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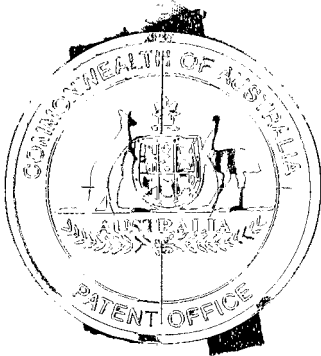
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I, PETER SCHLAEFER, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2007902246 for a patent by MAURICE JOSEPH PAUL TABONE as filed on 30 April 2007.



WITNESS my hand this
Twenty-seventh day of February 2008

A handwritten signature in cursive script, reading 'P. Schlaefer'.

PETER SCHLAEFER
TEAM LEADER EXAMINATION
SUPPORT AND SALES

2007902246 30 Apr 2007

AUSTRALIA
Patents Act 1990

PROVISIONAL SPECIFICATION

Applicant:
Maurice Joseph Paul Tabone

Invention Title:
A CONTAINER

The invention is described in the following statement:

A CONTAINER

AREA OF INVENTION:

- 5 This invention generally relates to containers having a tamper evident container top or lid option.

BACKGROUND:

- 10 Although traditional two piece (separate base with snap on lid) containers and traditional single hinged lidded thermoformed containers are still widely in use, they require a "wrap around" self adhesive label in order to secure the container lid to the container sidewall area,
15 which is uneconomical and often problematic.

- The most common problem encountered by users/packers of traditional single hinged lidded thermoformed containers whilst attempting to use a self adhesive label to achieve
20 tamper evidence, is that these containers (in a variety of designs and sizes) do not have any flat areas upon which to adhere a self-adhesive label in a flat fashion, either manually or by automation. It is accepted that applying a label in this way (i.e. "flat") would be the most
25 appropriate and economical method. On occasions, the lack of an available flat area upon which to apply a self-adhesive label or similar to attain tamper evidence, has led to issues such as superfluous label designs/shapes which are cumbersome when applying in a non-flat
30 "wraparound" fashion (either manually or rarely automatically) which proves costly due to the machinery/applicator and label needing to be customized to suit the specific "wraparound" application. The unnecessarily oversized/fancy shaped labels are
35 comparatively expensive and are often not aesthetically pleasing once wrapped around to the container's lid edge in a quest for tamper evidence. Also, as barcodes are

generally required to be printed on these product labels which need to be applied flat for best scanning/readability, this compounds the problems associated with wraparound label use on single lid flapped
5 containers.

In more recent times, alternatives have included "dual hinged lids" which when closed (often automatically in filling/packing/labeling machines), create a generally
10 flat area across the two adjacent closed lid edges in the centre of the container top, thus allowing a "flat" self-adhesive label to be applied over the "lid join", thus acting as a tamper evident seal. Although the current multiple lidded design effectively achieves tamper
15 evidence on relatively small containers, there are instances where applying a self-adhesive label to the centre of the container top (over the "lid join") would not be viable for reasons such as obstructing the consumer's vision of the container's contents (because of
20 the relatively high "label to lid area ratio") or, on larger containers, the need to apply a label which is large enough in proportion to the "lid join" length, merely to achieve a substantial enough tamper evident seal would prove uneconomical.

25

SUMMARY OF THE INVENTION:

The present invention provides a container comprising a base and a lid, the lid being moveable with respect to the
30 base between an open position and a closed position. When the lid is in the closed position, a planar portion of the lid is substantially co-planar with a planar portion of the base, whereby the substantially co-planar portions define a substantially planar surface to which an adhesive
35 membrane can be affixed.

As will be appreciated by a person skilled in the art, the

containers of the present invention provide a substantially planar surface to which an adhesive membrane can be affixed in a "flat" fashion to achieve tamper evidence without necessarily encountering the problems
5 described above.

This invention intends to simplify the task of applying a tamper evident seal in a "flat" fashion to these lidded containers. Applying the tamper evident seal in a "flat"
10 format is proven to be more conducive to high speed, self-adhesive label applicators and the high volume packing lines upon which these machines are in use.

