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(54) **Container and method**

(57) A container (10) comprising a base portion (20) having a rim portion (30), wherein the rim portion (30) is separable from the base portion (20) by means of a frangible connection (40). The container (10) also comprises a lid portion (50) coupled to the rim portion (30). The rim portion (30) and the base portion (20) can be semi-rigid. The lid portion (50) can be flexible, such as a film. The container (10) can be suitable for containing a foodstuff. The invention also provides a method of manufacturing a container (10) including the steps of: providing a base

portion (20) having a rim portion (30); frangibly connecting the base portion (20) and the rim portion (30); and coupling a lid portion (50) to the rim portion (30). The method can include the step of thermoforming the rim portion (30) and the base portion (20) as a one-piece item. The method can include the step of punching or cutting perforations between the rim portion (30) and the base portion (20) to form the frangible connection (40) therebetween. The method can include heat-sealing the lid portion (50) to at least one of the base portion (20) and the rim portion (30).

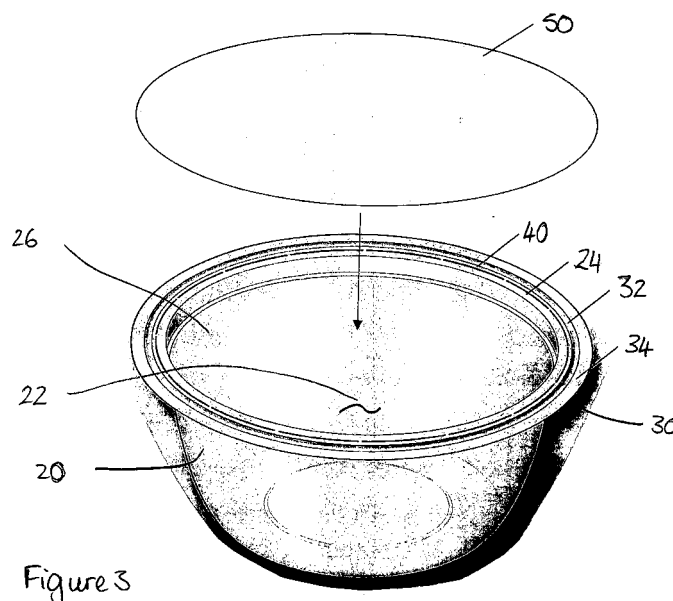


Figure 3

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Description

[0001] The present invention relates to a container and a method of manufacturing the container. In particular, although not exclusively, the invention relates to containers for foodstuff.

[0002] Typically, foodstuff needs to be stored in a container that maintains a satisfactory level of freshness, prevents contamination and provides evidence of tamper resistance. Some known containers are made with a separate or hinged thermoformed lid that can be closed over a base in order to store the food within the container. Thermoformed lids are typically semi-rigid and are therefore allow stacking of containers. These lids can also be replaced over the base. However, a thermoformed lid does not provide an airtight seal.

[0003] Alternatively, lidding film can be heat sealed over the base of a container. A heat sealable lidding film has the advantage that it can be airtight to enable a longer shelf life of the foodstuff within the container and also allows the container to be gas flushed prior to sealing to further prolong the life of the foodstuff. Lidding film has a lower relative thickness than a thermoformed lid, which can therefore reduce the cost of each container because less material is required. However, one disadvantage of lidding film is that if the contents of the container need to be heated by microwave for example, the lidding film must be pierced prior to heating. Another disadvantage is that once the lidding film is removed from a container it cannot be easily replaced over the container to reseal or cover any foodstuff that remains within.

[0004] According to a first aspect of the invention, there is provided a container comprising:

- a base portion having a rim portion, wherein the rim portion is separable from the base portion by means of a frangible connection; and
- a lid portion coupled to the rim portion.

[0005] The rim portion can have a greater rigidity relative to the lid portion.

[0006] The base portion can be shaped to define a container portion. The container portion can be suitable for containing a foodstuff.

[0007] The base portion can have an opening adapted to be selectively closed by the lid portion. The opening can provide access to the container portion.

[0008] Optionally, the lid portion can be adapted to close the opening such that the lid portion provides a substantially fluid tight seal around the container portion.

[0009] The rim portion can circumscribe at least a part of the opening of the base portion.

[0010] The rim portion and the base portion can be made from the same material. The rim portion can have the same thickness as the base portion. The rim portion and the base portion can be semi-rigid.

[0011] The rim portion and the base portion can be formed as a one-piece item. The rim portion and the base

portion can be thermoformed.

[0012] The frangible connection can include perforations located between the rim portion and the base portion. Typically, the frangible connection represents a weak part of the container that is more easily disrupted than other parts of the container.

[0013] According to the embodiment where the frangible connection comprises perforations, the perforations can have the dual function of providing a plurality of air vents allowing ventilation of the container portion. This is advantageous for example, during use of the container in a microwave as the lid portion does not have to be separately pierced.

[0014] The lid portion can be flexible. The lid portion can be heat sealable to the rim portion.

[0015] The lid portion can have a lower relative thickness than the base or the rim portions. The lid portion can be a film.

[0016] The lid portion can be coupled to rim portion at a first sealing area. The lid portion can be coupled to the base portion at a second sealing area. The first and second sealing areas can be separable by the frangible connection.

[0017] The second sealing area can be provided within the region surrounded by the first sealing area. The second sealing area can be provided within the region surrounded by the frangible connection.

[0018] A fluid tight seal can be provided at the first sealing area between the lid portion and the rim portion. A fluid tight seal can be provided at the second sealing area between the lid portion and the base portion.

[0019] The lid portion can be peelable at least in the region of the second sealing area.

[0020] A reinforced part can be provided proximate the frangible connection. The reinforced part can be provided on at least one of the base portion and the rim portion.

[0021] The reinforced part can be provided between the first and second sealing areas. The reinforced part can comprise a channel member formed as part of the rim portion.

[0022] The frangible connection can be more easily disrupted than the coupling between the lid portion and the rim portion.

[0023] The coupling between the rim portion and the lid portion can require a greater separation force in a particular direction than the frangible connection, such that in normal use, the frangible connection is disrupted to facilitate separation of the rim portion from the base portion rather than separation of the lid portion and the rim portion.

[0024] Alternatively, or additionally, the relative location of the coupling between the lid portion and the rim portion can be such that the coupling is less easily separated than the frangible connection between the rim portion and the base portion. Thus, it can be more difficult for a user to gain a purchase on the lid portion in order to separate this from the rim portion.

[0025] At least one of the rim portion and the base por-

tion can be provided with clips for reattaching the rim portion and the base portion following disruption of the frangible connection.

[0026] The clips can comprise at least two radial indents on the rim portion and an undercut on the base portion, such that the radial indents can be located in the undercut, thereby to clip the rim portion and the base portion.

[0027] At least one of the first and second sealing areas can be covered with an adhesive to facilitate resealing of the lid portion over the base portion following disruption of the frangible connection.

[0028] According to a second aspect of the invention, there is also provided a base portion of a container wherein the base portion has an opening adapted to be covered by a lid portion, and wherein the base portion has a rim portion coupled thereto by means of a frangible connection.

[0029] The rim portion can be provided with a first sealing surface. The base portion can be provided with a second sealing surface. A lid portion can be provided for sealing to the first sealing surface. The lid portion can also seal to the second sealing surface.

[0030] The first and second sealing surfaces can be separated by the frangible connection. The first and second sealing surfaces can be separated by a reinforcing part.

[0031] The base and the rim portions and the frangible connection can also include any features previously described with reference to the first aspect of the invention.

[0032] According to a third aspect of the invention, there is provided a method of manufacturing a container including the steps of:

providing a base portion having a rim portion;
frangibly connecting the base portion and the rim portion; and
coupling a lid portion to the rim portion.

[0033] The rim portion can have a greater rigidity relative to the lid portion.

[0034] The method can include the step of forming the rim portion and the base portion as a one-piece item. The method can include the step of thermoforming the rim portion and the base portion.

[0035] The method can include punching or cutting perforations between the rim portion and the base portion to form the frangible connection therebetween.

[0036] The method can include heat-sealing the lid portion on at least one of the base portion and the rim portion. The method can include heat sealing the lid portion on at least one of the base portion and the rim portion in order to form a fluid tight seal.

[0037] According to a fourth aspect of the invention, there is provided a method of storing a foodstuff including the steps of:

providing a container comprising a base portion and

a rim portion;
frangibly connecting the base portion and the rim portion;
storing a foodstuff within the base portion; and
coupling a lid portion to the rim portion.

[0038] The fourth aspect of the invention can include any of the features or steps previously described with reference to any other aspect of the invention.

