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(54) **Racetrack-shaped container with lid**

Rennbahnförmiger Behälter mit Deckel

Conteneur à extrémités arrondies avec couvercle

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to a container and, in particular, a racetrack-shaped container with lid.

BACKGROUND OF THE INVENTION

[0002] Containers, such as containers for storing food products, come in all different sizes and shapes and are composed of various materials. The most common food container shapes include rectangular, square, circular, oval and tub-shaped. Manufacturers select a particular shape of container based on various factors, including what food product will be stored in the container, ease of use of the container and manipulation and handling of the container, as well as visual aesthetics.

[0003] Two commonly used food container shapes are cylindrical and oval. However, cylindrical and oval-shaped containers have drawbacks which may render their respective shapes less than optimal. For example, with regard to both cylindrical and oval-shaped containers, when these containers are packaged in a shipping box or crate and placed side-by-side, due to their round shape, there is empty or void airspace in the shipping container between the respective cylindrical or oval containers. As a result, a significant percentage of each shipping box is filled with void airspace, rather than with the respective containers.

DE29809960 discloses a device for storing canned food comprising which is arranged such that when the device is closed, the ambient air surrounding the canned food is minimised.

FR2417446 discloses an apparatus for storing dry fruits, especially dates comprising a container in the shape of a raretrack comprising a continuous lip extending around the sidewall of the container and a removable lid comprising a skirt and inwardly extending projections or spacers to engage the lip of the containers. The device is arranged to ensure the preservation and conservation of the fruits through the inclusion of venting means.

GB2116524 provides a device for properly aligning the sealing member of a cover relative to the sealing rim of a container. The device includes at least one alignment tab which cooperates with at least one alignment slot to align the sealing member of a cover with respect to the sealing rim of a container. Accurate alignment of the sealing member and sealing rim ensures a proper seal and prevents deformation of the container and cover due to misalignment.

[0004] An additional disadvantage with both cylindrical and oval-shaped containers is that, when these items are placed on a store shelf front-to-back, the cylindrical and oval containers can rotate, spin or pivot, relative to each other, on the store shelf. Thus, the containers on the store shelf may not be properly aligned with their labels facing directly forward.

[0005] Often food containers include a snap tight lid, which is firmly attached to a top opening of the container. The tight fit ensures that the lid will remain attached to the container and, in some cases, provides an airtight engagement between the lid and a container body. One disadvantage of having such a tight fitting lid is that it may be difficult to remove the lid to gain access to the contents contained therein.

[0006] There is a need in the art for a new and improved container which overcomes the deficiencies of prior art containers.

SUMMARY OF THE INVENTION

[0007] The present invention relates to a container which, in cross-section, is in the shape of a racetrack and, as such, its sidewalls contain two opposing parallel sides and two opposing curved, semicircular sides, thus forming the racetrack. Preferably, the dimensions of the racetrack-shaped sidewall are maintained from a bottom of the container uniformly to proximate a top opening opposite the bottom. The top opening has the same racetrack-shaped dimensions as the bottom of the container.

[0008] Advantageously, the container is made of a transparent or translucent material, such as a plastic material, so that one can see the contents of the container through its sidewalls. A lip in the form of a flange extends from the opposing parallel sides and a portion of the curved sides of the racetrack-shaped top opening of the container, while a central portion of the curved sides does not include a lip. The absence of a lip on a central portion of the curved sides allows one to more easily remove a lid attached to the container over the top opening.

[0009] The present invention, in one form, relates to a container comprising a container body having a bottom, a sidewall extending up therefrom, and a top opening opposite the bottom, the sidewall having two opposing parallel sides and, two opposing curved sides forming a racetrack shape, wherein the top opening has the same racetrack shape as the bottom, and the top opening is in the form of a complete racetrack shape defined by the sidewall of the container body; a lip of the container body extends outward from the opposing parallel sides and a portion of the curved sides of the racetrack shape of the top opening, wherein a central portion of at least one of the curved sides does not have a lip disposed thereon; and a removable lid adapted to snap onto the container body over the top opening and wherein the removable lid comprises a skirt with an inwardly extending bead, wherein the bead engages the container body below the lip when the removable lid is disposed on the container body, and the removable lid has a plurality of tabs extending radially outward from a central portion of the removable lid toward the skirt.

