ECO-FRIENDLY FOOD CONTAINER

Inventor: Crystal Figlietti, Colma, CA (US)

Correspondence Address:
NOLD INTELLECTUAL PROPERTY LAW
101 California Street, Suite 2450
San Francisco, CA 94111 (US)

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ABSTRACT

A reusable, easily washable, eco-friendly food container that contains an enclosed pouch and a placemat. The eco-friendly food container folds over itself for spill free storage and in its open position is capable of wrapping around a horizontal bar to hang open so the pouch contents are easily accessible. A removable pouch tray facilitates food handling inside and outside of the pouch.
ECO-FRIENDLY FOOD CONTAINER

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part and claims priority to U.S. Ser. No. 11/256,761, filed Oct. 24, 2005, which application claims priority to U.S. Ser. No. 60/622,554 filed Oct. 26, 2004, the contents of both are incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] Commonly used ways of carrying food includes using disposable, plastic bags that seal. Another commonly used item is the plastic bowl or cup that has a lid. Prior art food containers used to carry food are deficient in a number of areas. First, the disposable, plastic bags are disposable and thus wasteful and harmful to the environment. Also, disposable plastic bags are made from a thin plastic and when torn or ripped become a choking hazard to a young child and are ingested by wild birds. The prior art food containers are not able to easily attach and hang open from a horizontal bar, such as a stroller or shopping cart handle bar. Prior art used plastic bowls and/or cups with a lid are not easy to store and keep until one returns home to clean them. Prior art plastic bowls and/or cups comprise hard plastic and are potentially dangerous in the hands of young children. Further, prior art plastic bowls and/or cups are not able to hang open from a horizontal bar, such as a stroller or shopping cart handle bar. Prior art food containers do not provide for a placemat.

[0003] It is an object of the invention to provide a container for food that is washable, reusable, and that can wrap around a horizontal bar and hang open for easy access to contents and having a built-in placemat. Further, it is another object of the invention to provide a container for food that will fold over itself and keep the contents from spilling out.

SUMMARY OF THE INVENTION

[0004] The present invention describes a food container comprising a pouch section, a placemat section and a closure flap, wherein said pouch section comprises a pouch, wherein said pouch comprises a pouch opening portion and a pouch peripheral portion, and said placemat section comprises at least one peripheral wall extending partially around the outer perimeter of said placemat section, wherein said pouch section is affixed to said placemat section so that said pouch opening faces said placemat section, and said closure is attached to said pouch section, and said pouch section is capable of being folded into said placemat section and rest therein and said closure flap is capable of being folded over said pouch section. In another embodiment there is a strap attached to the front of the pouch section, wherein said strap is affixed at the bottom of the pouch section and the top of the pouch section and extends across the pouch section. In another embodiment the invention contemplates a food tray having a bottom and peripheral walls, said tray capable of being removably inserted in said pouch. In another embodiment the invention comprises a peripheral raised portion, said raised portion positioned between 1/8 inches and 2 inches inside of the placemat section at least one peripheral wall, and the peripheral raised portion extending between about 1/4, 1/2, 3/4 or all the way around the placemat section. In another embodiment the invention contemplates a first closure is disposed on the inside of said closure flap and a second closure disposed on the back side of the pouch section, wherein first and second closure are complimentary closures. In another embodiment of the invention the pouch peripheral portion comprises walls or edge seals. In another embodiment of the invention the pouch section is affixed to a side of the placemat section and the closure flap is affixed to the opposite side of the placemat section.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] FIG. 1 is a front plan view of one embodiment of the food container when in the fully opened position;

[0006] FIG. 2 is a rear plan view of one embodiment of the food container in the fully opened position; and

[0007] FIG. 3 is a front perspective view of one embodiment of the food container when in the open position and wrapped around a horizontal bar;

[0008] FIG. 4 is a plan view of one embodiment of the invention when in the open position;

[0009] FIG. 5 is a view of one embodiment of the invention in the closed position.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0010] Reference will now be made in detail to some specific embodiments of the invention including the best modes contemplated by the inventors for carrying out the invention. Examples of these specific embodiments are illustrated in the accompanying drawings. While the invention is described in conjunction with these specific embodiments, it will be understood that it is not intended to limit the invention to the described embodiments. On the contrary, it is intended to cover alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims. In the following description, numerous specific details are set forth in order to provide a thorough understanding of the present invention. The present invention may be practiced without some or all of these specific details. In this specification and the appended claims, the singular forms “a,” “an,” and “the” include plural reference unless the context clearly dictates otherwise. Unless otherwise defined, all technical and scientific terms used herein have the same meaning as commonly understood to one of ordinary skill in the art to which this invention belongs.

[0011] By “pouch peripheral portion” it is meant that part of the pouch that is not part of the pouch opening.

