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(54) **REFILLABLE SOFT FOOD CONTAINER**

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USPC **426/383; 426/394; 383/42**

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(57)

ABSTRACT

(22) Filed: **Aug. 1, 2012**

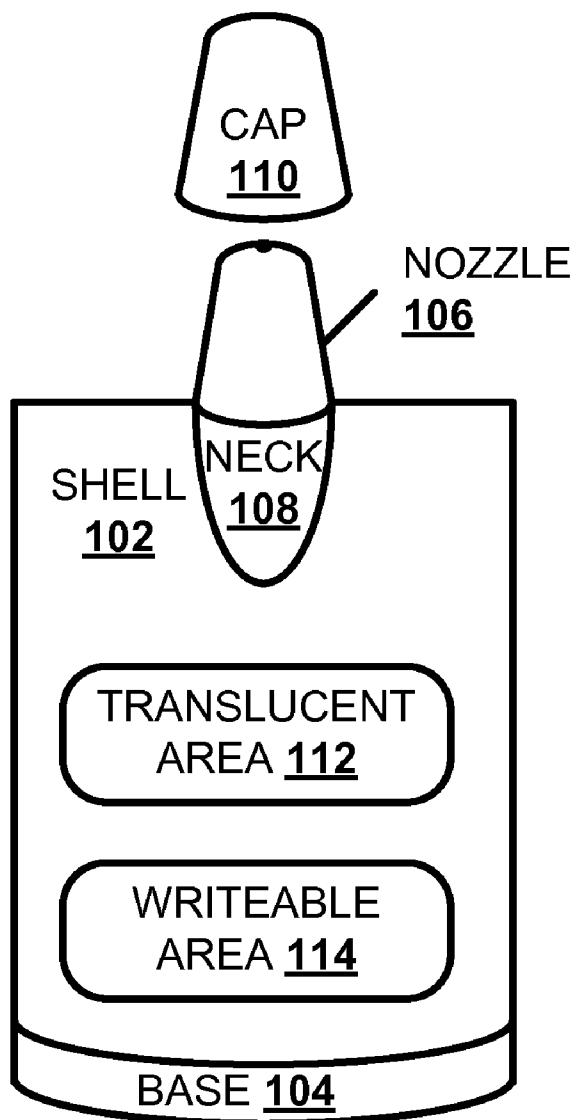
In one embodiment, a soft food container may be refillable with an interchangeable nozzle system. A base **104** may have a resealable opening **142** to receive a soft food product. A nozzle opening **302** may receive a food nozzle. A pressure release nozzle **352** may disperse the soft food product. A pliable shell may connect the base **104** to the nozzle opening **302**.

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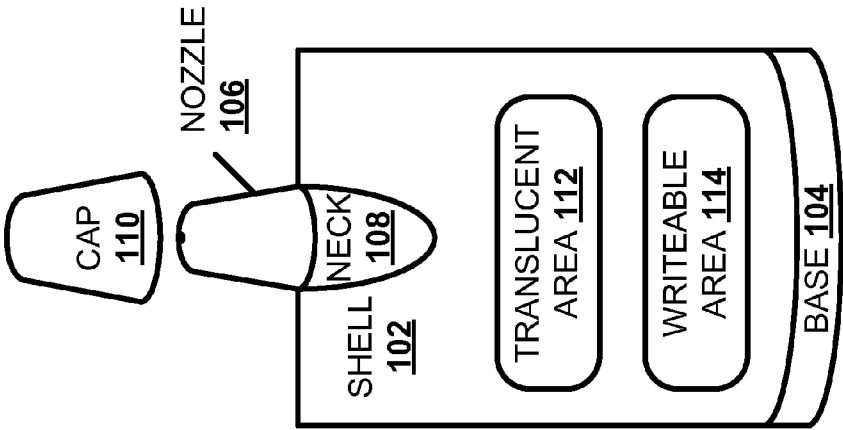