The invention described here has very accessible tamper
15 evident capabilities and can be adapted to any currently known container design. This simplicity can allow for manual or high speed automatic closure, and flat adhesive membrane application creating tamper evidence, whilst employing the minimum amount of moving parts in its
20 operation.

Typically, the lid is hingedly attached to the base and pivots between the open and closed positions. In such cases, the substantially planar surface may be located at
25 an opposite side of the container to the hinge.

In some embodiments, the planar portion of the lid overlaps part of the planar portion of the base. Thus, it will be understood that the terms "substantially co-planar
30 portions" and "substantially planar surface" as used herein, are intended to include situations where there is a small step between the planar portion of the lid and the planar portion of the base, provided that an adhesive membrane can be affixed to the substantially planar
35 surface.

In some embodiments, the base has a floor and upwardly

extending side walls, the side walls ending at a rim onto which the lid is receivable in the closed position.

5 In some embodiments, the lid is a generally flat sheet having edges that are adapted to abut the base in the closed position. The lid may, however, comprise a recessed portion for storing items which a consumer will require once the container had been opened (e.g. cutlery or dressings).

10 In some embodiments, the base and lid are adapted to be mechanically locked in the closed position. For example, the base and lid may be mechanically locked by a projection on the lid that can be received via an
15 interference-type fit into a corresponding recess in the base, or vice versa.

In order to achieve appropriate sealing and tamper evidence properties, the substantially planar surface is
20 typically greater than 5cm^2 .

Typically, the adhesive membrane is a self adhesive label. However, in alternate embodiments, the adhesive membrane may be a heat sealable lidding film of plastic, foil or
25 other sheet material.

In some embodiments, the adhesive membrane may have a perforation locatable at or adjacent to an edge of the planar portion of the lid when the lid is in the closed
30 position. This perforation makes opening the container more simple for the consumer without affecting the tamper evident properties of the container.

Typically, the container is moulded from a thermoformable
35 plastic material, for example, polyvinyl chloride (PVC), polyethylene terephthalate (PET), polypropylene, polylactide (PLA), biaxially oriented polystyrene (BOPS),

etc.

The present invention would preferably be used on thermoformed containers to package a variety of perishable food products such as cherry tomatoes, strawberries, alfalfa/bean sprouts, as well as bakery products etc. These food products are generally sold to consumers through supermarket chain stores and the like.

10 The invention can be used for either vented or non-vented containers and also allows for a hang sell hole option for "off shelf" retail display if required. Using this invention, it is possible to maintain minimal obstruction of vision through the container lid, whilst offering
15 important tamper evident capabilities. Unlike currently available multiple lid flap designs, the container size and shape will not unnecessarily dictate the self adhesive label size/cost required to achieve tamper evidence. For
20 alternative graphic methods to be used (e.g. pre-printing the branding and nutritional panels onto the lid area), thus reducing labeling requirements to a smaller, basic tamper evident label only.

25 BRIEF DESCRIPTION:

As best viewed in FIGURES 1, 2 and 3 (attached) this invention relates to a container top for a container base (1) having a bottom and upwardly extending side walls (2),
30 the top being molded of plastic material and including: a top lip edge rim (3) to be mounted on or formed integrally with the said side walls (2) and surrounding an opening (4) via which product would pass with respect to the container. A singular lid flap (5) being pivotally
35 attached to the top lip edge rim (3) so as to be movable between a closed position at least substantially closing the opening, and an open position at least partly exposing

the opening (4) to allow product to pass into the container. The lid flap (5) in the open position being angularly displaced from the closed position in a direction away from the container base (1). The lid flap (5) has a flat portion (the "flat lid flap portion") (6). The said flat lid flap portion (6) being generally adjacent to a flat portion on the container top lip edge rim (the "flat rim portion") (7) when the lid flap (5) is in the closed position so that the flat portions (6 & 7) are generally coplanar. If required, the flat lid flap portion (6) may also overlap the "flat rim portion" (7) when the lid flap (5) is in the closed position. When the lid flap (5) is in the closed position, a label or other self adhesive material (8) can be adhered to the flat lid flap portion and the flat rim portion (6 & 7) to achieve a tamper evident seal across these two flat portions.