[0012] By “affixed” it is meant that one part is joined to another either by starting with two separate parts and joining them or by starting with one part and creating two separate parts. A pouch section can be affixed to a placemat section and two sections formed from one piece of sheeting, for example.

[0013] FIG. 1 is a front plan view of the food container comprising pouch 14 when in the fully opened position according to one embodiment of the present invention. The food container 24 can be kept open while eating lunch or having a snack to get to the pouch front opening 18. In one embodiment the present invention is comprised of front section 7 and back section 8 having a top 3a and a bottom 3b part where the back section 8 is larger than the front section 7. Pouch 14 has pouch edges 9a, 9b, 9c and 9d. Preferably edge 9d is not sealed to create pouch opening 18. In the embodiment shown the food container has two creases 5a and 5b facilitating the inwardly folding at points 5a and 5b. Optional seal 16 partially or wholly covers pouch opening 18 during
folding to create a pouch seal. When folded, crease 5b folds over back section bottom 3b and closure 12 hooks to a complementary closure 20 on the backside of back section 8. Seal 16 is located on the inside of the back section 8. Seal 16 may comprise any suitable material and/or may comprise a laminate of materials. Seal 16 may comprise a coating applied to the inside of the back section 8. Seal 16 may be contiguous or broken and may extend from an area on the inside of the back section 8 below the pouch opening 18 to the crease 5a or even further. Seal 16 may comprise a male/female interlocking seal where the male portion is integral with the inside of back section 8 and the female portions integral with the backside of the front section 7. For example, the female portion may be on the inside of the back section and the male portion is located on the inside of the front section 7 so that sealing may be accomplished. Such seals are known in the art (ZipLoc®) and have color coded changes indicating open/closed positions. The seal 16 may comprise a hook and loop closure having a hook portion on the inside of the back section at seal 16 and the loop portion on the back section of the front section 7. The front section 7 faces a portion of the back section 8 and one or more peripheral edges of the front section 7 is joined to the peripheral edge of one or more sides of a portion of the back section 8 to create a pouch 14 having opening 18. Preferably for a complete peripheral seal the front section 7 is sealed peripherally at three edges 9a, 9b and 9c with a portion of the back section 8. The edges 9a, 9b and 9c may comprise any seal suitable for the material used. The seal may comprise a heat seal or be sewn. The edges 9a, 9b and 9c may each independently be the same or different and may further comprise a wall portion constructed at the edge, said wall portion being substantially perpendicular to the plane of front section 7 and the portion of back section 8 and extending wholly or partially peripherally around the front section 7 and the portion of the back section 8 sealed to the front section 7. The wall portion has a top part joined to front section 7 and a bottom portion joined to the portion of the back section 8 used to create the pouch having opening pouch opening 18 wherein the length of the wall portion from the top to the bottom of the wall determines the thickness of the pouch. The invention contemplates any thickness depending on the desired end use. The thickness is between zero, meaning there is substantially no wall and the edges are joined directly together to 160 mm or even larger. The edges 9a, 9b and 9c may independently be the same or different and may be sealed or partially sealed. As used herein “sealed” includes partially sealed at the edges 9a, 9b and 9c i.e. there may be one or more gaps in the seal, or holes in the wall portions so as to define a passageway from the inside of the pouch 14 to the outside of the pouch 14 enabling the passage of air or liquids. Preferably the edges and/or wall portions form a complete seal. The invention contemplates that a variety of suitable materials are suitable for the present invention depending on the desired end use. Preferably a food grade plastic is used. This facilitates cleaning and manufacture. Preferably the material is free of chemicals such as bisphenol A and phthalates. In one embodiment of the present invention the food container may have any portion comprised of a laminate of materials. The choice of laminate depends on the end use. For environments where the food container is to keep contents fresh laminates comprising Al foil may be used. For environments where the food container may be exposed to flowing, dripping or seeping liquids, a laminate comprising an absorbent may be employed. In a preferred embodiment the laminate is an integral part of the pouch 14 inside wall, either attached to the back section 8 inside face or the front section 7 inside face, or both. Optional pull tab 2 is preferably located at the center front of the pouch front opening 18 or other location on the food container front section 7. The tab may comprise a cord, ribbon, nylon webbing, etc. In one embodiment there is one single piece of material. In one embodiment the back section is integral with the front section 7 and folds at the back section bottom 3b and may be sealed on the sides 9a and 9c to create a pouch having pouch opening 18. For closure 12 a case hook and loop may be used. Others closures include snaps and/or buttons. Crease 5b separates the back section top area 6a from the back section middle area and the area between crease 5a and crease 5b defines the back section middle area. A closure means, for example a hook and loop are sewn or otherwise affixed by glue or other means to the back section top area 6a on the inside face 12. Complimentary closures are closures where a first part of the closure is designed to mate with a second part of the closure. Back section top area 6a preferably includes a triangular shaped tip for ease of opening and manipulating the back section top area 6a. This is separated from the placemat section 6b via a fold 5b.

