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(54) **Container and lid arrangement**

Verpackung und Deckel

Emballage et couvercle

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## Description

[0001] The invention to which this application relates is to a container of the type for holding an item such as, although not exclusively, a foodstuff, such that the container, with the foodstuff can be provided as a retail pack for sale at a retail outlet such as a supermarket or the like.

[0002] Many forms of these containers are known and typically the container includes a base which acts as a tray with a cavity in which the item is held. A lid is provided which covers the opening into the cavity and protects the same. The lid may be hinged to the base or can be a separate item. If required, retaining formations can be formed on the base and/or lid to enable the lid to be retained in the closed position.

[0003] However, a common problem is that removal of the lid from the base is not desired to occur until the container has reached its final destination i.e. once the container and item therein has been purchased. This is in order to prevent the possibility of the item being tampered with.

[0004] One possible way of achieving this is to provide a formation as an integrated part of the container and said part is connected, to the base and/or lid typically via a line of weakening, to allow the part to be broken off or released and access gained to allow the lid to be opened from the base. However this form of tamper evident formation can be expensive to produce, limits the types of plastics which can be used, and can, on occasion, be circumvented.

[0005] One possible solution to this problem is disclosed by US6352170, wherein a container is provided which has a label passing between the container base and lid. The label passes through a gap on a raised portion formed on the lid, which prevents the label being slid off without being manipulated in a tamper evident manner. However, this does not disclose the prevention of access to tabs to allow removal of the lid from the base.

[0006] The aim of the present invention is to provide a container having a lid and a base and to provide an effective way of allowing the same to have a tamper evident characteristic but without the need for a line of weakening or frangible line to be provided.

[0007] The further aim of the present invention is to overcome the abovementioned problems.

[0008] In a first aspect of the invention there is provided a container including a base and a lid, said container provided as a retail pack with an item to be used or consumed contained therein, said lid closing an opening in the base wherein prior to first removal of the lid for access to the item, a sheet material is positioned so as to prevent the removal of the lid from the base without altering the condition of the sheet material **characterised in that**; said base and/or lid includes at least one tab to be gripped to remove the lid from the base and the sheet material is positioned over at least one of said tabs.

[0009] In one embodiment the at least one tab is located at a gap in a raised portion along at least part of

the periphery of a flange on the body and into which the lid is placed. Preferably the edge profile of at least the base changes adjacent the location of the said gap. Typically the change in edge profile is an indent inwardly.

[0010] In one embodiment, the sheet material is in the form of a label. In one embodiment, the label is attached to both the base and lid and extends between the same. In one embodiment the label includes a band portion and the label is oriented on the container such that the band is located to pass through the gap defined at the flange of the body.

[0011] Typically the label is attached by adhesive to the body and lid.

[0012] In an alternative embodiment the label need not be attached to the container but instead can be provided with its free ends attached to each other to form a band which passes around the container with a portion of the label passing over at least one of the tabs. When the tabs are located in the said gap, the label is located to pass through the grip and be of sufficient toughness so as not to be lifted from the gap without ripping the same.

[0013] In both embodiments, in order to remove the lid from the base it is necessary for the label to be torn, this is due to the fact that in the embodiment when the label is adhered to the container, the label needs to be torn to allow release of the lid, and in the arrangement where the label is a band, the same is formed sufficiently tightly on the base and lid such that when it is located in the gap it cannot be slid over the raised portions without causing tearing of the label or clearly apparent deformation of the container.

[0014] Thus, in whichever of the embodiments, the container in accordance with the invention is tamper evident as, if the label is torn then it is clear that the same has been tampered with and that access may have been gained to the contents of the container. As a result the container can be discarded. Typically, and in whichever embodiment, the shaping of the edge profile of the lid and base flange at the interface between lid and base are such that access can only be gained to grip and lift the lid from the base where there are tab portions and as these tab portions are covered by the sheet material, the only possible way of opening the same is protected.

[0015] Preferably the flange with the raised portion of the base receives the edge of the lid which lies to the inner side wall of the raised portion. This makes it difficult to engage the edge of the lid with the flanges except where the tab(s) is/are provided.

[0016] A specific embodiment of the invention is now described with reference to the accompanying drawings wherein;

Figures 1a-c illustrates a container in a closed condition in accordance with one embodiment of the invention in plan from the top, side elevation and plan from the base respectively.