This invention simply produces a generally coplanar area by incorporating into the container's design a "flat lid flap portion" and a "flat rim portion" that co-operate when the lid flap is closed to produce said "generally coplanar" area. Preferably, this "generally coplanar area" will be directly opposite the lid flap's hinged edge (see example "C") when the lid flap is closed, however the "top lip edge rim" at the container's corners (see example "B") or anywhere else on the "top lip edge rim" of the container (see example "A") may be designed to act as the said "flat rim portion" if required. Based on the position of the "flat rim portion", the corresponding "flat lid flap portion" is positioned, formed and shaped to arrive generally coplanar to the "flat rim portion" when the lid flap is closed ("A", "B" & "C"). A self-adhesive label or similar sheet material can then be applied to this generally coplanar area, creating a tamper evident seal between the "flat lid flap portion" and the "flat rim portion" ("A", "B" & "C"). In any case, the surface area of both the flat lid portion and the flat rim portion co-

operating together to be generally coplanar (as described herewith), would be ample and suitable to apply a self-adhesive label or similar sheet material to in a generally flat fashion and attain tamper evidence. Preferably, the generally coplanar label application area produced by this invention and accompanied container design, would not interfere with any instrument (human or otherwise), used to apply a self-adhesive label in a flat fashion in any known way (e.g. auto-applicator head clearance), therefore being conducive to effective and trouble free label application.

In some embodiments, the actual area of the "flat lid flap portion" alone, which is contactable by the "Adhesive membrane/label" may be minimized. Based on this, and as best seen in Diagrams "F", the current invention will allow at least a portion of the container lid top to be recessed toward the base of the container when closed. In these applications, the adhesive membrane will generally be of a suitable size so as to bridge across the recessed lid area when it is applied, at times adhering mostly to the container's flat rim portion at the perimeter of the closed container (but whilst still adhering to at least a small portion of the flat lid flap portion). This bridging of the adhesive membrane will create a void area between the adhesive membrane and the recessed lid area when the container is closed and sealed. The tamper evident attributes are not at risk when employing a recessed lid shape within the scope of the current invention. The void area created between a recessed lid area and the adhesive membrane, may be used to house any number of items depending on the product contained (e.g. plastic cutlery, salad dressing portion, printed media/recipe booklet etc).

As will be appreciated, embodiments of the present invention can have a number of advantages, including:

1. Though preferably rectangular or square, prior to incorporating this invention within its design, a container may be of any existing and known shape, size or design/style.
5
2. If hang sell is a requirement, the invention's "flat rim portion" may be extended in a direction away from the container's side wall to accommodate a hang sell hole (see example "C").
10
3. This invention can be applied to any suitable, hinged lidded container design.
4. The container lid may have mechanical locking mechanisms. These locking mechanisms or lugs may be of any suitable, known type and will generally be integrally formed into the lid flap side edges and top lip edge rim, so as to cooperate to lock the lid flap in the closed position. Locking lugs of any known kind may also be positioned on the "flat lid flap portion" and the corresponding "flat rim portion" if required (see example "D")
15
20
5. The container's lid style may also be of any suitable, known type, being generally either "inside fitting" or "outside fitting" in relation to the top lip edge rim circumference when closed.
25
6. When the lid flap is closed, the "flat lid flap portion" and the corresponding "flat rim portion" may present at any angle in relation to the container base, lid or sidewalls whilst remaining generally coplanar in relation to each other (see example "E").
30
7. When the lid flap is closed, the angle at which the generally coplanar "flat lid flap portion" and corresponding "flat rim portion" present, would
35

preferably result in a suitable area for a self-adhesive label or similar, to be applied by an automated applicator machine (see example "E") in a generally flat fashion.

5
8. When the lid flap is closed, the "flat lid flap portion" and the corresponding "flat rim portion" are generally adjacent though they may partially overlap if required, whilst remaining generally coplanar in relation to each other.

10
9. Although preferably applied to a container top or lid, the invention described herewith may also be applied to a design of a singular, hinged "lid flap portion" and "rim portion", which is orientated by way of design or end use, so as to not be the uppermost part of the container (i.e. the singular, hinged lid flap may actually be on the side or base of the container when in normal use or otherwise).

