312 forming a cavity 318 inside the base 310. In other examples, the side wall 312 may be formed from one side wall or section or, alternatively, from multiple side wall sections which may be joined or may be spaced apart.

[91] In this example, the base 310 has a generally circular cross-section, while in other examples the base 310 may have a different cross-section. For example, the cross-section of the base 310 may be generally oval or polygonal.

[92] In this example, the base 310 is tapered. That is, the cross-section is larger at one end of the base 310 such that the base 310 has a generally conical shape. In this example, a distal end of the base 310 has a larger circular cross-section than a proximal end of the base 310.

[93] A lip 314 is located at the distal end of the base 310. The lip 314 extends along a generally radial direction with respect to the side wall 312 of the base 310. In this example, the lip 314 extends along the entire circumference of the base 310, but in other examples the lip 314 may extend along a section of the side wall 312 or, generally, along an arc. In this example, the lip 314 defines an opening of the cavity 318 inside the base 310.

[94] In this example, the lip 314 forms a pressing portion 316. In this example, the pressing portion 316 is generally circular, but in other examples the pressing portion 316 may be formed along a segment of a circle or along an arc. The pressing portion 316 is arrangeable, in use, to engage the lid 200. Conveniently, the lip 314 defines a generally planar portion of the base 310. Through the pressing portion 316, force may be exerted onto the lid 200. Thereby the lid 200 may be urged against the drinking cup 100, in order to secure the lid 200 to the drinking cup.

[95] The proximal end of the base 310 is joined to the gripping portion 320. In this example, the gripping portion 320 comprises a neck 322 and a head 324. Suitably, the base 310 is joined to the neck 322. In other examples, the head 324 may be joined directly to the base 310.

[96] The utensil 300 is arranged to make manually handling the utensil 300 convenient and safe. Suitably, the utensil 300 comprises the neck 322. When a user manually exerts a force onto the utensil 300, there may be a risk of the user's hand slipping off the head 324. Conveniently, the neck 322 provides a guard which may help to prevent a user's hand from slipping off the gripping portion 320. Suitably, the neck 322 is a region of the utensil 300 along which the cross-section of the utensil 300 changes significantly, thereby providing the guard.

[97] In this example, the head 324 is joined to the neck 322. A user may manually engage the head 324 in order to handle the utensil 300. The head 324 may have any suitable shape. For example, the head 324 may have an elongate shape, for example generally cylindrical, so as to provide a handle which a user may grasp. In this example, the head 324 is generally conical. Alternatively the head may be a knob type handle arrangement.

[98] The utensil 300 is configured for convenient and safe manual operation. Suitably, the head 324 forms a smooth surface. Thereby a risk of suffering an injury may be reduced as no sharp edges are present.

[99] A user may place their hand on the head 324 in order to exert a force using the utensil 300. Conveniently, a user may hold the utensil 300 by the head 300 in order to lift, place or otherwise manipulate the utensil 300.

[100] Figs. 4 and 5 show the drinking cup 100, the lid 200, and the utensil 300, wherein Fig. 4 shows a perspective view while Fig. 5 shows a cross-sectional view.

[101] In use, the utensil 300 is engageable to urge the lid 200 onto the drinking cup 100. In some examples, the lid 200 may comprise an extended spout 220. Suitably, the base 310 of the utensil 300 forms an opening by which the extended spout 220 may be received. Suitably, the base 310 has a generally conical or cylindrical shape and forms a cavity 318 inside the base 310 configured to receive the extended spout 220. Thereby, the pressing portion 316 may engage the lid rim 210.

[102] The utensil 300, the lid 200 and the drinking cup 100 are shown aligned about a vertical axis X. Thereby, the cup rim 110 and the lid rim 210 are aligned so that the lid 200 may be urged into engagement with the drinking cup 100. The pressing portion 316 is aligned with both the cup rim 110 and the lid rim 210.

[103] In some examples, the pressing portion 316 may be sized so as to substantially correspond to the cup rim 110. In other examples, the pressing portion 316 may be larger or smaller than the cup rim 110. Conveniently, the pressing portion 316 is sized such that it is approximately equal in size to the cup rim 110. Thereby, the lid 200 may be readily secured to the drinking cup 100.

[104] The utensil 300 is engageable to urge the lid rim 210 onto the cup rim 110. In this example, the pressing portion 316 is arranged to engage the lid rim 210 around a full circumference of the lid rim 210. Axes A and B illustrate two points where the pressing portion 316 engages the lid rim 210. In other examples, the pressing portion 316 may be arranged to engage the lid rim 210 about a section of the full circumference of the lid rim 210. In this example, the pressing portion 316 is arrangeable to engage the lid along direction X.