Figure 1a

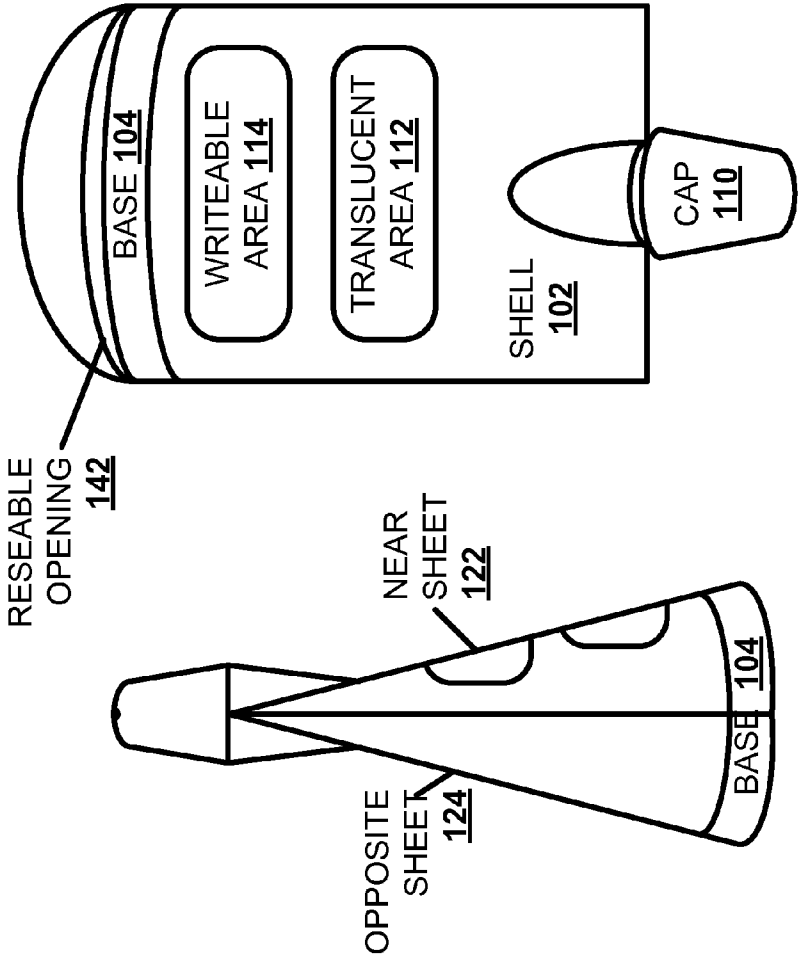


Figure 1b

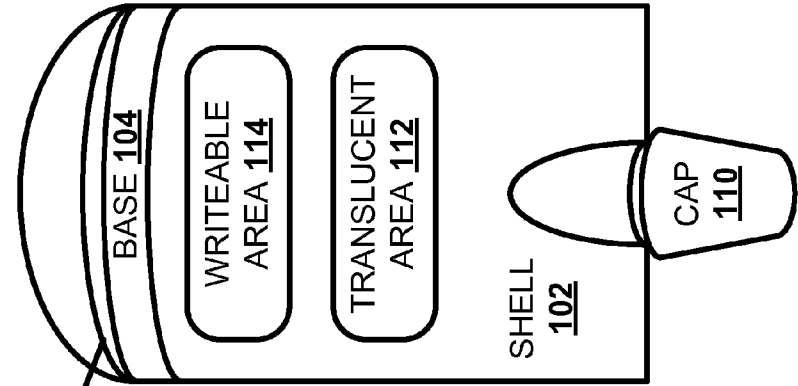


Figure 1c

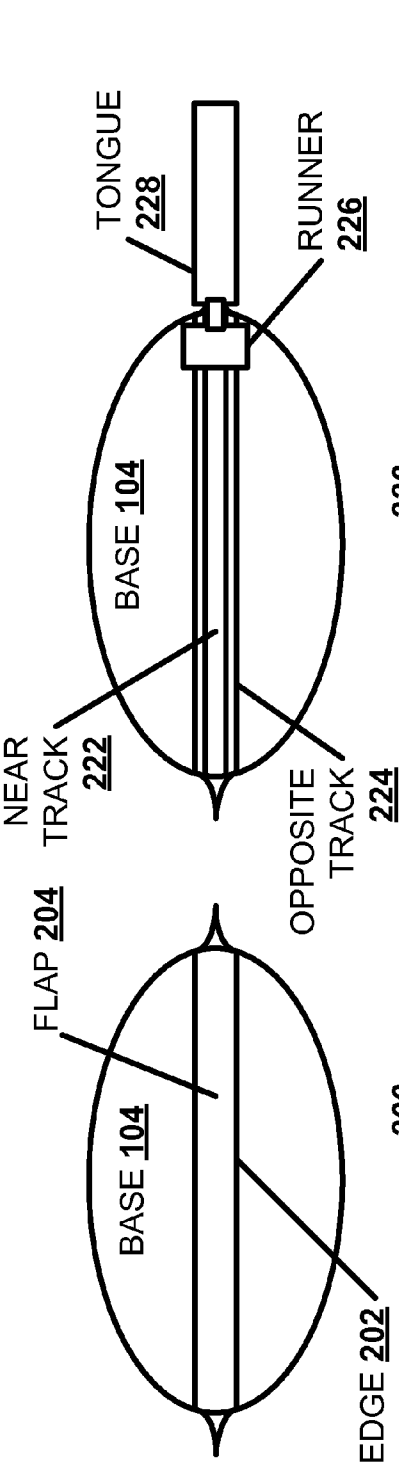


Figure 2a

220

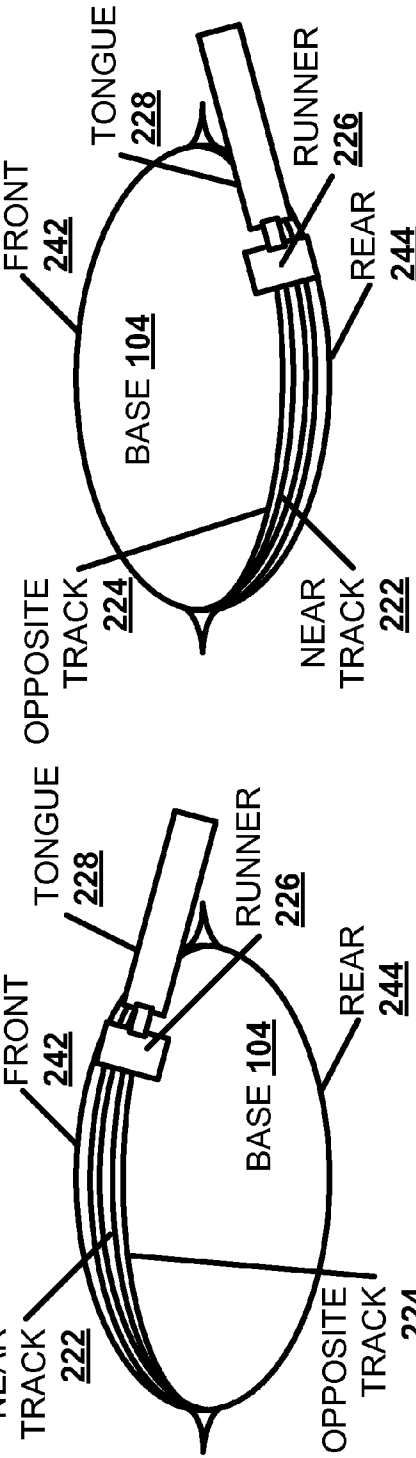


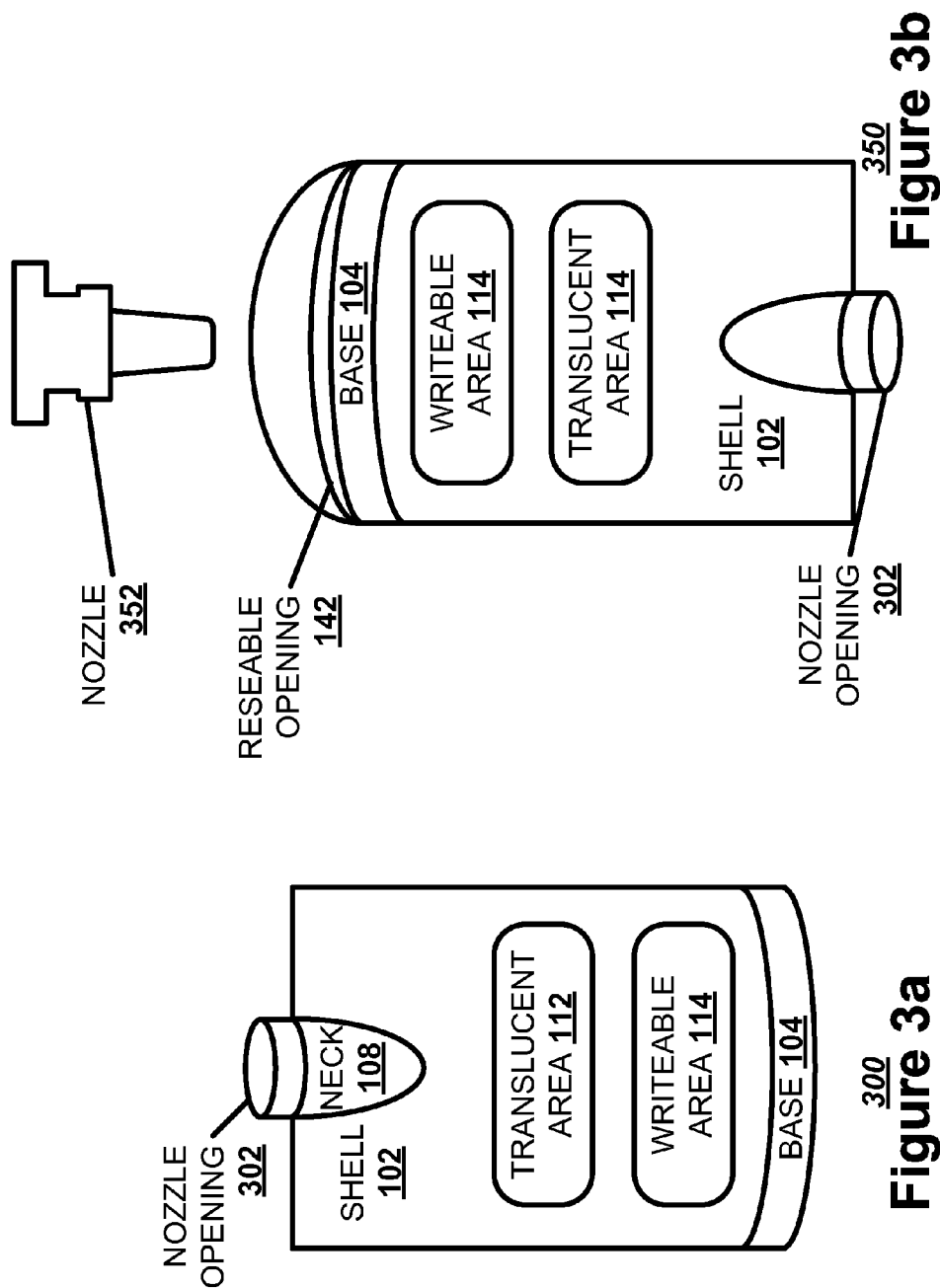
Figure 2b

260

Figure 2c

Figure 2c

240



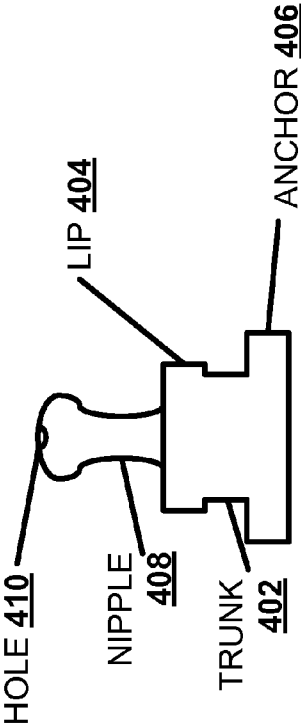


Figure 4a