BRIEF DESCRIPTION OF THE FIGURES

[0010] Figure 1 is a front elevation view of a container,

with the lid not shown, in accordance with the present invention;

[0011] Figure 2 is a side elevation view of the container of Figure 1;

[0012] Figure 3 is an exploded perspective view of the container and lid, in accordance with the present invention;

[0013] Figure 4 is a plan view of the container of Figure 1, shown from above;

[0014] Figure 5 is a plan view of the lid of Figure 3, shown from below;

[0015] Figure 6 is a partial side elevation of the container of Figure 3, shown with the lid disposed on the container body;

[0016] Figure 7 is a top plan view of the container of Figure 6;

[0017] Figure 8 is a cross-sectional view of the container, taken along line 8-8 of Figure 7; and

[0018] Figure 9 is a cross-sectional view of the container, taken along line 9-9 of Figure 7.

DETAILED DESCRIPTION

[0019] Referring now to Figures 1-9, container 10 comprises container body 12 and lid 30 (Figure 3). Container body 12 has a bottom 14 and a sidewall extending upward therefrom comprising two opposing curved sides 18a, 18b and two opposing parallel sides 20a, 20b. Opposite the bottom 14 is a top opening 15. The container body 12, in cross-section, has a racetrack shape defined by the two opposing curved sides 18a, 18b and the two parallel sides 20a, 20b. The racetrack-shaped dimensions are uniformly maintained from the bottom 14 to proximately the top opening 15, where lips 22a, 22b extend slightly outwardly from the sides 20a, 20b and from a portion of sides 18a, 18b of the container body 12. The perimeter of the top opening 15 is in the shape of a complete racetrack defined by opposing curved sides 18a, 18b and opposing parallel sides 20a, 20b.

[0020] Advantageously, the exterior surface of sides 18a, 18b, 20a, 20b are smooth and non-contoured. Preferably, the material which comprises container body 12 is transparent or translucent so that one can see the contents disposed within container 10. The material may be any suitable transparent or translucent material including, but not limited to, thermoplastics such as polypropylene and polyethylene.

[0021] The dimensions of the container 10 allow a user to hold the container in the palm of one's hand. In particular, the curved sides 18a, 18b, i.e. semicircular-shaped portions, allow the container 10 to securely fit in the palm of one's hand.

[0022] Lips 22a, 22b are in the form of flanges which extend radially outward from the perimeter of the top opening 15. Advantageously, lips 22a, 22b extend along the entire perimeter of sides 20a, 20b, respectively, and approximately half the perimeter of the curved sides 18a, 18b. Lips 22a, 22b are absent from central portions 16a,

16b of the curved sides 18a, 18b, respectively. The presence of lips 22a, 22b provides a sufficient snap tight arrangement between the lid 30 and container body 12, while the absence of lips 22a, 22b on the center portions 16a, 16b allows for easy removal of lid 30.

[0023] Lid 30 also has a racetrack shape, having exterior dimensions only slightly larger than that of the container body 12. A plurality of ribs 32 may be provided to form a textured surface on the exterior surface, around the perimeter of lid 30, to provide a friction surface, which enables one to more easily grasp and remove lid 30 from container body 12.

[0024] Referring now specifically to Figures 5-9, lid 30 has a center portion 34, a ridge portion 35 and a skirt 36. A plurality of tabs 37 extend radially outwardly from an interior wall which forms the ridge 35. A continuous bead 38 around the entire periphery of the lid 30 extends radially inward from an interior facing surface of the skirt towards the center portion 34. When lid 30 is disposed on the container body 12, the bead 38 is disposed below the lip portions 22a, 22b and the plurality of tabs 37 abut an interior facing surface of the sides 18a, 18b, 20a, 20b, as shown in Figures 8 and 9. To close the container 10, one places the lid 30 over the top opening 15 and presses the lid downward onto the container body 12 until the lid 30 snaps into place.

[0025] The absence of lips, such as 22a, 22b on central portions 16a, 16b, allows the lid to be more easily removed from the container body, since no lips engage with the bead 38 adjacent the center portions 16a, 16b. The resiliency of the material which comprises lid 30, which can be any suitable thermoplastic, allows the ridge 35 to form a hinge between skirt 36 and center portion 34, thereby allowing the skirt to resiliently move radially outward, thus permitting the bead 38 to ride up and over the lips 22a, 22b when the lid 30 is removed from and applied to the container body 12.

[0026] The present container can be used to store food items. Examples of food items include, but are not limited to, powdered beverage sticks. Other food items include individually wrapped food items which do not need to be stored in an airtight food container.

[0027] The racetrack shape of the present container 10 provides advantages and features to the container 10 which are absent in prior art containers having different shapes. For example, the non-curved sides defined by the opposing parallel sides 20a, 20b allow one to apply graphics to these sidewalls, and thereby provide for better graphic placement than on curved surfaces of cylindrical-shaped and oval-shaped containers.

