

(19)



(11)

EP 2 130 777 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
09.12.2009 Bulletin 2009/50

(51) Int Cl.:
B65D 21/02 (2006.01) B65D 25/32 (2006.01)
B65D 43/02 (2006.01)

(21) Application number: **09156551.5**

(22) Date of filing: **27.03.2009**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL
PT RO SE SI SK TR
Designated Extension States:
AL BA RS

(72) Inventor: **Baltz, Kyle L.**
Redondo Beach, CA 90278 (US)

(74) Representative: **Lamb, Richard Andrew**
Urquhart-Dykes & Lord LLP
New Priestgate House
57 Priestgate
Peterborough
Cambs. PE1 1JX (GB)

(30) Priority: **02.06.2008 US 131222**

(71) Applicant: **Rehrig Pacific Company**
Los Angeles, CA 90058 (US)

(54) **Pail with skirt and lid**

(57) A pail (10) includes a base (12) and at least one wall (14) extending upwardly from a periphery of the base (12) to an opening of the pail (10). A lip (16) protrudes outwardly from an upper edge of the wall (14) adjacent the opening. A skirt (20) curves outwardly and downwardly from an outer surface of the wall (14) below the lip (16). A lid (18) for the pail (10) includes an upper wall (52) and three latch portions (56) extending downwardly from an outer periphery of the upper wall (52). The three latch portions (56) are substantially evenly disposed about the outer periphery of the upper wall (52). A tear away strip (64) connects the three latch portions (56), to prevent removal of the lid (50) from the pail (10). When the tear away strip (64) is torn away from the lid (50), the lid (50) can be removed from the pail (10) by manually deflecting one of the latch portions (56).

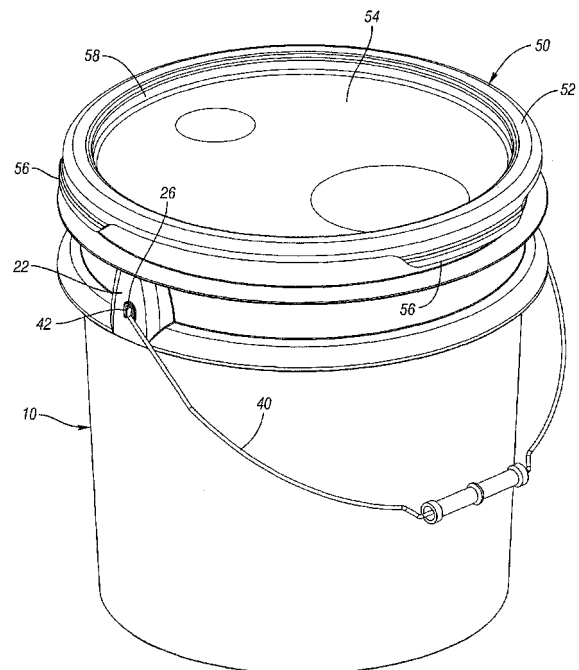


Fig. 8

EP 2 130 777 A2

Description

[0001] Pails are often used to ship and sell products to consumers. The pails include a base and a side wall extending upwardly from a periphery of the base. At an open end of the pail, a lip may be formed for retaining a lid thereon. Further, the pail may include one or more reinforcing rings protruding outwardly from the side of the side wall. These rings sometimes cause the pails to "shingle," wherein the ring of one pail rides up on top of the ring of an adjacent pail thereby interfering with stacking of the pails.

[0002] Many pails include lids that snap down over a lip at the open end of the pail. The lids may include a tear away portion around the periphery of the lid. The tear away portion prevents the lid from being removed until the tear away portion is torn away from the rest of the lid. Generally, four latch portions remain on the lid after the tear away portion has been removed. The latch portions permit the lid to be removably re-secured to the pail. Removal of the lid is a two step process, where the user must unsnap two opposing latch portions with two hands, then rotate his hands to unsnap the other two latch portions.

[0003] It is however desirable to provide an improved pail which addresses the above problems and/or offers improvements or an alternative to existing arrangements.

[0004] According to a first aspect of the present invention there is provided a pail as discussed in the accompanying claims.

[0005] According to another related aspect of the invention there is also provided a pail lid as described in the accompanying claims.

[0006] A pail according to one embodiment of the present invention includes a base and at least one wall extending upwardly from a periphery of the base to an opening of the pail. A lip protrudes outwardly from an upper edge of the wall adjacent the opening. A skirt curves outwardly and downwardly from an outer surface of the wall below the lip. The skirt performs several functions. First, the curved outer surface of the skirt prevents shingling by adjacent containers. Instead, the skirt of one container will slide down the curved surface of the skirt of an adjacent container. The skirt can be used as a handle and can be gripped from underneath to help lift the pail. The skirt also limits the amount of nesting of two empty pails, so that they do not get stuck together.

[0007] A lid includes an upper wall and three latch portions extending downwardly from an outer periphery of the upper wall. The three latch portions are substantially evenly disposed about the outer periphery of the upper wall. A tear away strip connects the three latch portions, to prevent removal of the lid from the pail. When the tear away strip is torn away from the lid, the lid can be removed from the pail by manually deflecting two of the latch portions in a single step. Thus, the lid is easier to remove from the pail in one step.

[0008] These and other features of the application can

be best understood from the following specification and drawings, the following of which is a brief description.

[0009] Figure 1 is a perspective view of a pail according to one embodiment of the present invention.

[0010] Figure 2 is a side view of the pail of Figure 1.

[0011] Figure 3 is a top view of the pail of Figure 1.

[0012] Figure 4 is a section view taken along line 4-4 of Figure 3.

[0013] Figure 5 is a bottom perspective view of the pail of Figure 1.

[0014] Figure 6 illustrates the pail of Figure 1 with a similar pail nested therein.

[0015] Figure 7 is a side view of the pail of Figure 1 with a similar pail adjacent thereto.

[0016] Figure 8 illustrates the pail of Figure 1 with a handle and lid (tear strip removed).

[0017] Figure 9 is a bottom perspective view of the lid of Figure 8 with the tear strip in place.

[0018] Figure 10 is a bottom perspective view of the lid of Figure 9 with the tear strip torn away.

[0019] Figure 11 is a bottom view of the lid of Figure 10.

[0020] Figure 12 is a top view of the pail and lid of Figure 8, with the tear strip removed.

[0021] Figure 13 is a section view taken along line 13-13 of Figure 12, with the tear strip removed.

[0022] Figure 14 is an enlarged view of a portion of Figure 13.

[0023] A pail 10 according to one embodiment of the present invention is shown in Figure 1. The pail 10 includes a base 12 and a side wall 14 extending upwardly from the outer periphery of the base 12. At the open end of the pail 10, a lip 16 protrudes outwardly from the upper edge of the side wall 14. Spaced below the lip 16, a mid-ring 18 protrudes outwardly from the side wall 14. Spaced below the mid-ring 18, a skirt 20 curves outwardly and downwardly from an outer surface of the side wall 14.

[0024] A pair of handle attachment walls 22 (one shown in Figure 1) are spaced outwardly of the side wall 14 and generally parallel thereto, or, more specifically, tangential thereto. The handle attachment wall 22 includes an aperture 26 for attaching a handle. Curved side walls 28 enclose the handle attachment wall 22. The handle attachment wall 22 extends from the skirt 20 to the mid-ring 18.

[0025] Referring to Figure 2, the handle attachment wall 22 extends downwardly to the lower most edge of the skirt 20 and upwardly to the mid-ring 18. This reinforces the handle attachment wall 22, the mid-ring 18 and the skirt 20. The handle attachment wall 22 is tapered toward the upper end of the handle attachment wall 22. The side walls 28 extend from the skirt 20 to the mid-ring 18 and also curve inwardly at the top of the handle attachment wall 22. The lip 16, mid-ring 18 and skirt 20 all contribute to the rigidity of the side wall 14 and help it maintain a circular cross-section.

