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(54) **FOOD PRODUCT PACKAGING HAVING STABILIZING INSERT**

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(57) **ABSTRACT**

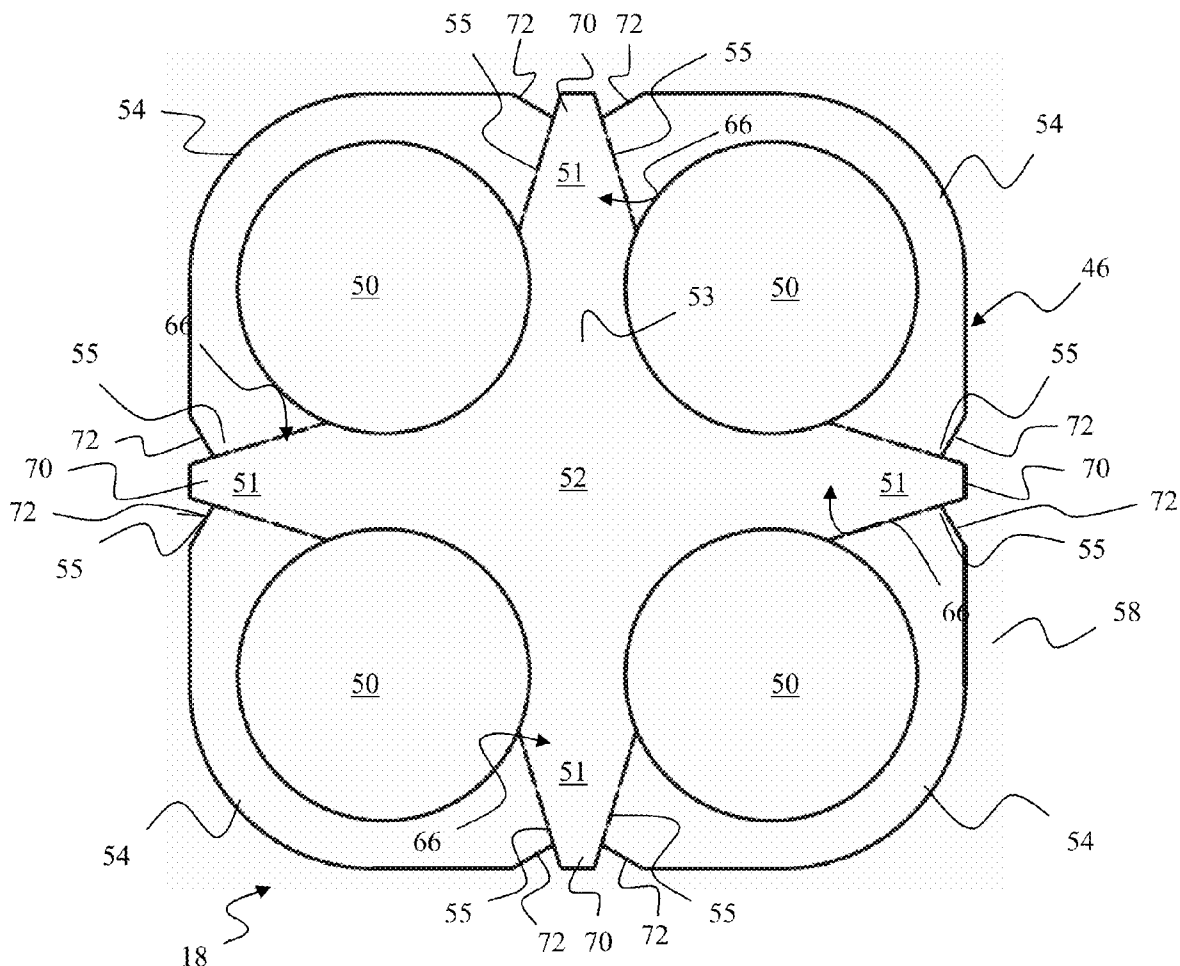
A food product package capable of stabilizing a food product being stored therein, is provided. Such a food product package may include a base, a cover, and an insert. The cover may be fastened to the base and the insert may be disposed between the base and the cover. A body of the base may include at least one pocket adapted to hold a food product, such as a cupcake. The insert may be positioned onto the base such that an edge portion of the insert may contact the food product. When the cover is fastened to the base, a portion of the cover may press the insert against the base to thereby securely hold the food product in place.

