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(54) **FOOD CONTAINER APPARATUS**

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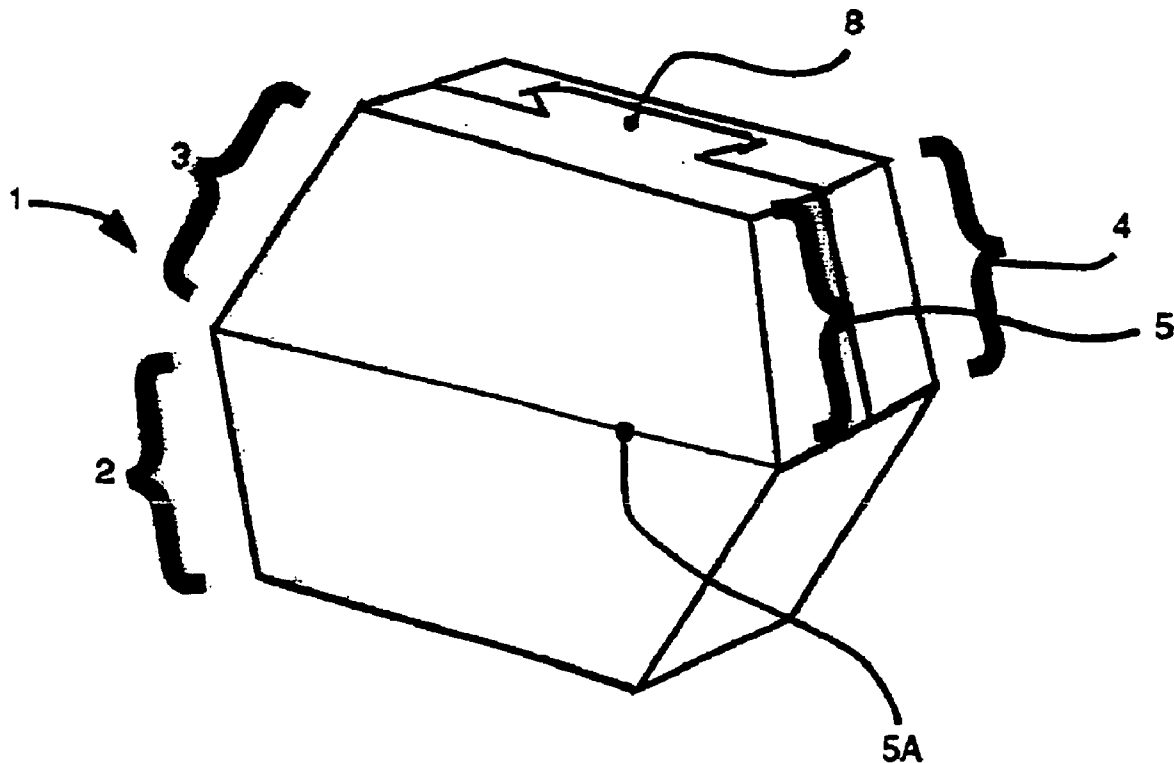
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(57)

ABSTRACT

A stackable food container includes a lower food receptacle portion, and an upper tray forming section with one or more sides foldably coupled to the lower food receptacle portion. The upper tray forming section encloses the contents of the food container when the one or more sides are in a closed state. The upper tray forming section is configured to cooperatively deploy into a tray when the one or more sides are in an open state. The tray may include an upward-facing rim substantially surrounding the contents of the food container.



