Provided herein is packaging for use with a disposable cup that is adapted to hold dehydrated edible products where hot water is applied to the disposable container in order to rehydrate the product. The packaging allows for making a stand that is operative to more securely hold the cup in its upright position.
OUTER PACKAGE FOR SECURELY SUPPORTING CUP-SHAPED PRODUCT ONCE PRODUCT IS REMOVED FROM THE OUTER PACKAGE

CROSS REFERENCE

[0001] This application claims the benefit of the filing date of U.S. Provisional Patent Application No. 61/577,501 having a filing date of Dec. 19, 2011, the entire contents of which is incorporated herein by reference.

FIELD

[0002] This application relates to dehydrated convenience foods capable of being reconstituted by contact with hot water, and particularly to an outer package adapted to hold the product during transport and sale and provide a secure base for the product once hot water is added to an inner package holding the food.

BACKGROUND

[0003] Instant noodles were invented in the 1950’s in Japan. Such noodles typically include a precooked block of noodles that requires only the addition of hot water and in some cases flavoring. Cooking time is around three minutes. Initially, these instant noodles were in the form of what has become known as Ramen noodles. In this arrangement, a block of such noodles are packaged (e.g., in a plastic wrap) and users remove noodles from the package, place the noodles in a bowl or pan and supply hot water.

[0004] In the early 1970’s, instant noodles were packaged in a disposable bowl or cup. In this arrangement, end users needed only remove a lid from the cup/bowl and pour in hot water. Once finished with the meal, the user disposes of the cup/bowl. The convenience of this arrangement made the instant noodle product an immediate commercial success. Such products are often referred to as “Cup O’Noodles®”.

[0005] Such instant noodle bowls and other rehydrate products are still available and are typically sold in a foam cup that is sold in a cardboard outer sleeve. These products are inexpensive and provide a convenient on-the-go meal. Billions have been sold since their introduction.

[0006] It is against this background and with a desire to improve on the prior art that a packaging design has been developed.

SUMMARY

[0007] While the cup of noodles and similar types of products remain extremely popular, the inventors have recognized that the current design of the product has a number of drawbacks. Specifically, the primary embodiment of the cup of noodles and similar products utilize a cup that has a height that is greater than its width. That is, rather than utilizing a bowl with a width greater than its height, most of these products come in a tall thin cup. Furthermore, many of these products utilize a cup that has a base that is smaller than the opening in the rim. Stated otherwise, these cups taper from the top opening to a smaller base. This design, while allowing for ready access to the contents, allows the cups to be easily knocked over. This is problematic as these cups are filled with hot water. Further, even once the water has been absorbed by the contents of the food therein, the food itself is very hot. Yet further complicating matters is that these products are commonly utilized for lunches of school-age children. Accordingly, the present inventors have identified a means by which the outer packaging of the product may be utilized to provide a sturdy base that provides enhanced resistance to tipping of the cup once filled with hot water.

BRIEF DESCRIPTION OF THE FIGURES

[0008] FIG. 1 is a side view of a cup-package utilized to hold dehydrated food products.

[0009] FIG. 2 is a perspective view of the product of FIG. 1 as purchased in a paperboard sleeve.

[0010] FIG. 3 is a perspective view showing the paperboard sleeve being used as a stand or base for a cup package of dehydrated food.

[0011] FIGS. 4A-4D illustrate various paperboard blanks that may be utilized to form the sleeve and holder of FIG. 3.

[0012] FIG. 5 illustrates a further embodiment of paperboard sleeve that may be used as a stand or base for a cup package of dehydrated food products.

DETAILED DESCRIPTION

[0013] Reference will now be made to the accompanying drawings, which assist in illustrating the various pertinent features of the packaging design. Although the present disclosure will now be described primarily in conjunction with a specific embodiment for use with dehydrated noodles, it should be expressly understood that the invention may be applicable to other food products. In this regard, the following description is presented for purposes of illustration and description. Furthermore, the description is not intended to limit the invention to the form disclosed herein. Consequently, variations and modifications commensurate with the following teachings, and skill and knowledge of the relevant art, are within the scope of the packaging design.

