US 20090077998A1

(19) **United States**

(12) **Patent Application Publication**

(10) **Pub. No.: US 2009/0077998 A1**

(43) **Pub. Date: Mar. 26, 2009**

Lowrey et al.

(54) **REFILLABLE COOLING CONTAINER**

(76) Inventors: **Christine Lowrey**, Madison, WI (US); **Patricia Falk**, West Bend, WI (US)

Correspondence Address:
GEHRKE & ASSOCIATES, S.C.
123 N. 86th ST
WAUWATOSA, WI 53226 (US)

(21) Appl. No.: **11/860,715**

(22) Filed: **Sep. 25, 2007**

Publication Classification

(51) **Int. Cl.**
F25D 3/08 (2006.01)

(52) **U.S. Cl.** **62/457.2**

(57) **ABSTRACT**

A refillable cooling container is provided for keeping food held in any size food container cool during serving. The refillable cooling container comprises a rubber bowl having a refillable hollow core, which may be reopened and secured with a plug. The bowl can be made in various sizes and shapes such as rectilinear, square, sphere-like, oblong, etc. The various shapes would conform to standard food containers and food bowls known in the art. The refillable cooling container can be filled with water, gel, or the like as well as pre-frozen ice cubes through its opening. The plug can then be secured to prevent the water, gel, or ice from escaping the hollow core.

