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(54) **A paint container**

Farbbehälter

Récipient de peinture

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(56) References cited:
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**GB-A- 2 284 587**
**US-A1- 2006 207 994**
**WO-A-97/48612**
**NL-C2- 1 029 305**

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## Description

**[0001]** The present invention relates to a paint container.

**[0002]** Known paint containers include a main body comprising an outer wall and a base, and a closure which seals onto a rim of the outer wall to prevent paint in the container from drying. Such paint containers also include a handle which is mounted on the outer wall body, and moveable between a resting position which is typically when the container is displayed in a retail display stand, and a carrying position to enable the container to be removed from the display stand.

**[0003]** Known paint containers also include a skirt located on the outer wall of the main body and positioned just below the rim. The purpose of the skirt is to provide rigidity around the rim area. The skirt also includes a projection which retains the handle in the resting position.

**[0004]** Known paint containers typically have a front face, a rear face, and two side faces. The front face also displays contents information, i.e. information about the paint in the container, for example, paint colour and finish. The container is oriented on the display stand such that the front face is visible to a consumer when stood in front of the stand.

**[0005]** It would be desirable to be able to position paint containers on the display stand with either the front face or side face visible, and still be able to view the contents information, as this different display stand configurations. When the front face is wider than the side face, it is possible to display more containers within a given display stand width by positioning the container such that the side face, as opposed to the front face is visible.

**[0006]** Whilst it is possible to simply reorientate the paint container such that either the side face or front face is visible, the handle must still be accessible such that it can be manipulated from the resting position towards the carrying position to enable to the container to be removed from the display stand.

**[0007]** EP 1681242 discloses a four-sided point container according to the preamble of claim 1, having four corners and a handle, in which the handle is hingedly connected to the container at two opposed corners (A, C), and is movable between a resting position and a carrying position via a first corner (D) between the two opposed corners, wherein the rotation of the handle towards a second corner (B) is prevented.

WO 97/48612 discloses a plastic container having a skirt and a handle, in which the skirt has a lower surface and a protrusion extending therefrom.

US 2006/0207994 discloses a container comprising a container body, a lid and at least one handle, wherein the ends of the at least one handle are pivotably connected to opposite sides of said container body, and are movable between a first position in which the handle is resting on the edge of the container and a second position in which the handle is resting along the sides of the container.

**[0008]** Thus, according to the present invention there is provided a paint container comprising a main body, a closure to seal the main body, and a handle, the main body having an outer wall, a base, and a skirt located on, and extending at least partially around, the outer wall, in which the skirt includes a lower surface and has undercut extending therefrom, wherein the undercut has an internal top surface which is vertically above the lower surface of the skirt, and that the undercut enables a user to manipulate the handle to move it from the resting position, where the handle lies between an upper and lower surface of the skirt, towards the carrying position.

**[0009]** Preferably the undercut is positioned on one of the corners of the skirt, thereby enabling the handle to be manipulated when a front or side face of the container is forward facing.

**[0010]** The invention will now be described by way of example only with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a paint container according to the present invention,

Figure 2 and 3 are perspective views of the paint container of Figure 1,

Figures 3A and 3B are side sectional view of part of the paint container of Figure 1,

Figure 4 is an enlarged perspective view of part of the paint container of Figure 1,

Figures 5 and 6 are perspective views of the paint container of Figure 1,

Figures 7 and 8 are end views of the paint container of Figure 1,

Figure 9 is an enlarged end view of part of the paint container of Figure 1,

Figures 10 to 14 are perspective views of part of the paint container of Figure 1,

Figure 15 is a plan view from above the paint container of Figure 1,

Figure 15A is a side sectional view showing part of the paint container of Figure 1,

Figure 16 is a plan view from underneath of the paint container of Figure 1,

Figure 17 is a perspective view of the paint container of Figure 1,

Figures 18 and 19 are enlarged plan views from underneath the paint container of Figure 1,

Figure 20 is a perspective view of part of the paint container of Figure 1,

Figure 21 is a perspective view of the paint container of Figure 1, and

Figures 21 and 22 are front view of the paint container of Figure 1 on a display stand.

**[0011]** With reference to Figures 1 to 22 there is shown a paint container 10 having a main body 12, a closure 14, and a handle 16.

**[0012]** The main body 12 is defined by a right side wall 18, a left side wall 20, a front wall 22, a rear wall 24, and a base 26. The side walls 18,20 and front 22 and rear walls 24 define an outer periphery 15 of the main body 12 which is substantially rectangular in plan, front, and side profile. The main body 12 includes a rim 13 (partially shown in Figures 3A and 3B) onto which the closure 14 snap-fits and seals in a known way to prevent paint (not shown) in the container from being exposed to the atmosphere.

**[0013]** A front left corner 80 of the container is defined by the intersection between the left side wall 20 and front wall 22, and a front right corner 82 of the container is defined by the intersection between the right side wall 18 and the front wall 20 (Figure 5).

**[0014]** The front wall 22 includes contents information 100 (Figure 1) relating to the paint inside the container 10.

**[0015]** The main body 12 further includes a skirt 28 which is substantially reverse L-shaped, and is reinforced by a plurality of webs 30 (best shown in Figures 16 to 21) extending outwardly from and substantially perpendicular to the outer periphery 15 of the main body 12. The skirt 28 extends around the entire periphery 15 of the main body 12.

**[0016]** With reference to Figures 3A and 3B, the skirt 28 has an upper portion 32 and a downwardly extending portion 34. The downwardly extending portion 34 is substantially parallel to the outer periphery 15 of the main body 12.

**[0017]** The skirt 28 is divided either side of a centre line X-X (Figures 15 and 16) into a front half 51 and a rear half 53. The rear half 53 of the skirt 28 has an outside surface 55. The front half 51 of the skirt 28 has an outside surface 57 (Figure 15A). It can be seen from Figure 15A that the outside surface 57 of the skirt 28 of the front half 51 is inboard of the outside surface 53 of the rear half 51, giving the skirt 28 a stepped profile in plan view.

**[0018]** The skirt 28 has an upper surface 21 and a lower surface 23 (Figures 3A and 3B).

**[0019]** The front half 51 of the skirt 28 has a left face 60, a right face 62, and a front face 64 (Figures 1, 5, 6 and 7).

**[0020]** The left and right faces 60,62 include a projection 66 which extends outwardly from each face 60,62. The front face 64 includes two projections 68 which extend outwardly from the front face 64.

**[0021]** The handle 16 has a left side portion 36, a right side portion 37, and a front portion 38.

**[0022]** With reference to Figures 6 and 15A, the handle 16 includes an integrated inwardly extending pin 70 near to each free end of the left and right side portions 36,37 which locate inside a hole 72 on each left and right face 60,62 of the skirt 28 such that the handle 16 can be moved from a resting position (Figure 6) to a carrying position which is substantially perpendicular to the resting position.

**[0023]** The handle 16 sits upon each of the projections 60,62,66 of the skirt 28 to retain it in the resting position. The stepped profile of the skirt 28 enables an outside surface 73 of the handle 16 to be substantially flush with the outside surface 55 of the rear half 53 of the skirt 28.

**[0024]** The skirt 28 includes an undercut 90 or recess at each corner 92,94 on the front half 51, each corner 92,94 being positioned at the intersection between the left face 60 and the front face 64, and the right face 62 and the front face 64 of the skirt 28. The undercut 90 extends from a lower surface 91 and is arc-like in form although other profiles such as rectangular form are envisaged. The undercut 90 has an internal top surface 99 which is vertically above the lower surface 91 of the skirt 28. The undercut 90 is in a plane defined by the downwardly extending portion 34 of the skirt 28, i.e. the undercut 90 and the downwardly extending portion 34 are in the same plane.