[0039] Embodiments of the invention will now be described with reference to and as shown in the accompanying drawings in which:-

Fig. 1 is a side view of a base portion;
Fig. 2 is a plan view of the base portion of Fig. 1;
Fig. 3 is a perspective view of a lid portion over the base portion of
Fig. 2;
Fig. 4 is a detailed sectional view of part of the base portion and the lid portion of Fig. 3;
Fig. 5 is a detailed perspective view of part of the base portion and the lid portion of Fig. 3;
Fig. 6 is a perspective view of the lid portion and a rim portion being removed from the base portion;
Fig. 7 is a detailed sectional view of part of the lid portion being removed from the base portion;
Fig. 8 is a detailed perspective view of part of a lid portion removed from the base portion;
Fig. 9 is a plan view of a base portion according to an alternative embodiment of the invention;
Fig. 10 is a side view of a container formed from the base portion of
Fig. 9;
Fig. 11 is a plan view of a base portion according to another alternative embodiment of the invention;
Fig. 12 is a side view of a container formed from the base portion of
Fig. 11; and
Fig. 13 is a plan view of a container according to another alternative embodiment of the invention;
Fig. 14 is a plan view of a base of the container of Fig. 13 following disruption of the frangible connection;
Fig. 15 is a plan view of a rim and lid of the container of Fig. 13 following disruption of the frangible connection; and
Fig. 16 is a plan view of the container of Fig. 13 with the rim and the lid clipped to the base following disruption of the frangible connection.

[0040] A base 20 of a container is shown in Figs. 1 and 2. According to the present embodiment, the base 20 has a lower face 20f that is reinforced by a recess 20r provided therein. A sidewall 20s extends upwardly from the lower face 20f. The inner surface of the lower face 20f and the sidewall 20s define a receptacle portion 22 that is suitable for containing a foodstuff. A reinforcing collar 20c is formed towards an upper end of the sidewall

20s and a lip 20l extends radially outward therefrom in a direction parallel to the lower face 20f. The lip 20l is formed at an acute angle relative to the reinforcing collar 20c to enhance the strength of the base 20 in this region and allow stacking of several containers during transit. An upper surface of the lip 20l defines a base sealing surface 24. An inner perimeter of the lip 20l defines an opening 26 through which foodstuff can be inserted into the receptacle portion 22 of the base 20.

[0041] A rim 30 is attached to an outer perimeter of the lip 20l by means of a frangible connection 40 in the form of a plurality of perforations. The rim 30 extends radially outward in the same plane as the lip 20l and is provided with a reinforcing means in the form of an annular channel 32 to improve the strength of the rim 30. A rim sealing surface 34 is provided on an upper surface of the rim 30 and parallel to (and in the same plane as) the base sealing surface 24 provided on the base 20.

[0042] The base 20 and the rim 30 are initially thermoformed as a one-piece item and the frangible connection 40 is subsequently effected by punching or cutting perforations between the rim 30 and the base 20 to thereby define these separate portions of the container. Suitable methods of forming the frangible connection will be well known, and kiss cutting is one example of another suitable method of forming the frangible connection.

[0043] A lid comprising a lidding film is shown at 50 in Fig. 3. The lidding film 50 has an outer profile approximately matching the outer edge of the rim 30. The lidding film 50 is a peelable film. Together, the lidding film 50 and the base 20 form a container 10.

[0044] The present embodiment is adapted to provide an airtight seal over the receptacle portion 22. The lidding film 50 is heat sealed to the rim 30 at the rim sealing surface 34 and to the base 20 at the base sealing surface 24, thereby creating two seals 35, 25 respectively. Since the base seal 25 sealing the lidding film 50 to the base 20 is located between the perforations of the frangible connection 40 and the opening 26, the base seal 25 provides an airtight seal to prevent fluid ingress/egress from the receptacle portion 22. This arrangement also allows gas flushing of the sealable receptacle portion 22 prior to sealing, to maintain greater longevity and freshness of the foodstuff within the receptacle portion 22.

[0045] Prior to use, the contents (not shown) such as foodstuffs are added to the receptacle portion 22 through the opening 26 of the container 10. The container 10 is then optionally flushed with an appropriate gas, and the lidding film 50 is then heat sealed to the base sealing surface 24 and the rim sealing surface 34 to create the seals 35, 25 (Figs. 4 and 5).

[0046] When access to the contents of receptacle portion 22 is required, a user can pull the rim 30 in a direction shown by an arrow 54 (Figs. 6, 7 and 8). Pulling the lidding film 50 upwardly away from the base 20 has the effect of disrupting the frangible connection 40. Thus, the rim 30 with the lidding film 50 attached at sealing area 35 is separated from the base 20. This action also causes the

seal 25 to break and the lidding film 50 is peeled off the base sealing area 24, but remains attached to the rim 30.

[0047] The rim 30 and the lidding film 50 are thereby removed together to provide access to the contents of the container 10 within the receptacle portion 22. The channel 32 strengthens the rim 30, to substantially reduce flexing of the rim 30 and the base 20 when a user is removing the lidding film 50 from the container 10. This also helps the perforations of the frangible connection 40 to make a clean break between the base 20 and the rim 30.

[0048] In the above-described manner, the rim 30 is pulled away from the base 20 with the seal 35 between the lidding film 50 and the rim sealing area 34 intact. The lidding film 50 remains attached to the rim 30 and is therefore prevented from curling or folding in such a way that it cannot be replaced over the base 20. The rim 30 acts as a semi-rigid frame around the perimeter of the lidding film 50 to effectively retain the lidding film 50 in a planar configuration. As a result, the lidding film 50 and the attached outer rim 30 can be re-used to cover the container after opening and cover any remaining foodstuff within the container portion 22.

[0049] The present invention retains the benefits of a container 10 having an airtight lidding film 50 with the additional advantage that the base 20 can be re-covered once the container 10 has been opened.

[0050] According to a second embodiment, the lidding film 50 is heat sealed onto only the rim sealing area 34. No airtight seal is provided between the receptacle portion 22 and the ambient environment because air can diffuse through the perforations of the frangible connection 40. Such a container is suitable for foodstuff that is frozen prior to cooking, where an airtight seal is neither necessary nor appropriate. This also has a particular advantage where foodstuff within the container is to be cooked in a microwave because the perforations of the frangible connection 40 provide a plurality of vents so that no separate piercing of the lidding film 50 is required.

[0051] According to any of the embodiments, the lidding film 50 can be resealable such that following removal of the rim 30 and the lidding film 50, once the base 20 is re-covered a pressure applied to the lidding film 50 over the region of the base sealing area 24 that causes the lidding film 50 to make a temporary seal. The sealing areas can be formed from or covered with an adhesive or tacky material to facilitate this re-sealing if desired.

[0052] Figures 9 and 10 show a container according to a third embodiment of the invention, having a different shape to the container 10 of the first embodiment. Like components are denoted with identical reference numbers having a prefix "1".

[0053] A base 120 of the container is divided into four individual base compartments 120a, 120b, 120c, 120d. Each of these base compartments 120a, 120b, 120c, 120d defines a receptacle portion 122a, 122b, 122c, 122d suitable for containing a foodstuff. A lip 120l circumscribes the edge of each base compartment 120a,

120b, 120c, 120d and the upper surface of the lip 1201 provides a base sealing surface 124. A rim 130 surrounds the edge of the lip 1201 and is connected thereto by means of a frangible connection 140. A reinforcing U-shaped channel 132 strengthens the container between the rim 130 and the frangible connection 140. At one corner of the rim 130 a tab 160 is formed to allow a user to gain a purchase on the rim 130 in order to initiate disruption of the frangible connection 140.

[0054] A lidding film 50 is sealed against a sealing area 134 on the upper surface of the rim 130 and against the base sealing area 124 that surrounds the edge of each base compartments 120a, 120b, 120c, 120d. The fluid tight seal around the base compartments 120a, 120b, 120c, 120d, allows each receptacle portion 122a, 122b, 122c, 122d to be filled with a different foodstuff without the risk of any cross-contamination due to the fluid tight seal between the lidding film 150 and the base sealing area 124.

[0055] The container 110 is manufactured as described with reference to the first embodiment and the base 120 and rim 130 are thermoformed into the desired shape with the four separate base compartments 120a, 120b, 120c, 120d, before the frangible connection 140 is punched. Once foodstuff has been added to the receptacle portions 122a, 122b, 122c, 122d, the lidding film 150 is heat sealed onto the rim sealing area 134 and the base sealing area 124 to provide airtight seals to prolong the life of the foodstuffs contained in the receptacle portions 122a, 122b, 122c, 122d.

[0056] A user can access the foodstuff within the receptacle portions 122a, 122b, 122c, 122d by grasping the tab 160 and pulling the rim 130 away from the base 120 to disrupt the frangible connection 140 therebetween. Once the user has accessed the contents of the receptacle portions 122a, 122b, 122c, 122d, the rim 130 with the attached lid can be used to cover the base 120 to keep the remaining contents fresh.

[0057] Figures 11 and 12 show another alternative shape of container 210. Like components have been denoted with similar reference numerals to Figures 9 and 10, using the prefix "2" instead of "1".