[0028] In addition, the parallel sidewalls 20a, 20b allow one to align a series of containers front-to-back on a store shelf in perfect alignment. The flat sidewalls 20a, 20b ensure that abutting containers will not spin or rotate relative to each other while on a store shelf. Therefore, the present container provides for a more orderly and efficient use of space on a store shelf.

[0029] Further, the dimensions of the present contain-

er, being in the form of a racetrack, allow for a more efficient packing of a plurality of containers 10 into a shipping box or crate, as compared with cylindrical or oval-shaped containers. The parallel sides 20a, 20b allow more containers 10 to be packed within the same space, as there will be less void airspace between individual containers 10 packed within the shipping box. As a result, transportation costs to ship the present container are reduced since more containers can be packed within the same shipping space. In addition, the parallel sides of the racetrack-shaped container allow for a more efficient use of store shelf space, maximizing the amount of product which can be stored on a shelf and minimizing the amount of wasted airspace or voids. Further, the present container has more capacity when compared to an oval-shaped container having the same length and width, again due to the parallel sides of the racetrack.

[0030] Yet an additional advantage of the present container is that the material is transparent or translucent, which allows a user to view the contents of the container without removing the lid. As a result, a user looking at the container can inventory its contents.

[0031] Although the invention has been described above in relation to preferred embodiments thereof, it will be understood by those skilled in the art that variations and modifications can be effected in these preferred embodiments without departing from the scope of the invention as defined in the appended claims.

Claims

1. A container (10) comprising:

a container body (12) having a bottom (14), a sidewall extending up therefrom, and a top opening (15) opposite the bottom (14), the sidewall having two opposing parallel sides (20a, 20b) and two opposing curved sides (18a, 18b) forming a racetrack shape, wherein the top opening (15) has the same racetrack shape as the bottom (14), and the top opening (15) is in the form of a complete racetrack shape defined by the sidewall of the container body (12);
a lip (22a, 22b) of the container body (12) extends outward from the opposing parallel sides (20a, 20b) and a portion of the curved sides (18a, 18b) of the racetrack shape of the top opening (15), wherein a central portion (16a, 16b) of at least one of the curved sides (18a, 18b) does not have a lip (22a, 22b) disposed thereon; and
a removable lid (30) adapted to snap onto the container body (12) over the top opening (15) and wherein the removable lid (30) comprises a skirt (36) with an inwardly extending bead (38), wherein the bead (38) engages the container body (12) below the lip (22a, 22b) when the removable lid (30) is disposed on the container

body (12), and the removable lid (30) has a plurality of tabs (37) extending radially outward from a central portion (34) of the removable lid (30) toward the skirt (36).

2. The container (10) of Claim 1, wherein the lip (22a, 22b) is absent from both central portions (16a, 16b) of the curved sidewalls (18a, 18b) comprising the racetrack shape of the top opening (15).
3. The container (10) of Claim 1 or 2, wherein the lid (30) has substantially the same racetrack shape as the container body (12).
4. The container (10) of any one of Claims 1 to 3, wherein the lid (30) has a textured exterior surface.
5. The container (10) of any one of Claims 1 to 4, wherein the sidewall has a substantially smooth and non-contour surface along its entire length.
6. The container (10) of any of Claims 1 to 5, wherein the sidewall is transparent or translucent so that one can view the contents inside the container body (12) through the sidewall.

Patentansprüche

1. Behälter (10), der Folgendes umfasst:

einen Behälterkörper (12) mit einem Boden (14), einer Seitenwand, die sich von demselben nach oben erstreckt, und einer oberen Öffnung (15) gegenüberliegend dem Boden (14), wobei die Seitenwand zwei gegenüberliegende parallele Seiten (20a, 20b) und zwei gegenüberliegende gewölbte Seiten (18a, 18b) aufweist, die eine Rennbahnform bilden, wobei die obere Öffnung (15) die gleiche Rennbahnform wie der Boden (14) hat, und die obere Öffnung (15) in Form einer vollständigen Rennbahnform vorliegt, die durch die Seitenwand des Behälterkörpers (12) begrenzt wird;
eine Lippe (22a, 22b) des Behälterkörpers (12), die sich von den gegenüberliegenden parallelen Seiten (20a, 20b) und einem Teil der gebogenen Seiten (18a, 18b) der Rennbahnform der oberen Öffnung (15) nach außen erstreckt, wobei ein Mittelteil (16a, 16b) mindestens einer der gebogenen Seiten (18a, 18b) keine darauf angeordnete Lippe (22a, 22b) aufweist; und
einen entfernbaren Deckel (30), der zum Einschnappen auf den Behälterkörper (12) über der oberen Öffnung (15) angepasst ist, und wobei der entfernbare Deckel (30) einen Rand (36) mit einem sich nach innen erstreckenden Wulst (38) aufweist, wobei der Wulst (38) den Behälterkörper