**[0025]** With reference to Figures 16 and 20, the skirt 28 has a profile defined by a radius $R_S$ and a centre point $C_s$. The handle 16 also has a profile at each corner 95,95, each corner being positioned at the respective intersection between the left side portion 36 and the front portion 37, and the right side portion 37 and the front portion 38. Each handle corner 95,96 has a profile defined by a radius $R_H$ and a centre point $C_H$. It can be seen from Figure 16 that the handle centre point $C_H$ is radially outward, i.e. closer to the outer wall of the container, of the centre point of the skirt $C_S$, and that the handle radius $R_H$ is less than the skirt radius $R_S$. Such an arrangement creates a gap 96 between the skirt 28 and the handle 16 in the region of each undercut 90.

**[0026]** The undercut 90 enables the handle 16 to be manipulated by a user's finger or thumb from the resting position towards the carrying position. The provision of the gap 96 facilitates the user when moving the handle 16 by reducing the likelihood of the user's finger interfering with the skirt 28.

**[0027]** It will be appreciated that a provision of the gap between the handle and the skirt is beneficial irrespective of whether or not the skirt includes the undercut of the invention.

**[0028]** It can be seen from Figure 1 that the handle 16 lies substantially horizontally when in the resting position, and is also substantially parallel to the downwardly extending portion 34, with the exception of the corner regions where the difference in radii of the handle and skirt results in a slight deviation from corner regions being

parallel.

**[0029]** It can also be seen from Figure 1 that the handle 16 lies between the upper and lower surfaces 21,23 of the skirt 28 when in the resting position.

**[0030]** With reference to Figure 21 there is shown part of a display stand 102 upon which four identical containers 10 are positioned (only one container being shown in detail). Figure 21 represents the view a consumer would have when standing in front of the display stand 102. Each container 10 is configured such that the contents information 100 is on the side wall 18, and the side wall 18 is front facing so as to be visible to the consumer.

**[0031]** With reference to Figure 22 there is shown the same display stand 102 upon which three identical containers 110 are positioned (only one container being shown in detail). Each container 10 is configured such that contents information 100 is on the front wall 22 as opposed to the side wall, and the front wall 22 is front facing so as to be visible to the consumer.

**[0032]** A comparison of Figures 21 and 22 shows that arranging the containers with the side walls front facing enables more containers to be displayed for a given display stand width. This is advantageous if a greater type of a particular type of paint container needs to be displayed.

**[0033]** It can be seen from Figures 21 and 22, that irrespective of the container having the front or side wall front facing, the provision of undercut 90 on each front corner enables the handle 16 to be manipulated towards the carrying position.

**[0034]** In an alternative embodiment, the undercut need only be present on only one corner of the skirt to enable access when either the front or side wall is front facing.

**[0035]** Whilst the embodiment above describes a paint container where the undercut is positioned on two corners of the skirt, it is also possible to include the undercut remote from the corners, e.g. in the centre of the front face of the skirt. Additionally, an undercut can be included in the side face of the skirt remote from the corner to enable the paint container to be oriented through ninety degrees but still retain access to the undercut when the side wall is front facing.

**[0036]** Thus it will be appreciated that locating a single undercut on one corner enables the handle to be manipulated when either the front or side wall is front facing, whereas, if the undercut is remote from the corners, two undercuts would be required, i.e. one on the side face, and one on the front face, to enable the handle to be manipulated when both either the front or side wall is front facing.

**[0037]** The embodiments above describe a rectangular paint container. The provision of an undercut in the skirt of a non-rectangular container is also beneficial. For example, a triangular container is envisaged where the undercut can be positioned on one, two, or all three corners of the skirt. In the case of a circular container, the provision of an undercut anywhere on the circumferential periphery will enable the handle to be more easily manipulated.

## Claims

1. A paint container (10) comprising a main body (12), a closure (14) to seal the main body, and a handle (16), the main body having an outer wall (20, 22, 24), a base (26), and a skirt ((28) located on, and extending at least partially around, the outer wall, wherein the skirt includes a lower surface (23, 91), and has an undercut (90) extending therefrom, and the undercut enables a user to manipulate the handle to move it from a resting position, where the handle lies between an upper (21) and the lower (23) surface of the skirt, towards the carrying position, **characterised in that** the undercut has an internal top surface (99) which is vertically above the lower surface of the skirt.

2. A paint container (10) according to claim 1 in which the skirt (28) includes at least one outwrardly extending projection (66, 68) upon which the handle (16) sits when in the resting position.

3. A paint container (10) according to claim 1 or 2 comprising a front wall (22), a rear wall (24), and two side walls (18, 20), a corner (80, 82) being defined on the skirt (28) at each intersection between the front and side walls, in which the undercut (90) is positioned on at least one corner such that the container can be positioned with either the front wall or side walls forward facing and still enable a user to manipulate the handle to move it from the resting position towards the carrying position.

4. A paint container (10) according to any preceding claim in which the handle (16) is arranged relative to the skirt (28) such that, when in the resting position, there is a gap (96) therebetween so as to minimise interference when manipulating the handle from the resting position towards the carrying position.

5. A paint container (10) according to claim 4 in which the gap is positioned adjacent the undercut (90).

6. A paint container (10) according to claim 4 or claim 5 when dependant on claim 4 in which the corner (80, 82) of the skirt (28) is defined by a skirt radius (Rs) and a skirt centre point (Cs), and the handle has a corner (95, 97) in the region of the corner of the skirt defined by a handle radius ($R_H$) and a handle centre point ($C_H$), in which the handle radius is less than the skirt radius, and the handle centre point is positioned radially outwards of the skirt centre point.

7. A paint container (10) according to any preceding claim, the skirt (28) having an outer surface (55), the handle having an outer surface (73), in which the outer surfaces are substantially flush to each other when the handle is in the resting position.

**Patentansprüche**

1. Lackbehälter (10), umfassend einen Hauptteil (12), einen Verschluss (14) zum Abdichten des Hauptteils und einen Griff (16), wobei der Hauptteil eine Außenwand (20, 22, 24), eine Basis (26) und einen Saum (28), der sich auf der Außenwand befindet und sich wenigstens teilweise rund um diese herum erstreckt, aufweist, wobei der Saum eine untere Fläche (23, 91) umfasst und eine sich davon ausgehend erstreckende Hinterschneidung (90) aufweist und die Hinterschneidung einen Anwender in die Lage versetzt, den Griff so zu handhaben, dass er ihn aus einer Ruhestellung heraus, wobei der Griff zwischen einer oberen (21) und der unteren (23) Fläche des Saumes liegt, in die Tragestellung bewegt, **dadurch gekennzeichnet, dass** die Hinterschneidung eine innere obere Fläche (99) aufweist, die sich vertikal oberhalb der unteren Fläche des Saumes befindet.

2. Lackbehälter (10) gemäß Anspruch 1, wobei der Saum (28) wenigstens einen sich nach außen erstreckenden Vorsprung (66, 68) umfasst, auf dem der Griff (16) ruht, wenn er sich in der Ruhestellung befindet.

3. Lackbehälter (10) gemäß Anspruch 1 oder 2, umfassend eine vordere Wand (22), eine hintere Wand (24) und zwei Seitenwände (18, 20), eine Ecke (80, 82), die auf dem Saum (28) an jedem Schnittpunkt zwischen der vorderen und der hinteren Wand definiert ist, wobei sich die Hinterschneidung (90) auf wenigstens einer Ecke befindet, so dass der Behälter entweder mit der vorderen Wand oder mit den Seitenwänden nach vorne gestellt werden kann und dennoch einen Anwender in die Lage versetzen kann, den Griff so zu handhaben, dass er ihn aus der Ruhestellung heraus in die Tragestellung bewegt.

4. Lackbehälter (10) gemäß einem der vorstehenden Ansprüche, wobei der Griff (16) relativ zu dem Saum (28) so angeordnet ist, dass es, wenn er sich in der Ruhestellung befindet, eine Lücke (96) dazwischen gibt, so dass die Störung, wenn man den Griff aus der Ruhestellung heraus in die Tragestellung handhabt, minimiert ist.