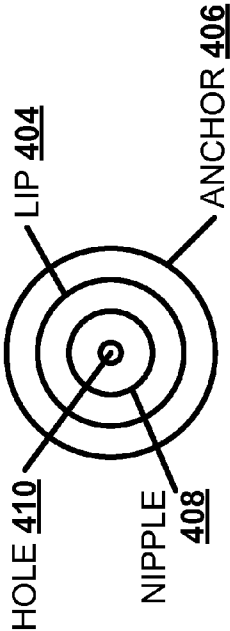


Figure 4b

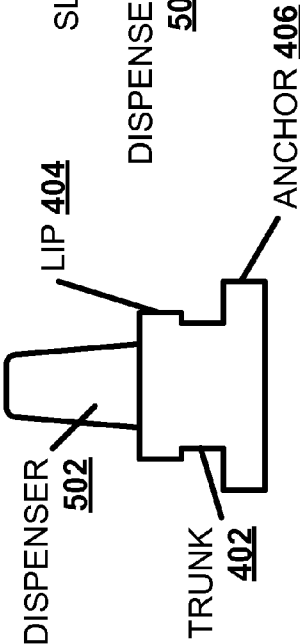


Figure 5a

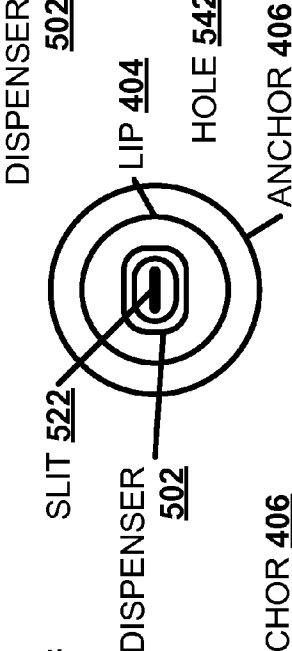


Figure 5b

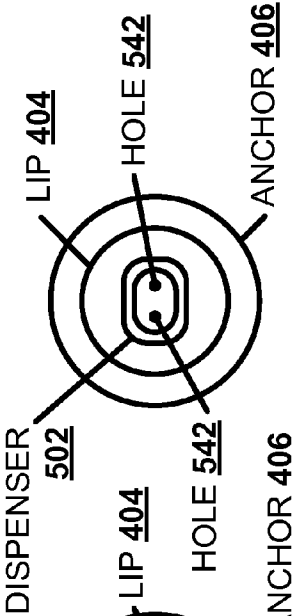


Figure 5c

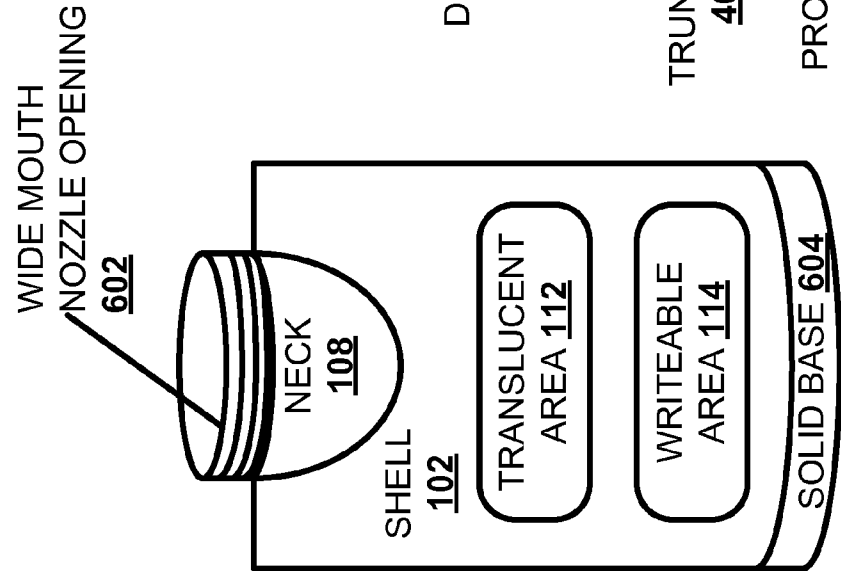


Figure 6a

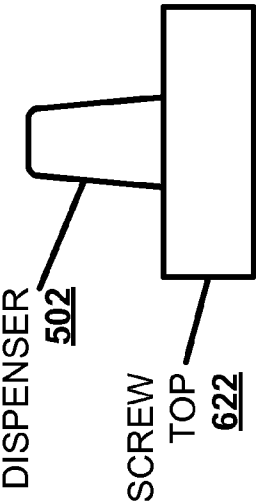


Figure 6b

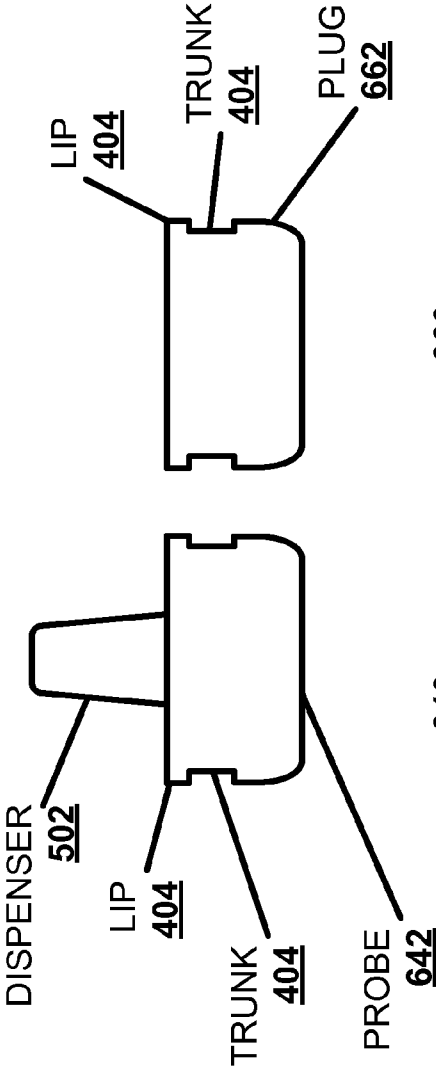