[0058] Figs. 13 to 16 show an alternative container 310 according to another embodiment of the invention. Like components have been denoted with similar reference numerals to Figures 9 and 10, using the prefix "3" instead of "1".

[0059] The base 320 is circular and has four indents 329 along the frangible connection 340 spaced at 90° relative to one another. The rim 330 has four corresponding protrusions 339 along the frangible connection 340 also spaced at 90° relative to one another.

[0060] The U-shaped reinforcing channel 332 is provided with four inwardly protruding radial indentations 337 spaced at 90° relative to one another and located vertically spaced from and beneath the protrusions 339. The indentations 337 extend radially inwardly beyond the general circumference of the frangible connection 340,

other than in the region of the base indents 329.

[0061] When access is required to the contents of the receptacle portions 322a, 322b, 322c, 322d, the rim 330 is pulled upwards away from the base 320 in a manner described with reference to previous embodiments. Since the frangible connection 340 is the weakest part of the container 310, the connection between the base 320 and the rim 330 is disrupted and the rim 330 with the lidding film 350 sealed thereto can be removed to uncover the receptacle portions 322a, 322b, 322c, 322d. Following disruption of the frangible connection 340, a new perimeter 381 is created around an edge of the base 320 as shown in Figure 14. The perimeter 381 extends radially outwardly from the base 320 and thereby creates an undercut (not shown) between a top end of a sidewall (not shown) of the base 320 and an outer edge of the perimeter 381.

[0062] Should a user wish to re-cover the receptacle portions 322a, 322b, 322c, 322d, for example, to maintain foodstuff contained therein in a fresh condition and/or restrict contamination of the foodstuff within the receptacle portions 322a, 322b, 322c, 322d, a user can reattach the rim 330 to the base 320. In order to achieve this, a user aligns the protrusions 339 on the rim 330 with the indents 329 on the perimeter 381 of the base 320 so that the lidding film 350 covers the base 320. The user can then rotate the rim 330 relative to the base 320 (or the base 320 relative to the rim 330) by around 45° so that the protrusions 339 are positioned above the perimeter 381 and the radial indentations 337 of the rim 330 are located beneath the perimeter 381 of the base 320, as shown in Figure 16. In this manner, the rim 330 is clipped to the base 320 by means of the protrusions 339 above and the radial indentations 337 below the perimeter 381, thereby securing the rim 330 on either side of the base 320. The base sealing area 324 can be provided with an adhesive so that the lidding film 350 can be pressed against the sealing area 324 to reseal the lidding film 350 to the base 320.

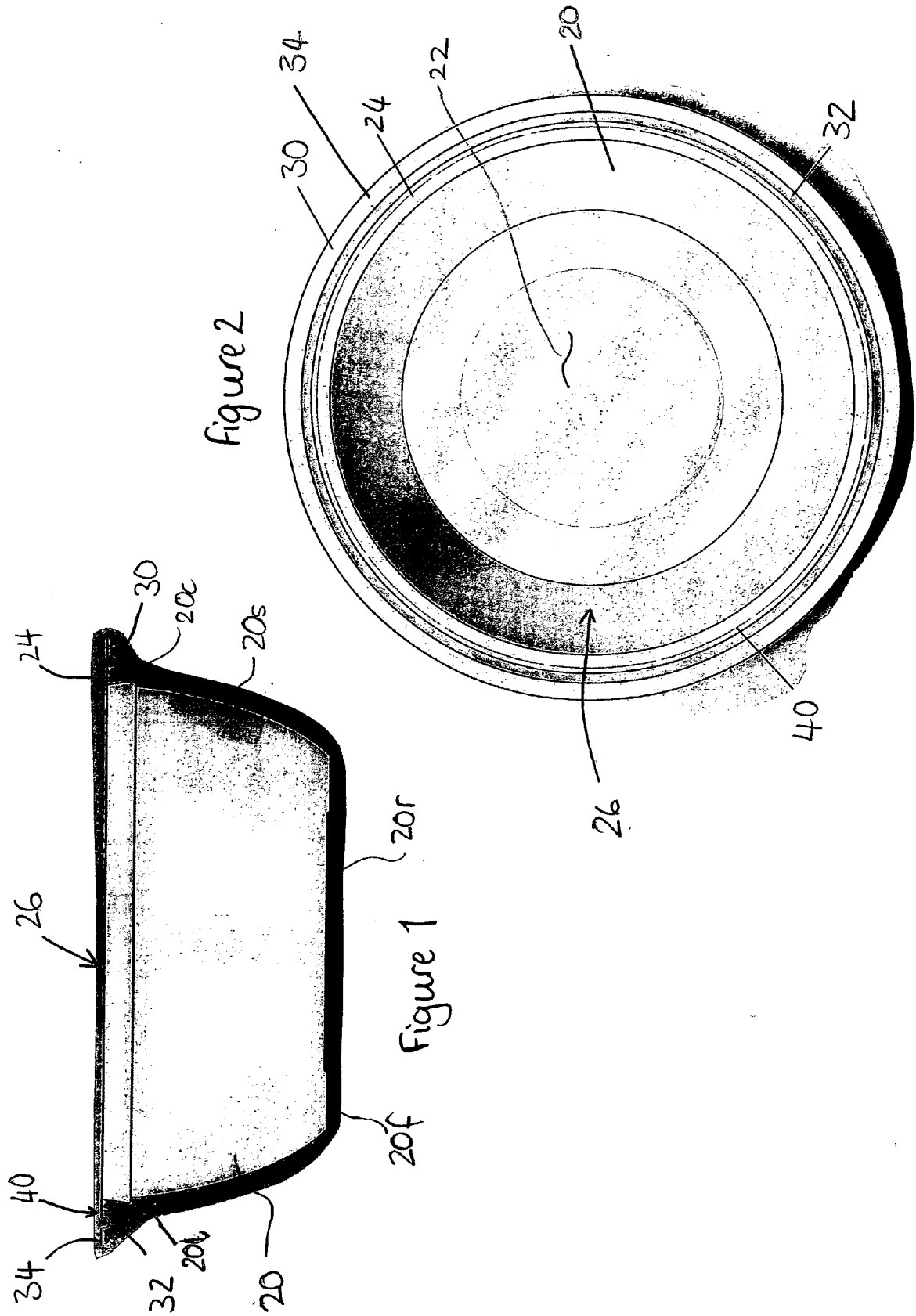
[0063] The above embodiment has the advantage that the lidding film 350 can be temporarily reattached to the base 320 enabling the contents of the receptacle portions 322a, 322b, 322c, 322d to stay fresh. This temporary clipping of the base 320 and the rim 330 is more secure than simply replacing the lidding film 350 over the receptacle portions 322a, 322b, 322c, 322d to act as a loose cover. This embodiment is particularly suited to round or circular containers 310 because the rim 330 and the base 320 can be easily rotated relative to one another. Although, this embodiment with the clipping feature can also be applied to other shapes of container.

[0064] Modifications and improvements can be made without departing from the scope of the invention. For example, although some of the present embodiments are described with reference to a container having a circular cross-section, the invention is also appropriate for containers of any shape, such as those having rectangular, oval or square cross-section.

Claims

1. A container comprising:
 a base portion having a rim portion, wherein the rim portion is separable from the base portion by means of a frangible connection; and
 a lid portion coupled to the rim portion. 5
2. A container as claimed in claim 1, wherein the rim portion has a greater rigidity relative to the lid portion. 10
3. A container as claimed in claim 1 or claim 2, wherein the base portion is shaped to define a container portion suitable for containing a foodstuff. 15
4. A container as claimed in any preceding claim, wherein the base portion has an opening adapted to be selectively closed by the lid portion. 20
5. A container as claimed in claim 4, when dependent on claim 3, wherein the opening provides access to the container portion.
6. A container as claimed in claim 4 or claim 5, wherein the lid portion is adapted to close the opening such that the lid portion provides a substantially air tight seal around the container portion. 25
7. A container as claimed in any one of claims 4 to 6, wherein the rim portion circumscribes at least a part of the opening of the base portion. 30
8. A container as claimed in any preceding claim, wherein the rim portion has the same thickness as the base portion. 35
9. A container as claimed in any preceding claim, wherein the rim portion and the base portion are semi-rigid. 40
10. A container as claimed in any preceding claim, wherein the rim portion and the base portion are formed as a one-piece item. 45
11. A container as claimed in any preceding claim, wherein the frangible connection includes perforations located between the rim portion and the base portion. 50
12. A container as claimed in claim 11, when dependent on claim 3, wherein the perforations have the dual function of providing a plurality of air vents allowing ventilation of the container portion. 55
13. A container as claimed in any preceding claim, wherein the frangible connection represents a weak part of the container that is more easily disrupted than other parts of the container.
14. A container as claimed in any preceding claim, wherein the lid portion is flexible.
15. A container as claimed in any preceding claim, wherein the lid portion is heat sealable to the rim portion.
16. A container as claimed in any preceding claim, wherein the lid portion has a lower relative thickness than the base portion and the rim portion.
17. A container as claimed in any preceding claim, wherein the lid portion is a film.
18. A container as claimed in any preceding claim, wherein the lid portion is sealed against the rim portion at a first sealing area and the lid portion is sealed against the base portion at a second sealing area.
19. A container as claimed in claim 18, wherein the frangible connection is located between the first and second sealing areas.
20. A container as claimed in claim 18 or claim 19, wherein the second sealing area is located within an area surrounded by the first sealing area.
21. A container as claimed in any one of claims 18 to 20, wherein the second sealing area is located within an area surrounded by the frangible connection.
22. A container as claimed in any one of claims 18 to 21, wherein a fluid tight seal is provided at at least one of the first sealing area and second sealing areas.
23. A container as claimed in any one of claims 18 to 22, wherein the lid portion is peelable in the region of the second sealing area.
24. A container as claimed in any preceding claim, wherein a reinforced part is provided proximate the frangible connection.
25. A container as claimed in claim 24, wherein the reinforced part is provided on at least one of the base portion and the rim portion.
26. A container as claimed in claim 24 or claim 25, when dependent on claim 18, wherein the reinforced part is located between the first and second sealing areas.
27. A container as claimed in any one of claims 24 to 26, wherein the reinforced part comprises a channel member formed as part of the rim portion.