5. Lackbehälter (10) gemäß Anspruch 4, wobei die Lükke an die Hinterschneidung (90) angrenzt.

6. Lackbehälter (10) gemäß Anspruch 4 oder Anspruch 5, wenn er auf Anspruch 4 bezogen ist, wobei die Ecke (80, 82) des Saumes (28) durch einen Saumradius ($R_S$) und einen Saummittelpunkt ($C_S$) definiert ist und der Griff eine Ecke (95, 97) im Bereich der Ecke des Saumes aufweist, die durch einen Griffradius ($R_H$) und einen Griffmittelpunkt ($C_H$) definiert ist, wobei der Griffradius kleiner ist als der Saumradius und sich der Griffmittelpunkt vom Saummittelpunkt aus gesehen radial nach außen befindet.

7. Lackbehälter (10) gemäß einem der vorstehenden Ansprüche, wobei der Saum (28) eine äußere Fläche (55) aufweist, wobei der Griff eine äußere Fläche (73) aufweist, wobei die äußeren Flächen im Wesentlichen bündig zueinander sind, wenn sich der Griff in der Ruhestellung befindet.

**Revendications**

1. Récipient de peinture (10) comprenant un corps principal (12), une fermeture (14) pour sceller le corps principal, et une poignée (16), le corps principal ayant une paroi externe (20, 22, 24), une base (26) et une jupe (28) positionnée sur et s'étendant au moins partiellement autour de la paroi externe, dans lequel la jupe comprend une surface inférieure (23, 91), et a une gorge (90) s'étendant à partir de cette dernière, et la gorge permet à un utilisateur de manipuler la poignée pour la déplacer d'une position de repos dans laquelle la poignée se trouve entre une surface supérieure (21) et la surface inférieure (23) de la jupe, vers la position de transport, **caractérisé en ce que** la gorge a une surface supérieure interne (99) qui est verticalement au-dessus de la surface inférieure de la jupe.

2. Récipient de peinture (10) selon la revendication 1, dans lequel la jupe (28) comprend au moins une saillie (66, 68) s'étendant vers l'extérieur, sur laquelle la poignée (16) est installée lorsqu'elle est dans la position de repos.

3. Récipient de peinture (10) selon la revendication 1 ou 2, comprenant une paroi avant (22), une paroi arrière (24) et deux parois latérales (18, 20), un coin (80, 82) étant défini sur la jupe (28) à chaque intersection entre les parois avant et latérales, dans lequel la gorge (90) est positionnée sur au moins un coin de sorte que le récipient peut être positionné avec la paroi avant ou les parois latérales orientée (s) vers l'avant et permet toujours à un utilisateur de manipuler la poignée pour la faire passer de la position de repos à la position de transport.

4. Récipient de peinture (10) selon l'une quelconque des revendications précédentes, dans lequel la poi-

gnée (16) est agencée par rapport à la jupe (28) de sorte que, lorsqu'elle est dans la position de repos, il y a un espace (96) entre elles afin de minimiser l'interférence lors de la manipulation de la poignée de la position de repos à la position de transport.

**5.** Récipient de peinture (10) selon la revendication 4, dans lequel l'espace est positionné de manière adjacente à la gorge (90).

**6.** Récipient de peinture (10) selon la revendication 4 ou la revendication 5 lorsqu'elle dépend de la revendication 4, dans lequel le coin (80, 82) de la jupe (28) est défini par un rayon de jupe (Rs) et un point central de jupe (Cs), et la poignée a un coin (95, 97) dans la région du coin de la jupe défini par un rayon de poignée ($R_H$) et un point central de poignée ($C_H$), dans lequel le rayon de poignée est inférieur au rayon de jupe, et le point central de poignée est positionné radialement vers l'extérieur du point central de jupe.

**7.** Récipient de peinture (10) selon l'une quelconque des revendications précédentes, la jupe (28) ayant une surface externe (55), la poignée ayant une surface externe (73), dans lequel les surfaces externes sont sensiblement de niveau les unes par rapport aux autres lorsque la poignée est dans la position de repos.