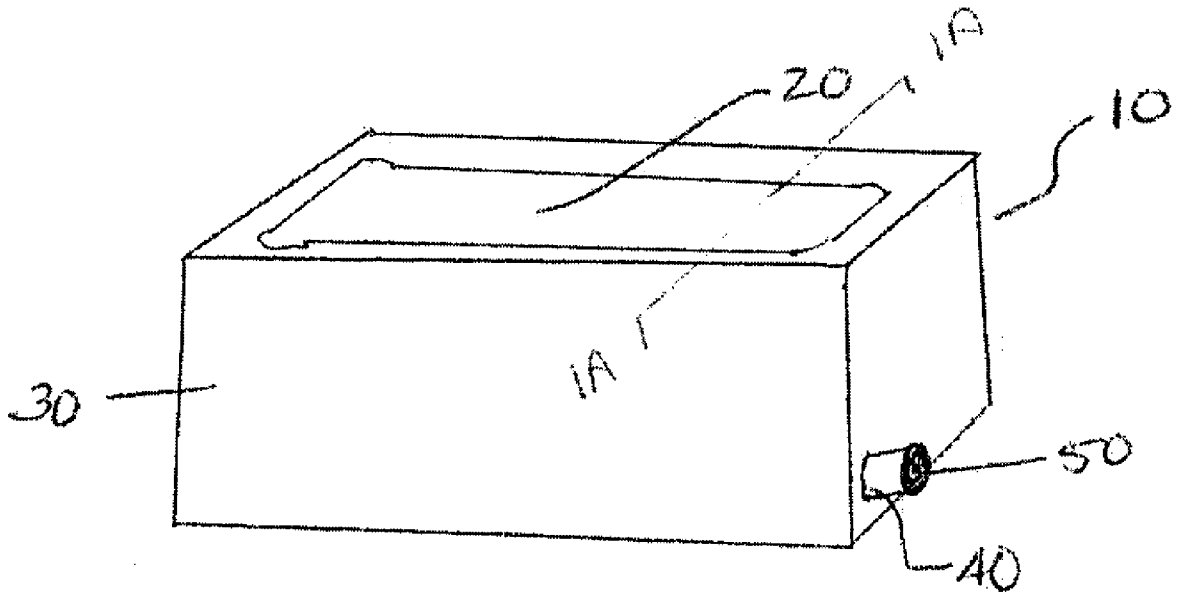


Figure 1

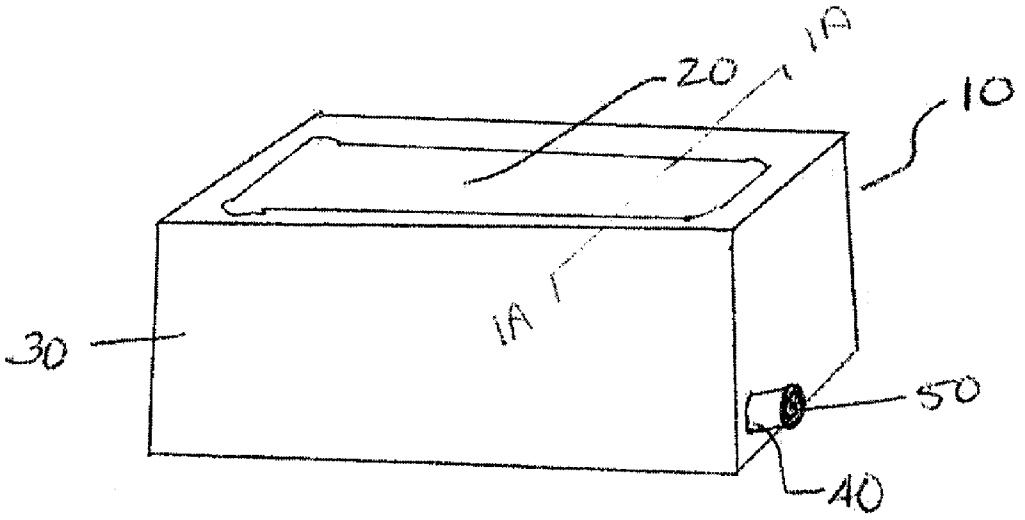


Figure 2

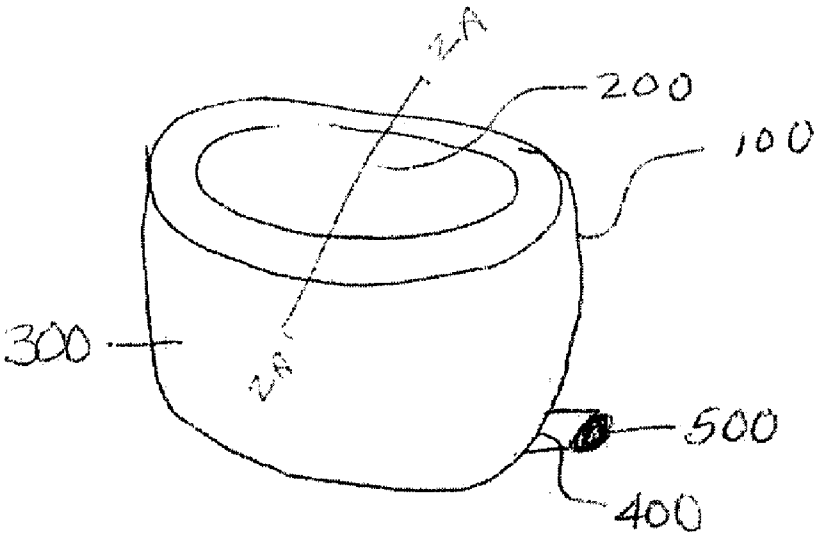


Figure 1A

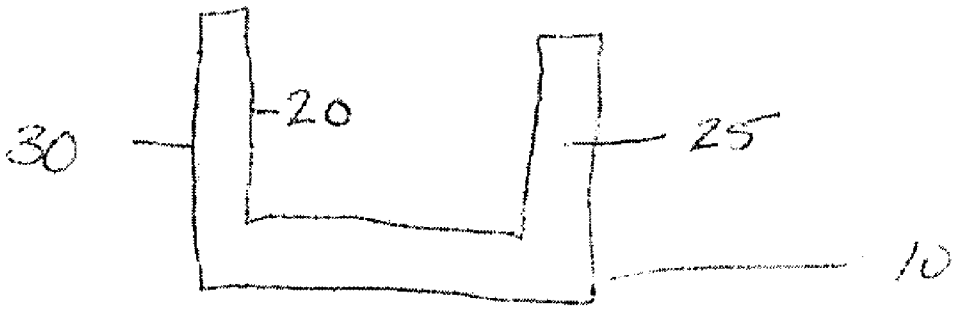
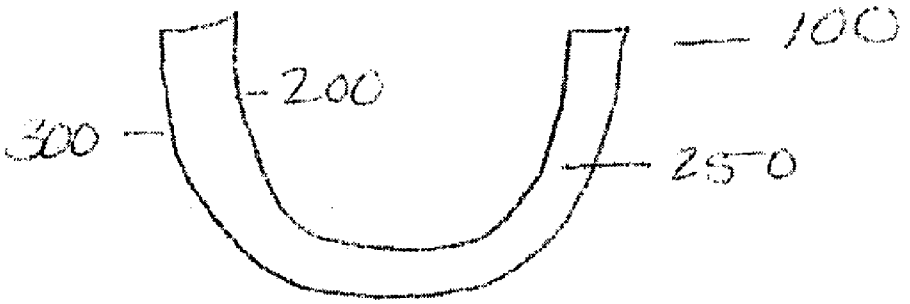