Figure 2a-d illustrate the container in the open con-

dition;

Figure 3 and 4 illustrate in greater detail the arrangement between the respective edges of the lid and base.

**[0017]** Referring firstly to Figures 1a-c and Figures 2a-d there is illustrated a container 2 comprising a base 4 and lid 6. In this case the lid is hinged to the base along edge 8 but this need not be the case. The base 4 has a cavity 10 in which an item such as a foodstuff is held, and an opening 12 into the cavity 10. When in the closed position, as shown in Figures 1a-c the lid closes the opening. In this arrangement the container can, for example, form a retail pack and it is desired that the container be in the closed position, and evidently so, until the container is to be opened for use of the item therein.

**[0018]** Also provided as part of the container is a label 14 which, in this embodiment has body portions 16, 18 attached to the underside and top of the body and lid respectively, typically by glue. A band 20 joins the body portions 16, 18 and passes between the lid and body. In the embodiment shown the label passes along a gap 22 formed in the lid as will be explained with reference to Figures 3 and 4. However, it should be noted that the invention in its broadest sense can be used with a container which does not include a gap formation and still be effective.

**[0019]** Figures 2a-d show the container 2 in an open position with lid 6 hingedly removed from the body 4 to allow access via opening 12 into the cavity 10. It is also shown in Figure 2a how the band portion 20 of the label 14 has had to be torn 21 to allow the lid to be opened.

**[0020]** Figures 3 and 4 show the arrangement between the lid and base in more detail at the respective peripheral edges at the location of the gap 22. As shown the lid is designed to fit by "plugging" into the base to form a tight closure and if required a leak resistant seal can be achieved.

**[0021]** The base is provided with a raised portion 24 around the periphery of the flange 26 and this raised portion matches the edge profile 28 of the lid in shape apart from at the location of the gap 22. Thus the lid sits within the inner edge of the raised portion and so with the exception of the location of the tabs the lid edge cannot be easily grasped to lever the base lid away from the opening. At the gap which in this case is where the tabs are located, part of the edge of the lid sits out beyond an indented portion 25 of the base flange and hence access can easily be gained to the same. Furthermore, as the fit which is achieved between the lid and base is relatively tight, even if access was gained to the lid edge it is still difficult to open the lid other than at the gap 22.

**[0022]** Thus, in order to open the lid, the indent 29 allows a portion 32 of the lid to be exposed for gripping by the fingers to act as a tab by which the lid can be raised from the base.

**[0023]** The gap itself is formed by the provision of "flat"

areas on the body flange and the lid such that the same is a gap in the raised portion 24. In addition to the provision of the "tab" the gap also acts as a location for the label band 20 as shown. This prevents the label from slipping with respect to the body or lid and also prevents attempts to open the lid without first tearing the label, as the label cannot be moved over the raised portions due to the "tightness" of the attachment via the gap. To further encourage the tearing of the band a line of weakening 34 can be provided to allow the label to be torn at the preferred location.

**[0024]** The present container therefore provides a container which can only be opened by gaining access to the tab at the gap and in order to do that the label must be torn, thus providing a container which is tamper evident.

## Claims

1. A container (2) including a base (4) and a lid (6), said container provided as a retail pack with an item to be used or consumed contained therein, said lid (6) closing an opening (12) in the base (4) wherein prior to first removal of the lid (6) for access to the item, a sheet material (20) is positioned so as to prevent the removal of the lid (6) from the base (4) without altering the condition of the sheet material (20) **characterised in that**;
- said base (4) and/or lid (6) includes at least one tab (32) to be gripped to remove the lid (6) from the base (4) and the sheet material (20) is positioned over at least one of said tabs (32).
2. A container (2) according to claim 1 **characterised in that** the base (4) has a raised portion (24) along at least part of the periphery of a flange (26) onto which the lid (6) is placed when in a closed condition.
3. A container (2) according to claim 2 **characterised in that** the tabs (32) are located at a gap (22) in the raised portion (24).
4. A container (2) according to claim 3 **characterised in that** the edge profile of at least the base (4) changes at the gap (22) to form one of the tabs (32).
5. A container (2) according to claim 1 **characterised in that** the label (14) is attached to and/or passes around both the base (4) and lid (6) and extends between the same.
6. A container (2) according to claim 5 **characterised in that** the label (14) is orientated on the container such that part of the label is located in a gap defined in the flange (26) of the body.
7. A container (2) according to claim 5 **characterised**

in that the label (14) is attached by adhesive to the body and lid.