- 28.** A container as claimed in any preceding claim, wherein frangible connection is more easily disrupted than the seal between the lid portion and the rim portion.
- 29.** A container as claimed in claim 28, wherein the seal between the rim portion and the lid portion requires a greater separation force in a particular direction than the frangible connection, such that in normal use, the frangible connection is disrupted to facilitate separation of the rim portion from the base portion rather than separation of the lid portion and the rim portion.
- 30.** A container as claimed in claim 28 or claim 29, wherein the location of the seal between the lid portion and the rim portion is less accessible than the frangible connection between the rim portion and the base portion.
- 31.** A container as claimed in any preceding claim, wherein the container is a foodstuff container.
- 32.** A container as claimed in any preceding claim wherein at least one of the rim portion and the base portion can be provided with a clip means for attaching the rim portion to the base portion following disruption of the frangible connection.
- 33.** A container as claimed in claim 32, wherein the clip means comprise at least two radial indentations on the rim portion and an undercut on the base portion such that the radial indentations are locatable in the undercut thereby to clip the rim portion and the base portion.
- 34.** A method of manufacturing a container including the steps of:
 providing a base portion having a rim portion;
 frangibly connecting the base portion and the rim portion; and
 coupling a lid portion to the rim portion.
- 35.** A method according to claim 34, including the step of forming the rim portion and the base portion as a one-piece item.
- 36.** A method according to claim 34 or claim 35, including the step of thermoforming the rim portion and the base portion.
- 37.** A method according to any one of claims 34 to 36, including the step of punching perforations between the rim portion and the base portion to form the frangible connection therebetween.
- 38.** A method according to any one of claims 34 to 36, including the step of cutting perforations between the rim portion and the base portion to form the frangible connection therebetween.
- 39.** A method according to any one of claims 34 to 38, including heat-sealing the lid portion to at least one of the base portion and the rim portion.
- 40.** A method according to any one of claims 34 to 39, including heat sealing the lid portion to at least one of the base portion and the rim portion in order to form a fluid tight seal.
- 41.** A base portion of a container wherein the base portion has an opening adapted to be covered by a lid portion, and wherein the base portion has a rim portion coupled thereto by means of a frangible connection.
- 42.** A base portion as claimed in claim 41, wherein rim portion is provided with a first sealing surface and the base portion is provided with a second sealing surface and wherein a lid portion is provided for sealing against the first sealing surface and the second sealing surface.
- 43.** A base portion as claimed in claim 41 or claim 42, wherein the frangible connection is located between the first and second sealing surfaces.
- 44.** A base portion as claimed in claim 42 or claim 43, wherein a reinforcing part is located between the first and second sealing surfaces.
- 45.** A method of storing a foodstuff including the steps of:
 providing a container comprising a base portion and a rim portion;
 frangibly connecting the base portion and the rim portion;
 storing a foodstuff within the base portion; and
 coupling a lid portion to the rim portion.