[105] Fig. 6 illustrates a method of securing the lid 200 to the drinking cup 100.

[106] The method comprises providing a beverage container, such as the drinking cup 100, and, separately, a lid 200 (S400). The method comprises placing the lid 200 on the drinking cup 100 (S402). Suitably, the lid 200 is placed such that the lid rim 210 engages the cup rim 110. The method comprises manually engaging a gripping portion 320 of the utensil 300 (S404). The method further comprises engaging the lid 200 with the pressing portion 316 (S406). The method comprises urging the lid 200 against the drinking cup 100, thereby securing the lid 200 to the drinking cup 100 (S408).

[107] The method may further comprise urging a lip 112 of the drinking cup 100 into the recess 212 of the lid 200.

[108] Fig. 7 shows a perspective view of the drinking cup 100 with the lid 200 secured to the drinking cup 100. The utensil 300 engages the lid 200 and the drinking cup 100 in order to remove the lid 200 from the drinking cup 100.

[109] When access to contents of the drinking cup 100 is desired, the lid 200 may first need to be removed from the drinking cup 100. Conveniently, the utensil 300 comprises the lid remover 340. In this example, the lid remover 340 is provided in the base 310 of the utensil 300. A portion of the side wall 312 is cut away in order to form the lid remover 340.

[110] The lid remover is configurable to engage the lid 200 when secured to the drinking cup 100. Here, one edge of the aperture forming the lid remover is arranged to contact the lid at or under the rim, and an opposed edge of the aperture is arranged to contact the top of the lid. The utensil can then be used to remove the lid by acting as a lever to peel off the lid. It will be appreciated that the aperture forming the lid remover is sized suitably to easily contact the lid in the required manner. Preferably, the aperture is sized so as to contact the lid at around a mid-point of the lid. As shown in the exemplary embodiments, the opposed edges are preferably arranged across the axis of the utensil so that the gripping portion or pressing portion can be used to apply the leverage on the utensil. For instance, in the exemplary embodiment showing a generally circular utensil, the opposed edges are arranged to extend circumferentially. In Figure 2, the lid remover is shown wherein the two opposed edges of the aperture forming the lid remover are substantially straight. The aperture may vary according to specific applications. Alternatively, as shown in Figure 3, one or both opposed edges may comprise engaging features such as teeth 342. The teeth 342 are formed by a tapered portion of the side wall 312 of the base 310, such that each tooth is insertable between the drinking cup 100 and the lid 200.

[111] In this example, the lid remover 340 comprises a pair of teeth 342. In other examples, the lid remover 340 may comprise a different number of teeth, such as a single tooth, three teeth or any other plurality of teeth.

[112] The pair of teeth 342 is insertable between the drinking cup 100 and the lid 200 secured thereto. Suitably, the pair of teeth 342 may be inserted between the cup rim 110 and the lid rim 210. When inserted, the utensil 300 is pivotable about the pair of teeth 342 in order to engage the lid 200 with an abutment portion 344 of the lid remover 344. In this example, the abutment portion 344 is formed by the base 310.

[113] The pair of teeth 342 and the abutment portion 344 are arranged to cooperate for removing the lid 200 from the drinking cup 100. Suitably, when the pair of teeth 342 and the abutment portion 344 are arranged to engage the lid 200, the utensil 300 is rotatable in order to exert a torque onto the lid 200. Conveniently, the utensil 300 is thereby arrangeable to lift the lid 200 from the drinking cup 100. Thereby the lid 200 may be removed from the drinking cup 100.

[114] Optionally, the lid remover may include an edge protector (not shown). For instance, a silicone or other pliable ring that engages adjacent either side of the edge to provide a cover thereto.

[115] In some examples, the lid 200 is removable without detriment to the lid 200, such that the lid 200 can again be secured to the drinking cup 100.

[116] Figs. 7 and 8 illustrate alternative methods of removing the secured lid 200 from the drinking cup 100. The alternative embodiments involve spinning the utensil through 180° so that the removal is caused by respective lifting of the pressing portion or lifting of the gripping portion.