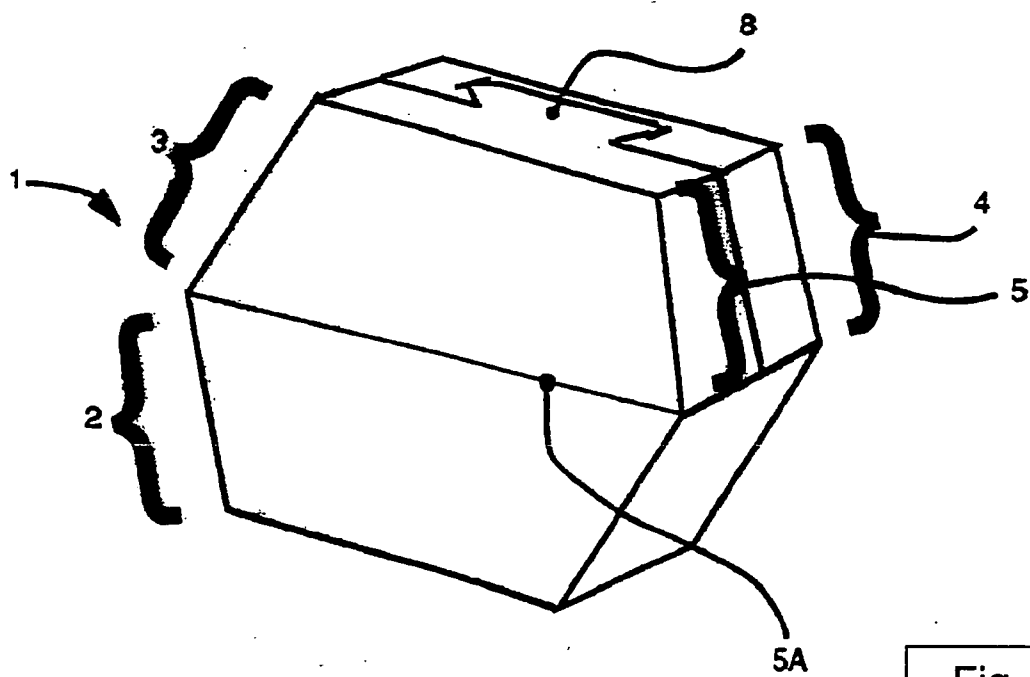


Fig. 1A

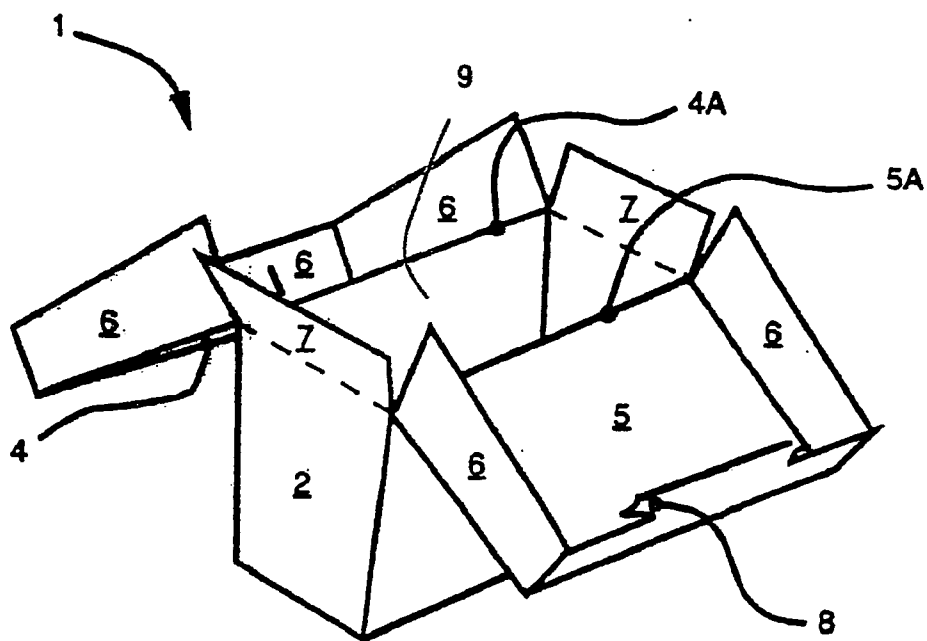


Fig. 1B

