PARTIALLY INSULATED DISHWARE AND COOKWARE

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APPL. NO.: 10/428,794

Filed: May 2, 2003

Related U.S. Application Data

 Provisional application No. 60/377,931, filed on May 3, 2002.

Publication Classification

 Int. Cl. A47G 19/00; A47G 21/00
 U.S. Cl. 220/574

ABSTRACT

Partially insulated dishware and cookware may be provided with selected areas of insulation to provide the user with the ability to grasp the dishware or cookware without the use of an oven mitt or other external device. The selected areas of insulation may also maintain a desired temperature for the dishware or cookware contents, provide sealing capability, and provide resistance to damage by way of shock absorption.
FIG. 3

FIG. 4
PARTIALLY INSULATED DISHWARE AND COOKWARE

CROSS REFERENCE TO RELATED APPLICATION


FIELD OF THE DISCLOSURE

[0002] The disclosure generally relates to dishware and cookware and, more particularly, relates to disposable dishware and cookware.

BACKGROUND OF THE DISCLOSURE

[0003] Disposable dishware is widely used. For example, paper plates are ubiquitous at such events as picnics, barbecues and many other social gatherings. Paper cups are used for everything from in-home drinks to dentists offices to fast food restaurants. Milk cartons and restaurant take-out packages are often made of paper material coated with a fluid impermeable layer.

[0004] In other forms of disposable or semi-disposable dishware, relatively thin layers of polypropylene or the like are used to form the dishes. Such dishes can be manufactured at such a low cost that they can be treated by the consumer as disposable, but if desired, washed and reused.

[0005] One difficulty associated with such items, however, is related to temperature exposure. For example, when such items are used within a microwave, it is common for the side of the dish to be heated sufficiently to require a consumer to use an oven mitt or the like for removal. Handles or thick insulating coats can be employed, but such steps result in added cost, potentially removing the items from the popular disposable market. Moreover, the handles and insulating coats often detract from the appearance of the dish or, in the case of a clear dish, prevent viewing of the dish contents.

[0006] Exposure to cold temperatures is equally problematic. In the case of thin polypropylene, the material becomes brittle upon freezing, such that the dish may tend to crack, especially if dropped or otherwise roughly handled. In the case of paperboard, the expansion of the contents of the dish, upon freezing, is often sufficient to rip the paper dish.

[0007] Another area which has not yet been optimized in such dishware, serverware, and cookware is in regard to food warming. After cooking, it is often desirable to maintain the food at an elevated temperature. Traditionally, warming trays with open flame heat sources, or electric heating pads have been employed. Such added equipment, however, adds additional expense and thus prohibits disposable use. Moreover, such heat sources are often in excess of the combustion or melting point of traditional disposable dishware.

SUMMARY OF THE DISCLOSURE

[0008] In accordance with one aspect of the disclosure, a dish is disclosed which may comprise of food retaining surface made of cellulosic material and an insulated layer mounted to the food retaining surface.

[0009] In accordance with another aspect of the disclosure, a dish may be provided which may comprise a food retaining surface, an insulated layer mounted to the food retaining surface, and a shock absorbent layer mounted to the food retaining surface.

[0010] These and other aspects of the disclosure will become more apparent upon reading the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a schematic representation of a dish constructed in accordance with the teachings of the disclosure;

[0012] FIG. 2 is a schematic representation of a second dish constructed in accordance with the teachings of the disclosure;

[0013] FIG. 3 is a schematic representation of a third dish constructed in accordance with the teachings of the disclosure;

[0014] FIG. 4 is a schematic representation of a fourth dish constructed in accordance with the teachings of the disclosure;

[0015] FIG. 5 is a schematic representation of a fifth dish constructed in accordance with the teachings of the disclosure;

[0016] FIG. 6 is a schematic representation of a sixth dish constructed in accordance with the teachings of the disclosure;

[0017] FIG. 7 is a schematic representation of a seventh dish constructed in accordance with the teachings of the disclosure;

[0018] FIG. 8 is a schematic representation of an eighth dish constructed in accordance with the teachings of the disclosure;

[0019] FIG. 9 is a schematic representation of a ninth dish constructed in accordance with the teachings of the disclosure;

[0020] FIG. 10 is a schematic representation of a tenth dish constructed in accordance with the teachings of the disclosure; and

[0021] FIG. 11 is a schematic representation of an eleventh dish constructed in accordance with the teachings of the disclosure.