[0026] Figure 3 is a top view of the pail 10. Figure 4 is a section view taken along line 4-4 of Figure 3 of the pail 10. As shown, the mid-ring 18 is angled downwardly as

it protrudes outwardly from the outer surface of the side wall 14. The skirt 20 generally has an outer surface that is rounded and curved. Ribs 30, perpendicular to the side wall 14 extend between the side wall 14 and skirt 20 to reinforce the skirt 20. The base 12 is slightly bowed upward toward the center and includes an annular lip 32 protruding downwardly from the lower surface of the base 12, thereby defining a lower recess 34.

[0027] Figure 5 is a bottom perspective view of the pail 10. A plurality of ribs 30 extend about the periphery of the side wall 14 inside the skirt 20. The rounded recesses formed by the skirt 20 between the ribs 30 define handle areas about the circumference of the pail 10. The handle attachment wall 26 defines a recess between the handle attachment wall 26 and the side wall 14 that opens downwardly through the skirt 20 up to the mid-ring 18. The recess is defined by the mid-ring 18, side walls 28, handle attachment wall 22 and two adjacent ribs 30, coincident with the side walls 28.

[0028] As shown in Figure 6, when a similar pail 10' is nested within the pail 10, the skirt 20' contacts the upper most edge of the side wall 14 of the lower pail 10 to limit the amount of nesting between the pails 10, 10', to prevent the pails 10, 10' from becoming stuck together.

[0029] Figure 7 illustrates the pails 10, 10' side by side. The skirts 20, 20' may contact one another, but if one skirt 20 rides up onto the other skirt 20', the weight of the material in the pail 10 will cause the skirt 20 to slide down the outer curved, rounded surface of the skirt 20'. This provides for easier stacking of the pails 10, 10'.

[0030] Figure 8 illustrates the pail 10 with an optional wire handle 40 having ends 42 received within apertures 26 of the handle attachment walls 22. Such handles 40 are well known. The pail 10 is also shown with an optional lid 50. The lid 50 includes an annular upper wall 52 and a circular lower wall 54. Three latch portions 56 protrude downwardly from an outer periphery of the annular upper wall 52. An inner annular lip 58 protrudes downwardly from an inner circumference of the annular upper wall 52 to connect the annular upper wall 52 to the circular lower wall 54. The lid 50 of Figure 8 is shown without the tear away strip. Figure 9 is a bottom view of the lid 50 with the tear away strip 64 in place. As shown, the tear away strip 64 protrudes upwardly from an outer most annular lip 65 protruding downwardly from an outer periphery of the annular upper wall 52 (Figure 8) and connecting the latch portions 56 to one another. The lid 50 further includes an inner annular lip 58 protruding downwardly from the upper wall 52 and a middle annular lip 60 protruding downwardly from the annular upper wall 52, outwardly of the inner annular lip 58. A plurality of ribs 66 protrude downwardly from the circular lower wall 54 of the lid 50 and extend between the inner annular lip 58 and the middle annular lip 60 to reinforce both of them.

[0031] Figure 10 illustrates the lid 50 of Figure 9 with the tear away strip 64 removed. Generally, the tear away strip 64 (Figure 9) is torn away from the outer most annular lip 65 and from the latch portions 56.

[0032] As shown in Figure 11, the lid 50 includes three latch portions 56 that are equally (or substantially equally) spaced about the periphery of the lid 50, i.e. having centers spaced by about 120°.

[0033] Figure 12 is a top view of the lid 50 on a pail 10, with the tear strip 64 removed.

[0034] Figure 13 is a section view taken along line 13-13 of Figure 12 with the tear strip 64 removed. Figure 14 is an enlarged view of the area of the pail surrounding the latch portion 56 of the lid 50 of Figure 13. As shown, when the tear strip 64 is removed, the latch portions 56 latch underneath the lip 16 of the pail 10, while other portions of the lid 50, the outer most annular lip 65 simply mates with the lip 16, without latching thereunder. Thus, by deflecting two of the latches 56 outwardly, the lid 50 can be removed from the pail 10 and removably resealed to the pail 10.

[0035] In accordance with the provisions of the patent statutes and jurisprudence, exemplary configurations described above are considered to represent a preferred embodiment of the invention. However, it should be noted that the invention can be practiced otherwise than as specifically illustrated and described without departing from its spirit or scope.

Claims

1. A pail (10) comprising:

- a base (12);
- at least one wall (14) extending upwardly from a periphery of the base (12) to an opening of the pail (10);
- a lip (16) protruding outwardly from an upper edge of the at least one wall (14); and
- a skirt (16) curving outwardly and downwardly from an outer surface of the at least one wall (14) below the lip (16).

2. The pail (10) of claim 1 wherein the skirt (20) has a generally rounded cross-section.

3. The pail (10) of claim 1 or 2 wherein the skirt (20) includes a plurality of cross-ribs (30) generally perpendicular to the at least one wall (14), the skirt (20) curving outwardly and downwardly over the cross-ribs (30).

4. The pail (10) of any preceding claim further including a handle attachment wall (22) spaced from the at least one wall (14).

5. The pail (10) of claim 4 wherein the handle attachment wall (22) is generally parallel to the at least one wall (14), the handle attachment wall (22) extends upwardly from the skirt (20), and wherein the handle attachment wall (22) opens downwardly.

6. The pail (10) of claim 4 or 5 wherein the handle attachment wall (22) includes a handle attachment opening (26).
7. The pail (10) of any of claims 4 to 6 further including a mid-ring (18) protruding outwardly from the at least one wall (14), the handle attachment wall (22) extending from the mid-ring (18) to the skirt (20). 5
8. The pail (10) of claim 7 further including a pair of side walls (28) connecting the at least one wall (14) to the handle attachment wall (22), the mid-ring (18) and the skirt (20). 10
9. A pail lid (50) comprising: 15
 - an upper wall (52);
 - three latch portions (56) extending downwardly from an outer periphery of the upper wall (52), the three latch portions (56) substantially evenly disposed about the outer periphery of the upper wall (52); and 20
 - a tear-away strip (64) connecting the three latch portions (56). 25
10. The pail lid (50) of claim 9 further including an inner lip (58) protruding downwardly from the upper wall (52), the inner lip (58) spaced inwardly from the latch portions (56). 30
11. The pail lid (50) of claim 11 further including a plurality of ribs (66) protruding downwardly from the upper wall (52) outwardly of the inner lip (58).
12. The pail lid (50) of claim 12 further including a middle lip (60) protruding downwardly from the upper wall (52), the plurality of ribs (66) between the inner lip (58) and the middle lip (60). 35
13. The pail lid (50) of claim 11 or 12 wherein the upper wall (52) is an annular upper wall. 40
14. The pail lid (50) of claim 13 further including a lower wall (54), the inner lip (58) extending downwardly from the upper wall (52) to an outer periphery of the lower wall (54) and wherein the ribs (66) extend onto a lower surface of the lower wall (54). 45
15. The pail of any of claims 1 to 8 further including the pail lid of any of claims 9 to 14. 50