- per (12) unter der Lippe (22a, 22b) ergreift, wenn der entfernbare Deckel (30) auf dem Behälterkörper (12) angeordnet wird, und der entfernbare Deckel (30) eine Mehrzahl von Ansätzen (37) aufweist, die sich radial nach außen von einem Mittelteil (34) des entfernbaren Deckels (30) in Richtung des Rands (36) erstrecken. 5
2. Behälter (10) nach Anspruch 1, bei dem die Lippe (22a, 22b) bei beiden Mittelteilen (16a, 16b) der gebogenen Seitenwände (18a, 18b) fehlt, die die Rennbahnform der oberen Öffnung (15) aufweisen. 10
3. Behälter (10) nach Anspruch 1 oder 2, bei dem der Deckel (30) im Wesentlichen die gleiche Rennbahnform wie der Behälterkörper (12) aufweist. 15
4. Behälter (10) nach einem der Ansprüche 1 bis 3, bei dem der Deckel (30) eine strukturierte Außenfläche aufweist. 20
5. Behälter (10) nach einem der Ansprüche 1 bis 4, bei dem die Seitenwand über ihre gesamte Länge eine im Wesentlichen glatte und nichtkonturierte Oberfläche aufweist. 25
6. Behälter (10) nach einem der Ansprüche 1 bis 5, bei dem die Seitenwand transparent oder lichtdurchlässig ist, so dass man die Inhalte innerhalb des Behälterkörpers (12) durch die Seitenwand sehen kann. 30
- Revendications**
1. Contenant (10) comportant : 35
- un corps de contenant (12) ayant un fond (14), une paroi latérale s'étendant vers le haut depuis celui-ci, et une ouverture supérieure (15) opposée au fond (14), la paroi latérale ayant deux côtés parallèles opposés (20a, 20b) et deux côtés courbes opposés (18a, 18b) formant un profil de champ de course, dans lequel l'ouverture supérieure (15) a le même profil de champ de course que le fond (14), et l'ouverture supérieure (15) est sous la forme d'un profil de champ de course complet que définit la paroi latérale du corps de contenant (12) ; 40
- une lèvre (22a, 22b) du corps de contenant (12) s'étend vers l'extérieur depuis les côtés parallèles opposés (20a, 20b) et une partie des côtés courbes (18a, 18b) du profil de champ de course de l'ouverture supérieure (15), dans lequel une partie centrale (16a, 16b) d'au moins l'un des côtés courbes (18a, 18b) ne comporte pas une lèvre (22a, 22b) disposée sur celle-ci ; et 45
- un couvercle amovible (30) adapté pour s'enclencher sur le corps de contenant (12) par-des- 50
- sus l'ouverture supérieure (15) et dans lequel le couvercle amovible (30) comporte une collerette (36) ayant un bourrelet s'étendant vers l'intérieur (38), dans lequel le bourrelet (38) entre en prise avec le corps de contenant (12) sous la lèvre (22a, 22b) quand le couvercle amovible (30) est disposé sur le corps de contenant (12), et le couvercle amovible (30) comporte une pluralité de languettes (37) s'étendant vers l'extérieur dans le sens radial depuis une partie centrale (34) du couvercle amovible (30) en direction de la collerette (36).
2. Contenant (10) selon la revendication 1, dans lequel la lèvre (22a, 22b) est absente des deux parties centrales (16a, 16b) des parois latérales courbes (18a, 18b) comportant le profil de champ de course de l'ouverture supérieure (15).
3. Contenant (10) selon la revendication 1 ou la revendication 2, dans lequel le couvercle (30) a essentiellement le même profil de champ de course que le corps de contenant (12).
4. Contenant (10) selon l'une quelconque des revendications 1 à 3, dans lequel le couvercle (30) a une surface extérieure à texture.
5. Contenant (10) selon l'une quelconque des revendications 1 à 4, dans lequel la paroi latérale a une surface essentiellement lisse et sans contour sur toute sa longueur.
6. Contenant (10) selon l'une quelconque des revendications 1 à 5, dans lequel la paroi latérale est transparente ou translucide de manière à pouvoir observer le contenu à l'intérieur du corps de contenant (12) au travers de la paroi latérale. 55