Figure 6c

Figure 6d

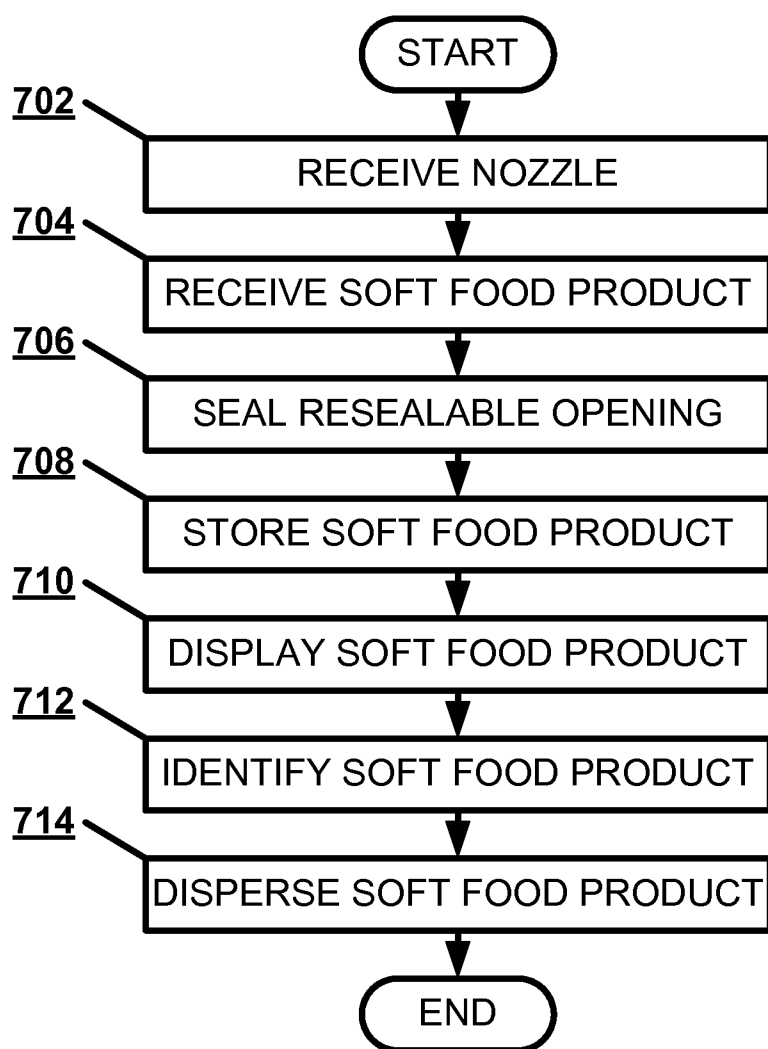


Figure 7

REFILLABLE SOFT FOOD CONTAINER

BACKGROUND

[0001] Food containers may take many different forms. Tupperware® may be used to store food left over from an earlier meal. Food may come wrapped in a plastic sheets that self-seal. Styrofoam® and cardboard containers may be used for fast food. Aluminum foil may allow food to be warmed in a consistent manner. Glass jars may lengthen the storage period for such food products.

SUMMARY

[0002] This Summary is provided to introduce a selection of concepts in a simplified form that is further described below in the Detailed Description. This Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter.