[117] The method, as explained with reference to Figure 9, comprises providing a drinking cup 100 with a lid 200 secured thereto. The method comprises providing the utensil 300, and manually engaging the head 324 of the utensil 300. The method comprises inserting an engaging portion between the lid 200 and the drinking cup 100. Suitably, the engaging portion is inserted between the lid rim 210 and the cup rim 110. The method comprises pivoting the utensil 300 about the engaging portion. The method comprises engaging the secured lid 200 with the abutment portion of the utensil 300. The method comprises exerting a torque onto the secured lid 200 in order to remove the secured lid 200 from the drinking cup 100.

[118] Figure 10 shows an exemplary embodiment of the utensil 300 comprising a lid retainer 350 arranged for holding the lid 200.

[119] The lid retainer provides the utensil 300 with a convenient arrangement for holding the lid 200. In particular, the lid retainer 350 is suitable for retrieving the lid 200, for example retrieving a lid 200 resting atop a stack of lids, and subsequently transporting the lid 200 to the drinking cup 100. Conveniently, a need for manually handling the lid 200 may be minimised and a risk of contamination may be reduced.

[120] In some examples, the lid retainer 350 may be secured to the utensil 300 permanently, for example using adhesive or it may be formed integrally with the utensil 300. In other examples, the lid retainer 350 is detachably secured to the utensil 300. Conveniently, the lid retainer 350 is removable from the utensil 300 such that either one, or both, may be thoroughly cleaned before reattaching the lid retainer 350 to the utensil 300. In some examples, the lid retainer 350 may be replaced instead of cleaned and refitted.

[121] In some examples, the lid retainer 350 may be provided on a portion of the utensil 300 other than the base 310. In this example, the lid retainer 350 is conveniently provided on the base 310 of the utensil 300. This is convenient, because the gripping portion 320 of the utensil 300, rather than its base 310, is intended for manually engaging the utensil 300 and may therefore become dirtied easily.

[122] In this example, the lid retainer 350 is arranged to receive and retain the lid 200 in a configuration in which the pressing portion 316 faces the lid 200. Thereby, the lid 200 can be picked up and placed on the drinking cup 100 using the lid retainer 350, and immediately attached to the drinking cup 100 using the pressing portion 316. In other examples, the lid retainer 350 may retain the lid 200 in a first configuration whereas the pressing portion 316 engages the lid 200 in a second configuration, and the utensil 300 requires to be rearranged from the first to the second configuration in order to secure the lid 200 placed on the drinking cup 100.

[123] In this example, the lid retainer 350 is conveniently configured to grip onto the lid 200 with a retention force which is sufficient to lift the lid 200 using the utensil 300. In some examples, the retention force may be overcome by a combined weight of the lid 200 and the drinking cup 100 such that, when the lid 200 is secured to the drinking cup 100, the utensil 300 can be detached from the lid 200 without substantially affecting the drinking cup 100 and the lid 200 secured thereto. That is, the combined weight of the lid 200 and the drinking cup 100 may be sufficient so that the utensil 300 can be removed from the lid 200 without detaching the lid 200 from the drinking cup 100 or lifting both the lid 200 and the drinking cup 100 secured thereto. In another example, the retention force may be overcome by the combined weight of the lid 200 and a drinking cup 100 which is at least partially filled with liquid.

[124] The lid retainer 350 is arranged to attach to the lid 200 when the lid 200 is engaged with the utensil 300. Suitably, the lid retainer 350 is provided at the distal end of the base 310. When engaging the lid 200 with the utensil 300, the extended spout 220 of the lid 200 is inserted into the cavity 318 through the opening formed at the distal end. In other examples, the lid 200 may comprise some other portion or projection to which the lid retainer 350 may attach.

[125] In some examples, the lid retainer 350 may be provided in some other location of the base 310. In this example, the lid retainer 350 is fitted onto the lip 314 of the base 310. That is, the lid retainer 350 is fitted to the base 310 as an attachment. In other examples, the lid retainer 350 may be formed integrally with the utensil 300.

[126] In this example, an inner flange of the lid retainer 350 is arranged to contact the lid 200 when the lid 200 is inserted into the cavity 318. Suitably, the inner flange is arranged to extend towards the vertical axis X of the utensil 300. In this example, inner flange extends towards the vertical axis X and forms an aperture 354 into which the lid 200 is insertable. That is, in this example the lid retainer 350 forms a membrane 352 or diaphragm 352. The membrane 352 is configured to form the aperture 354 into which the lid is insertable.

[127] Conveniently, the inner flange or, in this example, the membrane 352 is arranged to press against the lid 200 in order to retain the lid 200. Suitably, the inner flange is flexible and arranged to frictionally retain the lid 200.