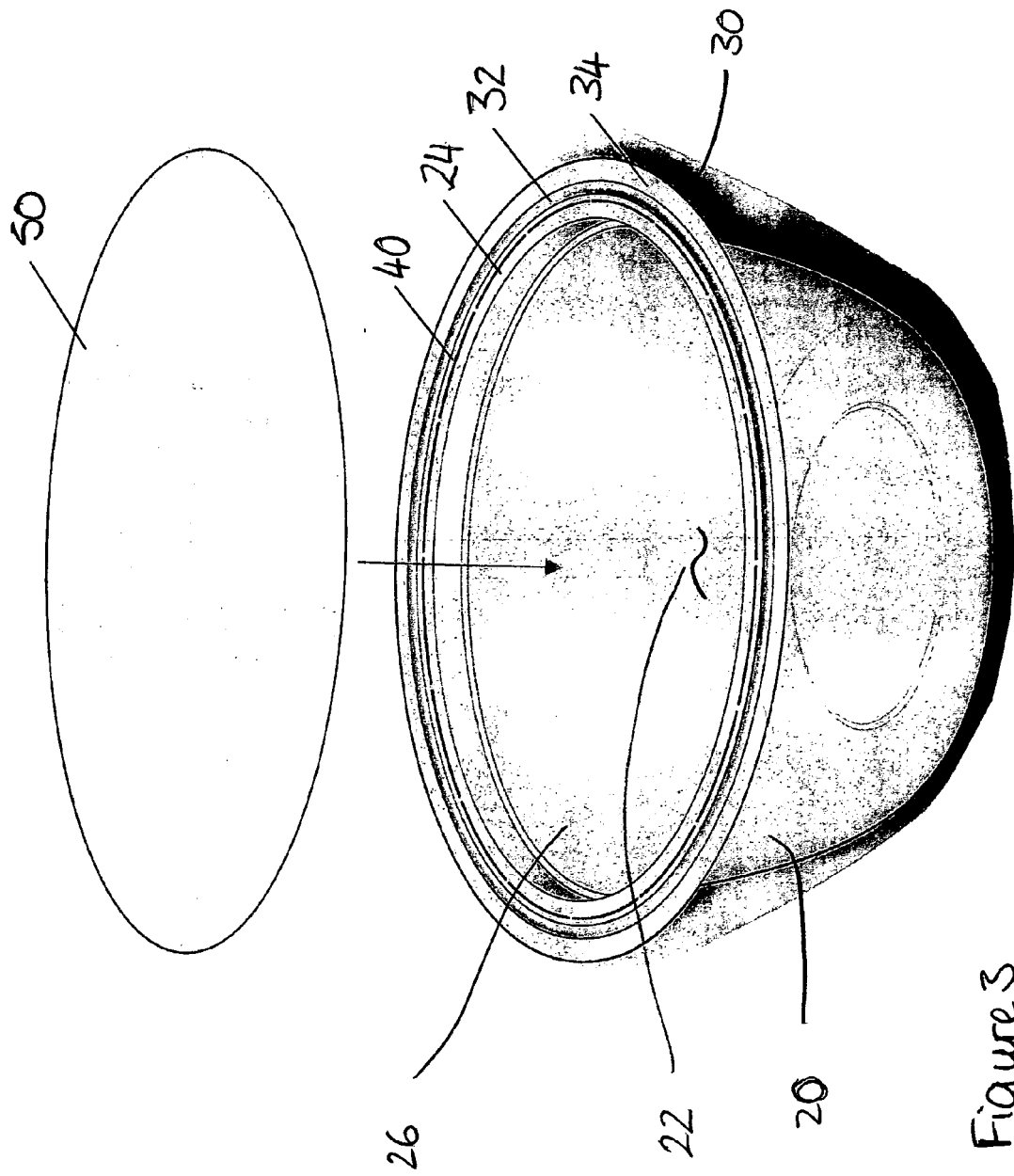


Figure 3

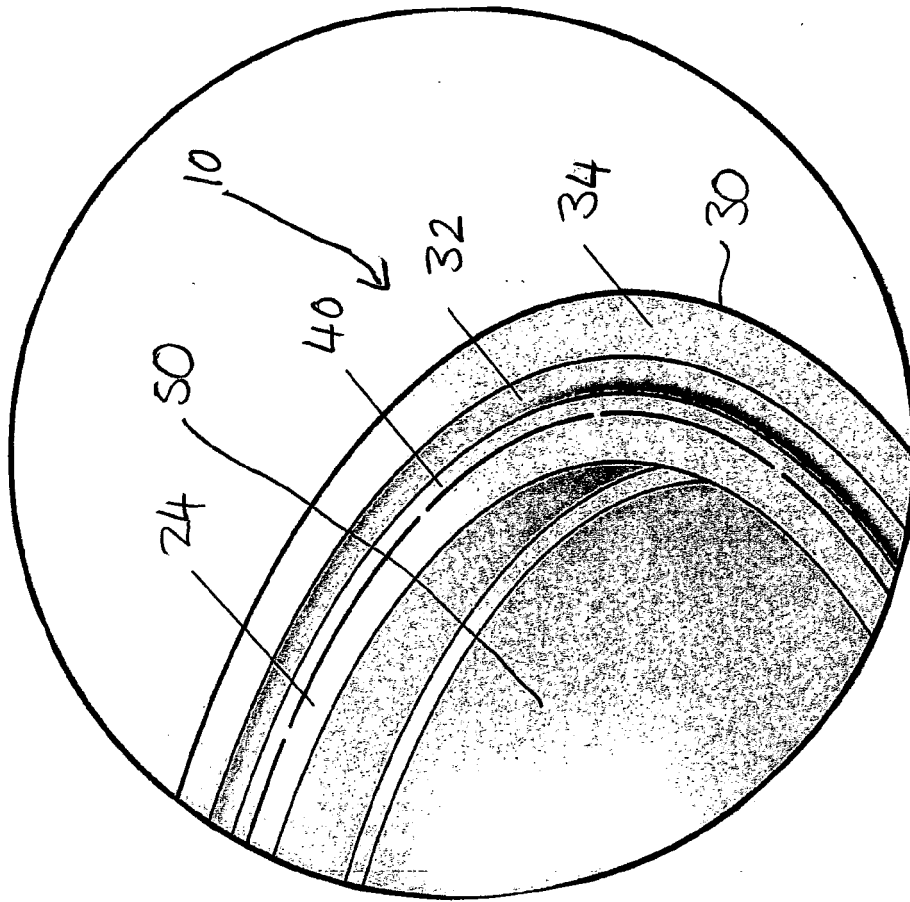


Figure 5

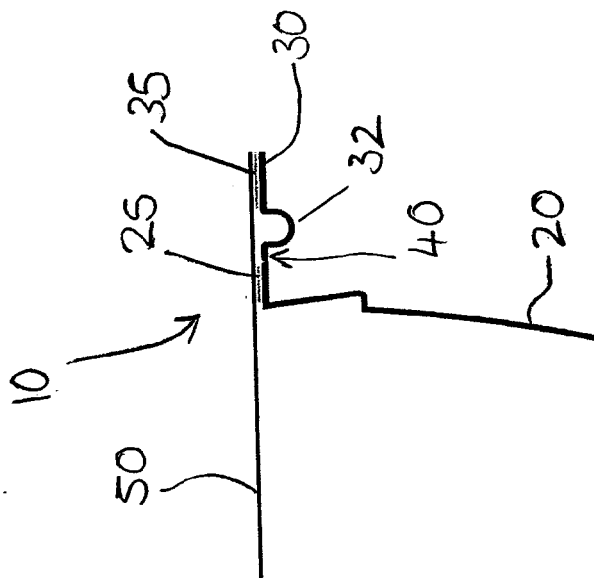


Figure 4

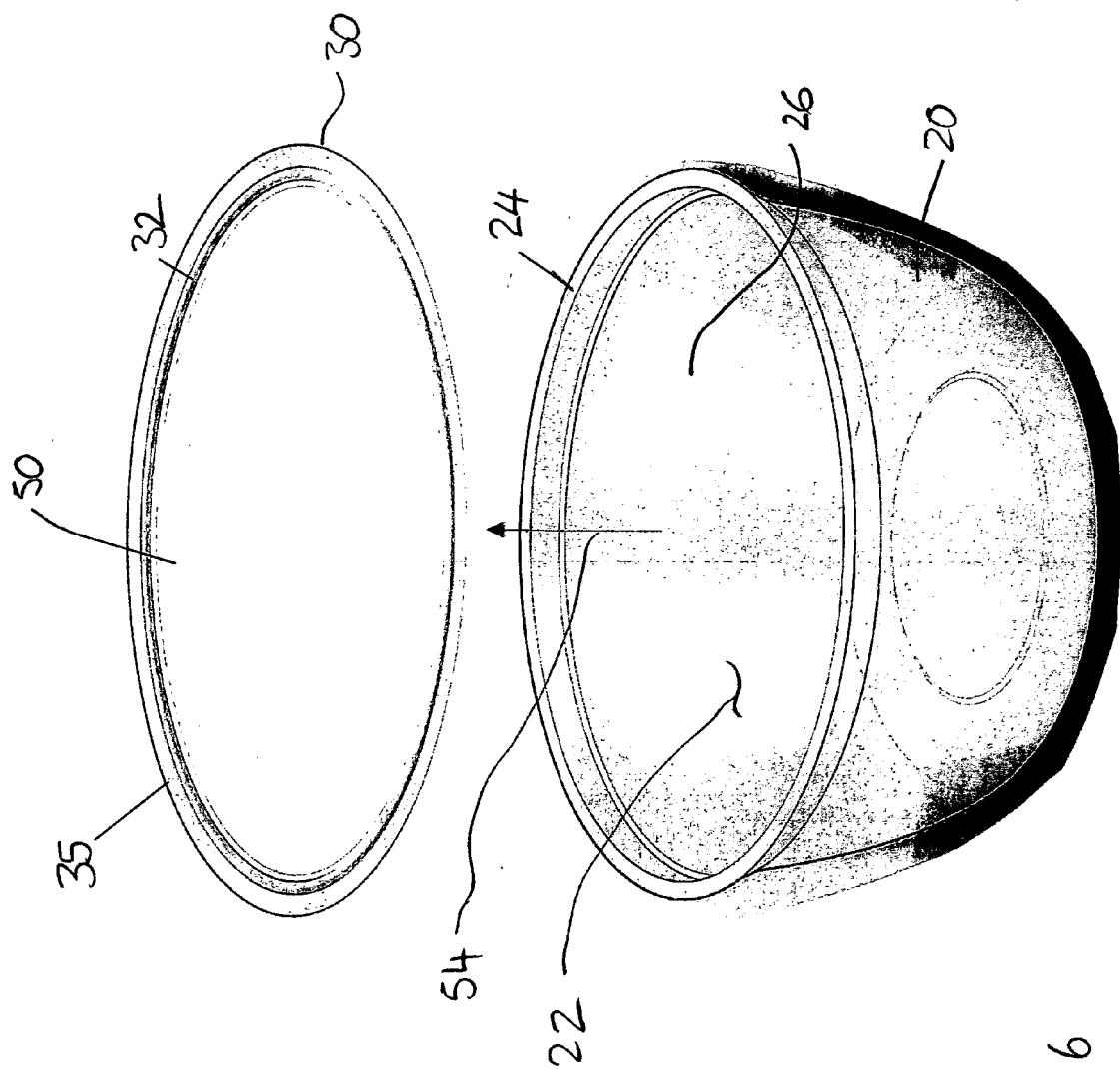


Figure 6