[0014] Provided herein is packaging for use with a disposable container that is adapted to hold dehydrated edible products where hot water is applied to the disposable container in order to rehydrate the product. The primary embodiment disclosed herein is directed towards use with a cup of noodles as illustrated in FIG. 1. As shown, the container of the illustrated package has a cup-shaped main portion (i.e., cup 10) typically made of a thermally insulating cellular foam. A cover 20 (e.g., plastic, wax paper, etc.) is adhered to the rim of the cup 10. While in place, the cover 20 seals the contents of the cup 10. The interior portion of the cup is filled to about three quarters with a body of dehydrated food, such as, for instance, instant noodles, instant rice, or instant potato flakes.

[0015] As illustrated in FIG. 2, when purchased, the cup 10 is disposed within a paperboard sleeve 30. In general, the paperboard sleeve 30 defines an outer container and the cup 10 defines the inner container of the final product. As illustrated, the paperboard sleeve 30 extends around the top and bottom of the cup 10 so there are two open sides and two paperboard sides 32, 34 creating the front and back of the package (or first and second sides). The paperboard sleeve also has a top surface 36 and a bottom surface 38. The paperboard sleeve makes the package more square for stacking and shipping. In use, the cup 10 is removed from the sleeve 30 and the cover 20 is pulled back such that boiling water may be added to the cup and sit for a few minutes to cook the noodles, soup etc.

[0016] As noted above, one drawback with this design is that the cup is tall and thin and has a tendency to tip over once
filled with hot water. In this regard, users and especially children may be at risk of receiving burns from the hot water and/or hot noodles (i.e., or other food products) if the cup is knocked over and spills.

[0017] Provided herein is a modification to the packaging that allows for making a stand that is operative to more securely hold the cup in its upright position. Specifically, a modification is made to the sleeve 30 as is illustrated in FIG. 3. As shown, one of the sides 32 or 34 of the paperboard sleeve 30 has an aperture 40 that is sized to receive the cup 10 therein. In this regard, once the cup is removed from the sleeve (i.e., through the open side of the sleeve) the base of the cup 10 may be disposed through the aperture 40 until the base contacts the opposing side surface as illustrated in FIG. 3. Once disposed through the aperture 40, the rim/periphery of the aperture 40 may provide support to the outside periphery of the sidewall of the cup 20. That is, the side of the cup is supported by the sleeve which forms a stand for the cup.

[0018] In one embodiment, the aperture 40 further utilizes a number of tabs or prongs 42A-N that are disposed about the circumference of the aperture 40. These prongs 42A-N are formed from a portion of the sleeve’s side surface 32. In this regard, the prongs may be defined by scoring and/or perforations through the side surface 32 of the sleeve 30 such that a user may, upon removing the cup 10 from the sleeve, break the scoring and/or perforations between the prongs 42, depress the prongs into the interior of the sleeve and thereby define the aperture 40 through the side surface of the sleeve 30.

[0019] FIGS. 4A-D illustrate different embodiments of apertures 40 that may be formed through one or both of the side surfaces of the sleeve 30. As will be appreciated, the sleeve 30 is formed from a paperboard blank 50. In the present embodiment, the paperboard blank 50 has a first end flap 38A that extends from a top edge thereof and a second end flap 38B that extends from a bottom edge thereof. These flaps 38a and 38b have mating tabs 54 and receiving apertures 52 when the paper board blank 50 is folded to define the sleeve 20. The tabs 54 are disposed in the mating apertures 52. Further, surfaces of these end flaps 38A and 38B are typically adhered together. Once connected, these flaps 38A and 38B collectively define the bottom surface 38 of the resulting sleeve 20. To permit the flaps 38A and 38B to be connected/adhered together, the paperboard blank 50 is folded along fold lines 58a-d. These fold lines collectively define the various surfaces 32-38 of the resulting sleeve 20. In any arrangement, the paperboard blank 50 is folded into a four sided sleeve 20. See FIG. 2. Generally, the interior volume of the resulting sleeve 20 substantially corresponds to the outside dimensions of the cup 10. In this regard, the width and height of the interior volume of the sleeve 20 may be sized to provide a frictional fit with the cup 10. In addition, a clear film, (not shown) may be utilized to wrap the cup 10 prior to purchase. In the present embodiment, there may be one or more apertures 56a-d formed along the fold lines 58a-d. Such apertures may allow for better conformance with the cup 10. However, this is optional. Prior to folding the paperboard blank 50, at least a first cup aperture 40 is scored and/or perforated into one or both of the side surfaces 32, 34.