15
20
In the claims which follow and in the preceding description of the invention, except where the context requires otherwise due to express language or necessary implication, the word "comprise" or variations such as
25 "comprises" or "comprising" is used in an inclusive sense, i.e. to specify the presence of the stated features but not to preclude the presence or addition of further features in various embodiments of the invention.

CLAIMS:

1. A container comprising a base and a lid, the lid being moveable with respect to the base between an open position and a closed position, wherein, when the lid is in the closed position, a planar portion of the lid is substantially co-planar with a planar portion of the base, whereby the substantially co-planar portions define a substantially planar surface to which an adhesive membrane can be affixed.
2. The container as claimed in claim 1, wherein the lid is hingedly attached to the base and pivots between the open and closed positions.
3. The container as claimed in claim 2, wherein the substantially planar surface is located at an opposite side of the container to the hinge.
4. The container as claimed in any one of claims 1 to 3, wherein the planar portion of the lid overlaps part of the planar portion of the base.
5. The container as claimed in any one of claims 1 to 4, wherein the base has a floor and upwardly extending side walls, the side walls ending at a rim onto which the lid is receivable in the closed position.
6. The container as claimed in any one of claims 1 to 5, wherein the lid is a generally flat sheet having edges that are adapted to abut the base in the closed position.
7. The container as claimed in any one of claims 1 to 6, wherein the lid comprises a recessed portion.

8. The container as claimed in any one of claims 1 to 7, wherein the base and lid are adapted to be mechanically locked in the closed position.
- 5 9. The container as claimed in claim 8, wherein the base and lid are mechanically locked by a projection on the lid that can be received via an interference-type fit into a corresponding recess in the base, or vice versa.
- 10 10. The container as claimed in any one of claims 1 to 9, wherein the substantially planar surface is greater than 5cm².
11. The container as claimed in any one of claims 1 to 10, wherein the adhesive membrane is a self adhesive label.
- 15 12. The container as claimed in any one of claims 1 to 11, wherein the adhesive membrane has a perforation locatable at or adjacent to an edge of the planar portion of the lid when the lid is in the closed position.
- 20 13. The container as claimed in any one of claims 1 to 12, wherein the container is moulded from a thermoformable plastic material.
- 25 14. The container as claimed in claim 13, wherein the thermoformable plastic material is polyvinyl chloride (PVC), polyethylene terephthalate (PET), polypropylene, polylactide (PLA), or biaxially oriented polystyrene (BOPS).
15. A container substantially as herein described with reference to the drawings.