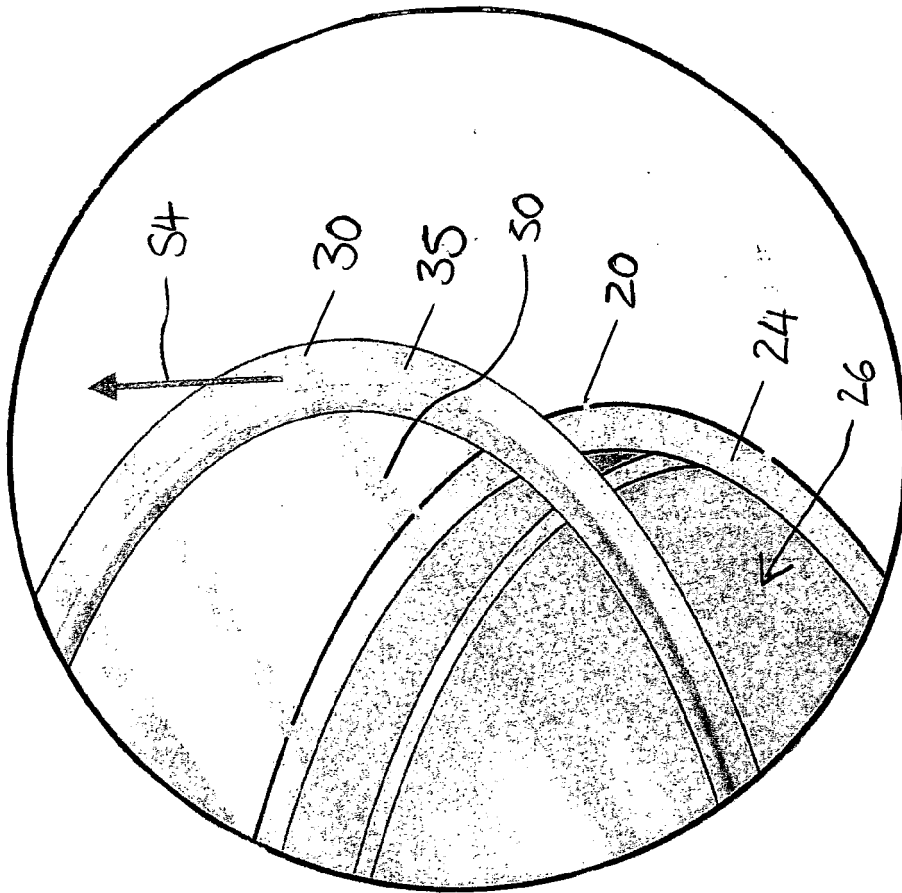


Figure 8

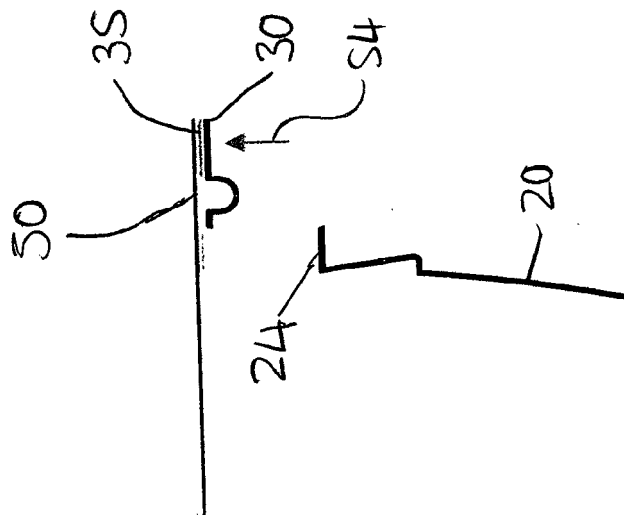
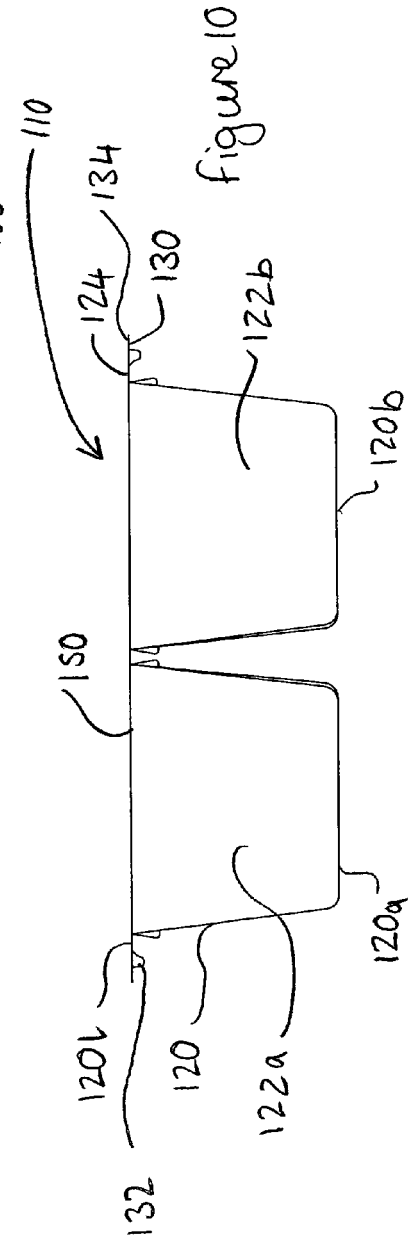
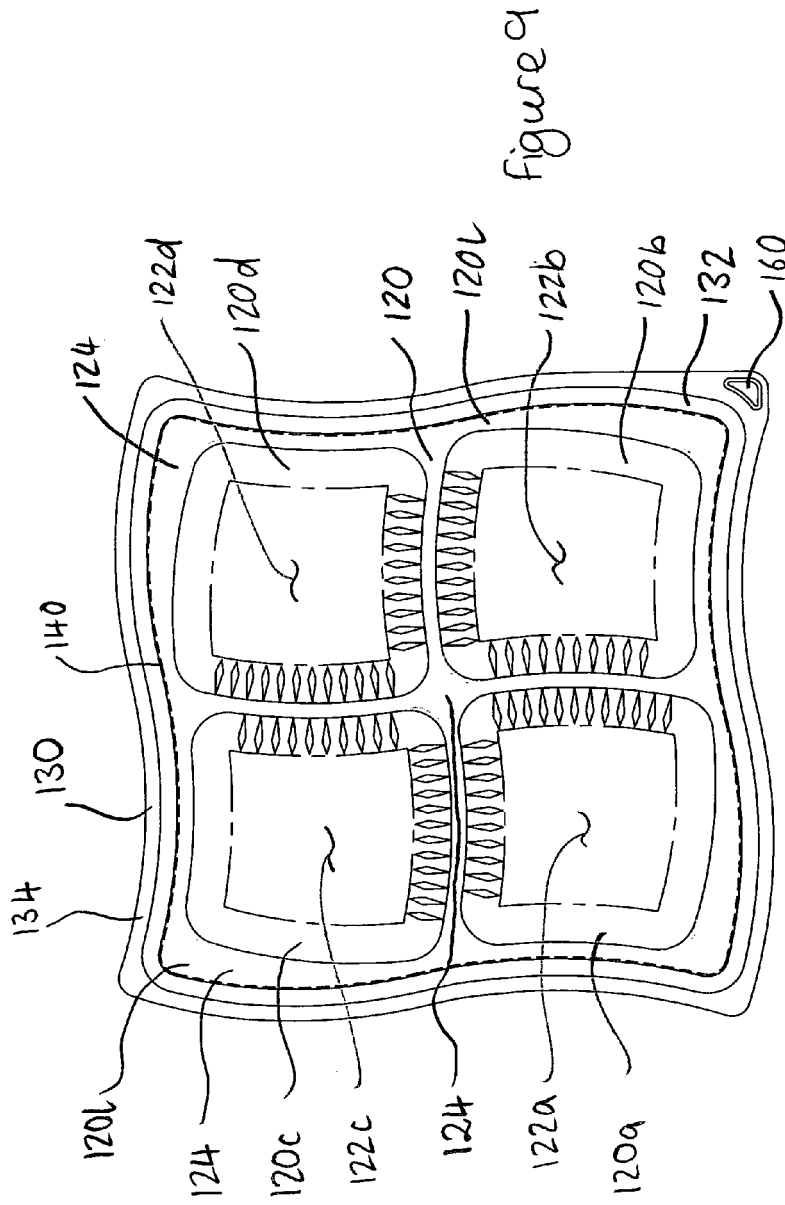
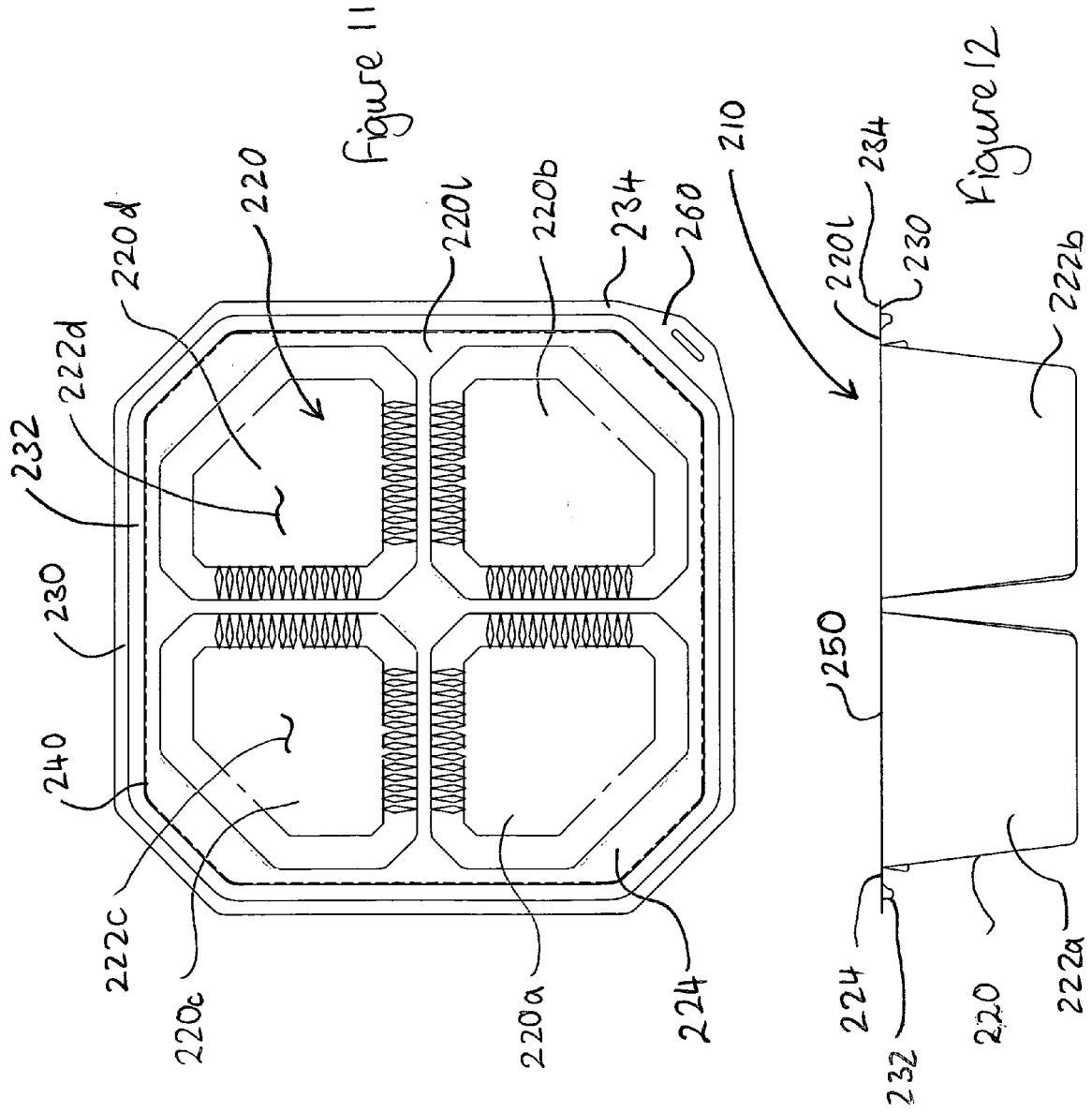