8. A container (2) according to claim 5 **characterised in that** the label (14) is provided in the form of a band (20) which passes around the container and a portion of the same passes through the gap in the flange of the base.
9. A container (2) according to any of claims 5 to 8 **characterised in that** in order to remove the lid (6) from the base (4) it is necessary for the label (14) to be torn or for the label to be removed from one of the base or the lid.
10. A container (2) according to any of the preceding claims **characterised in that** at the location on the edge profile of the base (4) with the indent (25), a portion of the lid (6) is exposed and acts as a tab (32) for gripping the lid to remove the same from the base.
11. A container (2) according to claim 1 **characterised in that** the flange (26) with a raised portion of the base (4) receives the edge of the lid (28) which lies to the inner side wall of the raised portion.

#### Patentansprüche

1. Behälter (2) mit einem Unterteil (4) und einem Deckel (6), wobei der genannte Behälter als Verkaufspackung mit einem darin aufgenommenen zu verwendenden oder zu verzehrenden Artikel vorgesehen ist, wobei der genannte Deckel (6) eine Öffnung (12) in dem Unterteil (4) verschließt, wobei vor dem ersten Abnehmen des Deckels (6) für Zugang zu dem Artikel ein flächiges Material (20) so positioniert ist, dass es die Entfernung des Deckels (6) von dem Unterteil (4) ohne Ändern des Zustands des flächigen Materials (20) verhütet, **dadurch gekennzeichnet, dass** das genannte Unterteil (4) und/oder der genannte Deckel (6) wenigstens eine Lasche (32) aufweist, die zum Abnehmen des Deckels (6) von dem Unterteil (4) zu ergreifen ist, und das flächige Material (20) über wenigstens einer der genannten Laschen (32) positioniert ist.
2. Behälter (2) nach Anspruch 1, **dadurch gekennzeichnet, dass** das Unterteil (4) an wenigstens einem Teil des Umfangs eines Flansches (26) entlang einen erhabenen Abschnitt (24) hat, auf dem der Deckel (6) in einem geschlossenen Zustand liegt.
3. Behälter (2) nach Anspruch 2, **dadurch gekennzeichnet, dass** die Laschen (32) an einer Aussparung (22) in dem erhabenen Abschnitt (24) positioniert sind.

niert sind.

4. Behälter (2) nach Anspruch 3, **dadurch gekennzeichnet, dass** das Randprofil von wenigstens dem Unterteil (4) sich an der Aussparung (22) ändert, um eine der Laschen (32) zu bilden.
5. Behälter (2) nach Anspruch 1, **dadurch gekennzeichnet, dass** das Etikett (14) an dem Unterteil (4) und dem Deckel (6) angebracht ist und/oder um diese herumläuft und zwischen diesen verläuft.
6. Behälter (2) nach Anspruch 5, **dadurch gekennzeichnet, dass** das Etikett (14) an dem Behälter so ausgerichtet ist, dass Teil des Etiketts in einer in dem Flansch (26) des Körpers definierten Aussparung positioniert ist.
7. Behälter (2) nach Anspruch 5, **dadurch gekennzeichnet, dass** das Etikett (14) mit Klebstoff an dem Körper und dem Deckel angebracht ist.
8. Behälter (2) nach Anspruch 5, **dadurch gekennzeichnet, dass** das Etikett (14) in der Form eines Bandes (20) bereitgestellt ist, das um den Behälter herumläuft, und ein Teil desselben durch die Aussparung in dem Flansch des Unterteils läuft.
9. Behälter (2) nach einem der Ansprüche 5 bis 8, **dadurch gekennzeichnet, dass** zum Abnehmen des Deckels (6) von dem Unterteil (4) das Etikett (14) zerrissen werden muss oder das Etikett von dem Unterteil oder dem Deckel entfernt werden muss.
10. Behälter (2) nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** an der Stelle mit der Ausnehmung (25) an dem Randprofil des Unterteils (4) ein Abschnitt des Deckels (6) freiliegt und als eine Lasche (32) zum Ergreifen des Deckels zum Abnehmen von diesem von dem Unterteil dient.
11. Behälter (2) nach Anspruch 1, **dadurch gekennzeichnet, dass** der Flansch (26) mit einem erhabenen Abschnitt des Unterteils (4) den Rand des Deckels (28) aufnimmt, der zur inneren Seitenwand des erhabenen Abschnitts hin liegt.