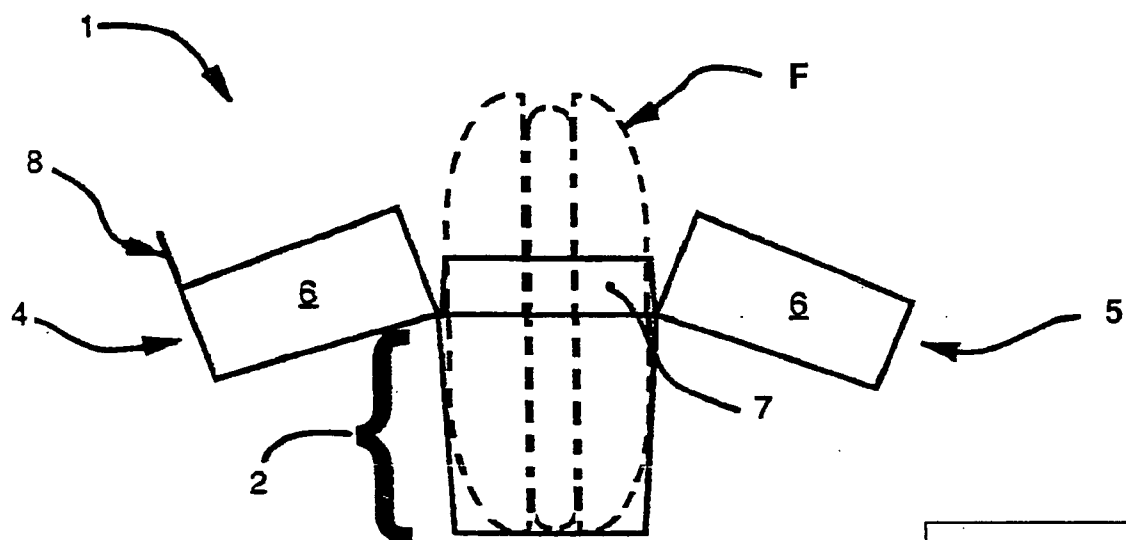


Fig. 1C

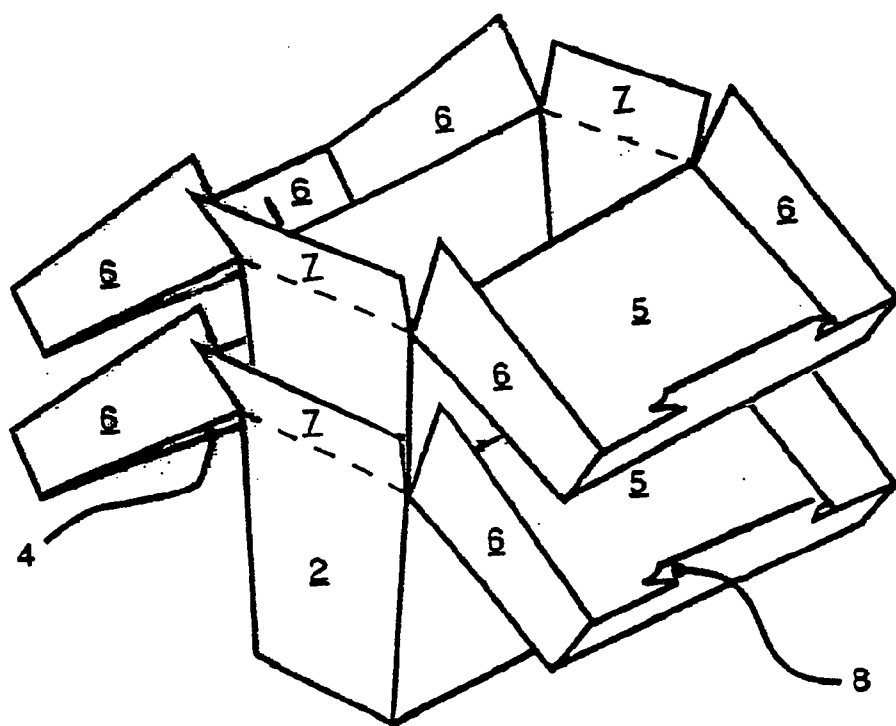


Fig. 1D

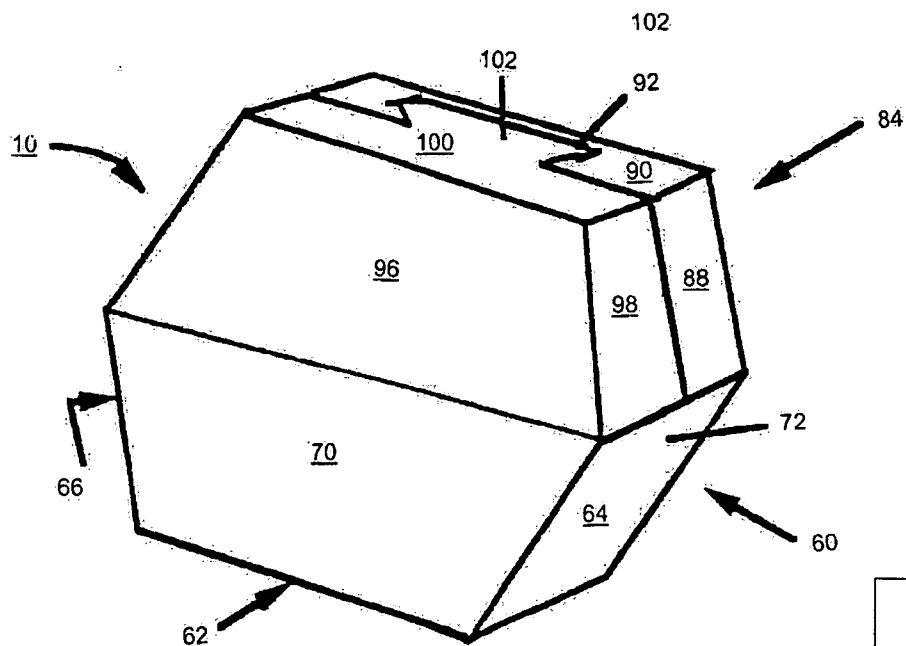