55

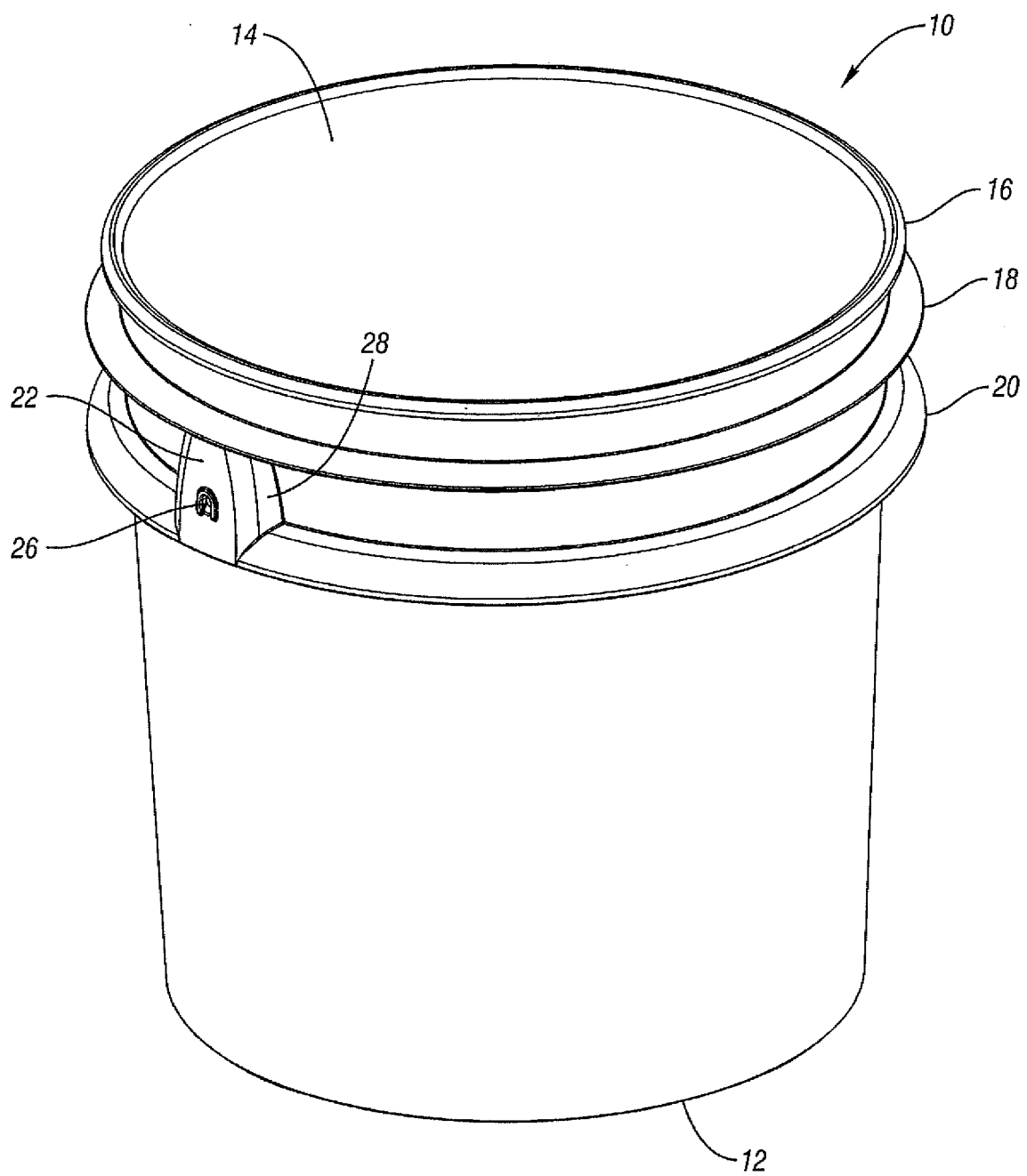


Fig. 1

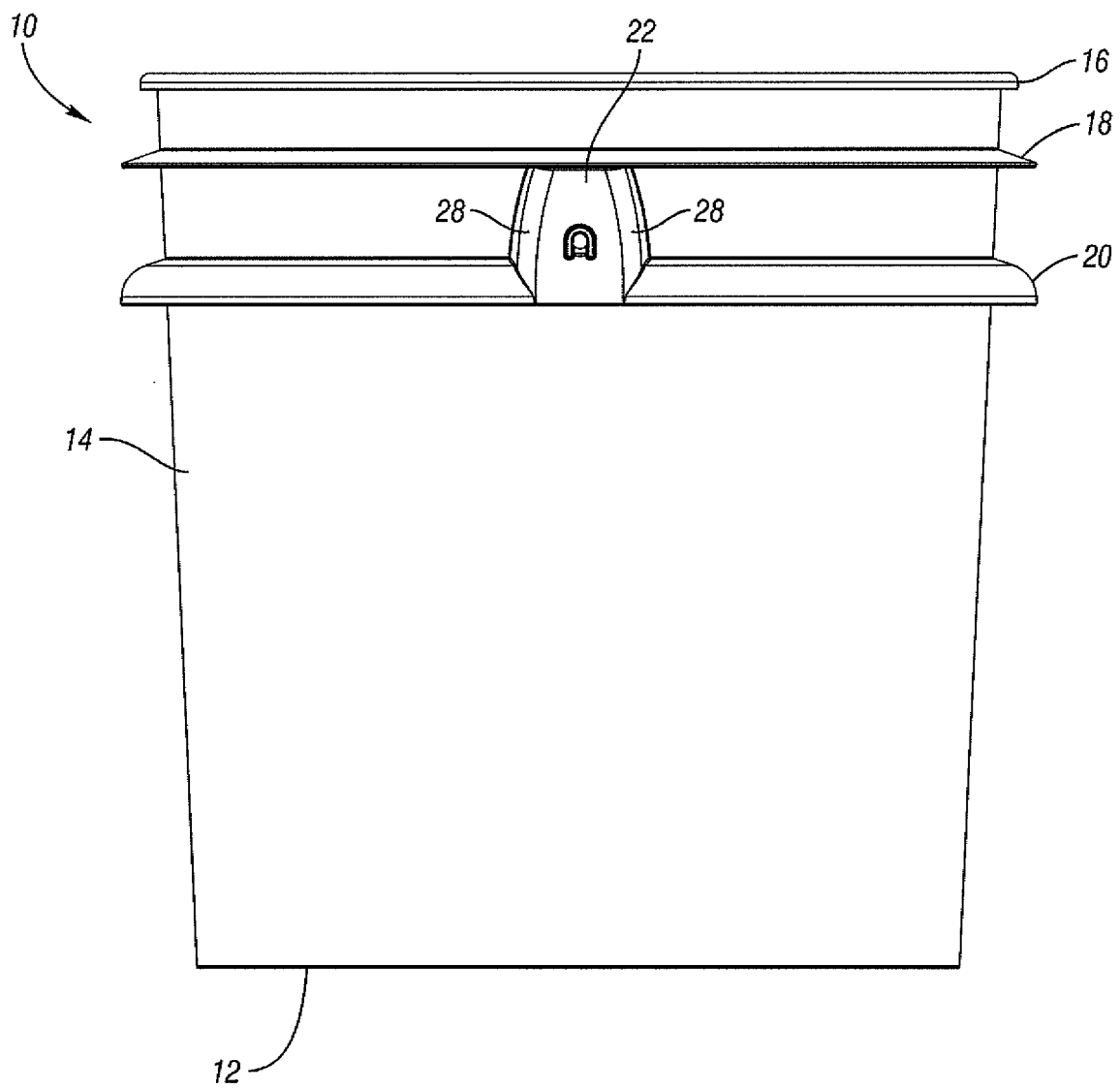