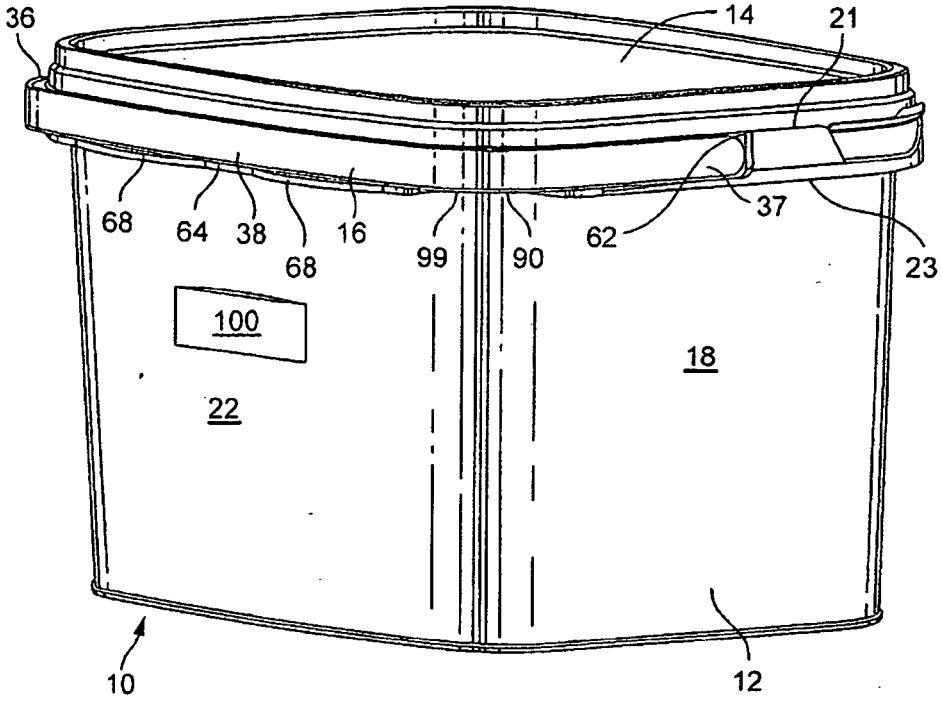



FIG. 1

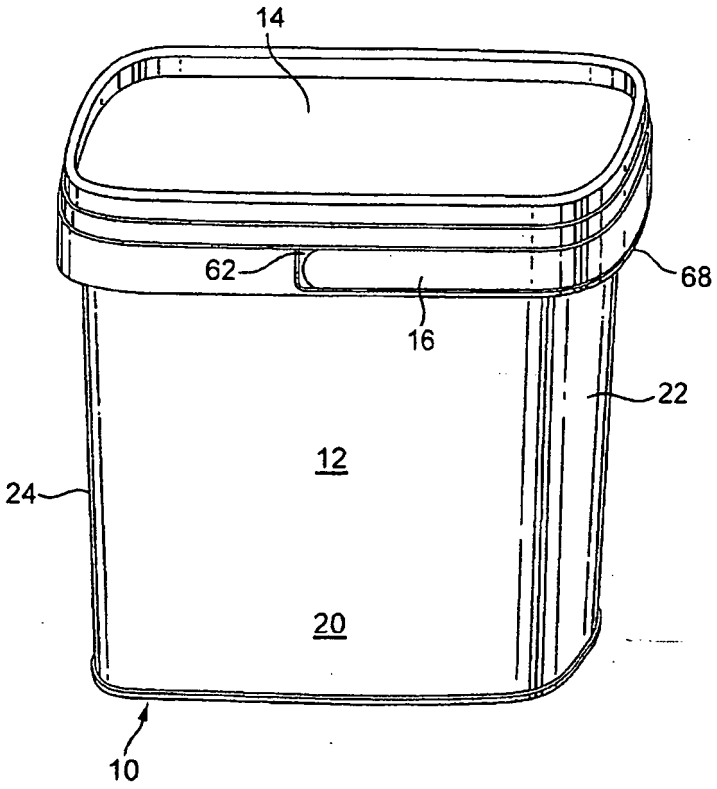



FIG. 2

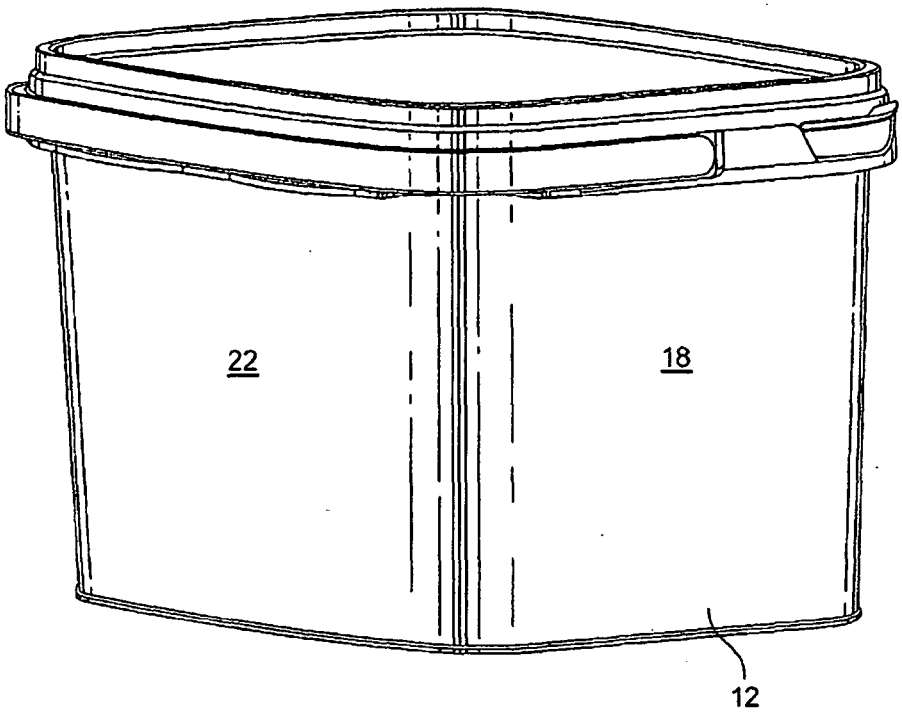



FIG. 3

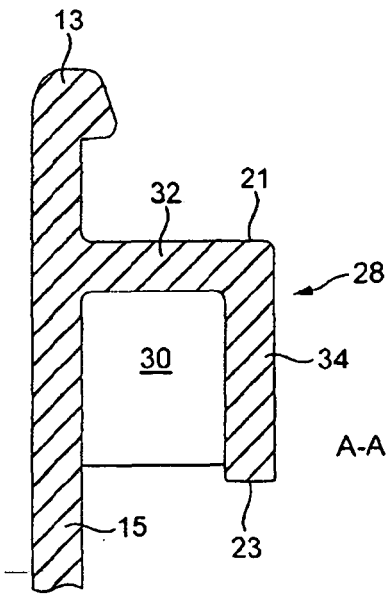



FIG. 3A

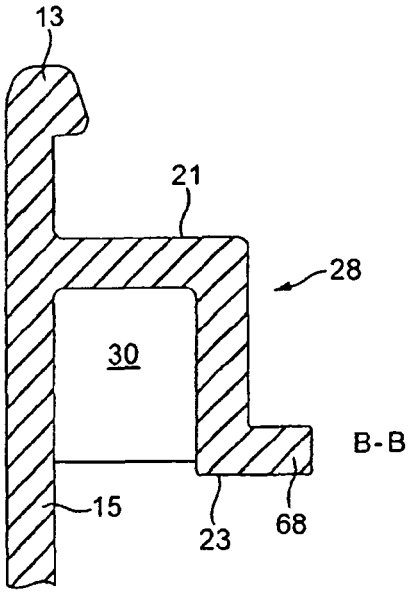



FIG. 3B

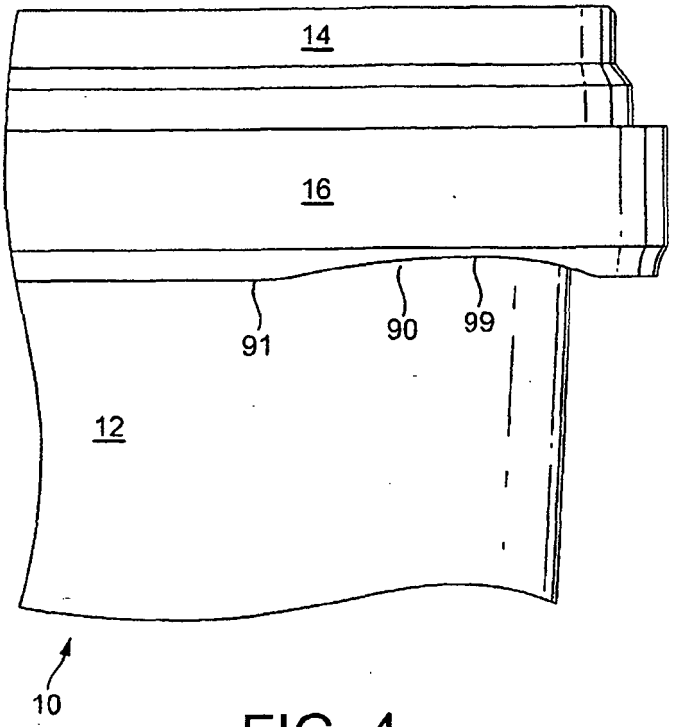



FIG. 4