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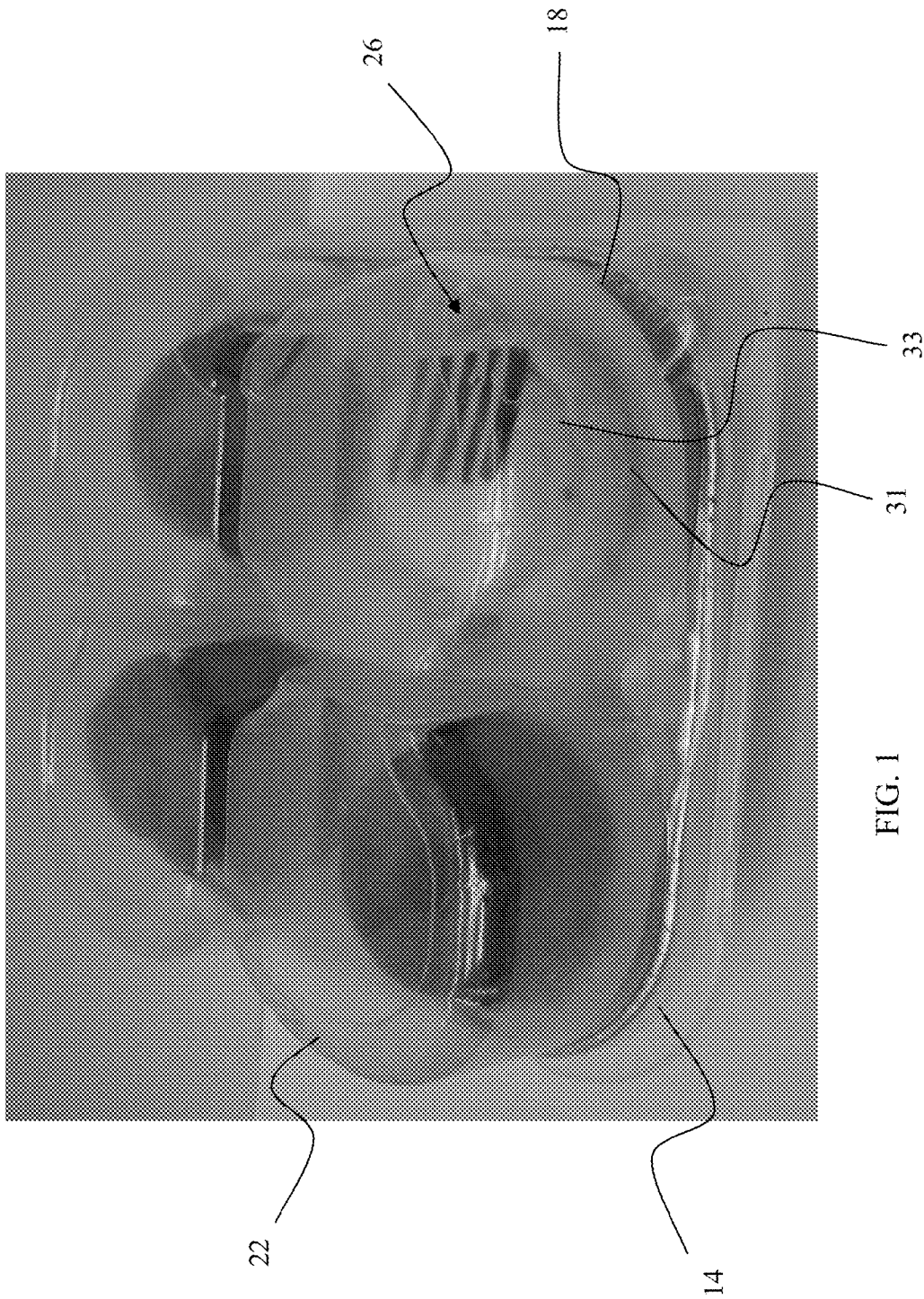
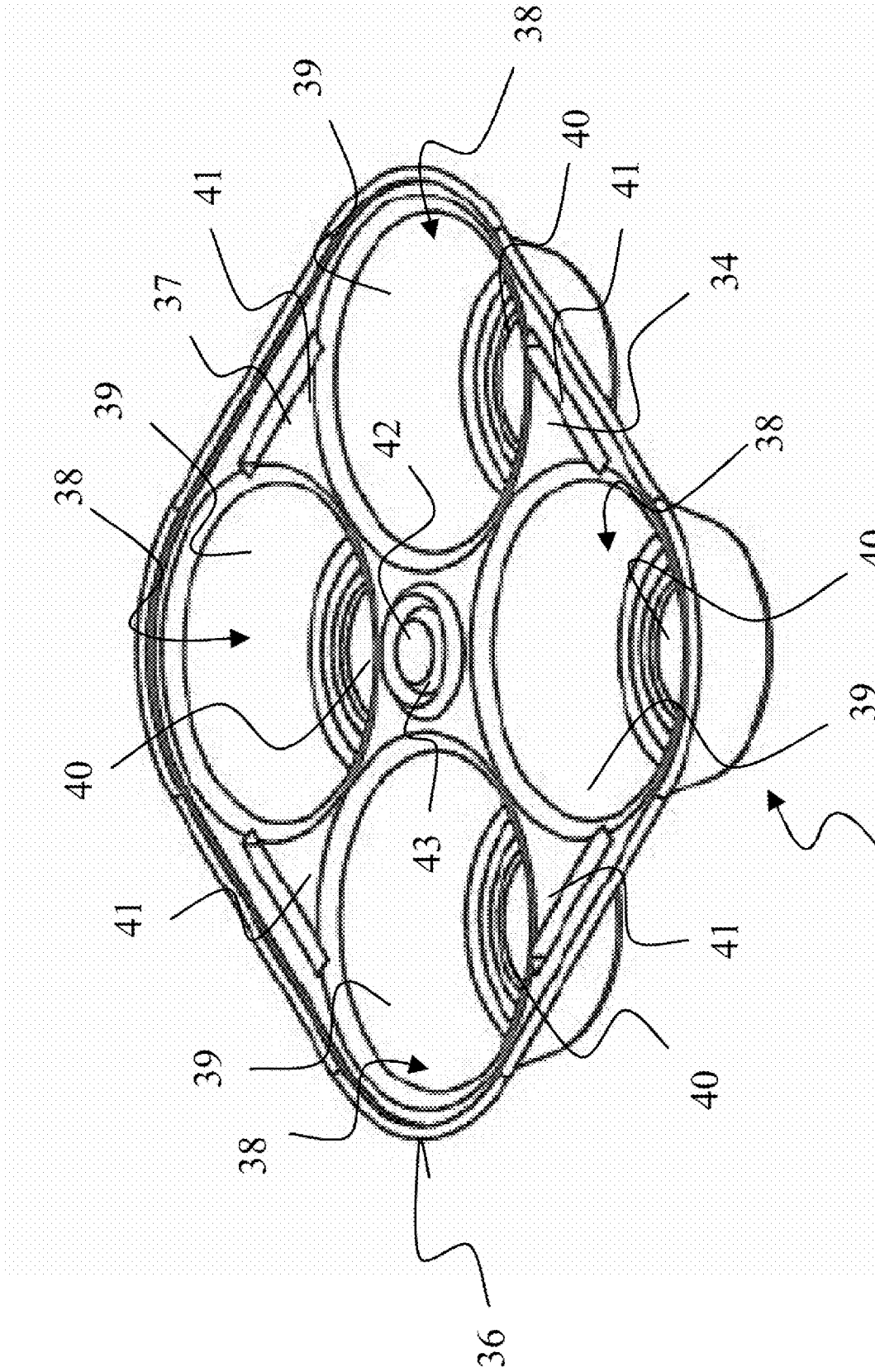