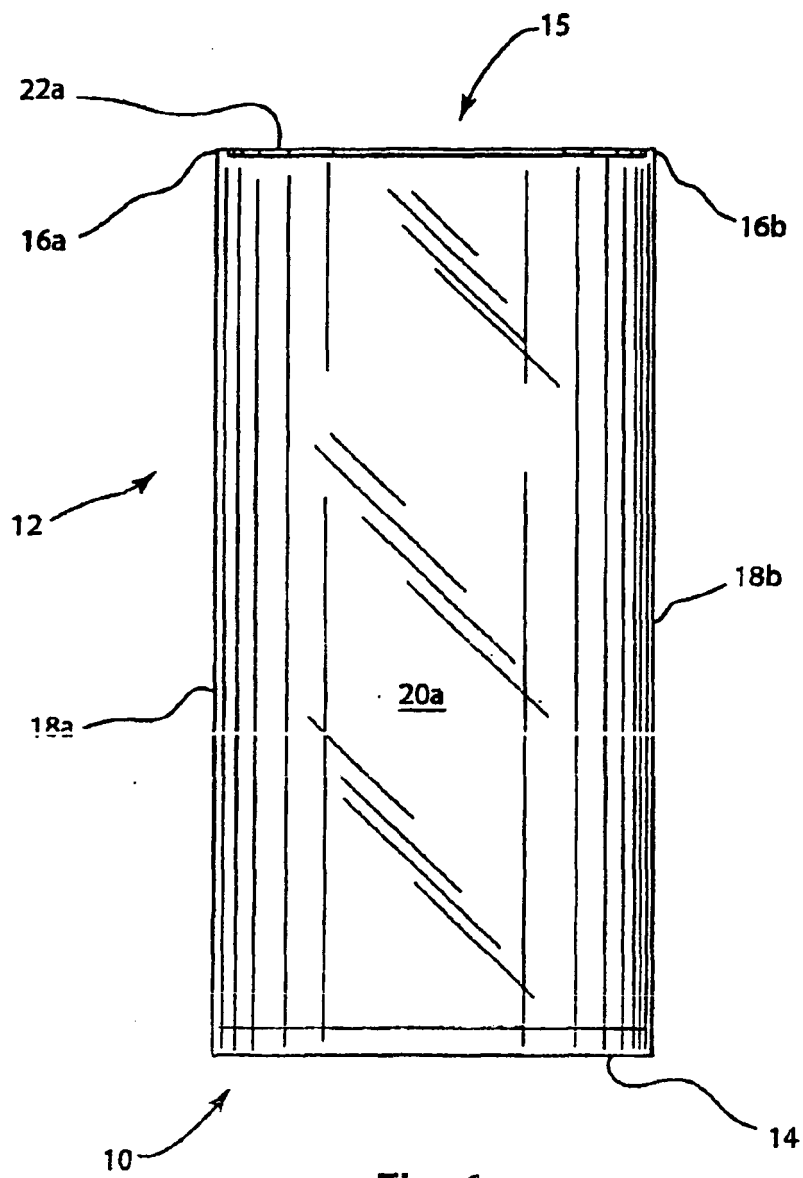


Fig. 1