Fig. 2A

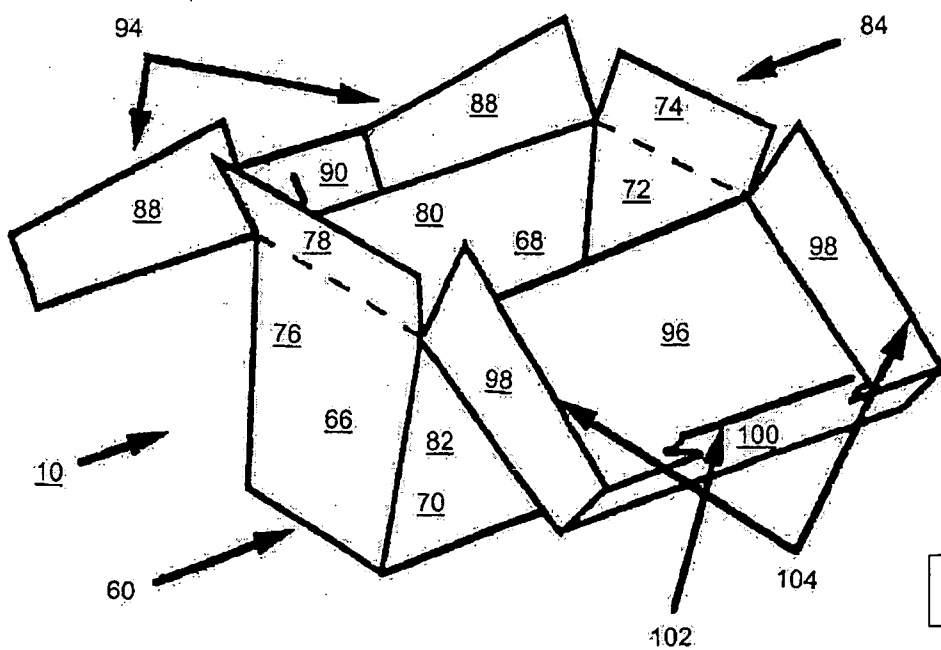
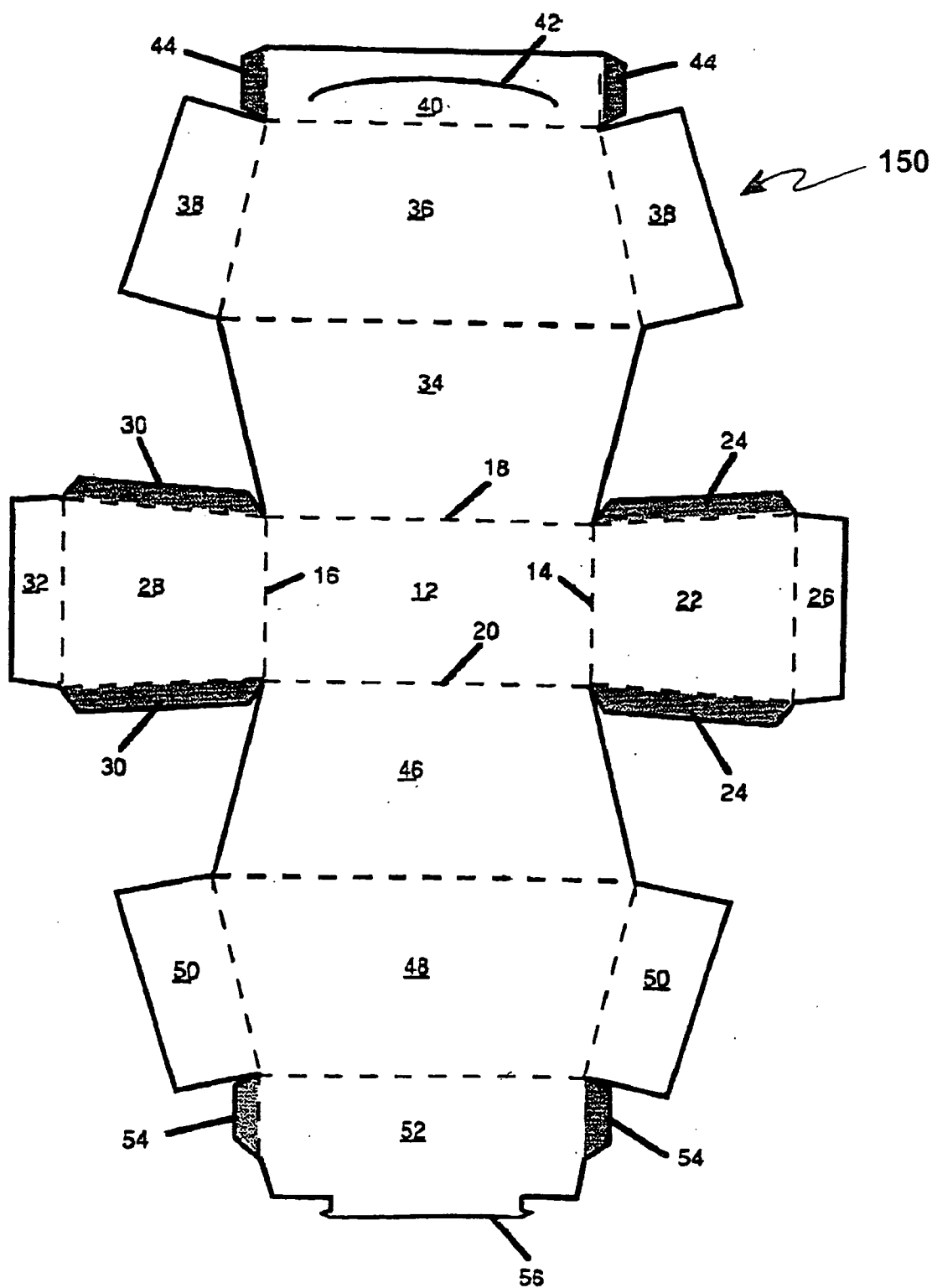