[128] When a portion of the lid 200, e.g. the extended spout 220, is inserted into the aperture 354, the inner flange is arranged to press against the portion of the lid 200. Thereby, the lid retainer 350 is arranged to frictionally engage the lid 200 and to retain the lid 200.

[129] Any suitable choice of flexible material suitable for engaging the lid 200 may be used for the lid retainer 350, or for the inner flange if formed separately from other parts of the lid retainer 350. For example, the lid retainer 350 may comprise a suitable choice of rubber, plastic or spring steel. Another example of a suitable material is silicone.

[130] In this example, the lid retainer 350 is integrally formed using silicone. In some examples, the lid retainer 350 may have a thickness between approximately 1mm and 2mm (millimetres) but could range between 0.1mm and 3mm dependant on the material characteristics. In one example, the central portion may have a thickness of substantially 1.5mm. The central portion may have a length between approximately 5mm and 15mm. That is, an extent of the central portion extending from the side wall towards the axis X may measure between approximately 5mm and 15mm. In one example, the central portion has a length of substantially 10mm.

[131] In this example, the lid retainer 350 is arranged to press against a lid 200 engaged by the utensil 300 along the entire circumference of the lid 200. Suitably, the lid retainer 350 extends along the entire circumference of the base 310. In other examples, a first lid retainer 350 and a second lid retainer 350 may press against the lid 200 from at least two directions. In further examples, a lid retainer 350 may be arranged to press against the lid 200 along a first direction, and further arranged to press the lid 200 against the side wall of the utensil 300 in order to thereby retain the lid 200.

[132] Other examples the lid retainer 350 may have different mechanisms for retaining the lid 200. For example, a mechanical manual-release system may be used.

[133] Figure 10 shows an example lid retainer 350 attached to the utensil 300, and a detail view A of the lid retainer 350.

[134] In this example, the lid retainer 350 is attachable to the base 310 of the utensil 300. Suitably, the lid retainer 350 is substantially ring-shaped, having a diameter similar to that of the distal end of the base 310.

[135] Conveniently, the lid retainer 350 forms a channel 356 arranged to receive the lip 314 of the base 310. Advantageously, the lid retainer 350 may be fitted onto the lip 314 and may be removed therefrom. Suitably, the lid retainer 350 is flexible. In this example, the lid retainer 350 is formed from silicone, providing the lid retainer 350 with suitable flexibility and elasticity.

[136] The lid retainer 350 comprises the membrane 352 which forms the aperture 354.

[137] Figure 11 shows an example lid retainer 350 attached to the utensil 300, and a detail view B of the lid retainer 350.

[138] A description of features similar to features already described above with references to other examples of a lid retainer 350 are omitted.

[139] In this example, the lid retainer 350 is substantially triangular in shape, having a base end and a tapered end.

[140] The base end forms the channel 356 arranged to receive the lip 314 of the base 310.

[141] The tapered end forms the inner flange which, in use, is arranged to engage the lid 200.

[142] In this example, a plurality of lid retainers 350 may be fitted to the base 310. For example, a pair of lid retainers 350 may be provided on the base 310 in opposing locations along the lip 314. However, a single lid retainer 350 may be sufficient to retain the lid 200.

[143] Each lid retainer 350 may be fitted either permanently or temporarily.

[144] A method of securing the lid 200 to the drinking cup 100 using the utensil 300 is provided. The method comprises manually engaging the gripping portion 320 of the utensil 300.

[145] The method further comprises engaging the lid 200 with the lid retainer 350 of the utensil 300. This step may include inserting a projection or other portion of the lid 200, such as the extended spout 220, into a cavity of the utensil 300 in which the lid retainer 350 is provided.

[146] The method further comprises lifting the utensil 300, thereby also lifting the lid 200 which is being retained by the lid retainer 350.

[147] The method further comprises locating the lid 200 on the drinking cup 100 using the utensil 300. This step may include placing the rim of the lid 200 on the lip of the drinking cup 100.

[148] The method further comprises urging the lid 200 against the drinking cup 100 using the pressing portion 316 of the utensil 300, thereby securing the lid 200 to the drinking cup 100. This step may include locating the lip of the drinking cup 100 in a recess formed by the lid 200.

[149] The method further comprises lifting the utensil 300 and thereby detaching the utensil 300 from the lid 200.

[150] Conveniently, using the utensil 300 may make outfitting a plurality of drinking cup 100 with lids more efficient. For example, when a stack of lids is provided it may be possible to pick up a first lid 200 from the top of the stack and secure it to a first drinking cup 100. A second lid 200 may then be fastened to a second drinking cup 100 in a similar way. Using the utensil 300, this may be done not only hygienically but also in rapid succession.