[0003] Embodiments discussed below relate to a refillable soft food container with an interchangeable nozzle system. A base may have a resealable opening to receive a soft food product. A nozzle opening may receive a food nozzle. A pressure release nozzle may disperse the soft food product. A pliable shell may connect the base to the nozzle opening.

DRAWINGS

[0004] In order to describe the manner in which the above-recited and other advantages and features can be obtained, a more particular description is set forth and will be rendered by reference to specific embodiments thereof which are illustrated in the appended drawings. Understanding that these drawings depict only typical embodiments and are not therefore to be considered to be limiting of its scope, implementations will be described and explained with additional specificity and detail through the use of the accompanying drawings.

[0005] FIGS. 1a-c illustrate, in diagrams, one embodiment of a soft food container.

[0006] FIGS. 2a-d illustrate, in diagrams, one embodiment of a base of the soft food container.

[0007] FIGS. 3a-b illustrate, in diagrams, one embodiment of a pliable durable food containment body.

[0008] FIGS. 4a-b illustrate, in diagrams, one embodiment of a nipple food nozzle.

[0009] FIGS. 5a-c illustrate, in diagrams, one embodiment of a dispenser food nozzle.

[0010] FIGS. 6a-d illustrate, in diagrams, one embodiment of a top loading soft food container.

[0011] FIG. 7 illustrates, in a flowchart, one embodiment of a method of storing soft food in a refillable soft food container.

DETAILED DESCRIPTION

[0012] Embodiments are discussed in detail below. While specific implementations are discussed, it should be understood that this is done for illustration purposes only. A person skilled in the relevant art will recognize that other components and configurations may be used without parting from the spirit and scope of the subject matter of this disclosure. The implementations may be a method, a pliable durable food containment body, or a soft food container.

[0013] Soft food products, such as baby food, applesauce, or mashed potatoes, may be easily stored in a pliable tube for

easy use and portability. The soft food product may be squeezed through a nozzle of the tube directly into the mouth of the eater. Generally, the pliable tube may be discarded after the food has been consumed. By making a soft food container refillable, the soft food container may be reused, or used by people who make their own soft food product. Additionally, the soft food container may have an interchangeable nozzle to allow the soft food container to be customized to the user, such as having a pressure release nozzle for dispersing the soft food product to infants. A pressure release nozzle disperses soft food product when pressure is applied to the sides of the nozzle. The pressure release nozzle may allow a user to avoid an accidental dispersal of soft food.

[0014] Thus, in one embodiment, a soft food container may be refillable with an interchangeable nozzle system. A base may have a resealable opening to receive a soft food product. A nozzle opening may receive a food nozzle. A pressure release nozzle may disperse the soft food product. A pliable shell may connect the base to the nozzle opening.

[0015] FIG. 1a illustrates, in a diagram, one embodiment of a front view 100 of a soft food container. The soft food container may have a pliable shell 102 atop a base 104 to store a soft food product. The pliable shell 102 may be thermally conductive to allow the soft food product to be easily heated or cooled. The pliable shell may be made of an appliance safe material. An appliance safe material is a material that does not interact in a harmful manner with an appliance, such as a microwave, freezer, dishwasher, or other household appliances. The base 104 may allow the soft food container to stand upright when the soft food container is not in use.

[0016] A food nozzle 106 may protrude from a neck 108 in the pliable shell 102. The food nozzle 106 may disperse the soft food product. The food nozzle 106 may be a pressure release nozzle, a nozzle that disperses food when pressure is applied to the sides of the nozzle. The food nozzle 106 may have a cap 110 to prevent the soft food product from leaking. The pliable shell 102 may be translucent or have a translucent area 112 to display the soft food product to the consumer. The pliable shell 102 may have a writeable label area 114 to allow a consumer to label the soft food product contained in the soft food container 100.

[0017] FIG. 1b illustrates, in a diagram, one embodiment of a side view 120 of the soft food container. The pliable shell 102 may be created by connecting a near thermally conductive sheet 122 to an opposite thermally conductive sheet 124 on opposing ends. Thus, the soft food container may be stored flat when empty.

[0018] FIG. 1c illustrates, in a diagram, one embodiment of a loading position 140 for the soft food container. The cap 110 may be placed on the food nozzle to prevent spillage. The soft food container may be inverted with the base 104 facing up. A resealable opening 142 in the base 104 may be open to receive soft food product. A user may fill the soft food container with soft food product through the resealable opening 142. Once the soft food container is full, the user may reseal the resealable opening 142.

[0019] FIG. 2a illustrates, in a diagram, one embodiment of a base 104 of the soft food container with a touch resealable opening 200. The base 104 may have an edge 202 along a near side of the resealable opening 142. The base 104 may have a flap 204 along an opposite side of the resealable opening that bonds with the edge 202 to seal the resealable opening 142. The flap 204 may bond with the edge 202 by a resealable adhesive present on the flap 204. Alternately, the surface of

the flap **204** may be covered by shaped dimples that protect adhesive pockets from the surface of the edge **202**. By pressing the flap **204**, the user may flatten the dimples, bringing the adhesive into contact with the surface of the edge **202**.