Fig. 2B



FOOD CONTAINER APPARATUS

[0001] This application claims the benefit of U.S. Provisional Application Ser. No. 60/353,395 filed Jan. 31, 2002 and is a Continuing Application of U.S. application Ser. No. 10/356,686 filed Jan. 30, 2003.

FIELD

[0002] The disclosed apparatus pertains generally to food containers and methods of use thereof, and more particularly to a disposable food container usable in a fast food or “take-out” environment which provides both quick and easy access to food within the container and which prevents spillage of food out from the food container.

BACKGROUND

[0003] Modern society, while conferring many advantages on its members, has introduced complexities which have eroded away at the amount of free time available to many individuals. As a result, various aspects of society have adapted by implementing time-saving measures and procedures. One of the most ubiquitous time-saving adaptations by modern society is that known generally as “fast-food” wherein individuals can quickly purchase and eat food items without the delay associated with preparing the food themselves or ordering food at a more traditional restaurant in which a substantial wait is generally required while food is prepared.

[0004] The “fast food” industry has given rise to numerous types of inexpensive, disposable food containers for various types of food products. Such disposable food containers include boxes, bags, cartons, trays of various structures and configurations according to the food items to be contained. The disposable food containers are typically made from paper, cardboard, polystyrene, or some other inexpensive material.

[0005] A particularly important aspect of the fast food industry is the “drive-through” window, which allows automobile drivers and passengers to purchase food within disposable containers without leaving the automobile, and to eat the food from the disposable container while traveling in the automobile.

[0006] Currently available food containers have proved deficient in some important respects. Specifically, currently available food containers typically do not provide protection for the user against drippage and spillage of food. Persons eating food while in an automobile, or who are otherwise simultaneously engaged in other activities while eating, are particularly prone to the drippage or spillage of food. Currently available food containers do not provide adequate protection against spillage, and the resulting grease spots and stains on a user’s clothing from such spillage is often a source of irritation and embarrassment for consumers of fast food.

SUMMARY

[0007] The disclosed invention is a food container apparatus which provides for quick, easy, and inexpensive manufacture, which prevents drippage or spillage of food on the user, and which is easily opened to expose the contained food item. The disclosed food container may also provide for manipulation of the food item within the container

without requiring unwrapping of the food item or removal of the food item from the container. Accordingly, a consumer may consume the food item without removing it from the container. Specifically, the container is used to hold the food item while the consumer is eating.