[0014] FIG. 2 shows the backside of the back section 8 of food container 24 shown in FIG. 1 when fully opened. Positioned near the bottom 3b of the food container 24 is a closure 20 capable of mating with complimentary closure 12 on the inside of the back section positioned in the back section top area once the flap is wrapped up and around the pouch front opening 18.

[0015] FIG. 3 is a front perspective view of the food container 24 of FIG. 1 and FIG. 2 when in the open position and wrapped around a horizontal bar. Access is provided to the pouch contents via pouch front opening 18. The food container 24 is not only intended to keep food but it is designed to keep food within reach of toddlers or young children who may be riding in a shopping cart or stroller. The back section top area 6a wraps around the horizontal bar and is connected to a closure on the back side of the back section.

[0016] FIG. 4 is a perspective view food container 23 according to one embodiment of the invention. This view shows the food container 23 in the open position with a pouch 15 containing pouch opening 18. The pouch edges 17a, 17b and 17c may be sealed by means of heat sealing the peripheral edges of the piece of sheeting material to form an enclosed pouch. In one embodiment the pouch 23 may comprise a wall structure as described in the embodiment shown in FIG. 1. A strap 45 suitable of holding in place a napkin 51 alone or utensils is positioned over the pouch 15 front. This strap 45 may comprise any suitable material including an elastic material. The strap 45 may be affixed to the food container 23 in a variety of manners, but preferably it is affixed to the front pouch 15 along edge 17b. In some embodiments strap 45 may be heat sealed to the main pouch along the bottom edge 17b and/or along the top edge 17d of the pouch 15. Strap 45 may be any suitable shape or length but preferably the strap extends from the edge 17b to the pouch opening 18. In one embodiment the strap may comprise a hook and loop closure where the strap is fixed at end 17b and a hook closure is placed on the inside of the strap and a loop closure is placed on the outside of the front of the pouch for mating with the aforementioned hook closure. Dual straps may be employed. Straps extending perpendicular to strap 45 may be employed even in the absence of strap 45. Such straps preferably extend from edge 17a to edge 17c. Preferably the strap is between 1-4
inches in width. Placemat area 40 is located in the center section of the food container 23 and is generally defined by the area bordered by walls 42, 46, 44 and fold 25a. Walls 42, 46, 44 may be independently the same or different heights and preferably define the peripheral area of the placemat and extend substantially perpendicular to the placemat area. Preferably the height of walls 42, 46, 44 is chosen so that when pouch 15 is full it can be folded over into placemat area 40 and the top of walls 42, 46, 44 are substantially flush or just slightly higher than the folded pouch 15 so that the closure flap 49 can fold over onto the pouch 15 and the closure flap 49 is then flush with walls 42, 46, 44. The invention contemplates that the pouch section rest in the placemat section, but this does not require that the walls of the placemat section be taller or shorter than the pouch section when the pouch section is folded into the placemat section. In other embodiments contemplated by the present invention the height of walls 42, 46, 44 is small, perhaps ½ inch and the folded pouch 15 extends higher that the walls 42, 46, 44. Generally the size is dictated by the size of the food container but preferably section 40 is slightly larger by about to ½ to ¾ inch bigger in at least three peripheral directions, the two lengths and the width than the pouch 15 so that the pouch fold into the placemat area 40. Fold 25a separates the pouch from the placemat area 40 and extends parallel to the pouch opening 18 and is scored or folded so that the placemat area 40 can fold over the pouch or vice versa. The placemat area 40 may comprise thicker mm sheeting in order to add structural support. Inside the walls 42, 46, 44 and fold 25a of the placemat area 40 and set approximately ¼ inch to 2 inches from the edges, there is an optional ridge or wall about ½ to 1 inch tall and acts as a barrier to food rolling off the edge of the placemat. This optional ridge or wall is a peripheral raised portion, and the peripheral raised portion extending between about ¼, ½, ¾ or all the way around the placemat section. Attached or integral thereto along the outer wall 46 and along the top of the ridge or wall is the closure flaps 49. Closure flaps 49 is preferably attached to wall 46 or the opposite side of the placemat section area that the pouch section is attached to. However, the invention contemplates that the closure flap 49 may be attached to either wall 44 or wall 42 or even affixed to the back side of pouch 15. In one embodiment this closure flap is optional. This flap may comprise a loop portion 22 of the hook and loop closure. This closure is attached to the flap and back of the pouch by any means, such as sewing. The flap 49 preferably has a triangular shape and is capable of wrapping around the filled pouch and attach to the bottom closure and make a secure connection. Shown in the center of the placemat area is removable food tray 30. This tray may be made of microwavable plastic, food-grade stainless steel or other material. This tray may be about ½ to 1 inch smaller in dimension than the exterior dimensions of the enclosed pouch 15. The outside walls of the tray are preferably perpendicular to the flat bottom of the tray and about ½ to 1 inch in height and preferably with the top edge rolled or smoothed so there are no rough edges.