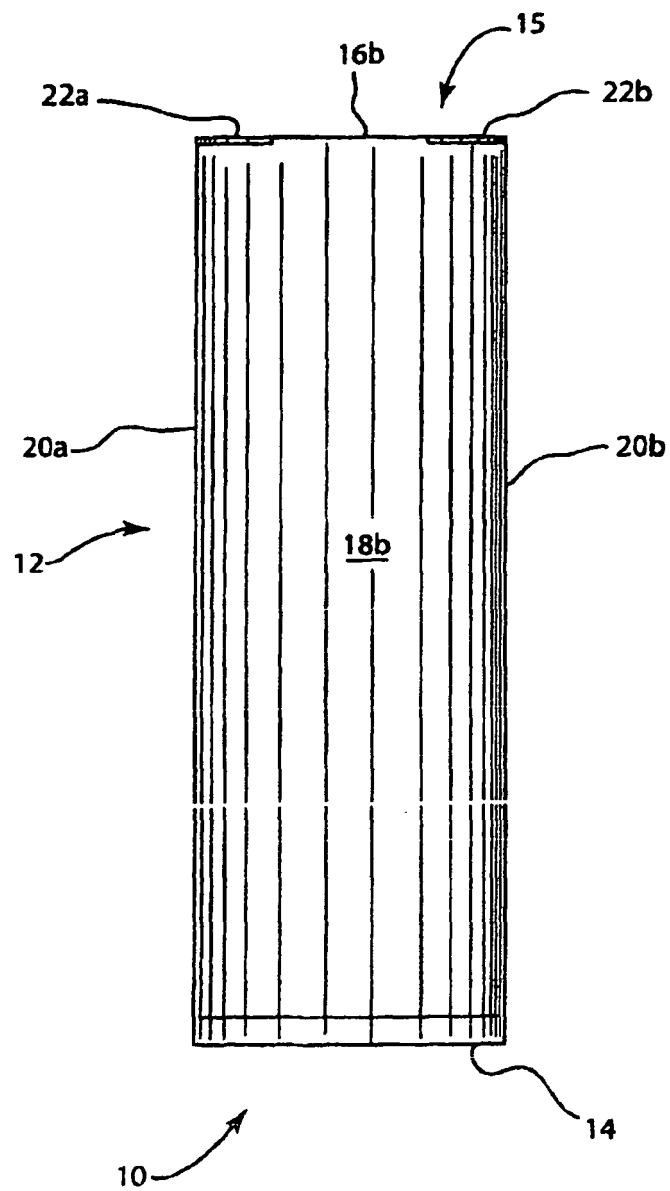
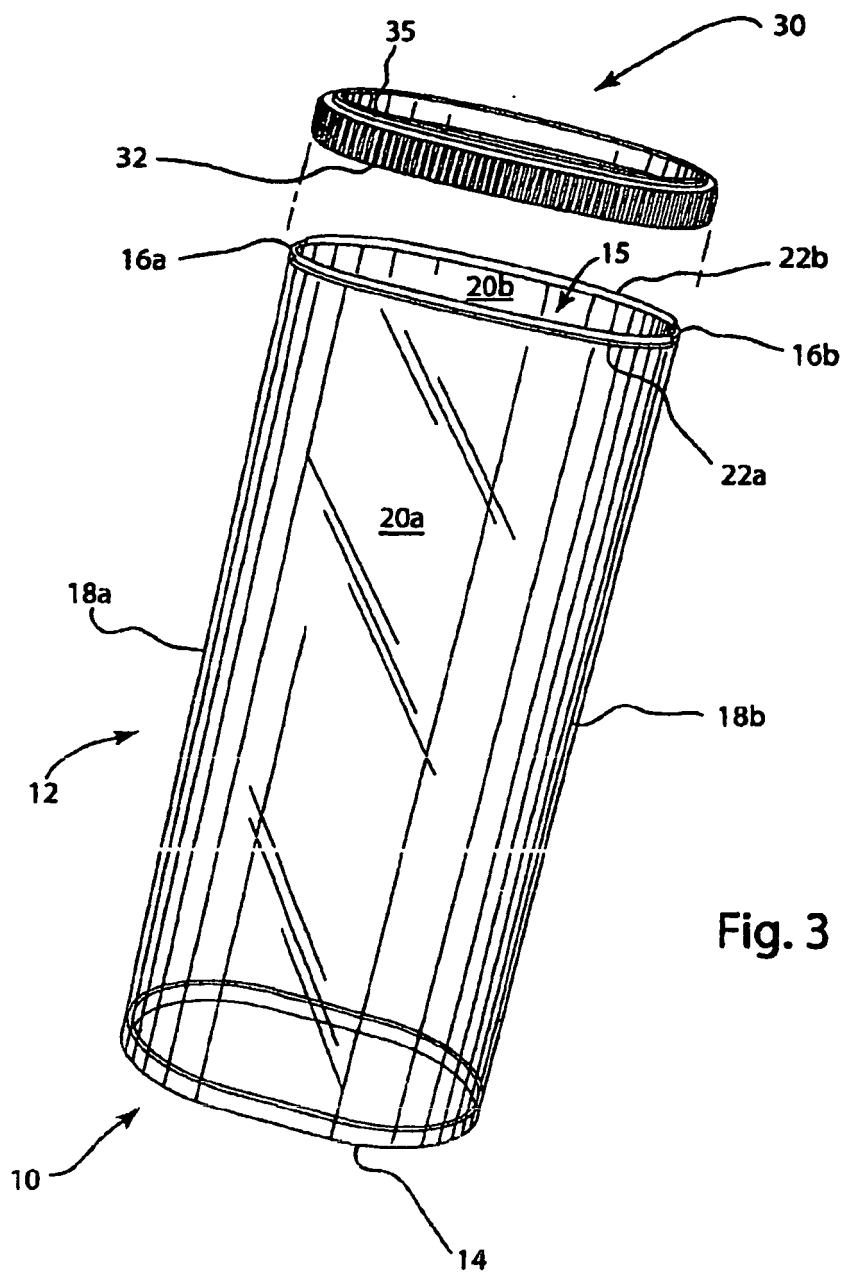