Fig. 2

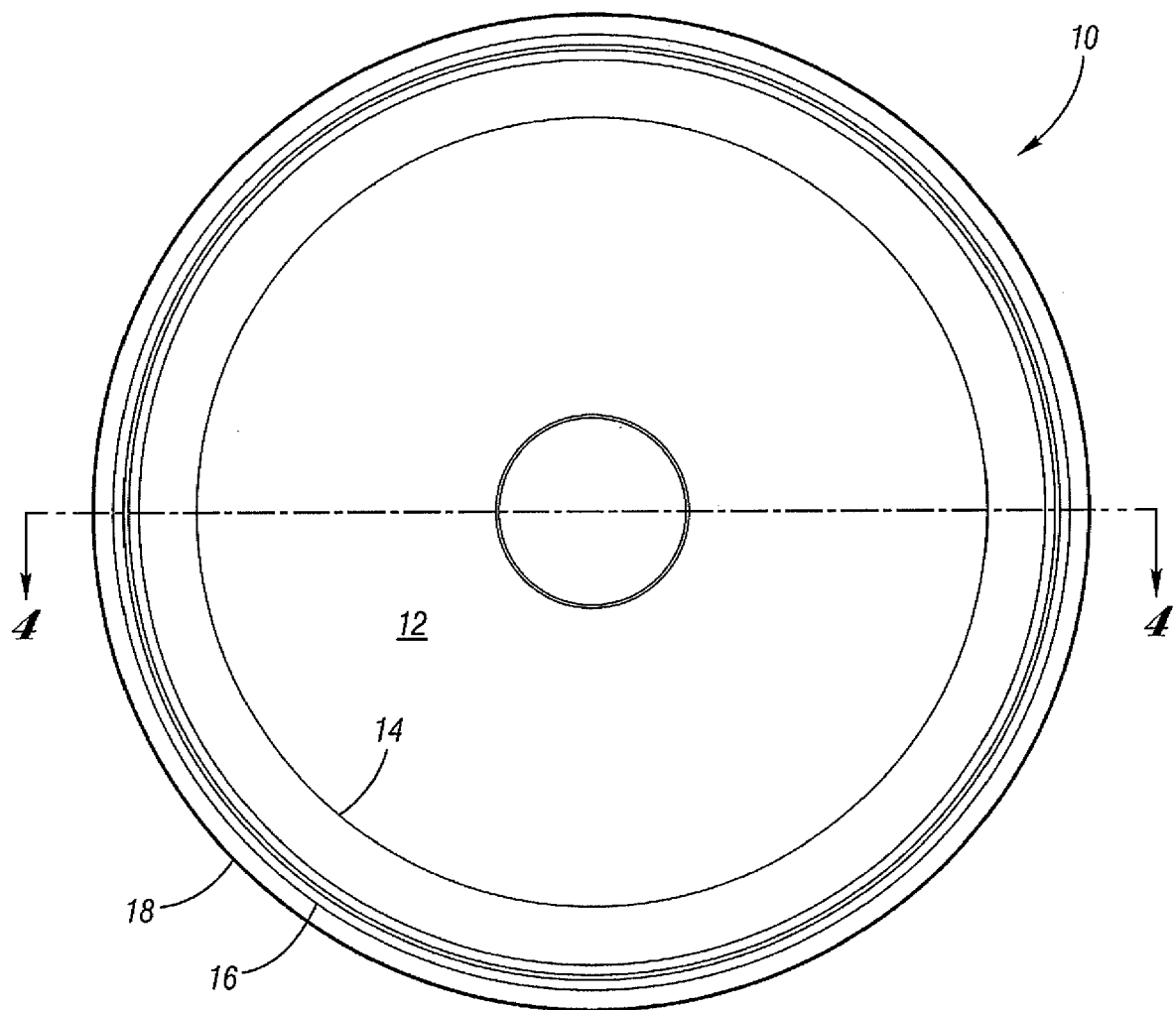


Fig. 3

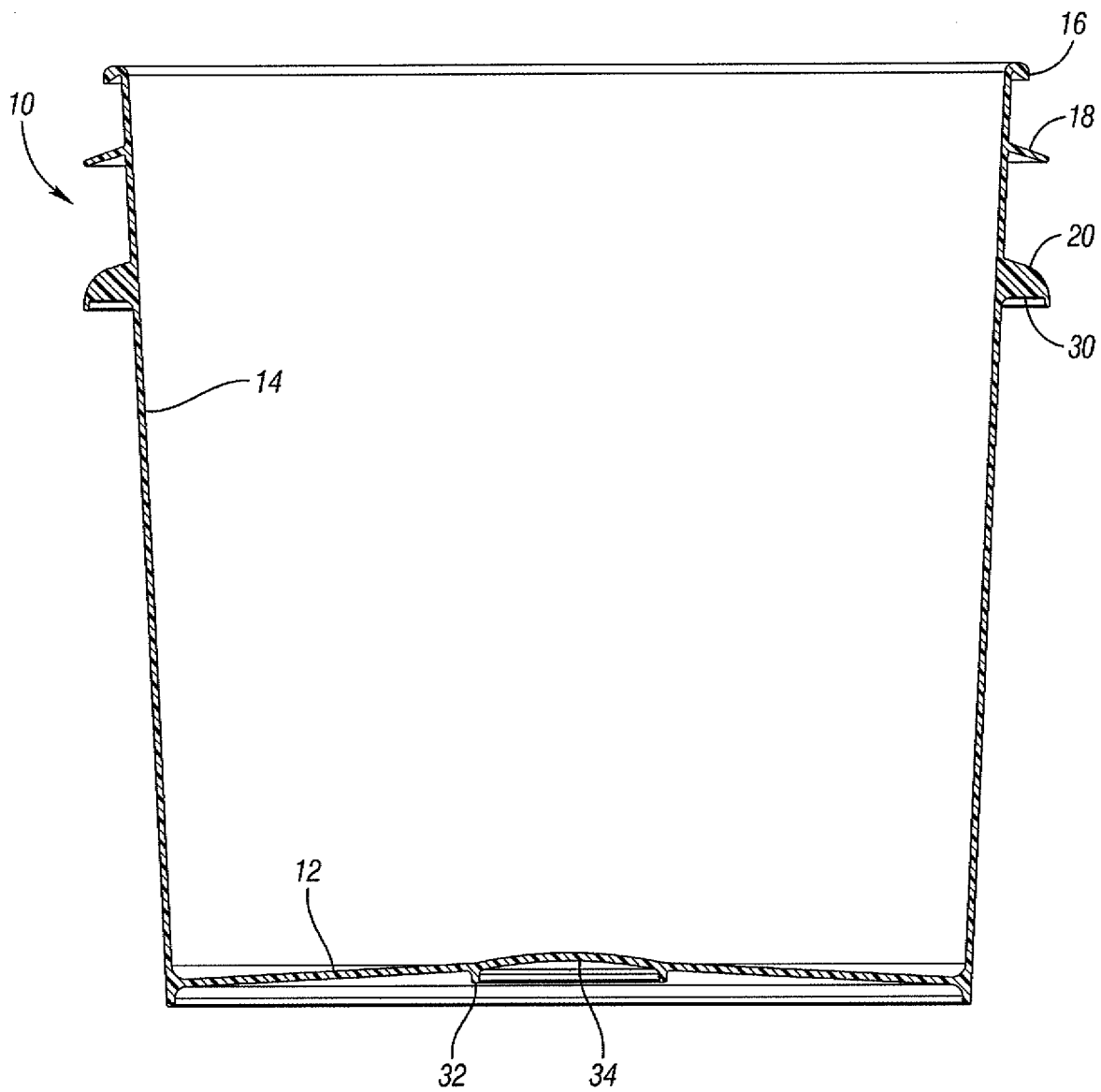