#### Revendications

1. Contenant (2) comportant une base (4) et un couvercle (6), ledit contenant se présentant comme un emballage du commerce de détail avec un article destiné à être utilisé ou consommé lequel est contenu dans celui-ci, ledit couvercle (6) fermant une ouverture (12) ménagée dans la base (4), cas dans lequel avant l'enlèvement du couvercle (6) pour la

première fois afin d'accéder à l'article, un matériau en feuille (20) est positionné de sorte à empêcher l'enlèvement du couvercle (6) de la base (4) sans altérer l'état du matériau en feuille (20), **caractérisé en ce que** :

ladite base (4) et/ou ledit couvercle (6) comporte au moins une languette (32) destinée à être agrippée afin d'enlever le couvercle (6) de la base (4) et le matériau en feuille (20) est positionné au-dessus de l'une au moins desdites languettes (32).

2. Contenant (2) selon la revendication 1, **caractérisé en ce que** la base (4) comporte une partie surélevée (24) le long d'au moins une partie de la périphérie d'une bride (26) sur laquelle le couvercle (6) est placé lorsqu'il est en position fermée. 15
3. Contenant (2) selon la revendication 2, **caractérisé en ce que** les languettes (32) sont positionnées au niveau d'un espace (22) dans la partie surélevée (24). 20
4. Contenant (2) selon la revendication 3, **caractérisé en ce que** le profil de bord d'au moins la base (4) change au niveau de l'espace (22) afin de former l'une des languettes (32). 25
5. Contenant (2) selon la revendication 1, **caractérisé en ce que** l'étiquette (14) est attachée à la fois à la base (4) et au couvercle (6) et/ou passe à la fois autour de la base et du couvercle, et s'étend entre ceux-ci. 30
6. Contenant (2) selon la revendication 5, **caractérisé en ce que** l'étiquette (14) est orientée sur le contenant de sorte qu'une partie de l'étiquette est positionnée dans un espace défini dans la bride (26) du corps. 35
7. Contenant (2) selon la revendication 5, **caractérisé en ce que** l'étiquette (14) est attachée au corps et au couvercle à l'aide d'un adhésif. 40
8. Contenant (2) selon la revendication 5, **caractérisé en ce que** étiquette (14) se présente sous la forme d'une bande (20) laquelle passe autour du contenant et une partie de celle-ci passe à travers l'espace ménagé dans la bride de la base. 45
9. Contenant (2) selon l'une quelconque des revendications 5 à 8, **caractérisé en ce que**, pour enlever le couvercle (6) de la base (4), il est nécessaire de déchirer l'étiquette (14) ou d'enlever l'étiquette de l'un des postes suivants, à savoir la base ou le couvercle. 50

10. Contenant (2) selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'**au niveau de l'emplacement sur le profil de bord de la base (4) comportant l'indentation (25), une partie du couvercle (6) est exposée et joue le rôle de languette (32) pour permettre d'agripper le couvercle afin d'enlever celui-ci de la base. 5

11. Contenant (2) selon la revendication 1, **caractérisé en ce que** la bride (26) comportant une partie surélevée de la base (4) reçoit le bord du couvercle (28) qui se trouve sur la paroi latérale interne de la partie surélevée. 10