[0022] While the disclosure is susceptible to various modifications and alternative constructions, certain illustrative embodiments thereof have been shown in the drawings and will be described below in detail. It should be understood, however, that there is no intention to limit the disclosure to the specific forms disclosed, but on the contrary, the intention is to cover all modifications, alternative constructions, and equivalents falling within the spirit and scope of the disclosure.

DETAILED DESCRIPTION OF THE DISCLOSURE

[0023] Referring now to the drawings, and with specific reference to FIG. 1, a dish constructed in accordance with the teachings of the disclosure is generally referred to by
reference numeral 20. While the dish 20 is depicted in the form of a bowl in FIG. 1, it is to be understood that the dish could be provided in any other form wherein insulation properties are desirable such as, but not limited to, plates, bowls, saucers, servers, casseroles, platters, and the like, many of which are depicted in later figures.

[0024] As shown therein, the bowl 20 may include an exterior wall 22 and a bottom wall 24. The exterior wall 22 may include a rim 26 defining an open mouth 28 to allow for access to an interior content space 30. A layer or coating 32 of insulation such as, but not limited to foam styrene, may be selectively positioned on the bowl 20 to provide for the aforementioned benefits. For example, as shown in FIG. 1, the layer 32 is provided about a lower section 34 of the bowl 20. In so doing, the user is provided with an area to grasp the bowl without risk of burning. Moreover, if the exterior wall 22 is made of a translucent cellulosic material, placement of the layer 32 about the lower section 34 still leaves an upper section 36 to serve as a area through which to view the contents of the bowl 20.

[0025] FIG. 2 depicts a similar embodiment to that of FIG. 1, but illustrates a cubic dish 38. It is to be understood that myriad other shapes are possible and encompassed within the scope of the present disclosure. Such shapes include, but are not limited to, cross-sectionally hexagonal, pentagonal, triangular, or otherwise polygonal cylinders.

[0026] FIG. 3 illustrates a cup 40 having a cylindrical side wall 42 and a closed base 44. A first band 46 of insulation is positioned about a central portion 44 of the cup 40, while a second area 48 of insulation is positioned about the base 44. The first band 46 provides an area allowing a consumer to grasp the cup 40 without subjecting the hand of the user to burning, while the second area 48 insulates the cup 40 from heat loss, and as described in further detail herein, provides shock absorption capabilities.

[0027] FIG. 4 depicts an alternative embodiment similar to the cup 40 of FIG. 3. More specifically, FIG. 4 depicts a bowl 50 having a first area 52 of insulation about a base 54 of the bowl 50, and a second area 56 of insulation about a rim 58 of the bowl 50. The bowl 50 may be made of translucent material with a middle section 60 between the first and second areas 56 being left unencumbered by the insulation for viewing purposes.

[0028] Similarly, FIGS. 5-8 depict plates with similar selective application of insulation. For example, FIG. 5 illustrates a plate 62 having a base 64 with a layer of insulation 66 thereon, while FIG. 6 illustrates a plate 68 having an upper surface 70 treated with a layer of insulation 72. The embodiment of FIG. 6 could be used as a warming plate, while the embodiment of FIG. 5 would provide a plate having shock absorption and an area for the user to safely grasp.

[0029] The plate 72 of FIG. 7 is the same as that of FIG. 6, but further includes a lid 74 which may be entirely insulated to maintain the temperature of the food placed on the plate 72. Finally, a plate 76 of FIG. 8 is similar to that of FIG. 5, but further includes a heat source 78 embodied therein. The heat source 78 may be any conventional form of heat source including, but not limited to, AC powered or battery powered induction coils or the like. The plate 76 may include a layer of insulation 80 about a base 82 thereof to hinder heat dissipation through the base 82, and rather conduct the heat generated by the source 78 through a top surface 84 and ultimately to food held thereon.