Fig. 4

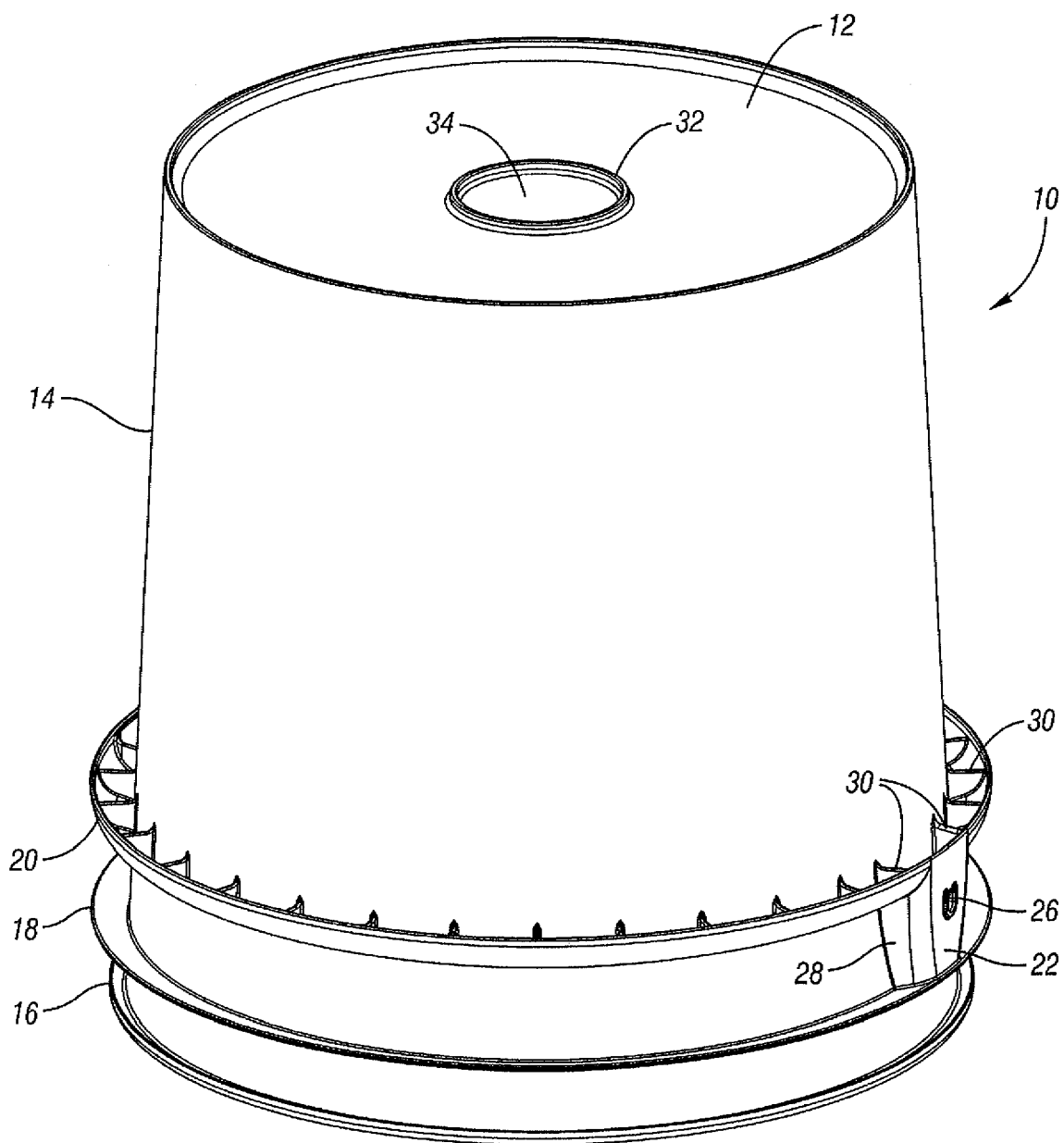


Fig. 5

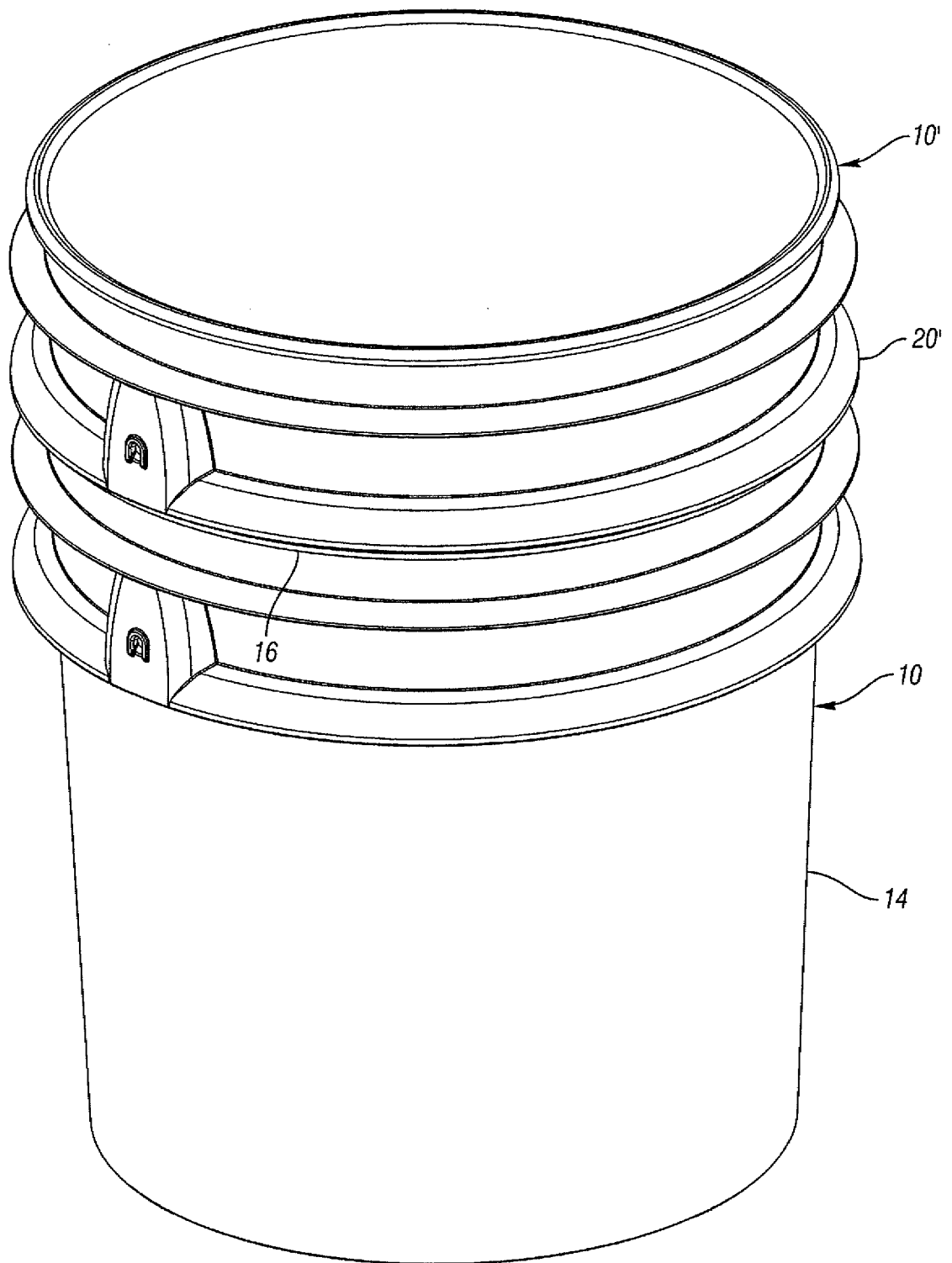