FIG. 1



14 FIG. 2A

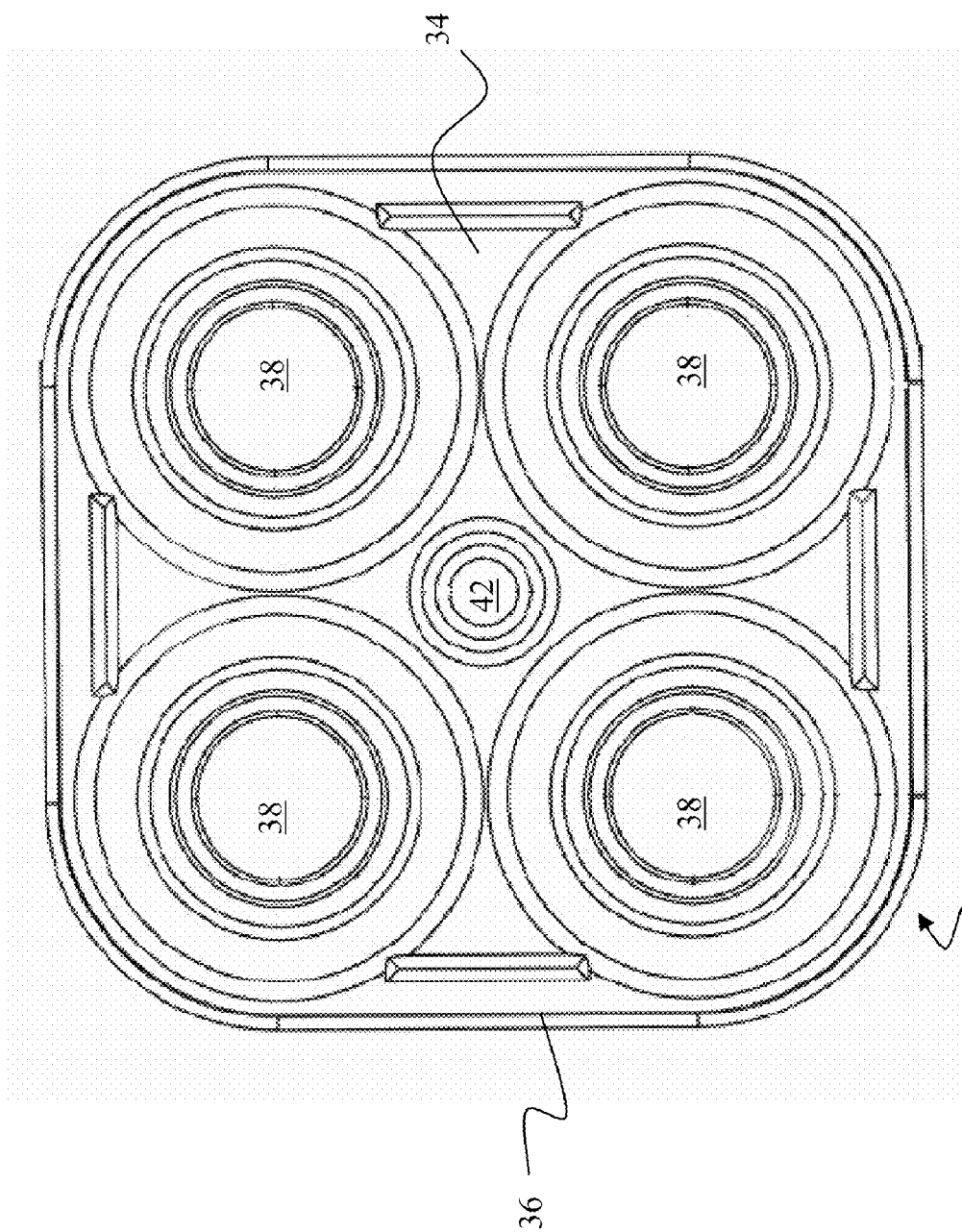
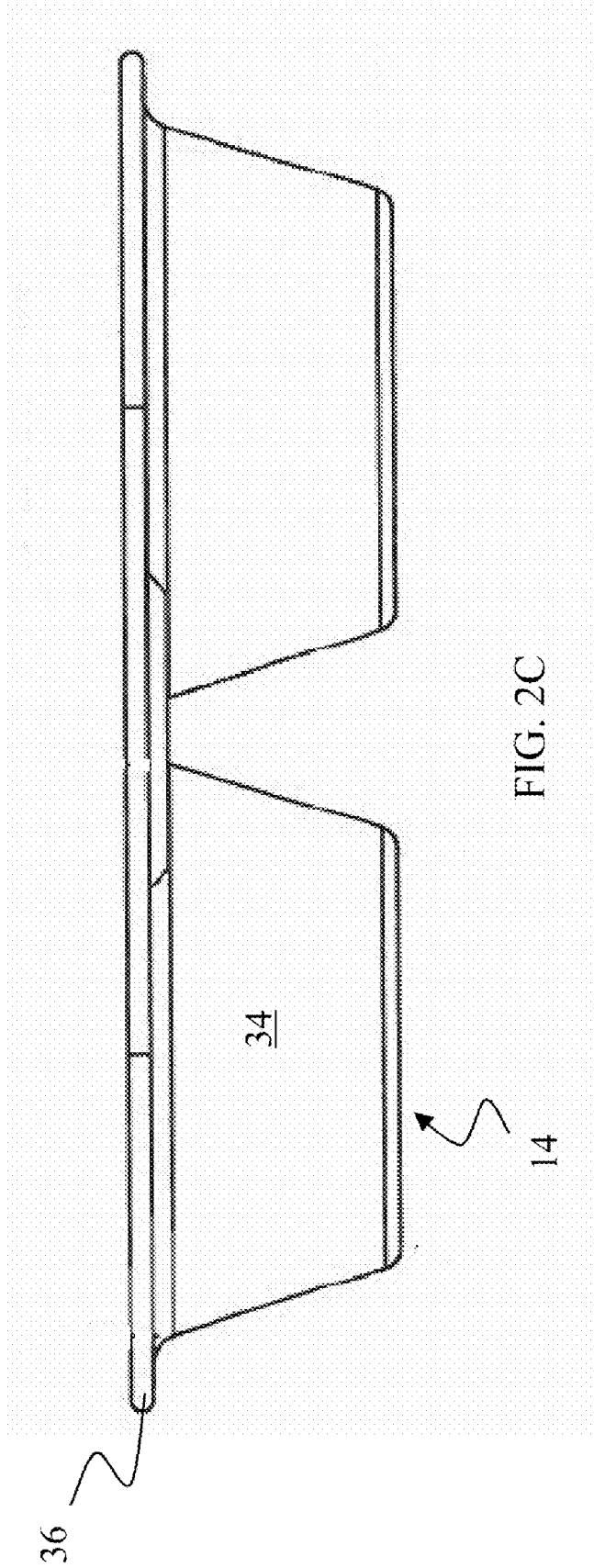