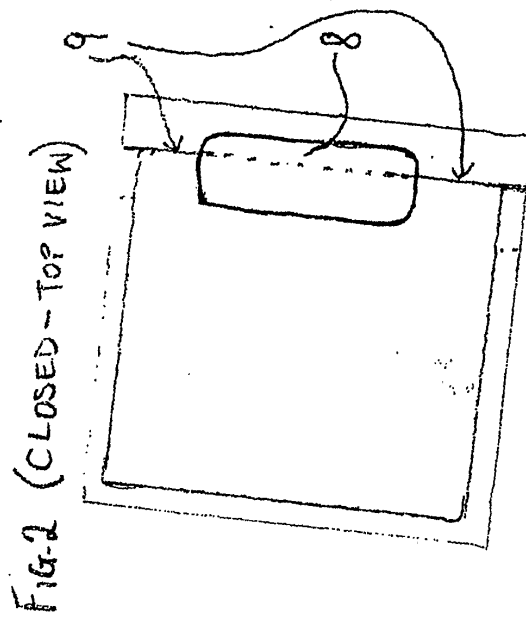
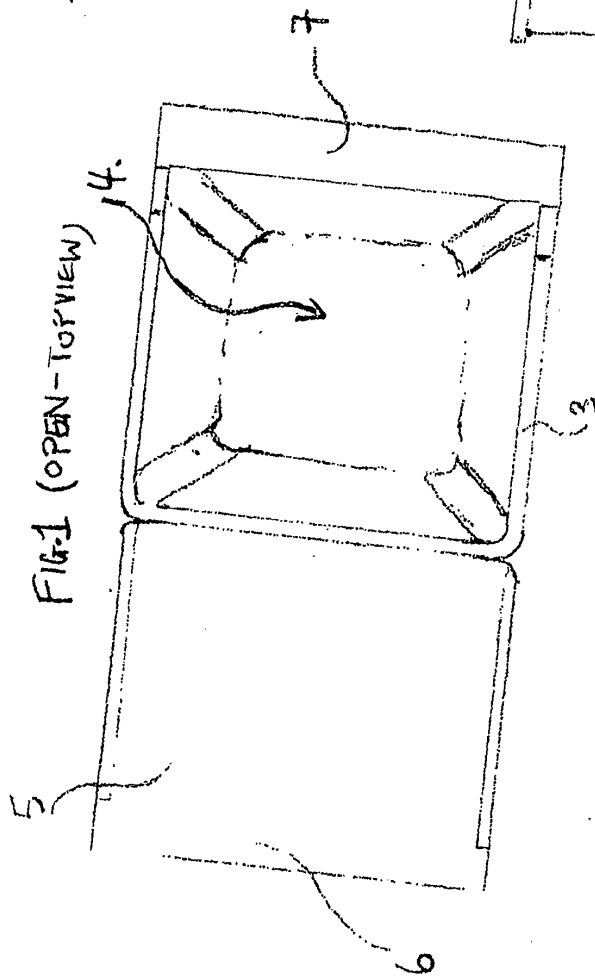
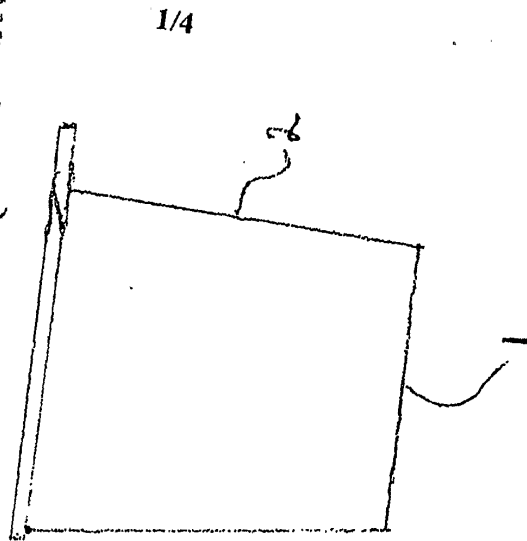
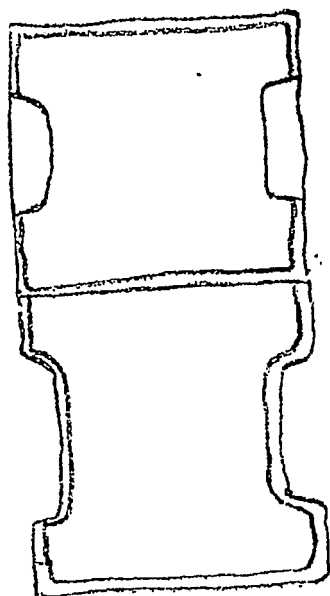
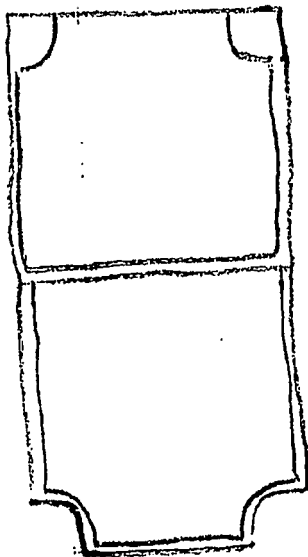


FIG. 3 (CLOSED-SIDE VIEW)