Fig. 6

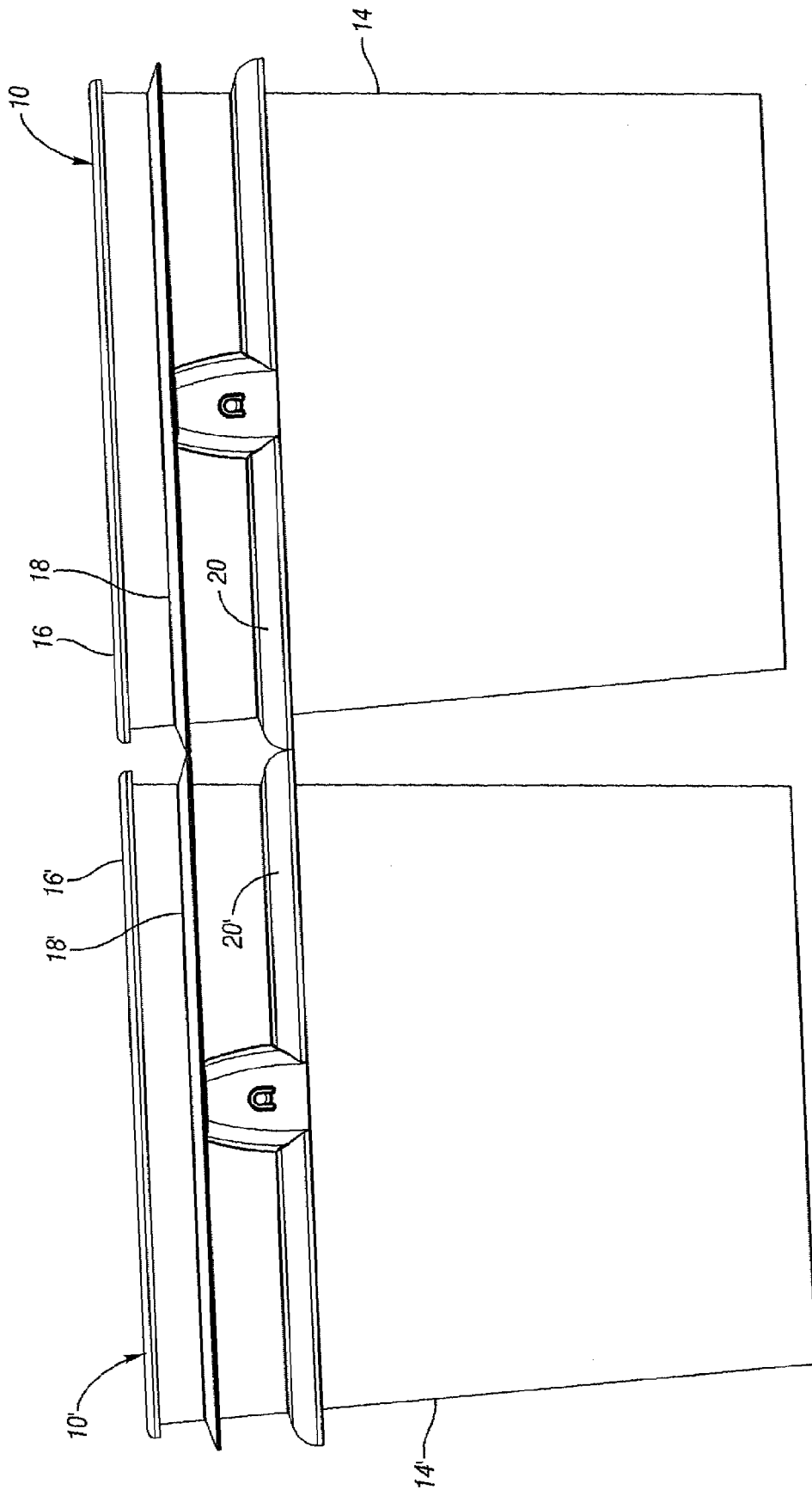


Fig. 2

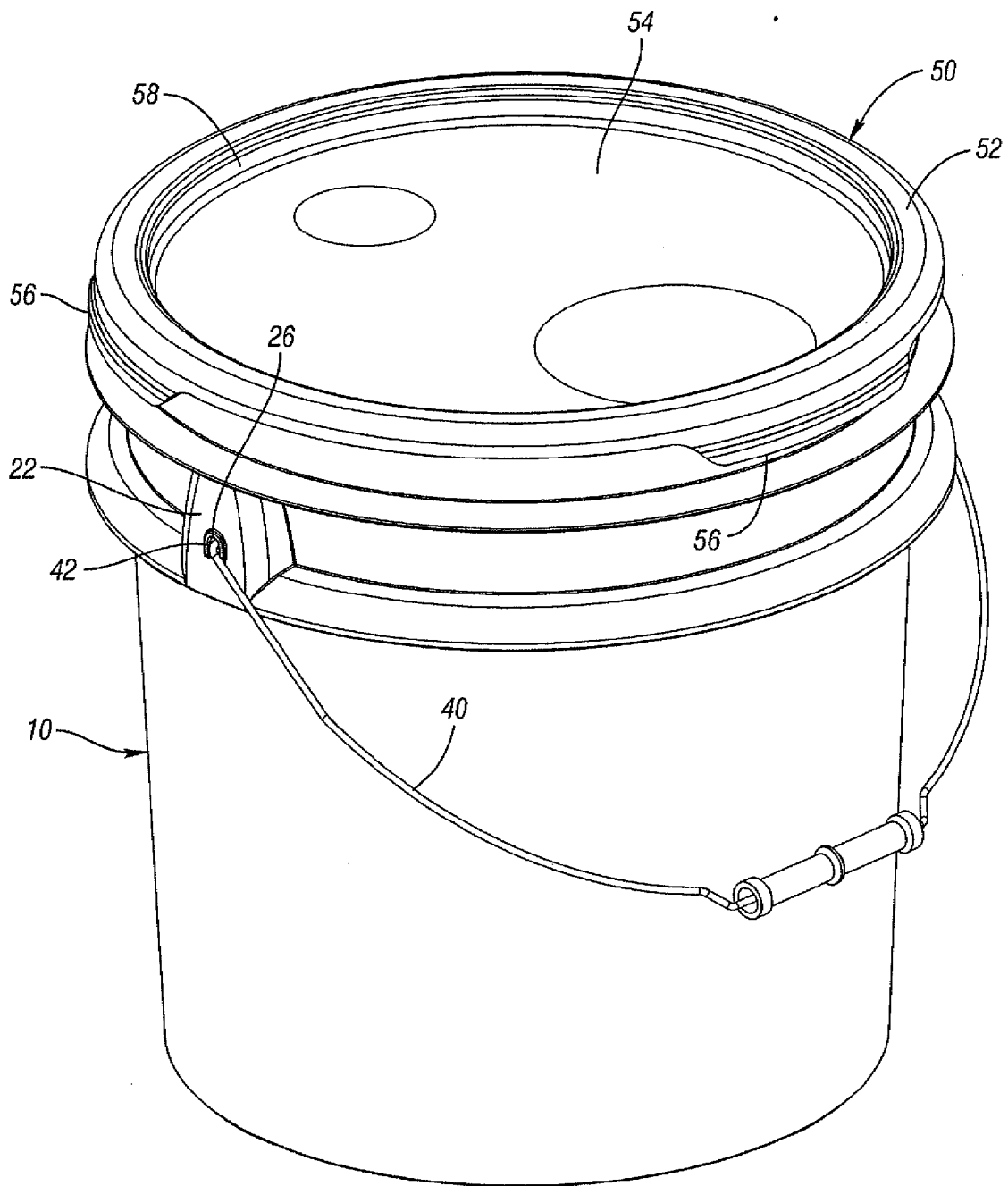