[0020] In its simplest form, the cup holding aperture 40 may be a simple closed geometric shape (e.g., circle, octagon, hexagon, irregular polygon, etc.) that is scored or perforated through the side surface 32 of the paperboard 50. In such an arrangement, the material within the score lines of the aperture may be entirely removed to define the aperture 40.

[0021] As noted above, the use of prongs or tabs defined from within the area of the periphery of the aperture provides improved conformance with the cup when disposed within the aperture. In this regard, one or more score lines/perforations 44 may extend across the geometric area defined by the periphery of the aperture 40. In this regard, the periphery of the aperture may define a fold line. However, it will be appreciated that the inclusion of a fold line about the periphery of the aperture is not a requirement. In any embodiment, once the score lines 44 are broken, a user may press the resulting prongs about the circle (or other closed geometric shape) downward (e.g., along a fold line or base of the prong) toward the interior of the sleeve. After the prongs are driven inward, the sleeve is placed on the side that is not pronged, so the open aperture 40 is on top. Before adding the hot water, the cup 10 is placed in the aperture 40. Accordingly, the sleeve is transformed into an effective base/stand for the cup which reduces the tendency of the cup to tip over.

[0022] It will be appreciated that during removal of the cup 10 from the sleeve, the top and bottom flaps 38A and 38B may sometimes come apart. A user may refasten the tabs if desired. However, the resulting cup holder still provides support even if the ends are not refastened. Once the cup is in the package serving as a base, the hot water can be added. With the base it is still possible to tip the cup, but much more difficult. Without the base, the cup is very easy to accidentally bump and knock over.

[0023] In instances where the cup is tapered, the periphery of the aperture needs to have a diameter bigger than the bottom of the cup so that the cup can fit down into the base. A diameter of approximately ½ inch larger than the base has been found to provide an adequate fit. However, other sizes are possible and considered within the scope of the present invention.

[0024] As illustrated in FIGS. 4D-H, the aperture 40 need not be circular and may be formed of, for example, an octagon (FIG. 4B) a hexagon (FIG. 4D). Further, the aperture 40 may be formed in the other side surface (FIG. 4D) or in both side surfaces (FIG. 4C). Other shapes are possible and considered within the scope of the present invention. Finally, it will be appreciated that the paperboard blanks are not limited to any particular type or thickness of material.

[0025] Finally, it will be noted that in a further embodiment, an aperture 140 may be pre-formed through the side surface 32 of the sleeve 30. See FIG. 5. In this regard, a user may not be required to form the aperture but rather may simply remove the cup 10 from the interior of the sleeve 30, lay the sleeve 30 on its side and position the cup 10 through the pre-formed aperture 140. It will be appreciated that the pre-formed aperture may have a simple perimeter (e.g. closed geometric shape). Alternatively, the pre-formed aperture may include pre-formed tabs that may, for example, be depressed into the interior of the sleeve as a user pushes the cup through the pre-formed aperture. It will be appreciated that such a pre-formed aperture may reduce the surface area of the sleeve 30 that historically has been utilized for product information. However, such product information may be placed on a portion of the outside surface of the cup 10 that is visible through the pre-formed aperture 140.