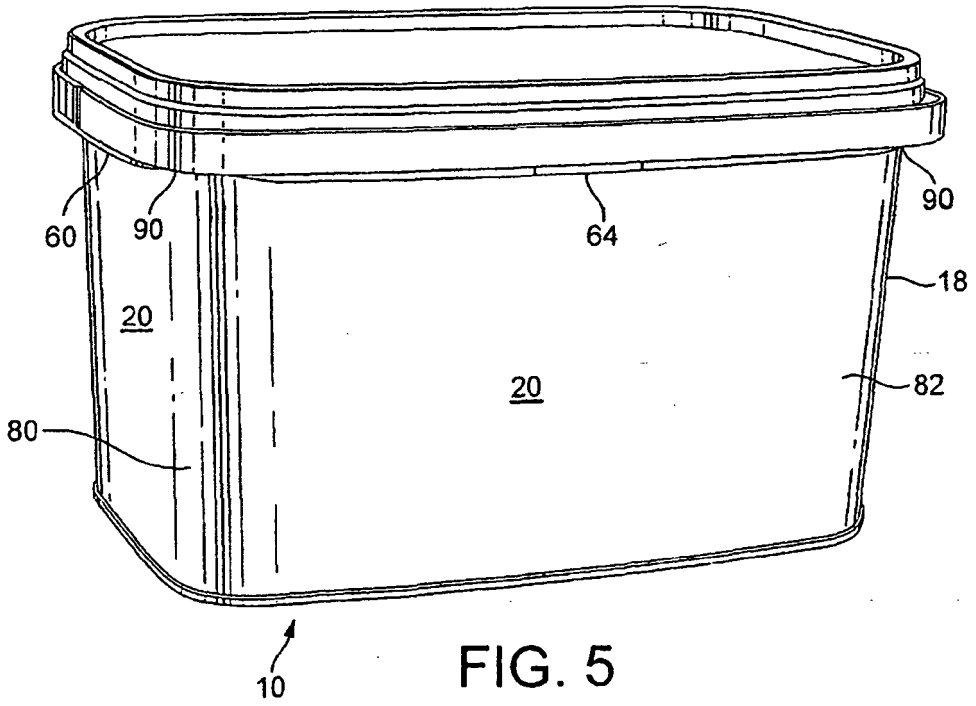



FIG. 5

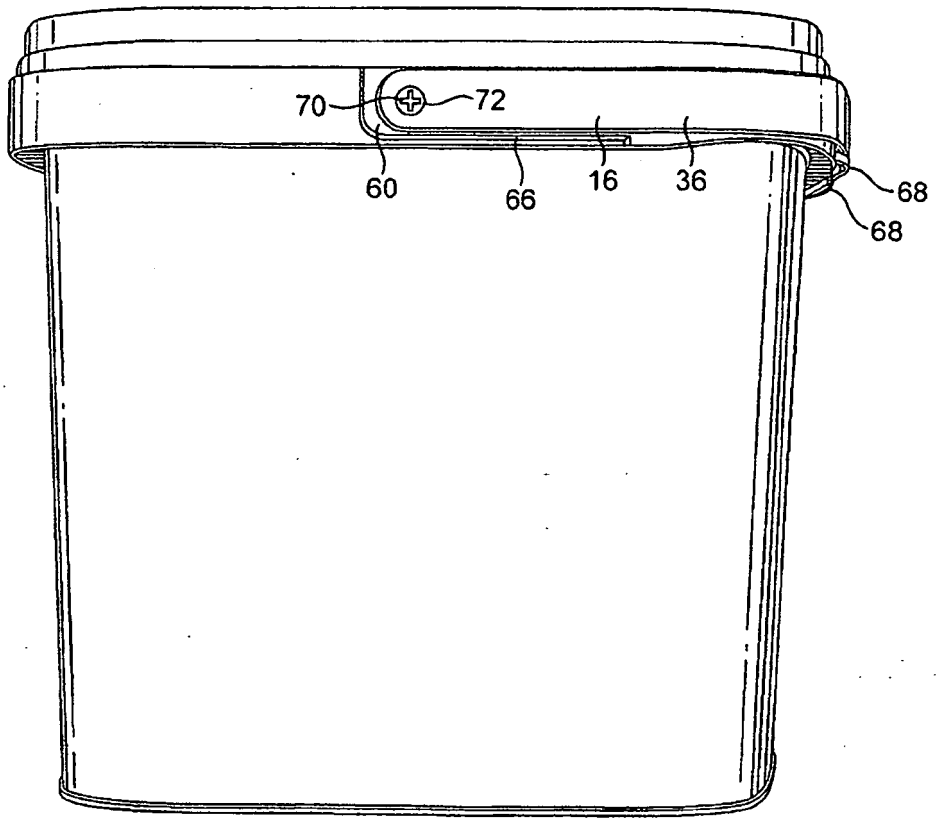



FIG. 6

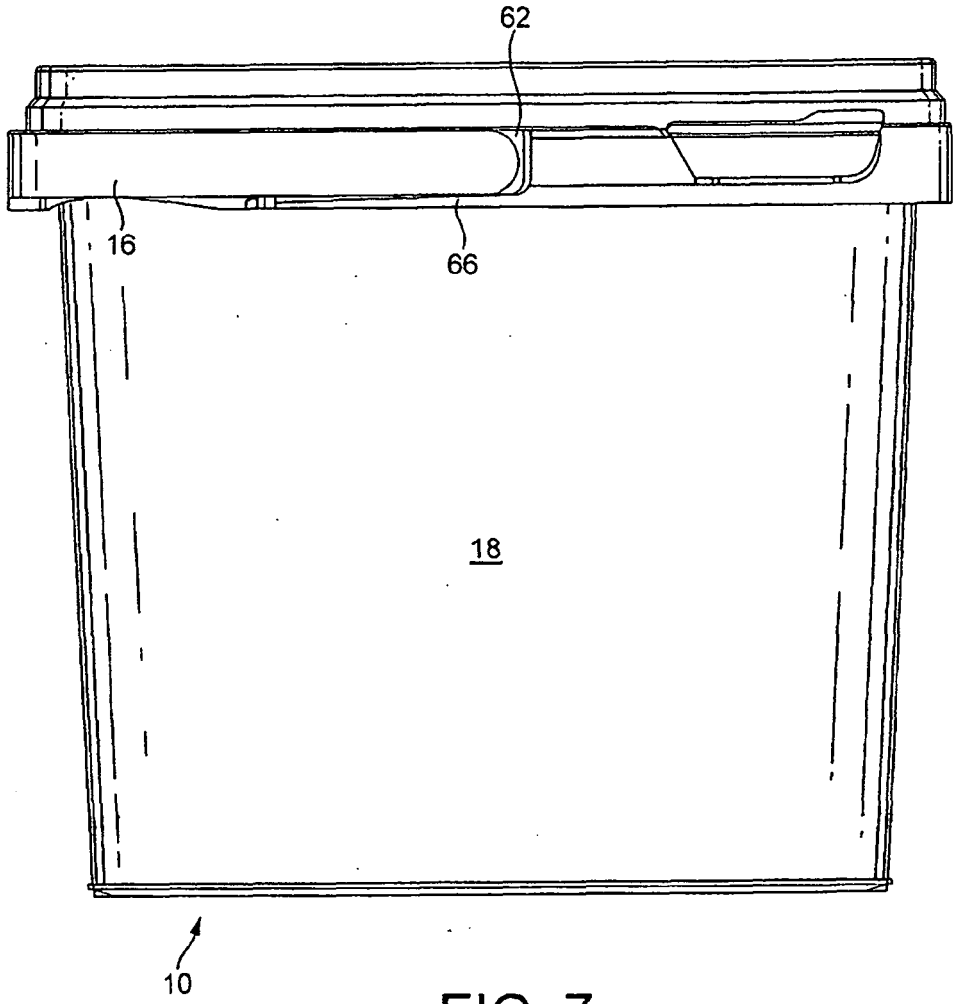



FIG. 7

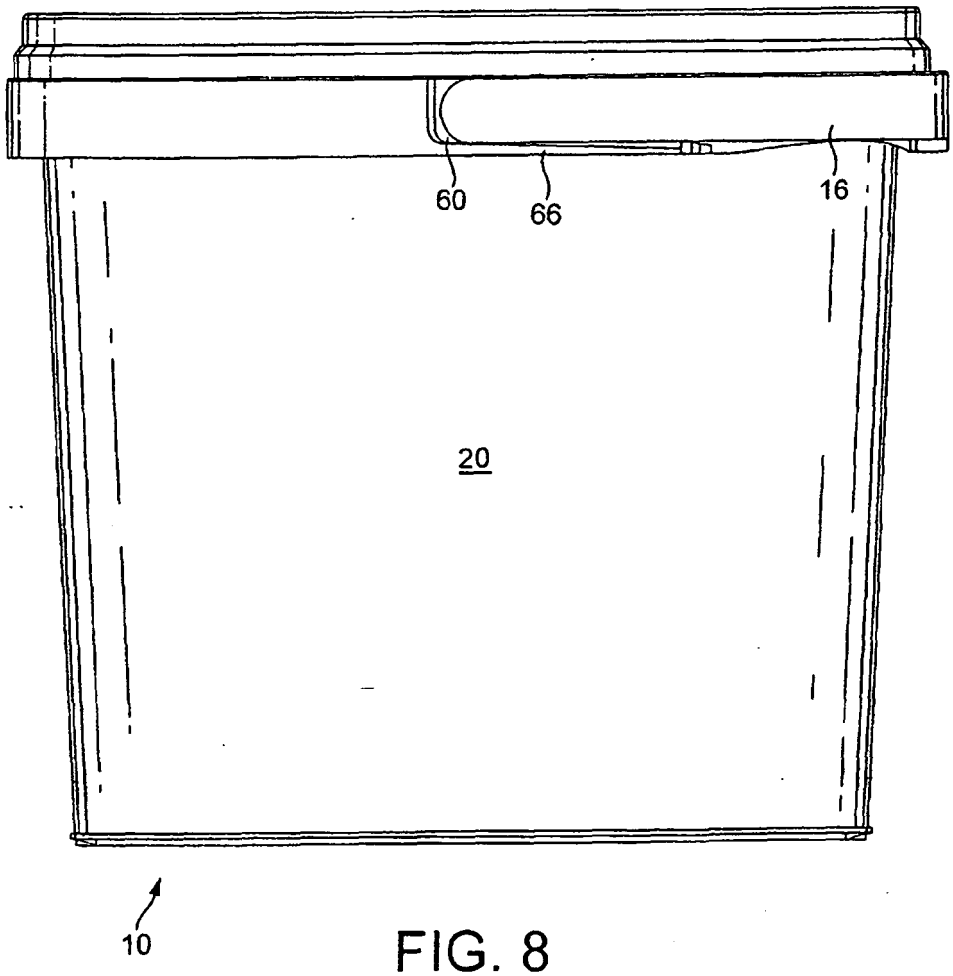



FIG. 8

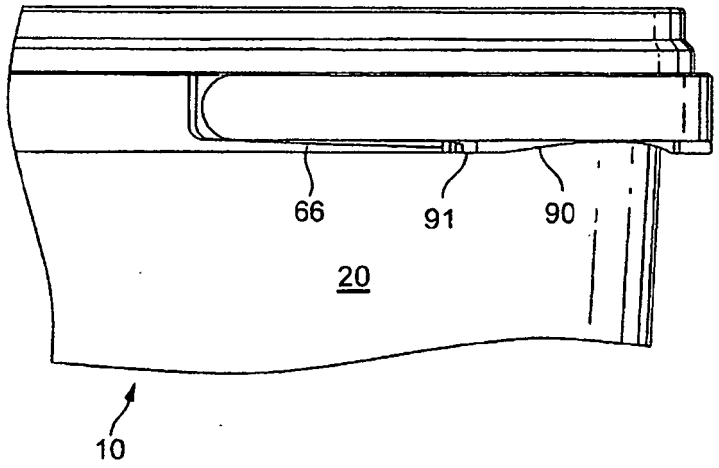



FIG. 9

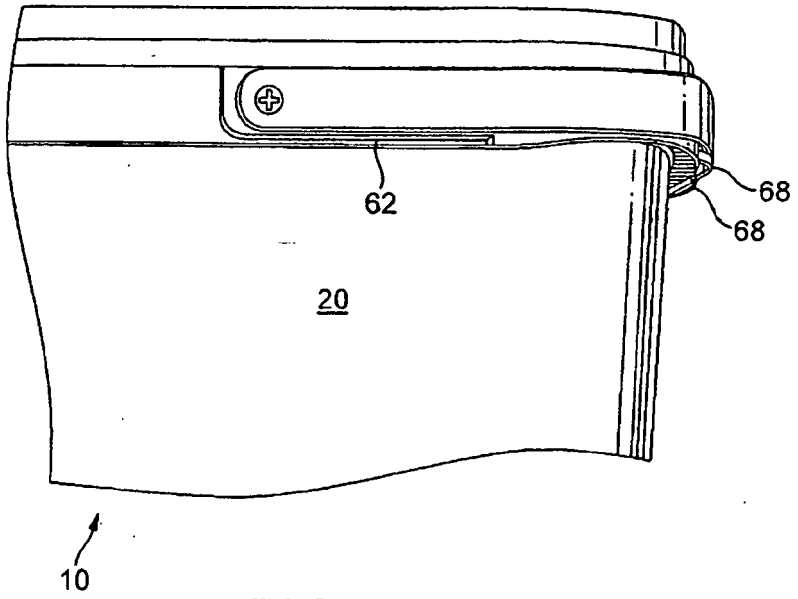



FIG. 10