[0020] FIG. **2b** illustrates, in a diagram, one embodiment of a base **104** of the soft food container with a two track resealable opening **220**. The base **104** may have a near interlocking track **222** on a near side of the two track resealable opening **220**. The base **104** may have an opposite interlocking track **224** on an opposite side of the two track resealable opening **220**. A user may apply a finger pressure to connect the near interlocking track **222** to the opposite interlocking track **224**. Alternately, a runner **226** may join the near interlocking track **222** to the opposite interlocking track **224**. A tongue **228** may pull the runner **226** along the near interlocking track **222** and the opposite interlocking track **224**.

[0021] The resealable opening **142** may be off center on the base **104** to reinforce the base **104** under the center of gravity created by the soft food. FIG. **2c** illustrates, in a diagram, one embodiment of a base **104** of the soft food container with a front off-center resealable opening **240**. The near interlocking track **222** and the opposite interlocking track **224** may be near the front **242** of the soft food container and away from the rear **244** of the soft food container.

[0022] Alternately, FIG. **2d** illustrates, in a diagram, one embodiment of a base **104** of the soft food container with a rear off-center resealable opening **260**. The near interlocking track **222** and the opposite interlocking track **224** may be near the rear **244** of the soft food container and away from the front **242** of the soft food container.

[0023] The soft food container may have interchangeable nozzles to allow customization of the soft food container. FIG. **3a** illustrates, in a diagram, one embodiment of a front view **300** of a pliable durable food containment body. A pliable durable food containment body is a food containment body that may be easily constricted to force the food through the nozzle, while still durable enough to prevent punctures or damage. A pliable durable food containment body may forgo any exterior protection, such as a hardened exterior container. The neck **108** may have a nozzle opening **302** for receiving a food nozzle, such as a pressure release nozzle. The pliable shell **102** may connect the base **104** to the nozzle opening **302**.

[0024] FIG. **3b** illustrates, in a diagram, one embodiment of the insertion **350** of a pressure release nozzle **352** into the pliable durable food containment body. The soft food container may be inverted with the base **104** facing up. The base **104** may have a resealable opening **142** to receive a soft food product. The resealable opening **142** in the base **104** may be open to receive the pressure release nozzle **352**. A user may insert the pressure release nozzle **352** into the nozzle opening **302**. A user may cap the pressure release nozzle **352** to prevent leakage during filing. Once the soft food container is full, the user may reseal the resealable opening **142**.

[0025] FIG. **4a** illustrates, in a diagram, one embodiment of a side view **400** of a nipple food nozzle. The nipple food nozzle may have a trunk **402** that lodges in the nozzle opening **302**. A lip **404** may keep the nipple food nozzle from falling back into the pliable durable food containment body. The nipple food nozzle may be made of a soft material, such as soft plastic, to allow the lip **404** to be distorted for insertion into the nozzle opening **302**. An anchor **406** may keep the nipple food nozzle from falling out of the pliable durable food containment body. A nipple **408** may have a hole **410** for dispersing the soft food product. The hole **410** may be opened

by applying pressure to the sides of the nipple **408**. FIG. **4b** illustrates, in a diagram, one embodiment of a top view **450** of the nipple food nozzle.

[0026] FIGS. **5a** illustrates, in a diagram, one embodiment of a side view **500** of a dispenser food nozzle. The dispenser food nozzle may have a trunk **402** that lodges in the nozzle opening **302**. A lip **404** may keep the dispenser food nozzle from falling back into the pliable durable food containment body. The dispenser food nozzle may be made of a soft material, such as soft plastic, to allow the lip **404** to be distorted for insertion into the nozzle opening **302**. An anchor **406** may keep the dispenser food nozzle from falling out of the pliable durable food containment body. A user may control dispersal of the soft food product by applying pressure to the sides of a dispenser **502**.

[0027] FIG. **5b** illustrates, in a diagram, one embodiment of a top view **520** of a slit dispenser food nozzle. The slit **522** may be opened by applying pressure to the sides of the dispenser **502**, pulling the sides of the slit **522** apart. FIG. **5c** illustrates, in a diagram, one embodiment of a top view **520** of a two-hole dispenser food nozzle. Each hole **542** may be opened by applying pressure to the sides of the dispenser **502**, widening the holes **542**.

[0028] A soft food container may be top loading. FIG. **6a** illustrates, in a diagram, one embodiment of a top loading pliable durable food containment body **600**. The top loading pliable durable food containment body **600** may have a wide-mouth nozzle opening **602** to allow soft food to be inserted into the pliable shell **102**. The wide mouth nozzle opening **602** may have striations to allow for screw top nozzle to attach. The top loading pliable durable food containment body **600** may have a solid base **604** to prevent blowouts.

[0029] FIG. **6b** illustrates, in a diagram, one embodiment of a screw top nozzle **620**. The screw top nozzle **620** may have a dispenser **502** atop a screw top **622**. The screw top **622** may allow the dispenser **502** to be screwed onto the wide mouth nozzle opening **602**. A user may control dispersal of the soft food product by applying pressure to the sides of a dispenser **502**.