FIG. 2B

14



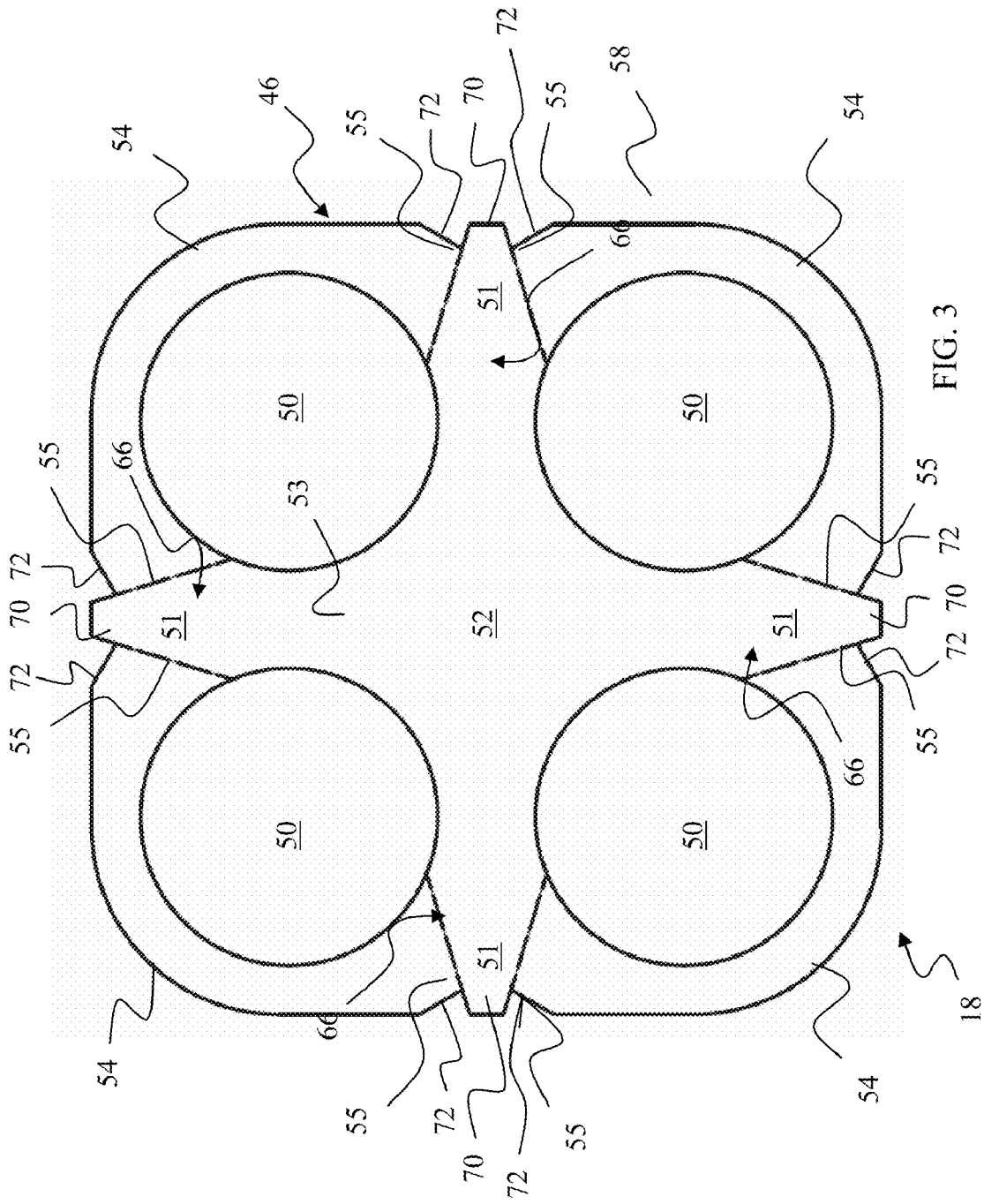
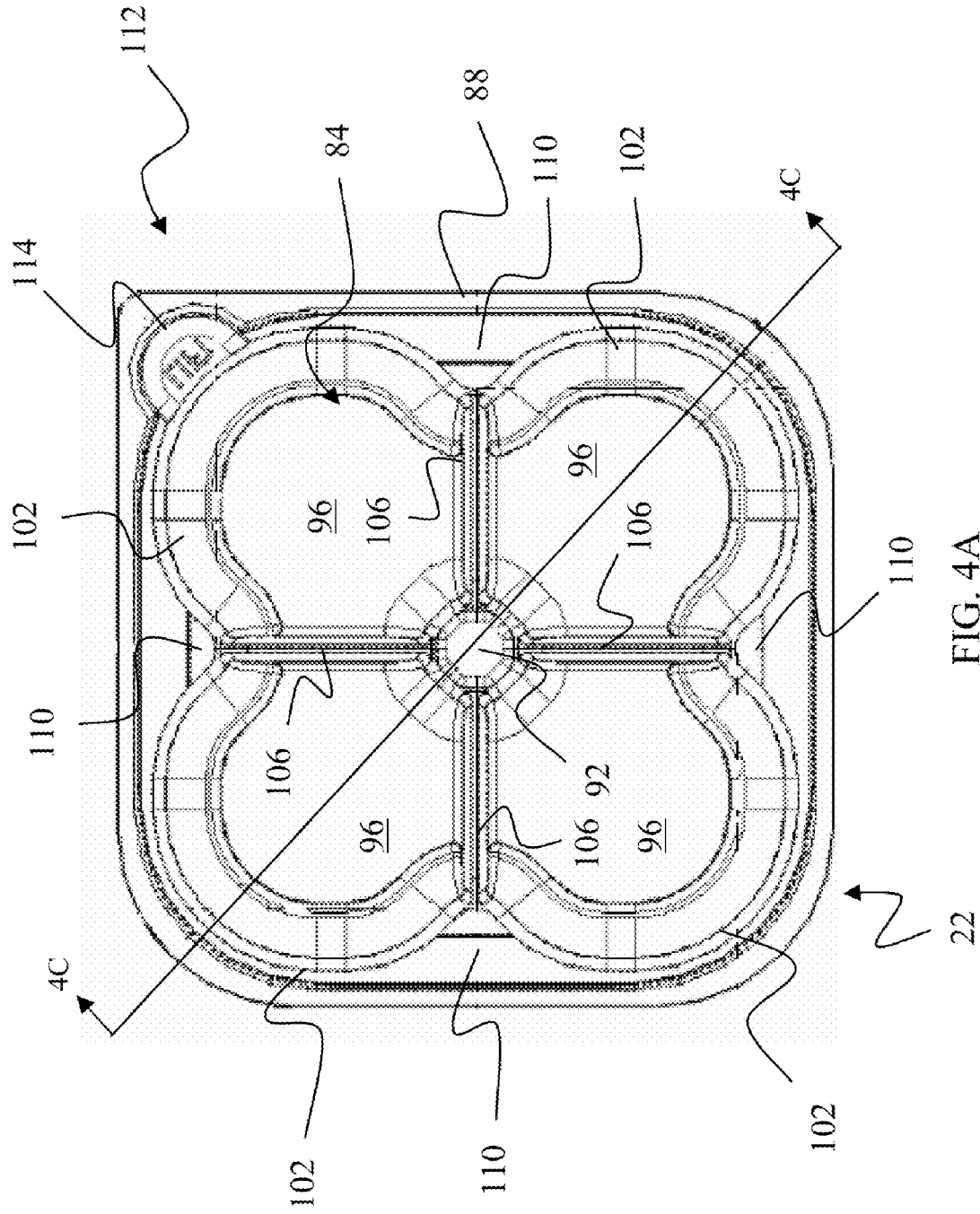