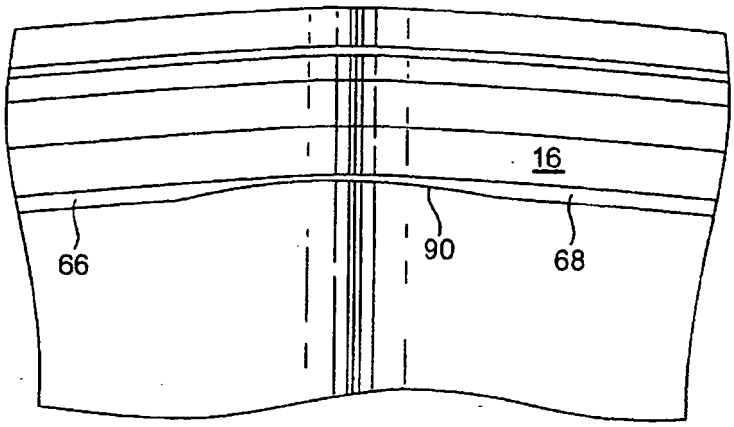



FIG. 11

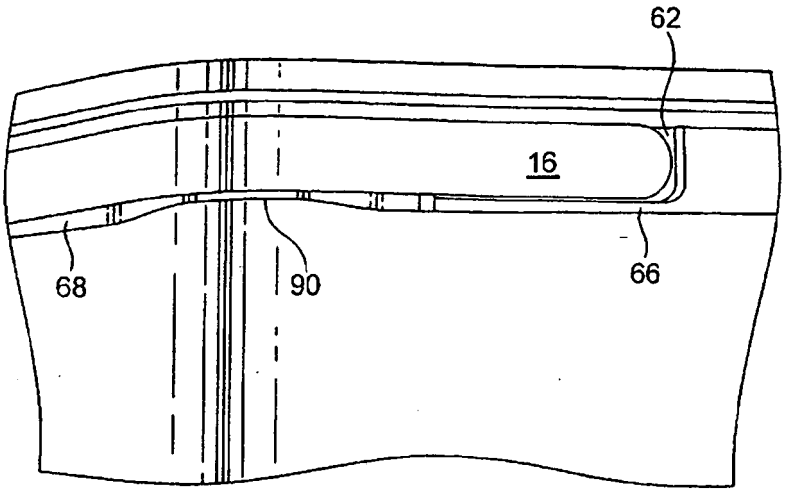



FIG. 12

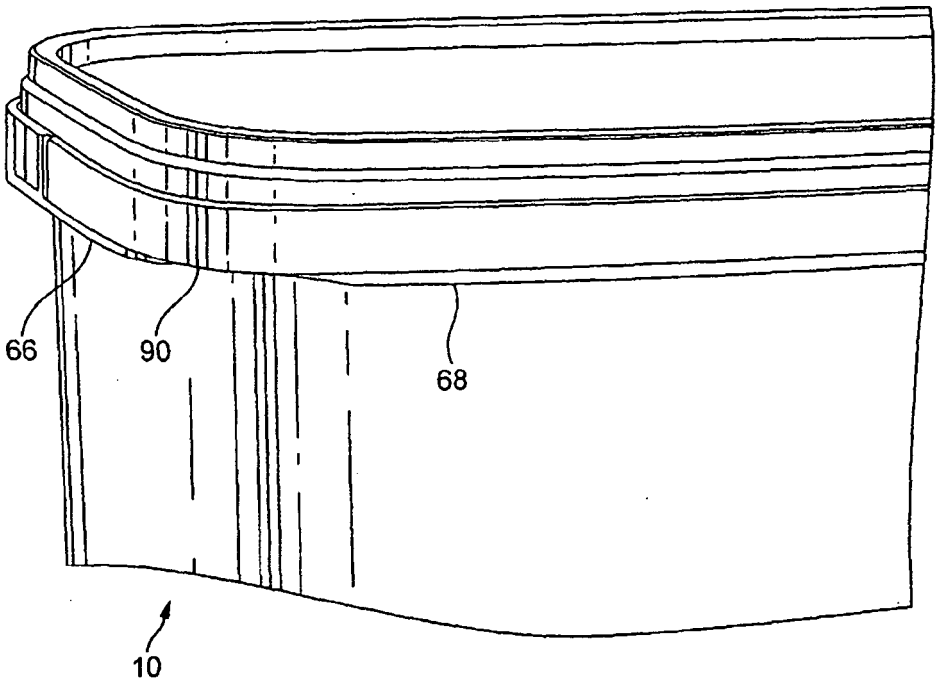



FIG. 13

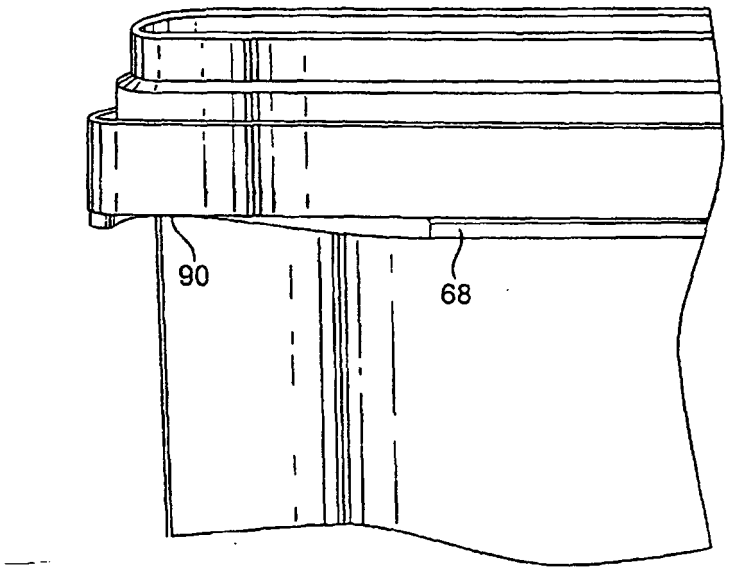



FIG. 14

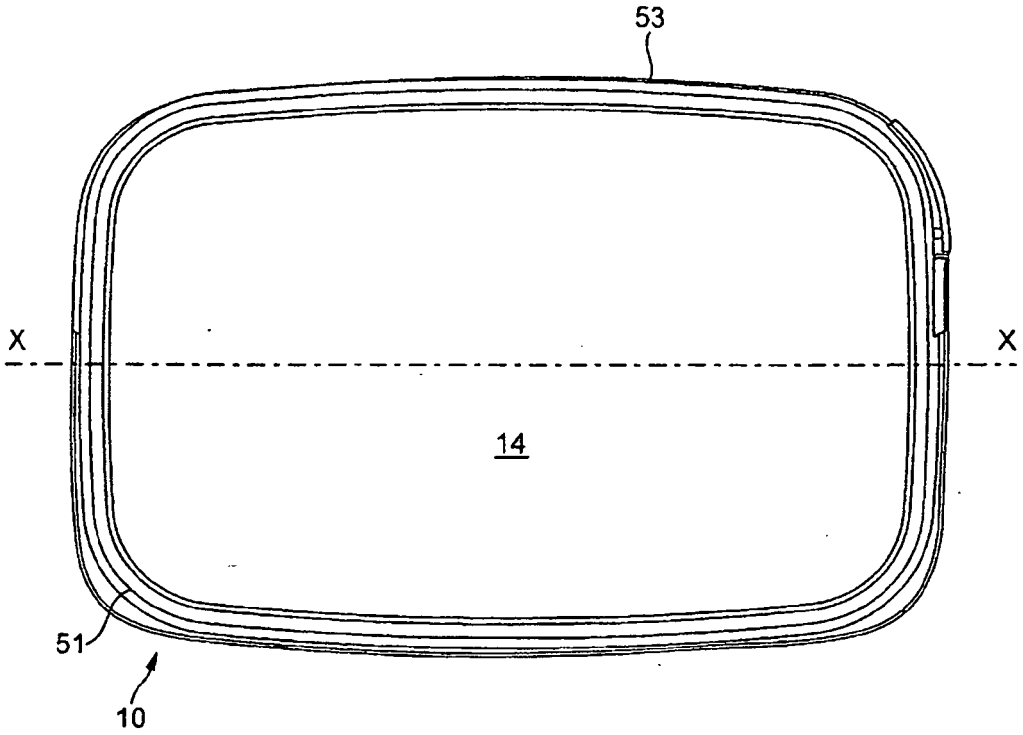



FIG. 15

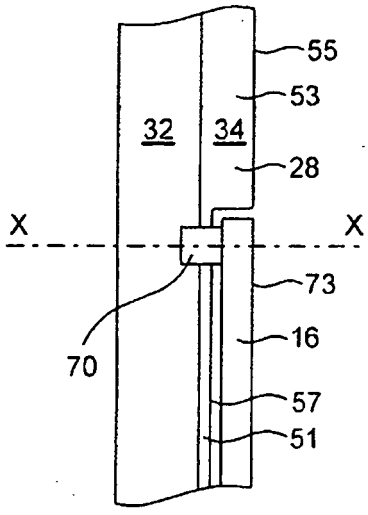



FIG. 15A

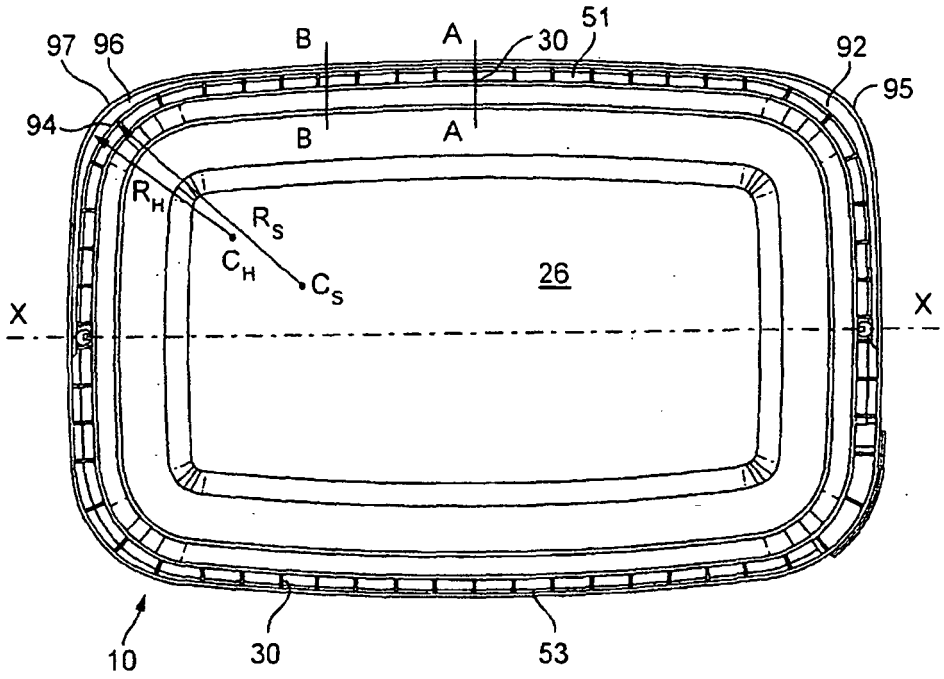