Fig. 8

Fig. 9

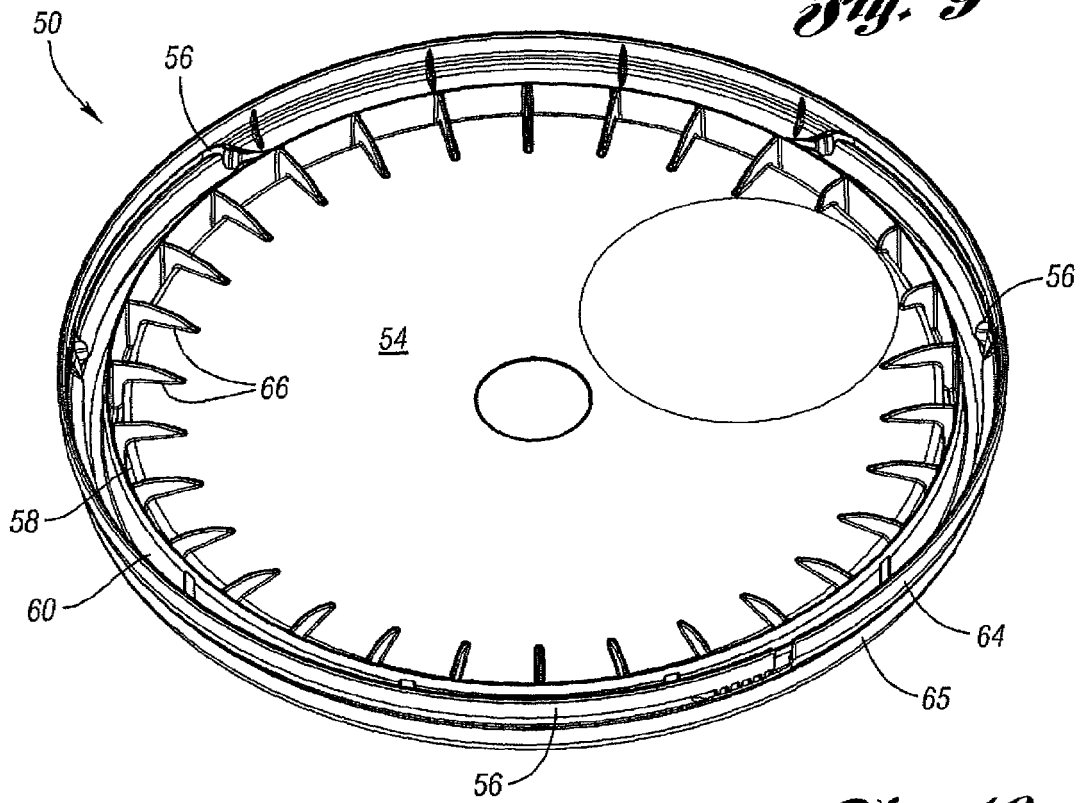
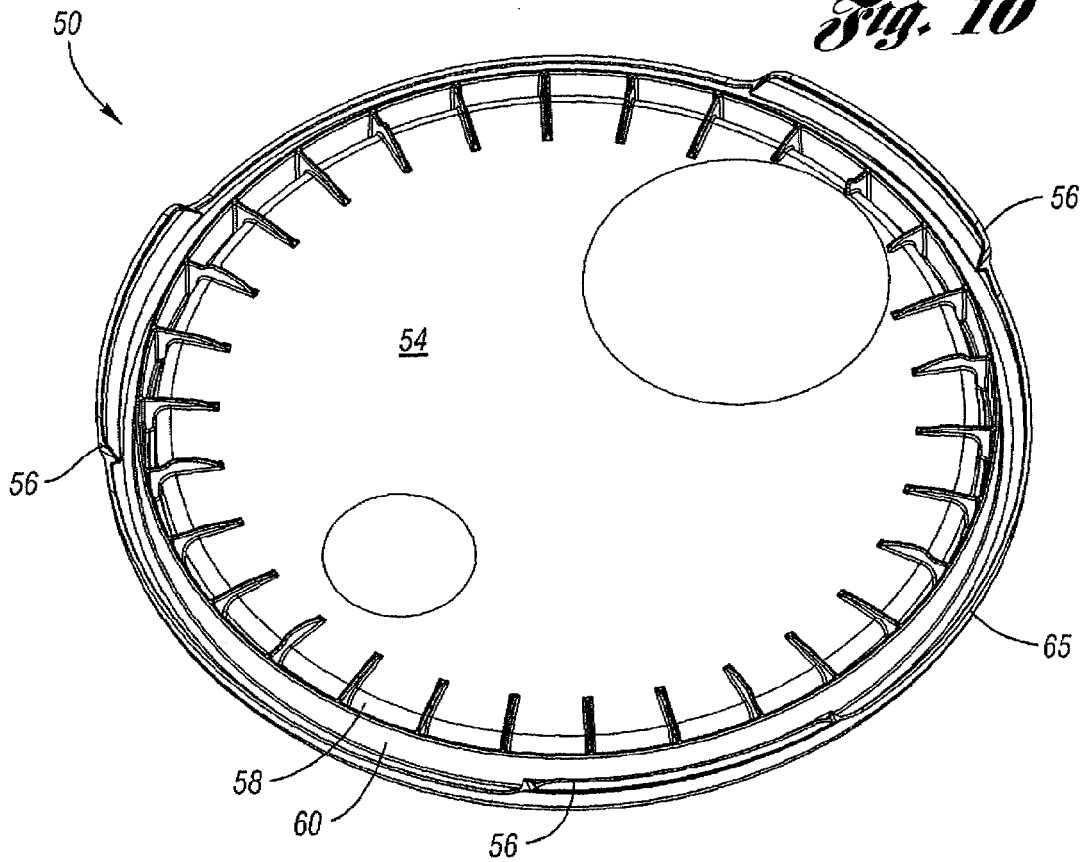