FIG. 3



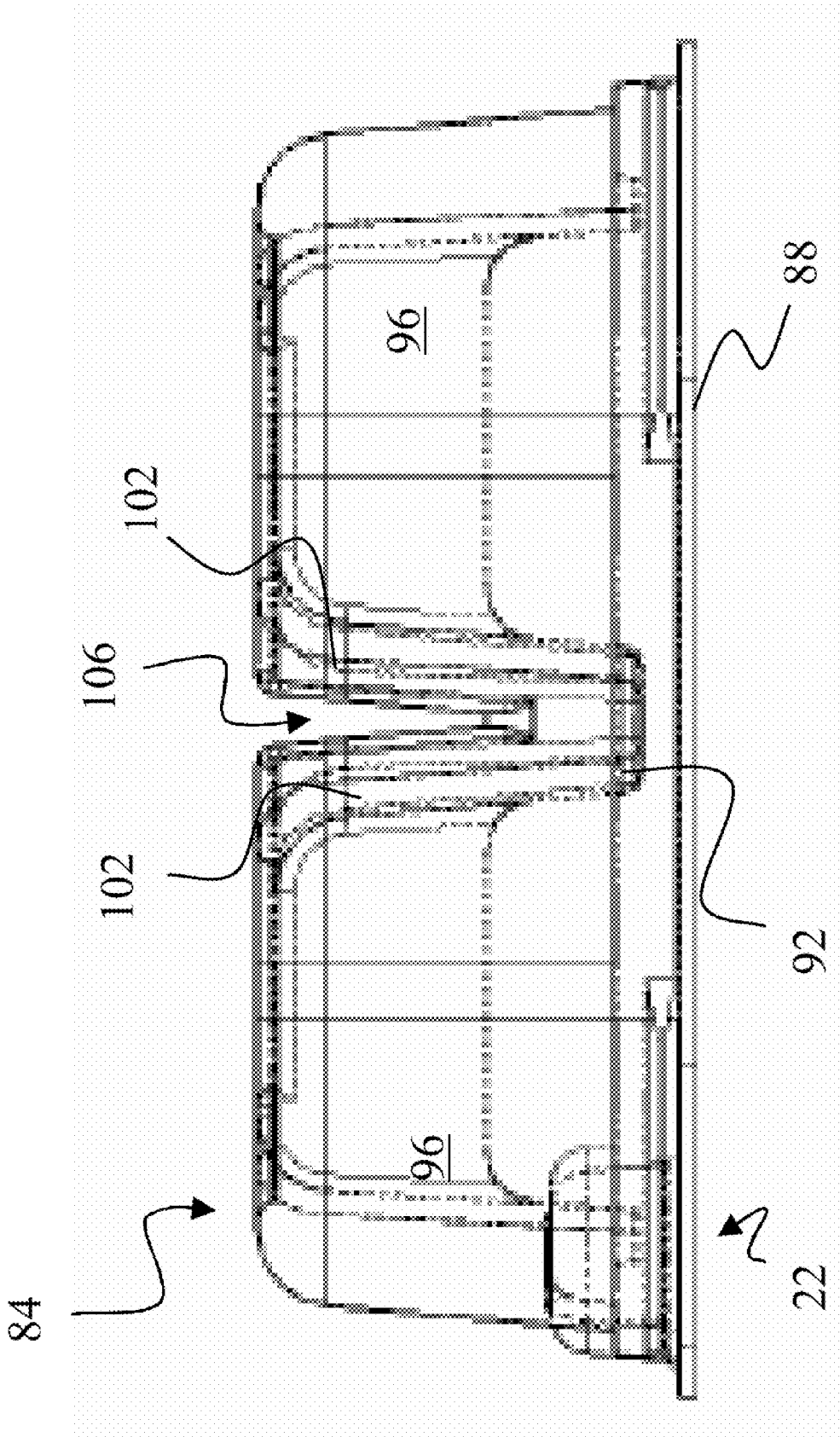
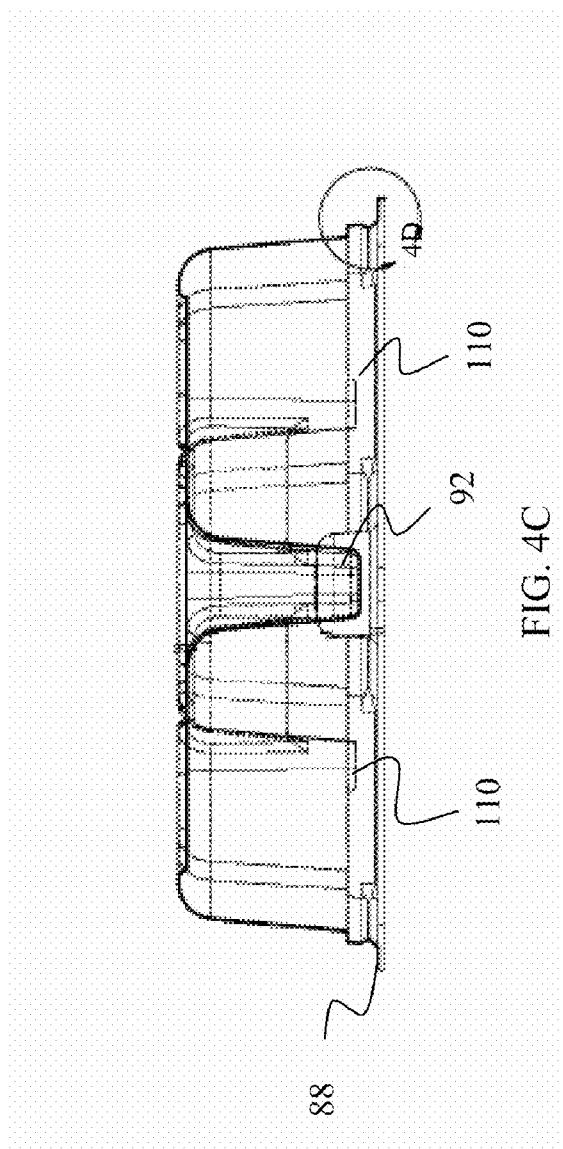
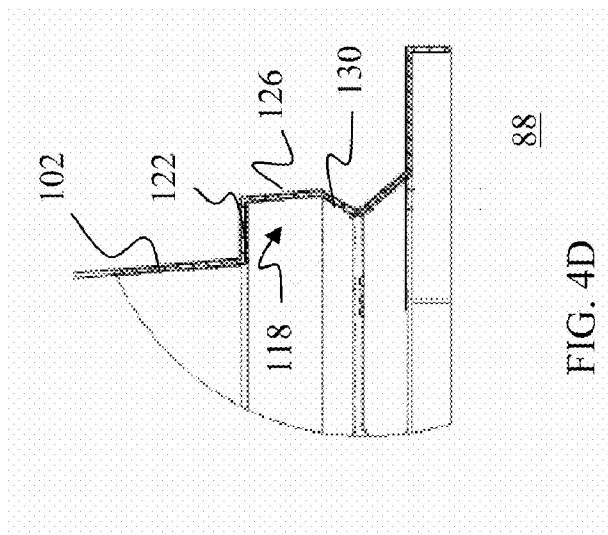