[0026] The embodiments described hereinabove are further intended to explain best modes known of practicing the invention and to enable others skilled in the art to utilize the inven-
tion in such or other embodiments and with various modifications required by the particular application(s) or use(s) of the invention. It is intended that the appended claims be construed to include alternative embodiments to the extent permitted by the prior art.

What is claimed is:

1. A package of convenience food, comprising:
   a cup including:
   a food product disposed within an interior of the cup; and a cover extending over a rim of the cup, wherein the lid enclosed the food product within the interior of the cup;
   a sleeve having four surfaces, wherein at least one of the surfaces includes a score line or perforation line that allows for selectively forming an aperture through the one surface;
   wherein in a first configuration, the sleeve is sized to receive the cup within an interior of the sleeve defined by the four side surfaces; and
   wherein in a second configuration, the cup is removed from the interior and disposed though the aperture in the one surface.

2. The package of claim 1, wherein the aperture has an area sized to receive an outside periphery of the cup in a substantially conformal relationship.

3. The package of claim 2, wherein an inside periphery of the aperture contacts at least a portion of the outside periphery of the cup.

4. The package of claim 1, wherein the aperture defines a closed geometric shape that is scored or perforated on the one surface.

5. The package of claim 1, further comprising:
   at least first and second score lines or perforation lines formed on the one surface.

6. The package of claim 5, wherein the first and second score lines or perforation lines intersect along their length.

7. The package of claim 6, wherein an area between first and second score lines or perforation lines define at least one tab or prong, wherein the tab or prong may be folded into an interior of the sleeve upon breaking the score lines or perforation lines.

8. The package of claim 5, wherein the aperture further comprises:
   a fold line defined in the one side surface about at least a portion of the aperture.

9. The package of claim 1, wherein in the first configuration, a top and bottom surface of the cup are conformal between opposing inside surfaces of two of the surfaces of the sleeve.

10. The package of claim 1, wherein in the second configuration, a bottom surface of the cup is disposed on an inside surface of one of the surfaces of the sleeve and a sidewalk of the cup extends through the aperture which is formed on an opposing side surface of the sleeve.

11. A method for use with a package of convenience food, comprising:
   removing a cup having a food content sealed therein from an interior of a four sided sleeve;
   opening an aperture through a side surface of the four sided sleeve, wherein the aperture has an inside periphery sized to receive an outside surface of the four sided sleeve, wherein a sidewall of the cup is engaged about at least a portion of its outside periphery by the inside periphery of the aperture.

12. The method of claim 11, further comprising:
   laying the four sided sleeve on a side opposing the side having the aperture, wherein the aperture faces up.

13. The method of claim 12, wherein a top of the cup faces up when disposed through the aperture and further comprising at least one of:
   removing a cover of the cup; and adding hot water to the cup.

14. The method of claim 11, wherein opening the aperture comprises:
   separating adjacent portions of the side surface along one or more pre-formed score lines or perforation lines.

15. The method of claim 14, further comprising:
   removing a portion of the side surface defined by a score line or perforation line.

16. The method of claim 14, further comprising:
   depressing a portion of the sidewall between adjacent or intersecting score lines or perforation lines to form a prong or tab.

17. A package of convenience food, comprising:
   a cup including:
   a food product disposed within an interior of the cup; and a cover extending over a rim of the cup, wherein the lid enclosed the food product within the interior of the cup;
   a sleeve having top and bottom surfaces and first and second side surfaces that collectively define an interior of the sleeve, wherein one of the side surfaces includes a pre-formed aperture having a periphery sized to receive the cup;
   wherein in a first configuration, top and bottom surfaces of the cup are conformal between opposing inside surfaces of the top and bottom surfaces of the sleeve such that the cup is substantially disposed within the interior of the sleeve;
   wherein in a second configuration, the cup is removed from the interior of the sleeve and disposed though the pre-formed aperture in the one side surface.

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