Fig. 10



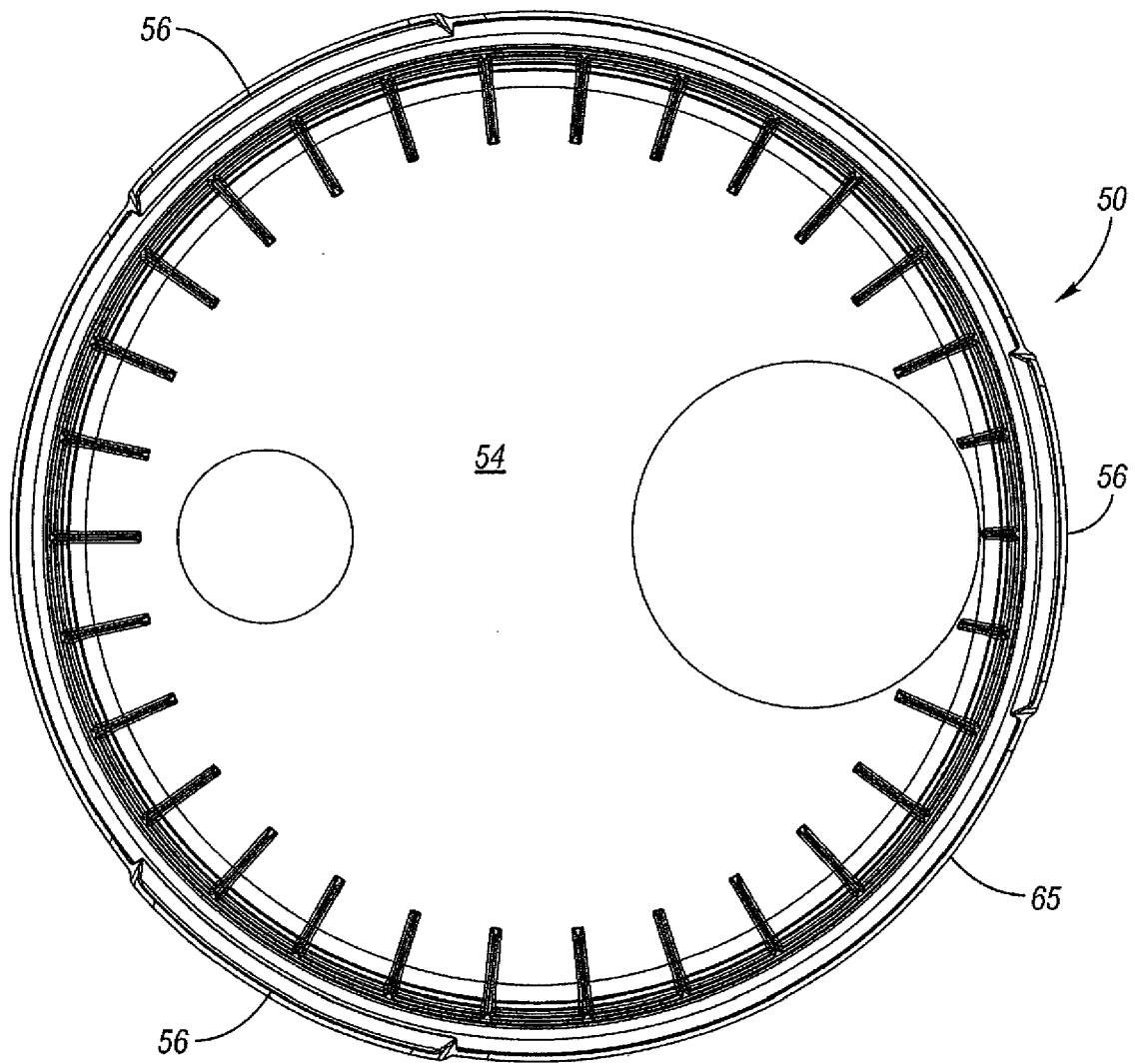


Fig. 11

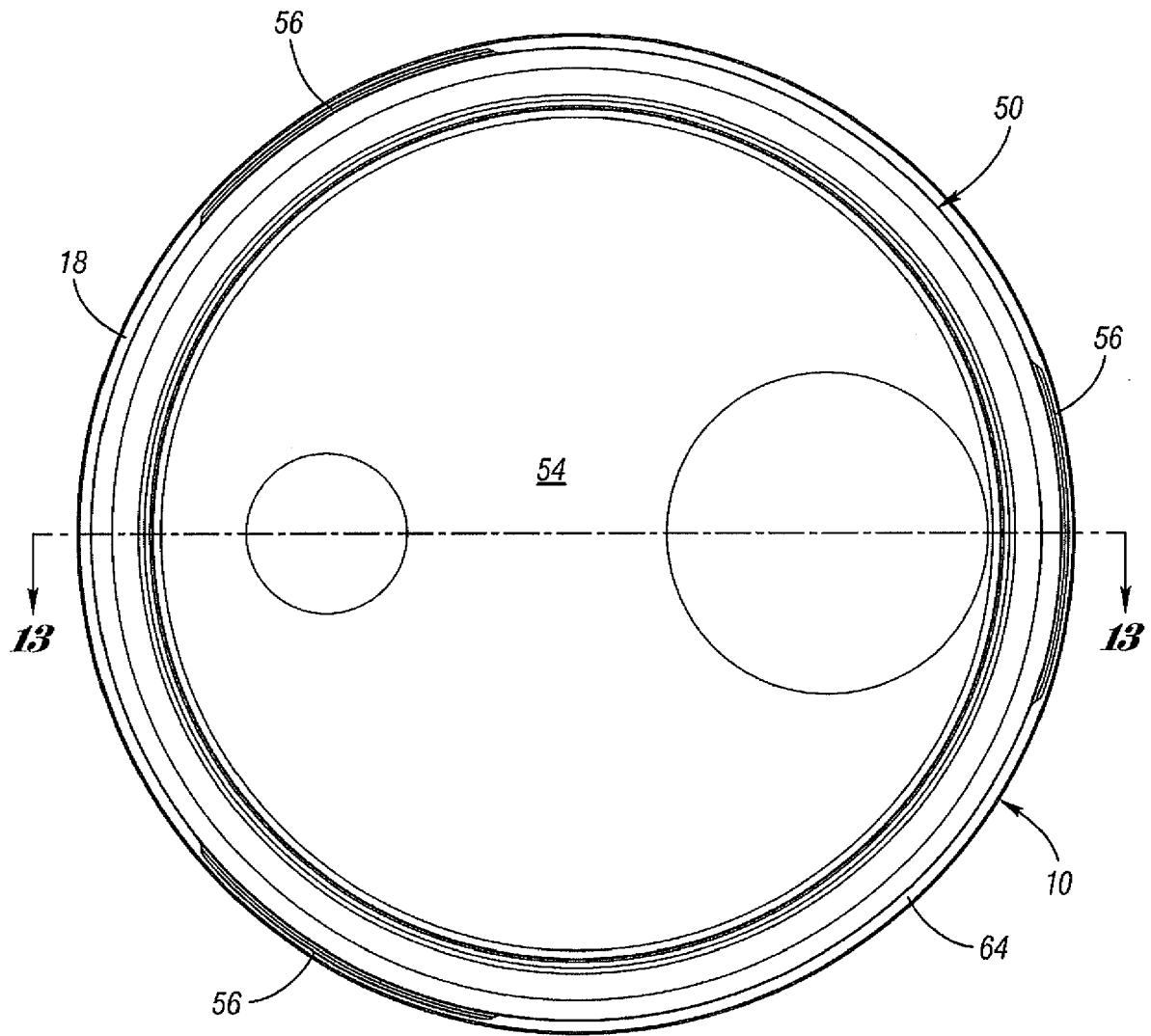


Fig. 12

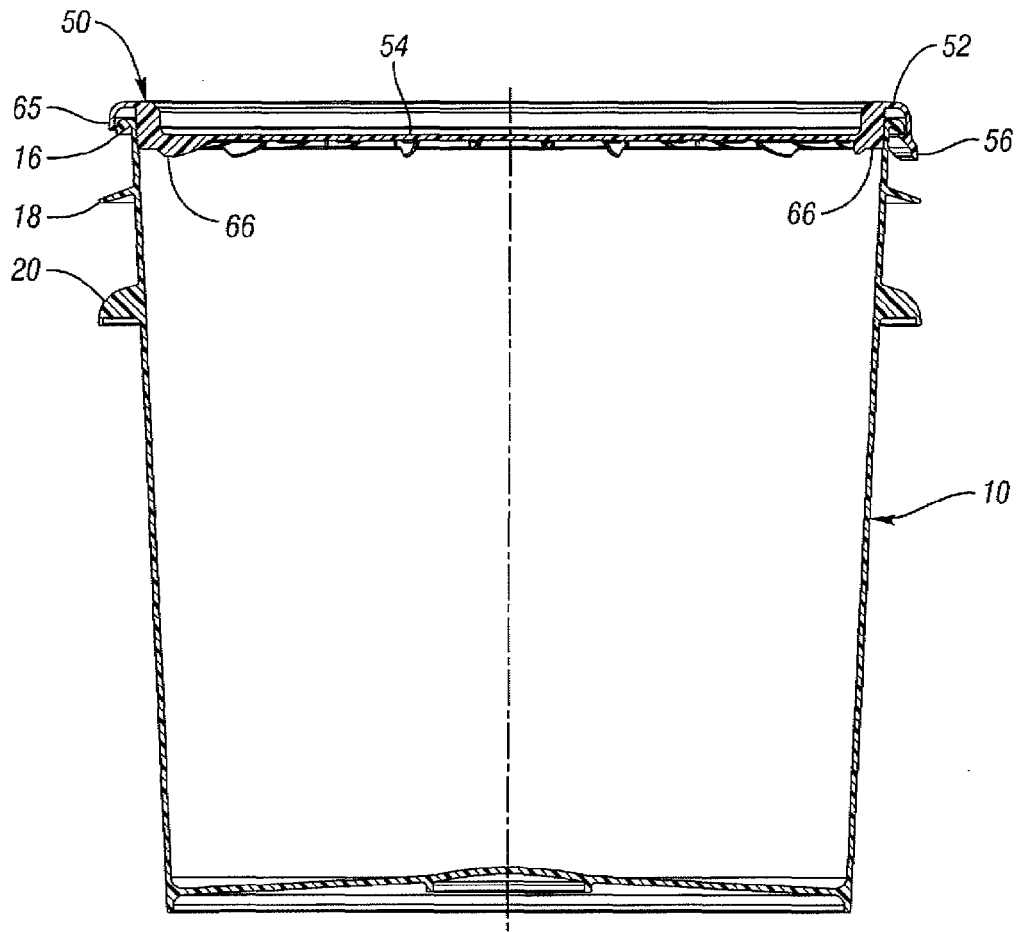


Fig. 13

Fig. 14