FIG. 4B



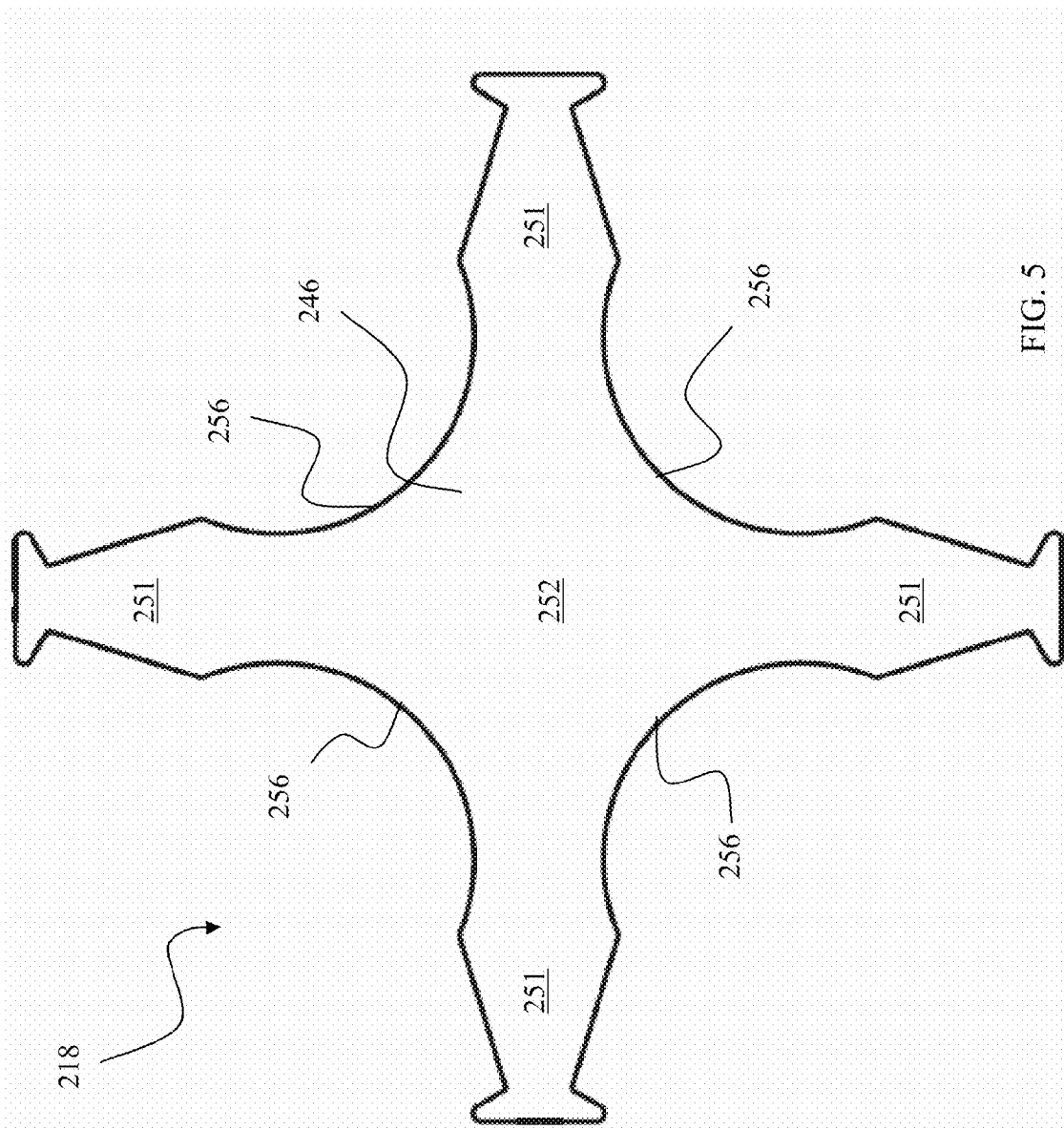


FIG. 5

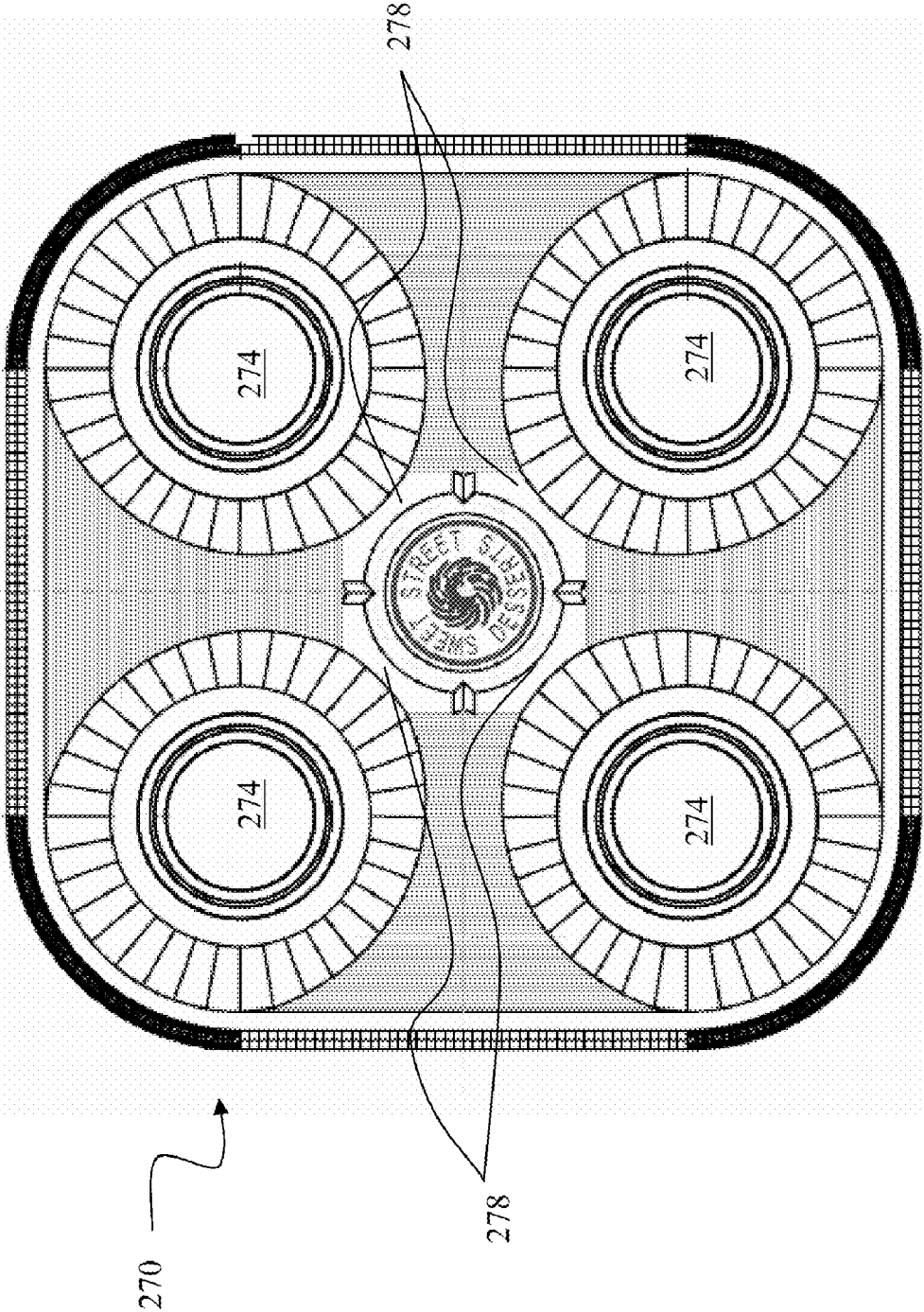


FIG. 6

FOOD PRODUCT PACKAGING HAVING STABILIZING INSERT

BACKGROUND

[0001] The invention relates to packaging for food products. In particular, the invention relates to packaging capable of stabilizing the food product being stored within the package.

[0002] Many food products are prepared commercially for distribution to consumers. Typical products may include pies, cakes, and other dessert items. With more and more frequency, such products are being created with toppings and creative embellishments to enhance their presentation to the ultimate consumer. For example, often times cupcakes are served with a decoration, such as frosting.

[0003] The food products may be baked or pre-cooked in an aluminum tray and a plastic dome or cover may be placed over the tray prior to distribution to consumers. Because of the current form of packaging, by the time the product has reached its destination, the product, and in particular the toppings of the product, may be compromised due to movement of the product within the packaging during transit. As a result, the consumer may not be satisfied and the manufacturer may have to reimburse the consumer, resulting in substantial losses. Accordingly, a package that helps stabilize the food product being stored within the package is needed. Such a package may help ensure that the food product being stored within the package does not get compromised. For example, such a package may prevent the frosting on top of cupcakes from being smeared or otherwise altered.

SUMMARY

[0004] A food product package capable of stabilizing a food product being stored therein, is provided. Such a food product package may include a base, a cover, and an insert. The cover may be fastened to the base and the insert may be disposed between the base and the cover. The base can have a body that includes at least one pocket adapted to hold a food product, such as a cupcake. The insert may be positioned onto the base such that a portion of the food product may be in contact with the insert. When the cover is fastened to the base, a portion of the cover may press the insert against the base to thereby securely hold the food product in place.