Figure 2A



REFILLABLE COOLING CONTAINER

BACKGROUND OF THE INVENTION

[0001] 1. Field of Invention

[0002] The present invention relates to a refillable cooling container used to keep food held by food containers chilled for serving purposes.

[0003] 2. Discussion of Relevant Prior Art

[0004] The use of various types of self-contained cooling containers is known in the art for keeping food in food containers cool. However, when current cooling containers thaw, the cooling containers or the ice pack portion of the cooling container must be replaced with another manufactured cooling container requiring either emptying food from one cooling container to another or using another frozen cooling container. This causes inconvenience for the consumer because they must have multiple cooling containers

[0005] While these devices offer cooling for food containers, a need exists for a cooling container that is refillable so that a consumer can quickly and conveniently replace thawed ice with fresh ice in the cooling container.

BRIEF SUMMARY OF THE INVENTION

[0006] The present invention is a new refillable cooling container. The refillable cooling container comprises a rubber bowl having a refillable hollow core, which may be reopened and secured with a plug. The bowl can be made in various sizes and shapes such as rectilinear, square, sphere-like, oblong, etc. The various shapes would conform to standard food containers and food bowls known in the art. The rubber bowl has an exterior surface and an interior surface. The space between the two surfaces creates a hollow core. This core can be filled with water, gel, or the like as well as pre-frozen ice cubes through its opening. The plug can then be secured to prevent the water, gel, or ice from escaping the hollow core.

[0007] In use, the refillable cooling container is filled with water, gel, or the like. It is then placed into a freezer. Once frozen, a food container may be place into the refillable cooling container to keep food cool. When the frozen material in the refillable cooling container melts, the food container may be removed. Then the plug can be removed and the melted substance poured out. The hollow core can then be filled with pre-frozen ice cubes and the plug may be replaced. By simply replacing the food container, cooling can continue with little interruption.

[0008] Alternatively, the hollow core of the refillable cooling container may be filled initially with pre-frozen ice cubes if the consumer has not thought ahead to pre-freeze the cooling container. Again, once the ice in the refillable cooling container melts, the plug may be removed and the core may be refilled with pre-frozen ice.

[0009] Of course, if the user is no longer in need of the cooling container for keeping food cold, they may place the cooling container with its filled core back into the freezer for future use.

[0010] The objects of the invention, along with the various features of novelty, which characterize the invention, are pointed out in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. **1** is a view of the refillable cooling container according to the present invention;

[0012] FIG. **1**A is a cross-sectional view of FIG. **1** taken along the **1***a*-**1***a* line;

[0013] FIG. **2** is an alternative embodiment of the refillable cooling container;

[0014] FIG. **2**A is a cross-sectional view of FIG. **2** taken along the **2***a*-**2***a* line.

DETAILED DESCRIPTION OF THE INVENTION

[0015] With reference now to FIGS. **1** and **2**, a new refillable cooling container embodying the principals of the current present invention will now be described.

[0016] FIG. **1** shows a refillable cooling container **10**. This refillable container is preferably made from soft rubber. Other material known in the art capable of withstanding freezing temperature may be used. The rubber or other material should be capable of withstanding washing as well to maintain the cleanliness of the refillable cooling container. The refillable cooling container **10** shown in FIG. **1** is rectangular in shape. In use, it could hold any type of rectangular food container. The refillable cooling container has a concave interior surface **20** that comes into direct contact with a food container (not shown). The refillable cooling container **10** also has an exterior surface **30**.

[0017] Looking now at FIG. **1**A, between the interior surface and the exterior surface of the refillable cooling container is a hollow core **25**. This hollow core can be filled with water, gel, or the like as well as pre-frozen ice cubes as will be discussed below. The refillable cooling container **10** has an opening **40**, which is fitted with a plug **50**. The plug **50** can be a screw type plug, friction fit plug, or any stopper known in the art.