[0008] Food items usable with the disclosed apparatus include all fast food items amenable to use in a container, including, by way of example, hot dog, hamburger, taco, burrito, donut, pastry, “french fries” or other fried foods, and the like.

[0009] The food container apparatus of the disclosed apparatus includes a first, upper container portion deployable into a substantially horizontal tray configured to catch spillage, and a second, lower container portion for holding the food item in a substantially vertical orientation.

[0010] By way of example, and not necessarily of limitation, the deployable tray preferably includes first and second halves of the upper container portion which are fastened together when in a closed portion, and which foldably open to define first and second tray elements when in an open position. The first and second tray elements extend outwardly from first and second side of the container and provide spill protection on the user on two sides of the container. In other embodiments, the tray elements can be configured in such a manner to provide spill protection on only one side or on four sides.

[0011] The food container of the disclosed apparatus is quickly, easily, and inexpensively manufactured and assembled from a single piece template which can be stamped from cardboard sheet or foam sheet and then folded into a container and held together by tabs, adhesives, or the like. The container may alternatively be molded from foam as a single piece without requiring the use of tabs or folding for assembly.

[0012] The template includes first and second sides, first and second lower end portions, first and second upper end portions, first and second top portions including a tab fastener, and a central opening or hole. The bottom of the container is defined upon folding the first and second sides. Tabs on the first and second lower end portions couple to the first and second sides to form the lower portion of the container and the foldable halves of the upper portion of the container.

[0013] To access and remove food from the container, the user unfastens the tab fastener on the top portion of the container and folds back the first and second halves of the top container portion to expose the portion of the food item within the top container portion. The two halves of the upper container portion define tray elements when folded open, as noted above, and, as the user eats the food item, the tray elements serve to catch drippage or spillage from the food item and protect the user from stains which might otherwise result. Once the consumer has finished eating, the food container along with any crumbs, drippings, or uneaten food may be re-closed and thrown away—or, if empty, recycled.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

[0014] FIGS. 1A and 1B are perspective views of a generally hexagonal embodiment of a food container according to the present invention in a closed and open state, respectively;

[0015] FIG. 1C is an end view of the food container shown in FIGS. 1A and 1B with a food item contained therein;

[0016] FIG. 1D is a perspective view of stacked empty food containers;

[0017] FIGS. 2A and 2B are more detailed perspective views of the food container shown in FIGS. 1A, 1B, and 1C;

[0018] FIG. 3 is a diagram of a sheet configured to be folded and assembled into the food container shown in FIGS. 1A, 1B, 1C, 2A, and 2B;

DESCRIPTION OF THE EMBODIMENTS

[0019] Persons of ordinary skill in the art will realize that the following description is illustrative only and not in any way limiting. Other embodiments, modifications, and improvements of the disclosed invention will readily suggest themselves to such persons of ordinary skill in the art having the benefit of this disclosure. In the following description, like reference numerals refer to like elements throughout.

[0020] FIGS. 1A and 1B are perspective views of a food container 1 according to the present invention in closed and open states, respectively. The food container 1 includes a lower receptacle portion 2 for receiving a food item. The lower receptacle portion 2 is formed from a single sheet 100, as shown in FIG. 3. This single sheet includes a plurality of solid panels, which panels come together at their respective edges to form a receptacle with contiguous sides. Once the receptacle is formed, an opening 9 allows for the substantially vertical insertion of a food item F, such as a hamburger or a sandwich, as shown in FIG. 1C. Though the lower receptacle portion 2 is shown in a generally rectangular configuration, it is to be understood that the lower receptacle portion 2 may be formed in any stackable tapered shape, as shown in FIG. 1D, suitable for receiving a particular food item.

[0021] As shown in FIG. 1A, the food container 1 further includes an upper tray forming portion 3 having a pair of opposing sides 4 and 5. As shown in FIG. 1B, each side 4 and 5 is foldably coupled to the lower receptacle portion 2 at fold lines 4A and 5A, respectively. In FIG. 4, the food container 91 includes only one tray portion 94 foldably coupled to the lower receptacle portion at fold line 94A.

[0022] In the closed state shown in Figure 1A, the opposing sides 4 and 5 preferably seal the contents of the food container 1 and may be secured together with a latch 8.