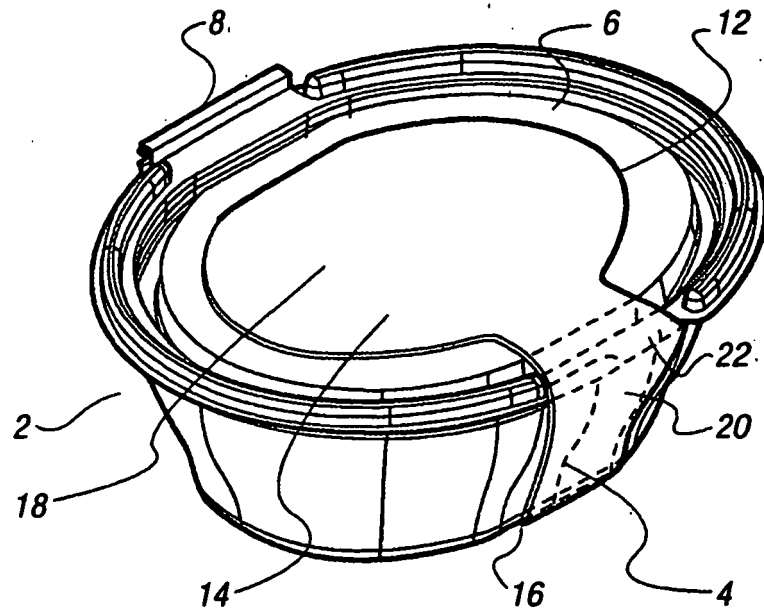


FIG. 1a

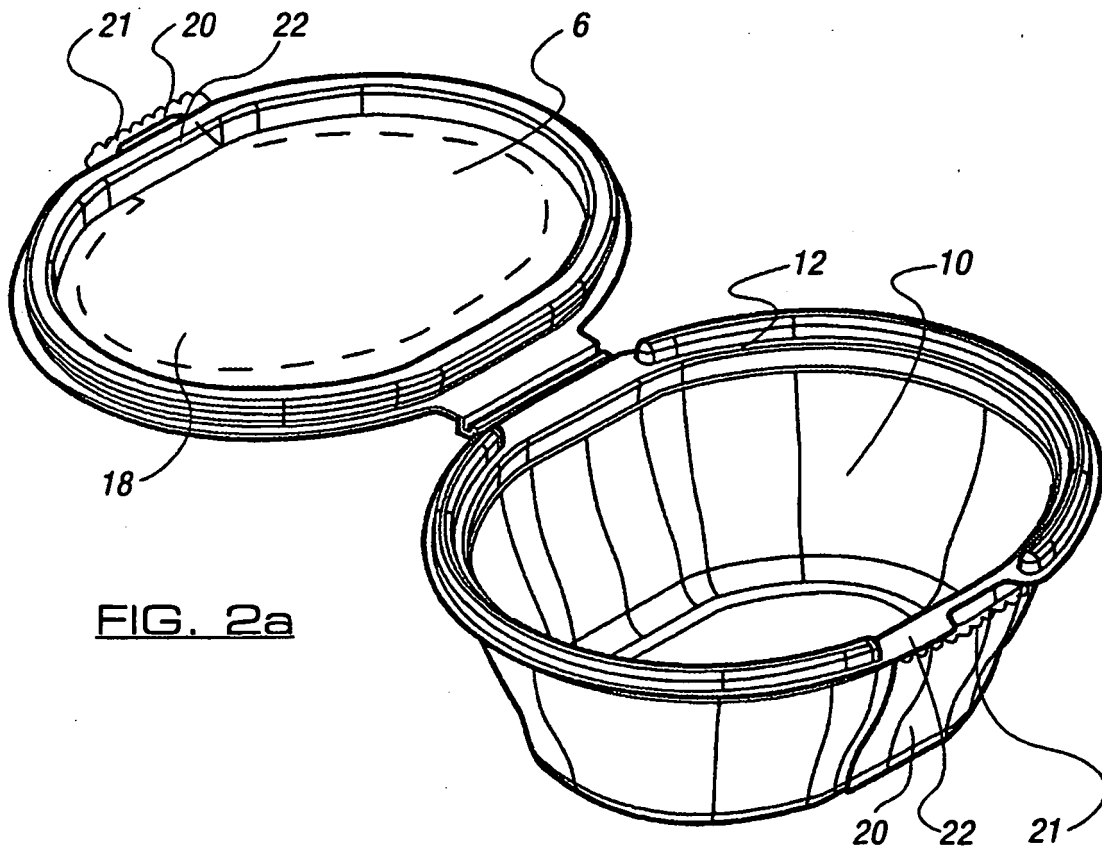


FIG. 2a

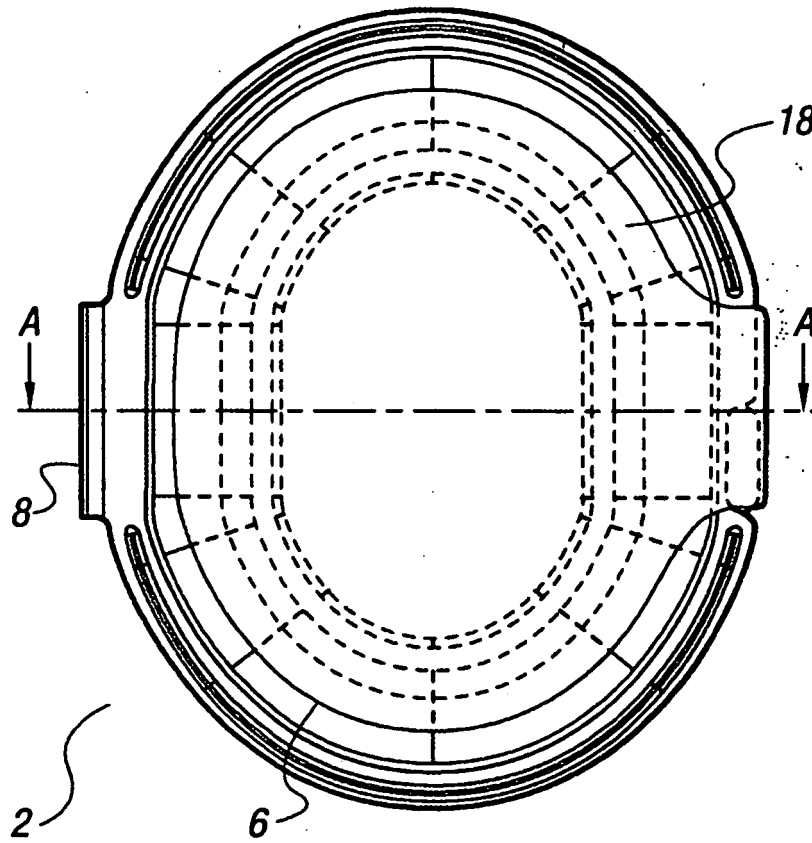


FIG. 1b

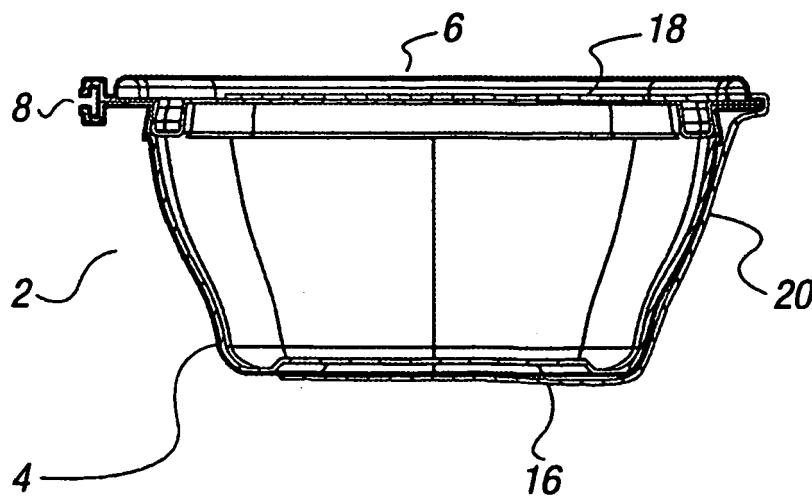


FIG. 1c