Figure 7





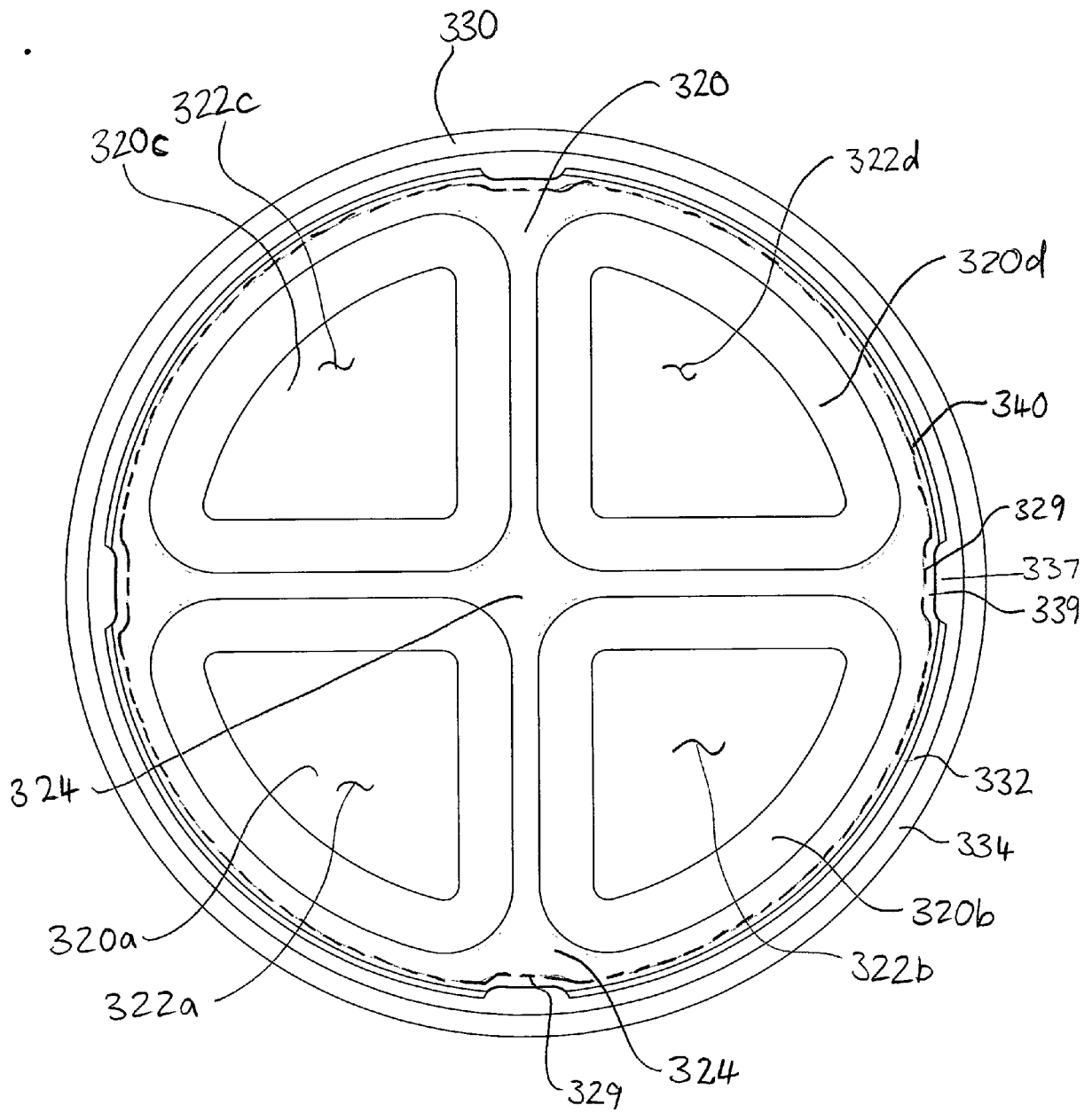


Figure 13

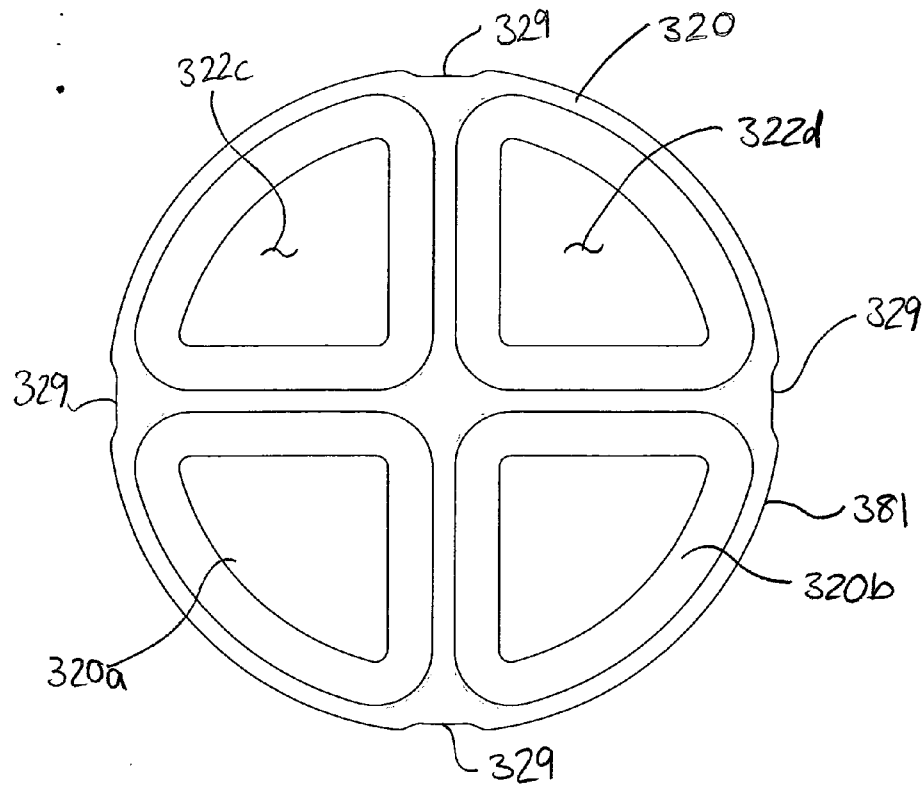


Figure 14

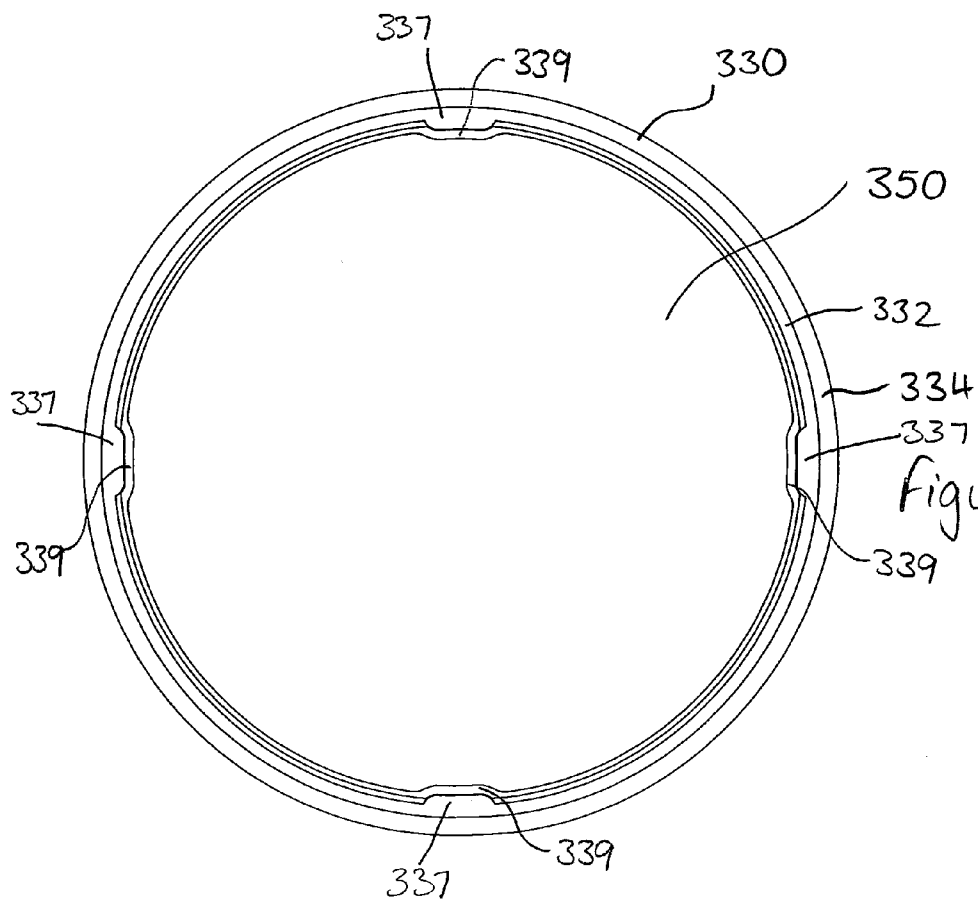


Figure 15

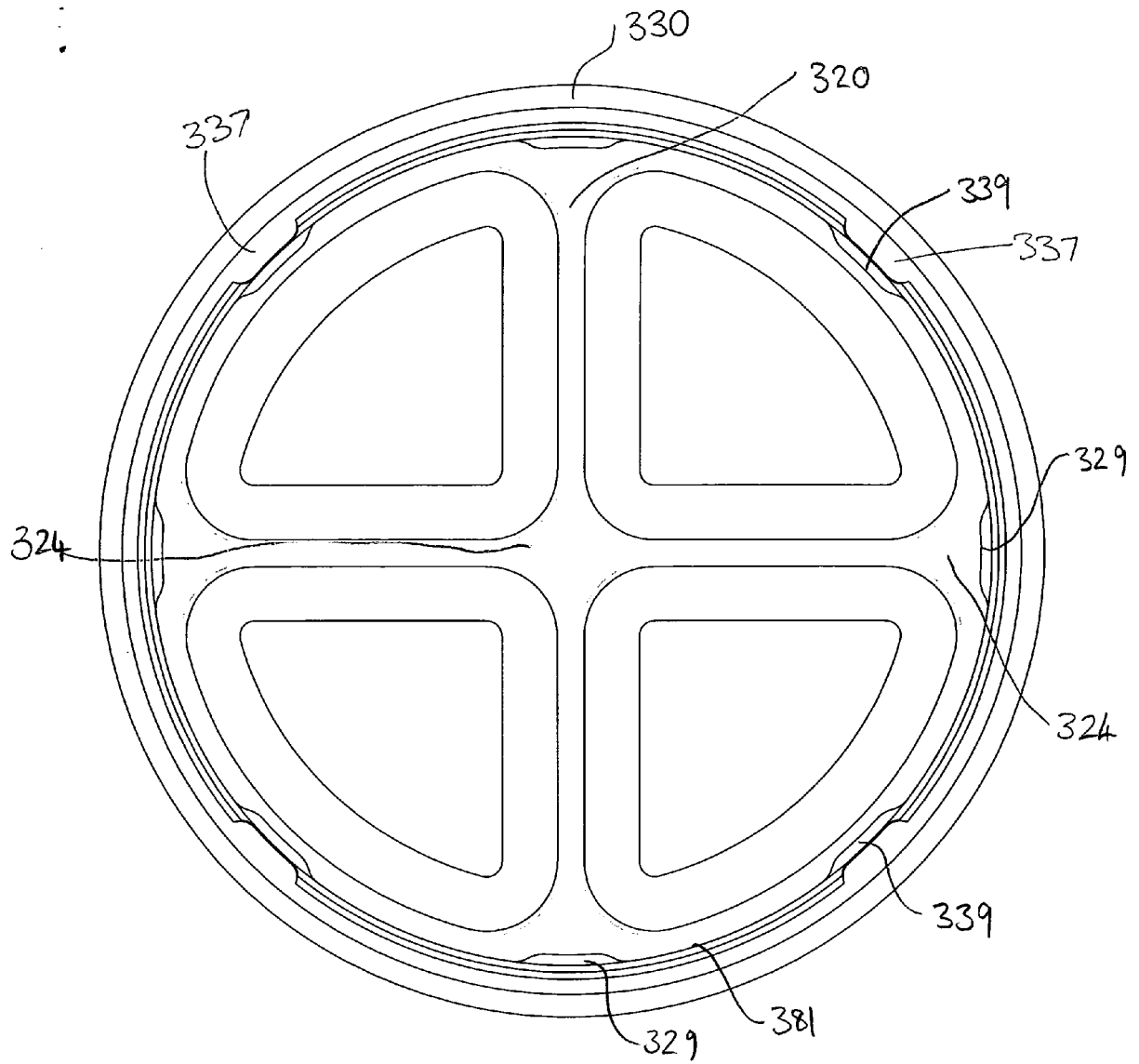


Figure 16



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Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 25 4735

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	FR 2 618 411 A (VALOINE SARL CHARCUTERIE [FR]) 27 January 1989 (1989-01-27)	1-10, 13-36, 39-45	INV. B65D77/20
Y	* the whole document *	11,12, 37,38	
X	FR 2 559 366 A (DELGRANDE LORENZO [MC]) 16 August 1985 (1985-08-16)	1-10, 13-17, 24,25, 28-32, 34-36, 39-41,45	
X	* the whole document *		
X	CH 677 473 A5 (ALUSUISSE) 31 May 1991 (1991-05-31)	1-10, 13-36, 39-45	TECHNICAL FIELDS SEARCHED (IPC) B65D
X	* column 7, lines 4-43; figures *		
X	US 3 318 477 A (SOUTHWICK JR CHARLES A ET AL) 9 May 1967 (1967-05-09) * the whole document *	1,34,41, 45	
Y	US 3 495 759 A (BERGSTROM ROGER C ET AL) 17 February 1970 (1970-02-17) * column 2, lines 69-71; figures *	11,37,38	
Y	JP 2003 221078 A (TACHIBANA YOKI KK) 5 August 2003 (2003-08-05) * abstract; figures *	12	
A	GB 896 753 A (NAT DAIRY PROD CORP) 16 May 1962 (1962-05-16) * the whole document *	1-45	
A	EP 0 306 982 A (IDEMITSU PETROCHEMICAL CO [JP]) 15 March 1989 (1989-03-15) * the whole document *	1-45	
	-/--		