[0030] Not only can the insulation be used to insulate the contents of the dish from temperature dissipation, but the elastic or resilient nature of such materials also lends itself to make such dishes more shock absorbing and leak-resistant. For example, in each of the embodiments listed above wherein insulation is provided around a base thereof, the elastic or cushioned nature of the insulation lends itself toward absorbing the force of impact should such a dish be dropped, for example.

[0031] With regard to improved sealing capability or leak resistance, the embodiments of FIGS. 9-11 are illustrative. Starting with FIG. 9, it can be seen that a container 86 is provided that includes a cylindrical side wall 88 terminating in a rim 90. A lid 92 is provided for closing the container by way of frictional interference between its outer edge and the container rim 90. By providing a layer 94 of resilient insulation about the rim 90, a more leak resistant and sealed connection between the rim 90 and lid 92 is formed. More specifically, the insulation is sufficiently compressible to allow the lid 92 to connect to the rim 90, and sufficiently elastically resistant to move radially outwardly against the lid 92 to thereby form a more leak resistance seal.

[0032] The embodiment of FIG. 10 is similar to that of FIG. 9, but rather provides the insulation on the lid 92 as opposed to the rim 90. Finally, the embodiment of FIG. 11 provides the insulation on both the rim 90 and the lid 92. Not only do such embodiments provide leak resistance, but also enable the contents of the container 86 to be viewed if made of a clear material. Moreover, the features of any of the foregoing embodiments can be combined with the presently discussed embodiments, and vice-versa, to tailor the dishware, serverware, or cookware to the needs of the particular user.

[0033] From the foregoing, one of ordinary skill in the art will readily appreciate that partially insulated dishware, serverware, and cookware can be constructed based on the teachings of the present disclosure. Moreover, one of ordinary skill in the art will understand that variations on the disclosed embodiments can be produced without departing from the scope and protection afforded by the disclosure.

1. A dish, comprising:
   a food retaining surface made of cellulosic material; and
   an insulative layer mounted to the food retaining surface.
2. The dish of claim 1, wherein the food retaining surface is provided in the form of a plate.
3. The dish of claim 1, wherein the food retaining surface is provided in the form of a bowl.
4. The dish of claim 1, wherein the food retaining surface is provided in the form of a cup.
5. The dish of claim 1, wherein the food retaining surface is provided in the form of a drinking glass.
6. The dish of claim 1, wherein the food retaining surface is provided in the form of a platter.
9. The dish of claim 1, wherein the insulated layer is provided at a base of the food retaining surface.

10. The dish of claim 1, wherein the dish further includes a lid adapted to cover the food retaining surface.

11. The dish of claim 1, wherein the insulated layer is provided about a rim of the lid.

12. The dish of claim 1, wherein the insulative layer covers the entire lid.

13. The dish of claim 1, wherein the insulative layer is provided in the form of foam styrene.

14. The dish of claim 1, further including first and second insulative layers, the first layer being provided as a grasping area, the second layer being provided as a shock-absorbing area.

15. The dish of claim 14, wherein the second layer is provided at a base of the dish.

16. The dish of claim 1, further including a heating element mounted within the food retaining surface.

17. A dish comprising:

   a food retaining surface;

   an insulative layer mounted to the food retaining surface; and

   a shock absorbing layer mounted to the food retaining surface.

18. The dish of claim 17, wherein the insulative layer and shock absorbing layer are both manufactured from foam styrene.

19. The dish of claim 17, wherein the insulative layer is mounted about a rim of the food retaining surface.

20. The dish of claim 17, wherein the shock absorbing layer is mounted at a base of the food retaining surface.

21. The dish of claim 17, further including a lid.

22. The dish of claim 21, wherein the lid includes an insulative layer mounted about a rim of the lid.

23. The dish of claim 17, wherein an insulative layer covers the entire lid.

24. The dish of claim 17, wherein the dish is provided in the form of a plate.

25. The dish of claim 17, wherein the dish is provided in the form of a bowl.

26. The dish of claim 17, wherein the dish is provided in the form of a cup.

27. The dish of claim 17, wherein the dish is provided in the form of a drinking glass.

28. The dish of claim 17, wherein the dish is provided in the form of a pan.

29. The dish of claim 17, wherein the dish is provided in the form of a platter.

30. The dish of claim 17, further including a heating element provided in the food retaining surface.

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