[0030] Alternately, the top loading pliable durable food containment body **600** may be used with an insertable nozzle. FIG. **6c** illustrates, in a diagram, one embodiment of an insertable nozzle **640**. The insertable nozzle **640** may have a trunk **402** that lodges in the wide mouth nozzle opening **602**. A lip **404** may keep the insertable nozzle **640** from falling back into the pliable durable food containment body. A probe **642** may facilitate inserting the insertable nozzle **640** into the pliable durable food containment body while keeping the insertable nozzle **640** from dislodging. The insertable nozzle **640** may be made of a soft material, such as soft plastic or rubber, to allow the lip **404** and probe **642** to be distorted for insertion into the nozzle opening **302**. A user may control dispersal of the soft food product by applying pressure to the sides of a dispenser **502**.

[0031] A top-loading stopper may replace the nozzle during freezing or heating to prevent the accidental dispersal of food. FIG. **6d** illustrates, in a diagram, one embodiment of a top-loading stopper **660**. The top-loading stopper **660** may have a trunk **402** that lodges in the wide mouth nozzle opening **602**. A lip **404** may keep the top-loading stopper **660** from falling back into the pliable durable food containment body. A plug **662** may facilitate inserting the top-loading stopper **660** into the pliable durable food containment body while keeping the top-loading stopper **660** from dislodging.

[0032] FIG. 7 illustrates, in a flowchart, one embodiment of a method 700 of storing soft food in a refillable soft food container. The pliable durable food containment body may receive in a nozzle opening 302 a pressure release nozzle 352 inserted through a resealable opening 142 (Block 702). The soft food container may receive a soft food product through the resealable opening 142 in a base 104 of the pliable durable food containment body (Block 704). The soft food container may seal the resealable opening 142 (Block 706). The soft food container may store a soft food product in the pliable durable food containment body (Block 708). The soft food container may display the soft food product through a translucent area 112 of the pliable durable food containment body (Block 710). The soft food container may identify the soft food product with a writeable label area 114 on the pliable durable food containment body (Block 712). The soft food container may disperse the soft food product through a pressure release nozzle (Block 714). The soft food container may disperse the soft food product through a pressure release slit in the pressure release nozzle or through at least two pressure release holes in the pressure release nozzle.

[0033] Although the above description may contain specific details, they do not limit the claims in any way. Other configurations of the described embodiments are part of the scope of the disclosure. For example, the principles of the disclosure may be applied to each individual user where each user may individually deploy such a system. This enables each user to utilize the benefits of the disclosure even if any one of a large number of possible applications do not use the functionality described herein. Implementations are not necessarily in one system used by all users. Accordingly, the appended claims and their legal equivalents should only define the invention, rather than any specific examples given.

1-7. (canceled)

8. A pliable durable food containment body comprising:
a base having a resealable opening to receive a soft food product;
a nozzle opening for receiving a food nozzle; and
a pliable shell connecting the base to the nozzle opening.

9. The pliable durable food containment body of claim 8, further comprising:

a near interlocking track on a near side of the resealable opening; and
an opposite interlocking track on an opposite side of the resealable opening.

10. The pliable durable food containment body of claim 9, further comprising:

a runner to join the near interlocking track to the opposite interlocking track.

11. The pliable durable food containment body of claim 10, further comprising:

a tongue to pull the runner along the near interlocking track and the opposite interlocking track.

12. The pliable durable food containment body of claim 8, further comprising:

a edge along a near side of the resealable opening; and
a flap along an opposite side of the resealable opening that bonds with the edge to seal the resealable opening.

13. The pliable durable food containment body of claim 8, wherein the resealable opening is off center on the base.

14. The pliable durable food containment body of claim 8, further comprising:

a writeable label area on the pliable shell.

15. The pliable durable food containment body of claim 8, wherein the pliable shell has a translucent area to display the soft food product.

16. The pliable durable food containment body of claim 8, wherein the pliable shell is made of appliance safe material.

17. The pliable durable food containment body of claim 8, wherein the pliable shell has a near thermally conductive sheet connected on opposing ends to an opposite thermally conductive sheet.

18. A soft food container, comprising:

a pliable durable food containment body having a base with a resealable opening to receive a soft food product;

a pressure release nozzle to disperse the soft food product.

19. The soft food container of claim 18, wherein the pressure release nozzle has a pressure release slit.

20. The soft food container of claim 18, wherein the pressure release nozzle has at least two pressure release holes.

21. A food storage method, comprising:

receiving a soft food product in a resealable opening of a base;

receiving a food nozzle in a nozzle opening; and

connecting the base to the nozzle opening with a pliable shell.

22. The food storage method of claim 21, further comprising:

sealing the resealable opening with a near interlocking track on a near side of the resealable opening and an opposite interlocking track on an opposite side of the resealable opening.

23. The food storage method of claim 22, further comprising:

joining the near interlocking track to the opposite interlocking track with a runner.

24. The food storage method of claim 23, further comprising:

pulling the runner with a tongue along the near interlocking track and the opposite interlocking track.

25. The food storage method of claim 21, wherein the resealable opening is off center on the base.

26. The food storage method of claim 21, further comprising:

presenting a writeable label area on the pliable shell.

27. The food storage method of claim 21, further comprising:

displaying the soft food product using a translucent area on the pliable shell.

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