FIG. 5 is a top view of the closed food container 23. In this view the napkin strap 45 and napkin 51 are seen through the closed pouch. This view shows the peripheral outside ridges or walls 44 and 46 of the placemat area. Closure flap 49 covers the pouch. Most, not all, of the food container dimensions are a matter of engineering design choice depending on the desired contents. If a rectangular food container is used the length may be about 6 inches to even 36 inches long, including the closure flap, the pouch section and the placemat section. The width can be 1 to 24 inches. The food container walls may be any thickness depending on the desired stability and material used but a reasonable thickness is about 0.2 mm to about 1.0 mm.

Example 1

[0018] Two pieces of fabric in any reasonable, soft material which may be washed can be utilized. One piece being for the front section and one piece being for the back section. If using two pieces of fabric, attach or sew the front and back sections together with the fabric wrong sides facing in. On the bottom half of the front piece, attach a plastic lining so that the lining will extend over the top of the pouch front opening once the pouch is in the closed position. Then the bottom quarter section of the front piece is folded up and sides are sewn or attached at the right and the left sides to create the pouch front opening. When using two pieces of fabric an inner liner of food safe plastic may be removable combined with the pouch. Fabric pieces of the front and back may be divided into smaller sections and additional colors, designs or patterns may be added to comprise the total of the front and the back pieces. In addition any decoration such as patches or embroidery may also be added to enhance the basic structure of the present invention.

[0019] Since other modifications and changes varied to fit particular operating requirements and environments will be apparent to those skilled in the art, the invention is not considered limited to the example chosen for purposes of disclosure, and covers all changes and modifications which do not constitute departures from the true spirit and scope of this invention.

What is claimed is:
1. A food container, comprising:
   a pouch section, a placemat section and a closure flap, whereinaid pouch section comprises a pouch, wherein
   said pouch section comprises a pouch opening portion and a pouch peripheral portion, and,
   said placemat section comprises at least one peripheral wall extending partially around the outer perimeter of said placemat section, wherein
   said pouch section is affixed to said placemat section so that said pouch opening faces said placemat section, and
   said closure is attached to said placemat section, and
   said pouch section is capable of being folded into said placemat section and rest therein and said closure flap is capable of being folded over said pouch section.
2. A food container as claimed in claim 1, further comprising:
a strap attached to the front of the pouch section, wherein:
said strap is affixed at the bottom of the pouch section and the top of the pouch section and extends across the pouch section.
3. A food container as claimed in claim 1, further comprising:
a food tray having a bottom and peripheral walls, said tray capable being removably inserted in said pouch.
4. A food container as claimed in claim 1, further comprising:
a peripheral raised portion, said raised portion positioned between ¼ inches and 2 inches inside of the placemat section at least one peripheral wall, and
the peripheral raised portion extending between about 1/4, 1/2, 3/4 or all the way around the placemat section.

5. A food container as claimed in claim 1, further comprising:
a first closure disposed on the inside of said closure flap and
a second closure disposed on the back side of the pouch section, wherein
first and second closure are complimentary closures.

6. A food container as claimed in claim 1, wherein:
the pouch peripheral portion comprises walls or edge seals.

7. A food container as claimed in claim 1, wherein:
said pouch section is affixed to a first side of the placemat section and
said closure flap is affixed to the opposite side of the placemat section.

8. A food container as claimed in claim 7, further comprising:
a strap attached to the front of the pouch section, wherein:
said strap is affixed at the bottom of the pouch section and
the top of the pouch section and extends across the pouch section.

9. A food container as claimed in claim 7, further comprising:
a food tray having a bottom and peripheral walls, said tray capable being removeably inserted in said pouch.

10. A food container as claimed in claim 7, further comprising:
a peripheral raised portion,
said raised portion positioned between 1/4 inches and 2 inches inside of the placemat section at least one peripheral wall, and
the peripheral raised portion extending between about 1/4, 1/2, 3/4 or all the way around the placemat section.

11. A food container as claimed in claim 7, further comprising:
a first closure disposed on the inside of said closure flap and
a second closure disposed on the back side of the pouch section, wherein
first and second closure are complimentary closures.

12. A food container as claimed in claim 7, wherein:
the pouch peripheral portion comprises walls or edge seals.

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