[151] Fig. 12 shows another example of a utensil 400.

[152] Conveniently, the utensil 400 may be used in an upside-down (or inverted) configuration. Suitably, the utensil 400 forms a passage 402 and two sets of pressing portions 404, 406 formed at either end of the passage. In use, the extended spout 220 of the lid 200 may be inserted into the passage from either end of the passage. The utensil is operable to secure the lid to the drinking cup 100 in either configuration. That is, the utensil may be rotated by 180° (degrees) and is suitable to engage the lid 200 in either configuration.

[153] In this example, the utensil 400 comprises an outer portion formed on a substantially circular perimeter enclosing the passage 402. Further, the utensil comprises a resilient portion 420 which extends inwardly from outer portion to restrict the passage. In this example, the resilient portion 420 is also referred to as a flexible flange ring 420.

[154] The outer portion comprises a support member in the form of a rigid insert 412. In this example, the rigid insert is generally ring shaped. That is, the rigid insert extends about the substantially circular central passage 402. Conveniently, the passage is dimensioned large enough to receive the spout 220, or other portion, of the lid 200. Suitably, the rigid insert has an inner diameter which is larger than the outer diameter of the spout 220, or other portion.

[155] Conveniently, the cross-section of the rigid insert 412 is chosen to ensure a secure grip on the utensil 400. Thereby the rigid insert 412 may be used to handle the utensil 400, removing the need for a separate handle, but in some examples a handle may be provided.

[156] In some examples, the rigid insert 412 is formed from stainless steel, aluminium or another metal or alloy with similar properties to withstand thorough and repeated cleaning of the utensil 400, as may be required in a professional commercial environment. Conveniently, the ring-shaped rigid insert 412 of this example provides for a shape which is easy to clean, without recesses or edges that may make achieving a particular level of cleanliness more difficult. Suitably, the ring-shaped rigid insert 412 has a substantially circular cross-section.

[157] Conveniently, the ring-shaped rigid insert 412 has a shape which is both compact and simple. Thereby manufacturing, cleaning and storing of the utensil 400 may be improved. Also, two or three fingers may suffice for handling the utensil 400.

[158] Conveniently, the utensil 400 is provided with the resilient portion 420 which provides means for engaging the lid 200.

[159] Suitably, the flexible flange ring 420 has a shape to fit the rigid insert 412. In this example, the flexible flange ring 420 is substantially circular and forms a channel 422 configured to receive the rigid insert 412. The flexible flange ring 420 is another example of a lid retainer 350, as described earlier with reference to Fig. 10. A detailed description is therefore omitted.

[160] Conveniently, the flexible flange ring 420 is stretchable for fitting to the rigid insert 412. Thereby the flange ring 420 may be fitted to the rigid insert 412 and a secure fit provided. In some examples, the flange ring 420 is permanently fixed to the rigid insert 412, for example using adhesive, but in this example the flange ring 420 is removable from the rigid insert 412.

[161] In some examples, the flexible flange ring 420 is formed from rubber, silicone or any other suitable choice of flexible material. Conveniently, the material is chosen to withstand repeated and thorough cleaning, while in other examples the flexible flange ring 420 is disposable.

[162] In some examples, the flexible flange ring 420 is arranged to be engaged manually. Conveniently, the flexible flange ring encloses a portion of the rigid insert 412 such that a user will normally hold the utensil 400 by contacting the flexible flange ring, rather than the rigid insert. Thereby a more secure grip on the utensil 400 may be provided. It is envisaged, for example, that handling the utensil 400 at the flexible flange ring may be more convenient with moist hands than directly holding the rigid insert 412, as the surface of the rigid insert may be relatively smooth. Conveniently, the flexible flange ring 420 may extend about the rigid insert 412, by receiving the rigid insert 412 in the channel 422, and provide a surface for improved handling.

[163] The flexible flange ring 420 comprises a flange 424 which, in use, extends towards the centre of the central aperture 402. Suitably, the flange 424 is large enough to engage the extended spout 220 of the lid 200 when it is being inserted into the central aperture 402 of the utensil 400. When inserted, the flange 424 is deformed and arranged to press against the extended spout 220, thereby attaching to the lid 200.