Fig. 2



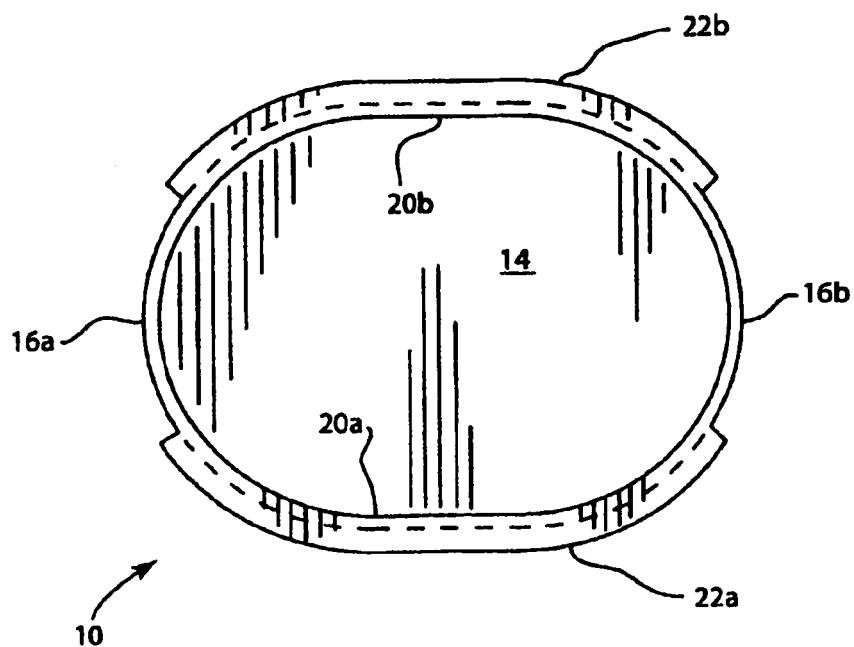


Fig. 4

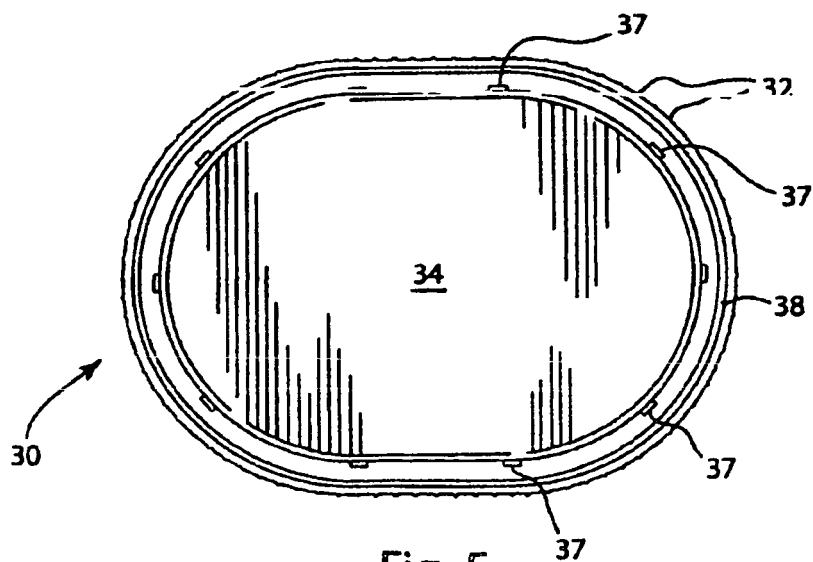
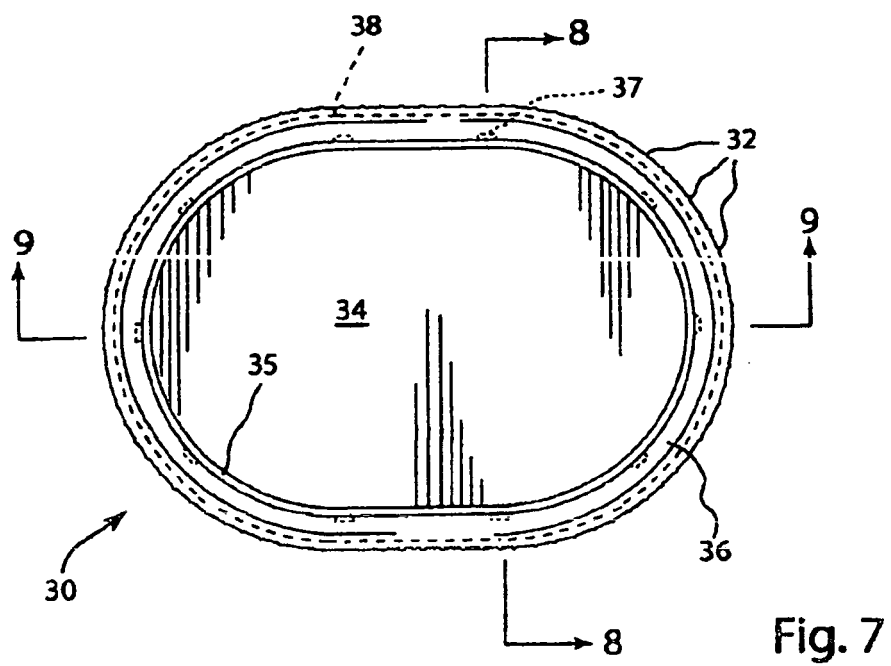
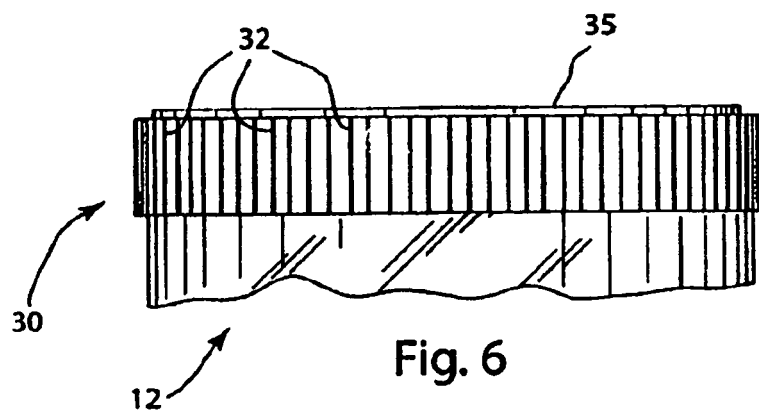