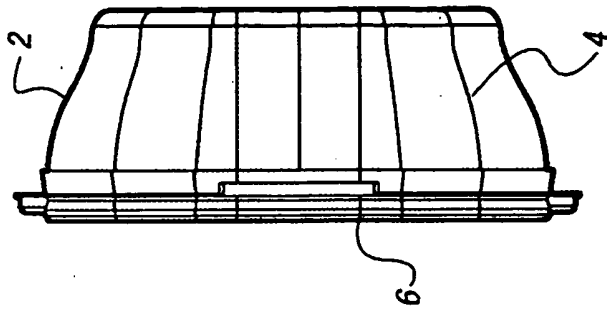


FIG. 2d

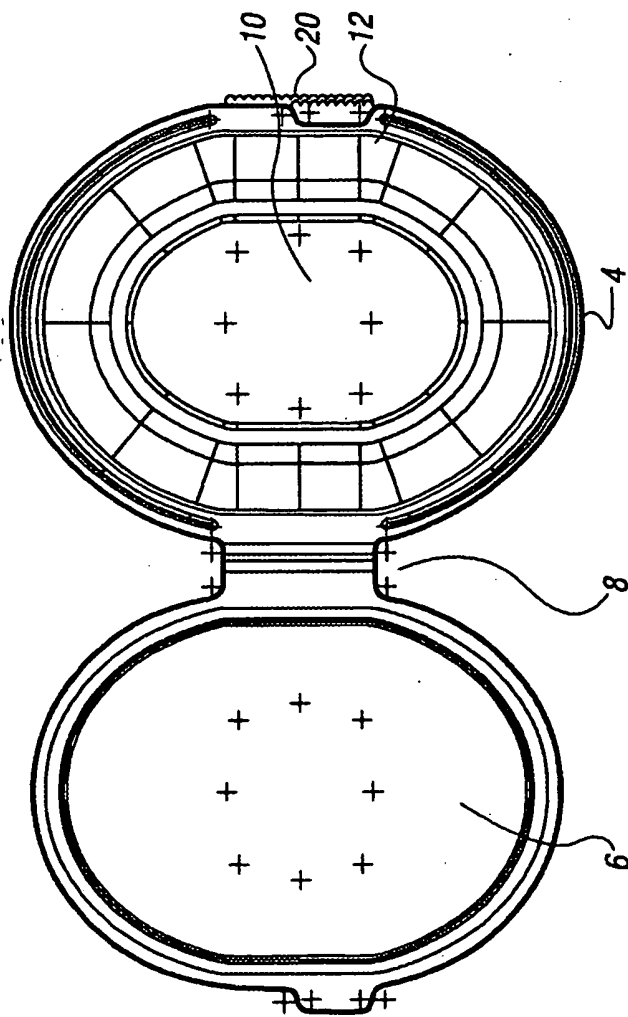


FIG. 2c

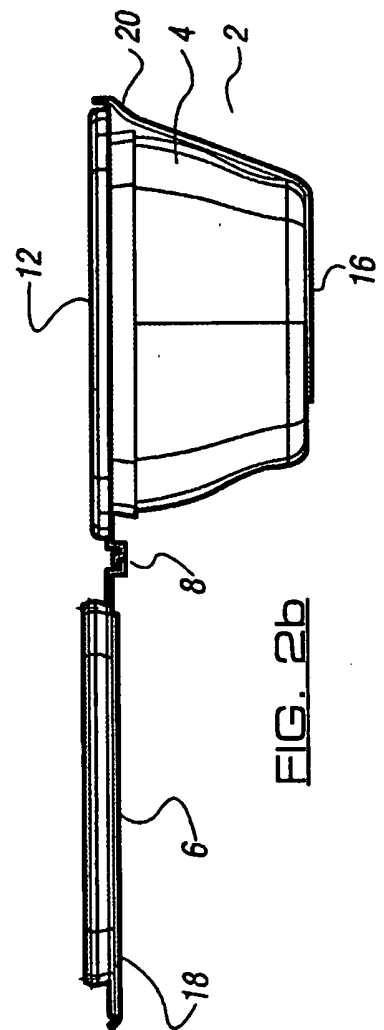


FIG. 2b

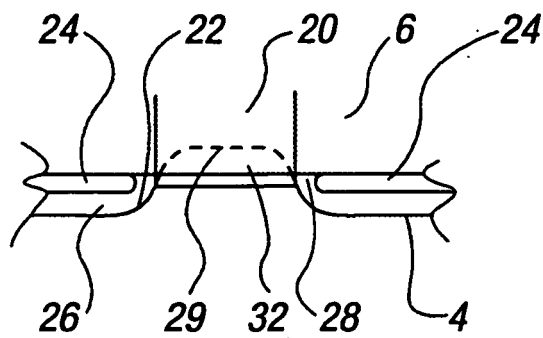


FIG. 3

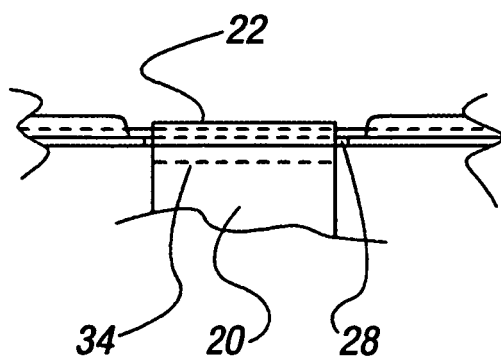


FIG. 4

**REFERENCES CITED IN THE DESCRIPTION**

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**Patent documents cited in the description**

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