[164] Suitably, the flange 424 is arranged to extend inwardly with respect to other portions of the flexible flange ring 420, i.e. towards the centre of the flange ring 420. In this example, the flange 424 forms a substantially circular inner aperture 426. That is, the flange 424 is arranged to form a substantially flat disc with an inner aperture 426. In other words, the flexible flange ring 420 comprises a punctured membrane.

[165] Conveniently, the flange 424 extends substantially parallel to the flat faces of the rigid insert 412. Thereby ease of use, particularly in relation to insertion of the extended spout 200, may be provided.

[166] Once inserted into the central aperture 402, the lid 200 is retained by the flexible flange ring 420. The lid 200 may then be moved and secured to a drinking cup 100 using the utensil 400. Thereby convenient and hygienic means for handling both lid 200 and drinking cup 100 may be provided, as a need for manual handling of the lid 200 and the drinking cup 100 is minimised.

[167] Conveniently, the utensil 400 is easy to store. As the utensil 400 is substantially flat, it may be placed inside a drawer or other compartment without taking up much space. Alternatively, the utensil 400 may be hung to a nail or hook or similar device. Also, the utensil 400 may be stored easily on a stack of lids 200.

[168] Fig. 13 shows another example of a utensil 500.

[169] The utensil 500 has a shape of a partial disk which is punctured and defines a passage 502 at its centre.

[170] In this example, the disk is generally flat. Accordingly, the disk has a flat top side and a flat bottom side. A first pressing portion 504 is formed by the top side, while a second pressing portion 506 is formed by the bottom side. In use, the utensil is operable in a regular configuration or an inverted configuration for securing the lid 200 to the container 100.

[171] The utensil 500 comprises an outer portion 510 and a resilient portion 520. In this example, the outer portion is a rigid body. Conveniently, the utensil may be handled by manually engaging the outer portion.

[172] In this example, the resilient portion comprises three flexible flanges 522. Conveniently, the flexible flanges 522 are fixed to the outer portion 510. In some examples, the flexible flanges are removable from the outer portion, but in this example they are fixed thereto permanently. A flange 522 may be fixed to the outer portion using, for example, a suitable adhesive.

[173] Fig. 14 shows another example of a utensil 600.

[174] In this example, the utensil 600 is secured to a rim of a second drinking cup 100-2. Conveniently, the drinking cup 100-2, outfitted with the utensil, may be used to retrieve a lid 200, and to secure the lid 200 to another drinking cup 100.

[175] Suitably, an outer portion 610 of the utensil may receive a lip of the second drinking cup 100-2 in a suitably sized channel 612. By holding onto the base of the second drinking cup 100-2, a user may engage an extended spout 220 of a lid 200 by means of the utensil. The user may then locate the lid 200 on the rim of the drinking cup 100 and, using the rim of the second drinking cup 100-2 to press, secure the lid 200 to the drinking cup 100.

[176] In some examples, the second drinking cup 100-2 as well as the utensil 600 are disposable. Once they have become dirtied, a new drinking cup may be fitted with a new utensil 600.

[177] The utensil may be manufactured industrially. For example, the utensil may be spun, pressed, rolled, or moulded. An industrial application of the example embodiments will be clear from the discussion herein.

[178] Although preferred embodiment(s) of the present invention have been shown and described, it will be appreciated by those skilled in the art that changes may be made without departing from the scope of the invention as defined in the claims.

CLAIMS

1. A utensil for use with a lid of a container, the utensil comprising:

a pressing portion, a gripping portion, and a lid retainer;

wherein the gripping portion is manually engageable to urge the pressing portion against said lid and the pressing portion comprises a rigid distal end extending along a closed loop to form a passage and for being received by the lid retainer;

wherein

the lid retainer comprises a flexible membrane forming an aperture, the flexible membrane comprising;

an outer portion having a channel to receive and attach to the rigid distal end,

wherein the outer portion is arranged to fit around said lid for, in use, pressing against said lid when fitting said lid to said container; and

a resilient portion that extends inwardly from the outer portion to restrict the passage,

wherein the resilient portion is arranged to receive and urge said lid toward an opposed part of the utensil to grip said lid.

2. The utensil according to claim 1, wherein the resilient portion continuously extends along the whole outer portion.

3. The utensil according to any previous claim, wherein the resilient portion is resiliently compressible.

4. The utensil according to any previous claim, wherein the resilient portion is resiliently flexible.

5. The utensil according to claim 1, wherein the rigid distal end is readily separable from the lid retainer.

6. The utensil according to claim 1, wherein the channel of the outer portion is resiliently deformable to expand an opening of the channel and to receive the rigid distal end of the pressing portion.