[0018] In use, the plug **50** is removed from the opening **40**. Water, gel, or other known freezable liquid is placed into the hollow core of refillable cooling container **10** through the opening **40** and the plug **50** is replaced. The refillable cooling container **10** is then placed into a freezer. When the liquid has frozen, the refillable cooling container **10** is removed from the freezer. A food container (not shown) may be placed into the refillable cooling container to keep food cool. When the frozen liquid thaws, the food container can be removed from the refillable cooling container. If further cooling is required, the plug **50** is removed from the opening **40** and the liquid is poured out. Pre-frozen ice cubes can then be placed in the hollow core **25** and the plug **50** replaced. Once the food container is replaced in the refillable cooling container, cooling of the food can resume. If no further cooling is required, the refillable cooling container **10** may be placed back into the freezer for future use.

[0019] Alternatively, the hollow core **25** of the refillable cooling container **10** may be filled with pre-frozen ice cubes if time does not permit pre-freezing of liquid.

[0020] FIGS. **2** and **2**A show an alternative embodiment of the invention. Here the refillable cooling container **100** is shaped in a semi-sphere. This shape would be suitable for a bowl shaped food container. Refillable cooling container **100** has an interior surface **200** and an exterior surface **300**. The space between these two surfaces created a hollow core **250**, see FIG. **2**A. The refillable cooling container **100** has an opening **400** and a plug **500**. It operates in the exact same way described hereinabove in reference to refillable cooling container **10**.

[0021] With respect to the above description then, it is to be realized that variations in size, materials and shapes will readily occur to those skilled in the art, and all equivalent

relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0022] Therefore, the foregoing is considered as illustrative only of the principle of the invention and it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents be resorted to, falling within the scope of the invention.

We hereby claim:

1. A refillable cooling container comprising:
an interior surface of the refillable cooling container;
an exterior surface of the refillable cooling container;
a hollow core formed between said interior and exterior surfaces of the refillable cooling container;
and an opening disposed on the exterior surface of the refillable cooling container, said opening allowing access to said hollow core.

2. The refillable cooling container of claim **1**, further comprising a plug to seal said opening.

3. The refillable cooling container of claim **1**, wherein said refillable cooling container is soft rubber.

4. The refillable cooling container of claim **1**, wherein said refillable cooling container is rectangular in shape.

5. The refillable cooling container of claim **1**, wherein said refillable cooling container is semi-spherical in shape.

6. A refillable cooling container comprising:
an interior surface of the refillable cooling container, said interior surface being concave to allow placement of a food container;
an exterior surface of the refillable cooling container;
a hollow core formed between said interior and exterior surfaces of the refillable cooling container;
and an opening disposed on the exterior surface of the refillable cooling container, said opening allowing access to said hollow core.

7. The refillable cooling container of claim **6**, further comprising a plug to seal said opening.

8. The refillable cooling container of claim **6**, wherein said refillable cooling container is soft rubber

9. The refillable cooling container of claim **6**, wherein said refillable cooling container is rectangular in shape.

10. The refillable cooling container of claim **6**, wherein said refillable cooling container is semi-spherical in shape.

11. A method a keeping a food container chilled comprising,
placing a food container against an interior surface of a refillable cooling container filled with a frozen cooling substance,
wherein said refillable cooling container has an exterior surface and said interior surface forming a hollow core therebetween, said exterior surface further comprising an opening for filling and emptying the cooling substance.

12. The method of keeping a food container chilled of claim **11** wherein said cooling substance is a cooling fluid or frozen ice cubes.

13. The method of keeping a food container chilled of claim **11** further comprising;
placing a plug in the opening to prevent said cooling substance from escaping the hollow core of the refillable cooling container.

14. The method of keeping a food container chilled of claim **12** further comprising;
freezing the cooling fluid in the hollow core of the refillable cooling container after the cooling fluid has been added.

15. The method of keeping a food container chilled of claim **11**, wherein said refillable cooling container is rectangular in shape.

16. The method of keeping a food container chilled of claim **11**, wherein said refillable cooling container is semi-spherical in shape.

17. The method of keeping a food container chilled of claim **11**, wherein said inner surface of said refillable cooling container is concave.

18. The method of keeping a food container chilled of claim **11**, wherein said refillable cooling container is made from soft rubber.

* * * * *