Fig. 5



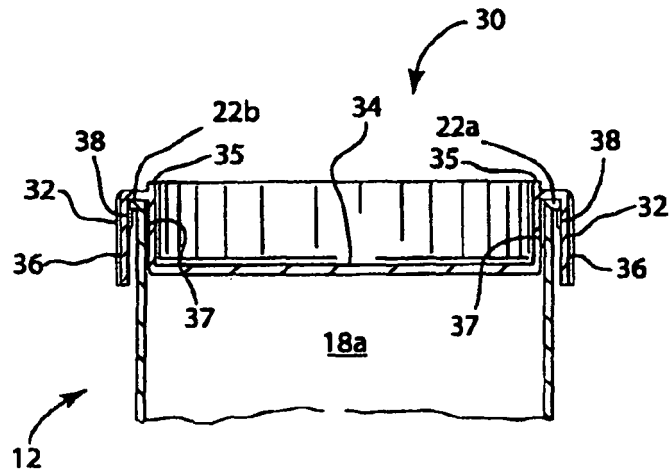


Fig. 8

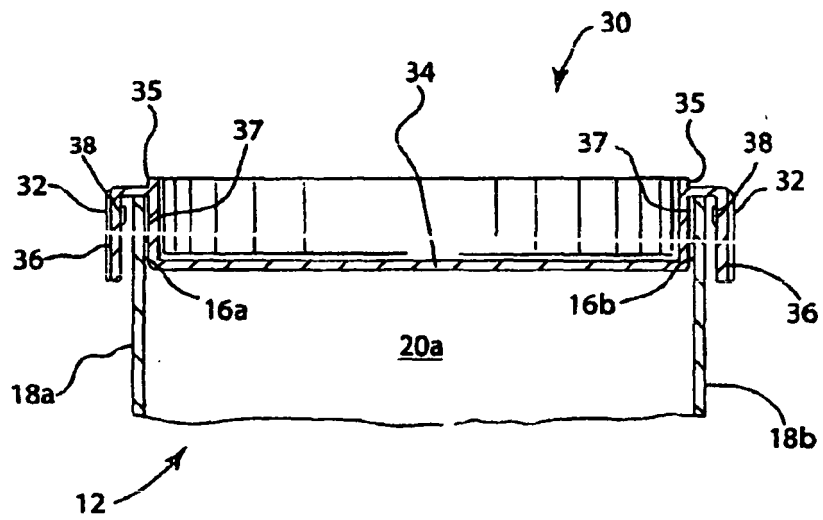


Fig. 9

REFERENCES CITED IN THE DESCRIPTION

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