[0023] It is contemplated that containers described in this disclosure may be made from paper, cardboard, polystyrene, or other inexpensive material.

[0024] In FIG. 1B and FIG. 1C, the food container 1 is shown with opposing sides 4 and 5 deployed into an open position. In this open position, a tray is cooperatively formed on either side of the opening 9 by the opposing sides 4 and 5, with the tray having an upward-facing rim 6. In a further embodiment, the rim 6 substantially surrounds any contents retained in the lower receptacle portion 2.

[0025] As shown in FIG. 1B, the food container 1 may optionally include a pair of opposing side or end flaps 7, which, in cooperation with the rim 6, may more completely surround the contents of the food container 1 and provide a

larger area of protection of the user's clothing. Those of ordinary skill in the art will understand that the tapered food receptacle portion 2 and the upper tray forming portion of the food container 1, in its open configuration, enable easy stackability of empty containers.

[0026] FIG. 1C is an end view of a food container 1 in an open state having a food item F contained therein in a substantially vertical orientation. As will be appreciated, a consumer will grasp the lower receptacle portion 2. By bringing the food item F to his/her face while partially surrounded by the lower receptacle portion 2, a bite may be taken from the food item F without removing the food item from the lower receptacle portion of the food container. The tray 4 or 5 and the rim 6 will catch and retain any debris that may fall from the food item F, thus preventing the debris from falling onto the clothes of the user. As is further apparent from FIG. 1C, when the food container 1 is in an open state, the food item F is presented to the user in a manner such that the item may be inspected and easily eaten, while still being retained in the lower receptacle portion 2.

[0027] If the food item F is generally planar in nature, such as the sandwich shown in FIG. 1C, it will be appreciated that the opposing sides 4 and 5 deploy cooperatively such that a tray is formed that is substantially perpendicular to the planar food item F, and the rim 6 is deployed in a substantially upward-facing manner, towards the user, substantially surrounding the food item F. If the pair of end flaps 7 are present, the user's clothing in the area around the food item F will be more completely protected.

[0028] FIGS. 2A and 2B are more detailed disclosures of a food container 1.

[0029] Referring generally to both FIGS. 2A and 2B, the food container 10 includes a lower container portion 60 including a bottom panel 62 having opposing first and second end edges 14 and 16, and opposing first and second side edges 18 and 20 orthogonal to the opposing first and second ends 64 and 66.

[0030] The lower container portion 60 may also include a first end panel 72 coupled to the bottom panel 62 proximate to the first end 64 of the bottom panel 62, with the first end panel 72 having a first end flap 74 distal from the first end 64 of the bottom panel 62.

[0031] Likewise, the lower container portion 60 may further include a second end panel 76 coupled to the bottom panel 62 proximate to the second end 66 of the bottom panel 62, with the second end flap 76 having a second end tab 32 distal from the second end 66 of the bottom panel 62.

[0032] Furthermore, the lower container portion 60 may also include a first lower side panel 80 coupled to the bottom panel 62 at a location proximate to the first side 68 of the bottom panel 62, and a second lower side panel 82 coupled to the bottom panel proximate to the second side edge 70 of the bottom panel 62.

[0033] The food container 10 may also include an upper container portion 84 including a first upper side panel 86 flexibly coupled to the first lower side panel 68. The first upper side panel 86 may include opposing first and second side flaps 88 and a first cover panel 90 coupled to the first upper side panel 86 at a location distal from the first lower side panel 68. The first top panel 90 may also include a slot 92.

[0034] As will be appreciated by those of ordinary skill in the art, the first and second side flaps **88** coupled to the first top panel **90** define a first rim **94** of the upper container portion **84**.

[0035] The upper container portion **84** may further include a second upper side panel **96** flexibly coupled to the second lower side panel **70**. The second upper side panel **96** may also include opposing first and second side panels **98** and a second top panel **100** coupled to the second upper side panel **96** distal from the second lower side panel **70**. The second top panel **100** may further include a closing tab **102**.

[0036] As will be further appreciated by those of ordinary skill in the art, the first and second side panel flaps **98** being coupled to the second cover **100** define a second rim **104** of the upper container portion along the peripheral edge of second upper side panel **96**. Additionally, the first upper side panel **86** and the first rim **94** define a first upper tray **106**, and the second upper side panel **96** and the second rim **104** define a second upper container tray **108**.