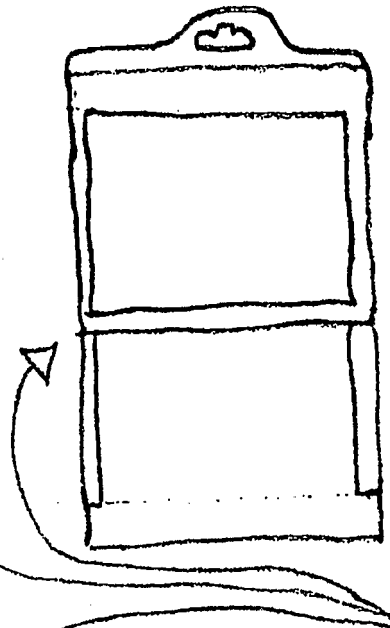




A

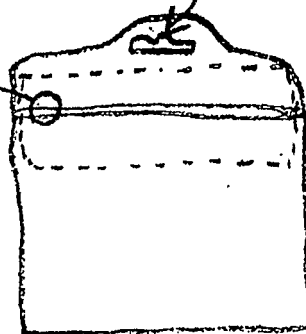
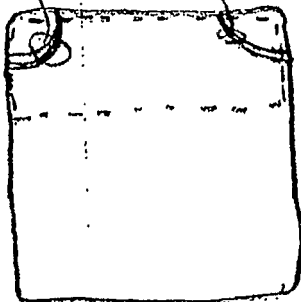
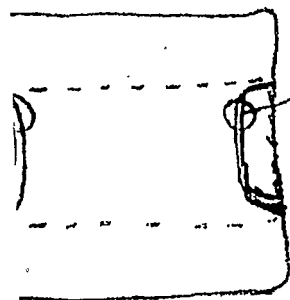


B



C

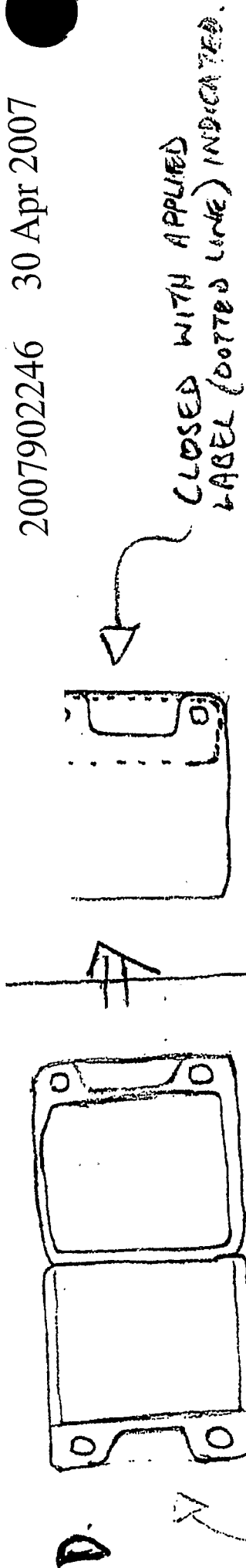
TOP VIEWS SHOWING "OPEN" OPTIONS



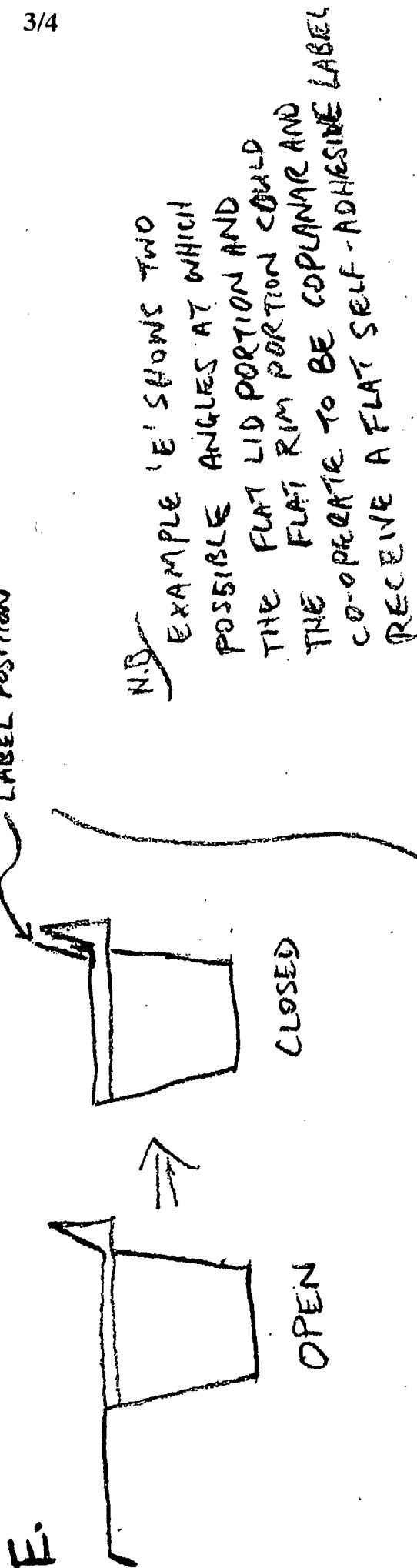
TOP VIEW SHOWING
CLOSED OPTIONS WITH
LABEL AREA (DOTTED LINE) NOTED.