FIG. 16

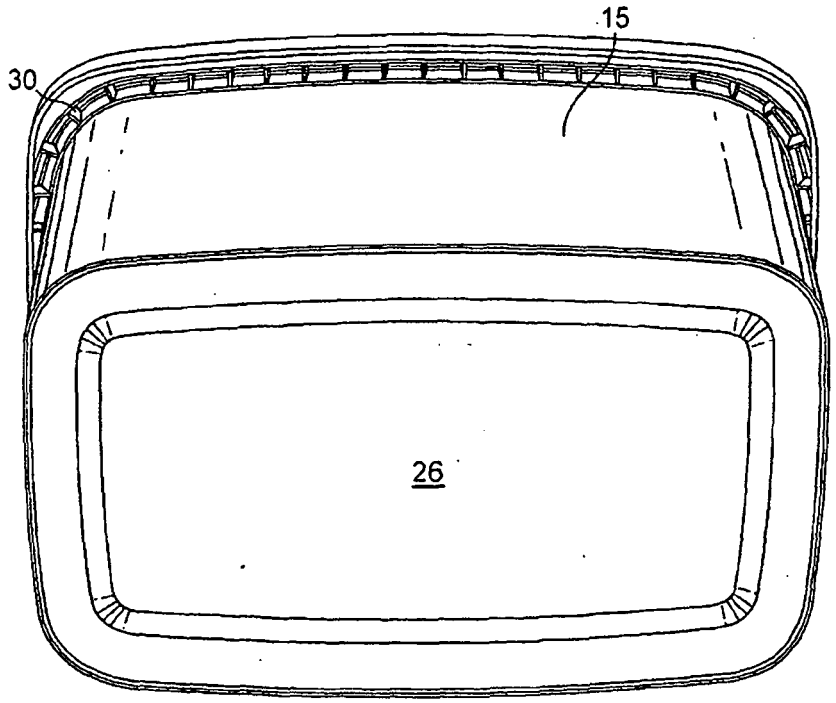



FIG. 17

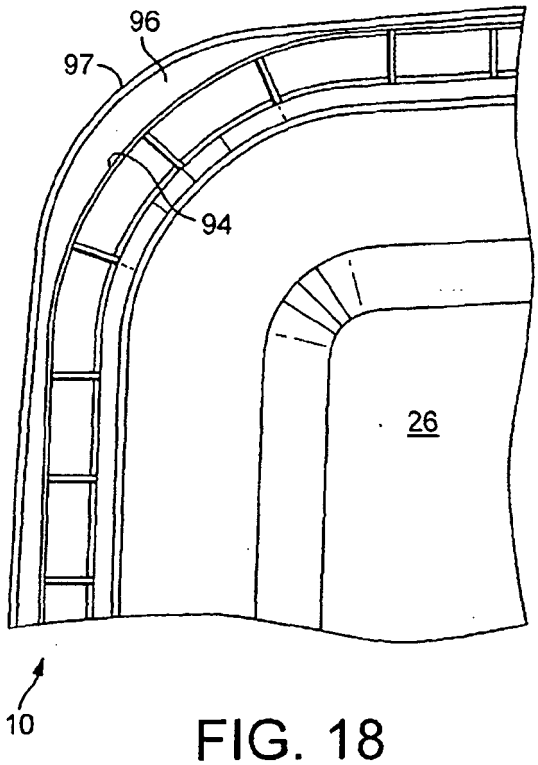



FIG. 18

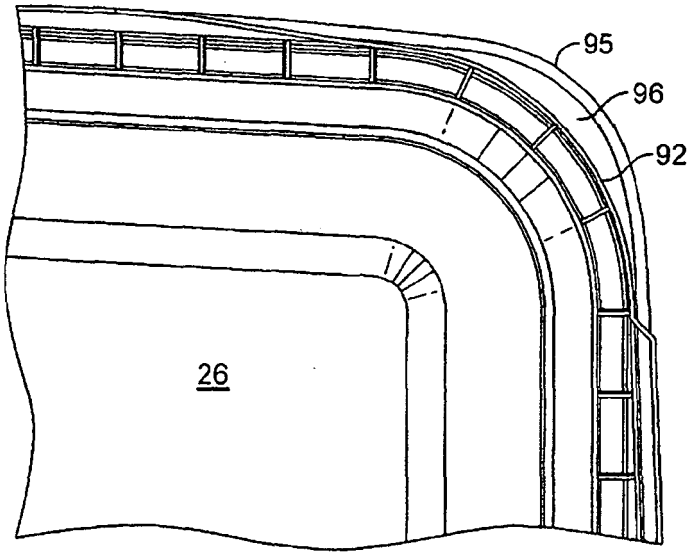



FIG. 19

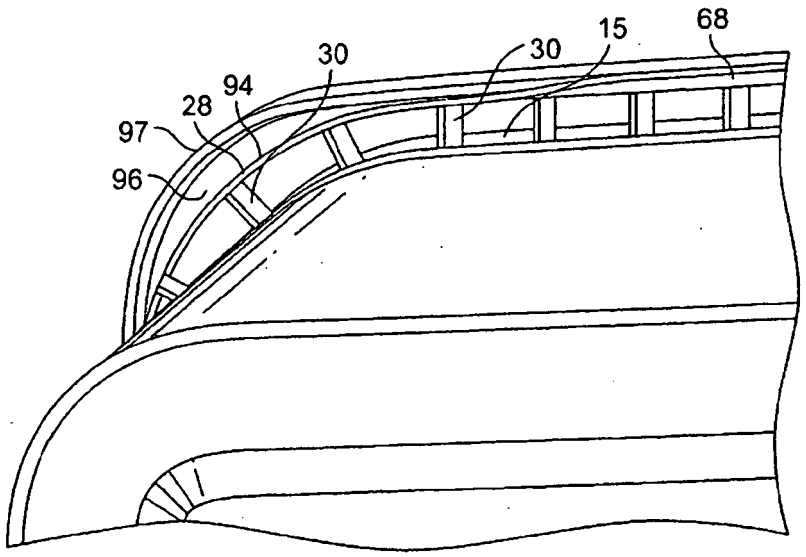



FIG. 20

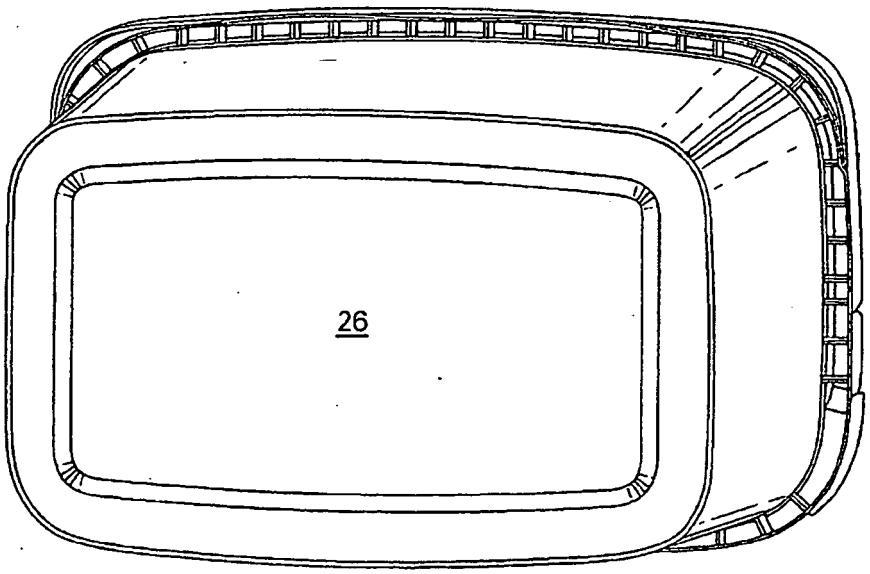



FIG. 21

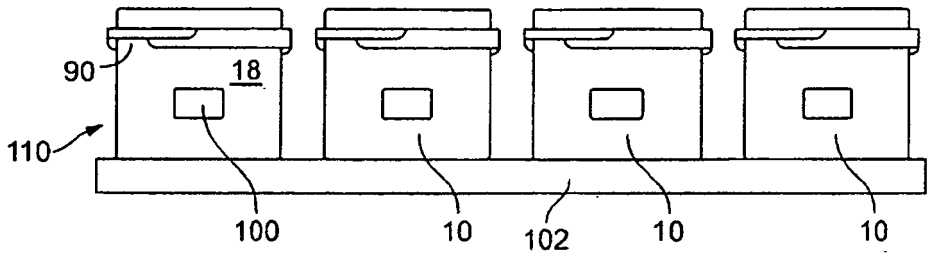



FIG. 22

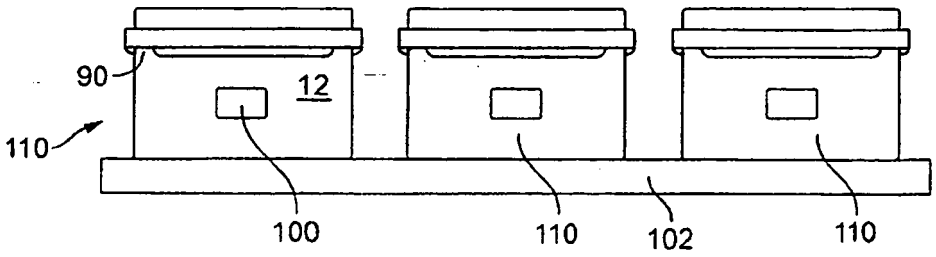



FIG. 23

## REFERENCES CITED IN THE DESCRIPTION

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### Patent documents cited in the description


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- WO 9748612 A **[0007]**
- US 20060207994 A **[0007]**