[0037] Thus, in an open state, the first upper portion **106** and the second upper container **108**, along with the first end tab **74** and the second end tab **78**, are configured to form a peripheral food item catch tray. Conversely, in a closed state, the first upper container tray **106** and the second upper container tray **108** are configured to engagably close and sealably contain the food item **F** within the food container **10**.

[0038] FIG. 3 depicts a food container sheet **150** configured to be folded and assembled into a food container as described in FIGS. 1A, 1B, 1C, 2A, and 2B. In a preferred embodiment, the sheet **100** may include a substantially rectangular bottom panel **12** having first and second opposing ends **14**, **16**, and first and second opposing sides **18**, **20**.

[0039] The sheet **150** may also include a first end panel **22** coupled to the first end edge **14** of the bottom panel **12** at a fold line. The first end panel **22** may include a pair of opposed side tabs **24** coupled thereto by fold lines, and a first end tab **26** coupled to a distal end thereto by a fold line.

[0040] The sheet **100** may also include a second end panel **28** coupled to the second end edge **16** of the bottom panel **12** at a fold line of the bottom panel **12**. The second end panel **28** may include a pair of opposed side tabs **30** coupled thereto by fold lines, and a second end tab **32** coupled to a distal end thereto by a fold line.

[0041] The sheet **100** may further include a first lower side panel **34** coupled at a proximate end thereof to the first side **18** of the bottom panel **12** at a fold line, and a first upper side panel **36** coupled to a distal end of the first lower side panel **34**. The first upper side panel **36** may include an opposed pair of end flaps **38** coupled thereto by fold lines.

[0042] The sheet **150** may also include a first top panel **40** coupled to the first upper side panel **36** at a fold line. The first top panel **40** may further include a slot **42** formed therein, an opposed pair of cover tabs **44** coupled thereto by fold lines. In a preferred embodiment, the slot **42** may comprise an arc-shaped slot to better facilitate mating with closing tab **56**.

[0043] The sheet **150** may further include a second lower side panel **46** coupled at a proximate end thereof to the second side **20** of the bottom panel **12** at a fold line, and a

second upper side panel **48** coupled to a distal end of the second lower side panel **46**, with the second upper side panel **48** including an opposed pair of end flaps **50** coupled thereto by fold lines.

[0044] The sheet **100** may further include a second cover panel **52** coupled to the second upper side panel **48** at a fold line, with the second cover panel **52** including an opposed pair of cover tabs **54** coupled thereto by fold lines, and a closing tab **56** coupled to a distal end thereto by a fold line.

[0045] Additionally, the first and second lower side panels may be substantially trapezoidal in shape. As such, the trapezoids will each have two parallel edges and two non-parallel edges. The longer of the adjacent parallel edges on each side share a common fold line.

[0046] When the panels of the food container are trapezoidal shaped, the food container may be assembled and stacked, as shown in Figure D, within each other when the upper tray portion is in the open state.

[0047] While multiple embodiments and applications of this disclosure have been shown and described, it is now apparent to those skilled in the art that many more modifications and improvements than described above are possible without departing from the inventive concepts herein. The disclosure, therefore, is not to be restricted except in the spirit of the appended claims.

1-12. (canceled)

13. A container for a food item for facilitating both holding and consumption of the food item, said container comprising:

- a tapered lower receptacle portion having ends, sides, a bottom, and an opening formed therein, said tapered lower receptacle portion being constructed and arranged to surround the food item to enable both holding in a substantially vertical orientation and consumption of the food item;

- an upper tray forming section, said upper tray forming section having at least one edge foldably coupled to said tapered lower receptacle portion on at least one side of said opening;

- said upper tray forming section being constructed and arranged to enclose the food item within the container when the container is in a closed state and to deploy into a substantially horizontal tray in an open state;

- whereby said taper of said lower receptacle portion enables stacking of multiple empty containers when said upper tray forming section is in an open state.

14. A container for enabling those eating a food item therefrom to prevent drips or crumbs from the food item from falling onto their clothes, said container comprising:

- a tapered hollow lower portion constructed and arranged to include an opening for insertion of the food item in a substantially vertical orientation;

- an upper tray forming section attached to at least one side of said opening and being foldably coupled to said tapered hollow lower portion;

- said upper tray forming section being configured to close over said tapered hollow lower portion and deploy into a substantially horizontal surface for catching drips or

crumbs while the food item is being eaten from the container.

15. The container as defined in claim 14 wherein said tapered hollow lower portion is shaped to facilitate stacking

of empty containers when said upper tray forming section is not closed over said tapered hollow lower portion.

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