N.B. WHEN LID FLAP IS CLOSED,
FLAT LID FLAP PORTION AND FLAT RIM
PORTION ARE GENERALLY COPLANAR
TO RECEIVE A FLAT, SELF-ADHESIVE
LABEL TO AREA SHOWN BY DOTTED
LINE.

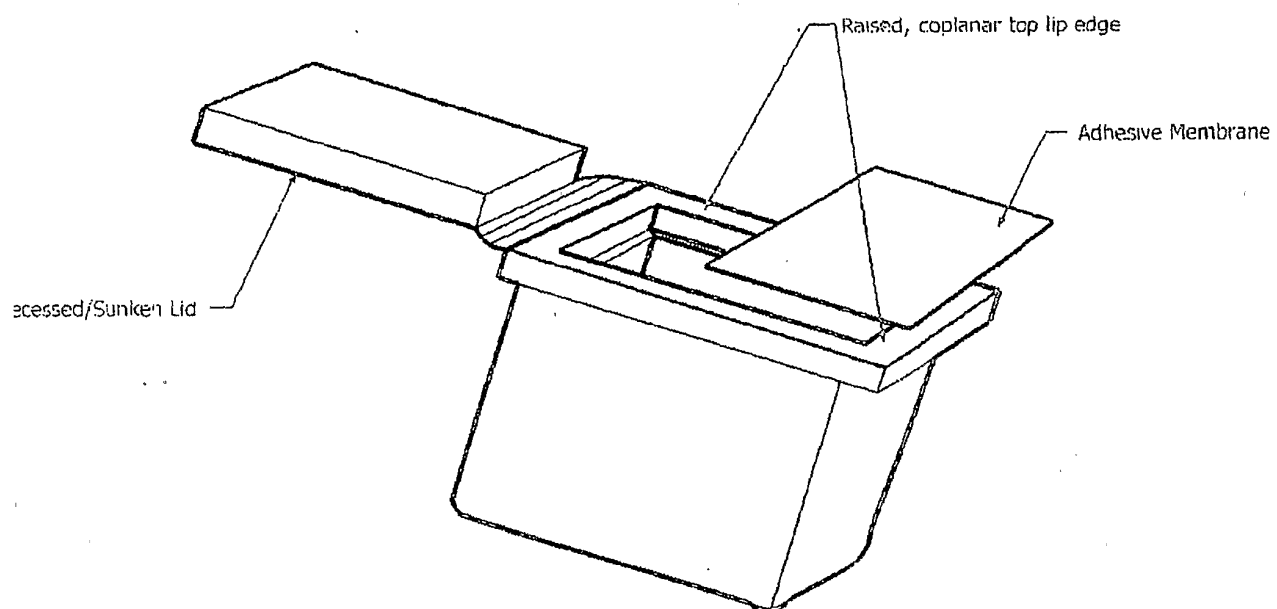
N.B.
EXAMPLE 'C' ALSO SHOWS HANGING
HOLE OPTION BY EXTENDING THE
FLAT RIM PORTION IN A DIRECTION
AWAY FROM THE CONTAINER.



FLAT, SELF-ADHESIVE LABEL POSITION



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