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 February 2008	Examiner Vigilante, Marco
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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Application Number
EP 07 25 4735

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 3 108 708 A (BETNER THOMAS E) 29 October 1963 (1963-10-29) * the whole document * -----	1-45	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 February 2008	Examiner Vigilante, Marco
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ON EUROPEAN PATENT APPLICATION NO.**

EP 07 25 4735

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The members are as contained in the European Patent Office EDP file on
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26-02-2008

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
FR 2618411	A	27-01-1989	NONE		
FR 2559366	A	16-08-1985	NONE		
CH 677473	A5	31-05-1991	NONE		
US 3318477	A	09-05-1967	NONE		
US 3495759	A	17-02-1970	NONE		
JP 2003221078	A	05-08-2003	JP	3914137 B2	16-05-2007
GB 896753	A	16-05-1962	NONE		
EP 0306982	A	15-03-1989	AU	604151 B2	06-12-1990
			AU	2198588 A	23-03-1989
			BR	8804588 A	11-04-1989
			CA	1307240 C	08-09-1992
			DE	3883116 D1	16-09-1993
			DE	3883116 T2	17-03-1994
			MX	170425 B	23-08-1993
			NZ	226028 A	26-06-1990
			US	4858780 A	22-08-1989
US 3108708	A	29-10-1963	GB	906180 A	19-09-1962