[0005] The cover may include a post that extends down from its center, and the post may extend a distance such that it presses a center portion of the insert against the base. The cover may also include one or more protrusions that extend down proximate to a peripheral rim of the cover, and each protrusion may extend a sufficient distance to press a respective region of the insert against the base. The insert can thus ensure that the food product being stored within the package is securely held in place.

[0006] The insert may include one or more apertures that receive the food product, and can further include a perforated portions that each extend from an edge of the insert to a respective one of the apertures. When access to the food product is desired, the perforated portions can be torn so that corners of the insert may be removed from interference with the food product disposed in the corresponding aperture without jeopardizing the integrity of the food product. The perforated portions can further facilitate removal of the insert from the food product package prior to removal of the food product.

[0007] In some embodiments, the food product package may be designed to hold cupcakes. The food product can thus be prepared by placing cake batter into a pocket of the base. The base may then be placed into an oven so that the cake batter can be baked. Once the cake batter has completed baking, the insert may be placed onto the base such that a portion of the baked cake is exposed through the aperture. A decoration may then be placed on top of the baked cake. The cover may be placed over the base such that a portion of the cover presses the insert against the base to thereby hold the cupcake in place. It should be understood that the decoration may be placed on top of the baked cake prior to placing the insert onto the base.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is an isometric view depicting a food product package including a base, a cover, and an insert constructed in accordance with an example embodiment of the present invention;

[0009] FIG. 2A is an isometric view of the base illustrated in FIG. 1;

[0010] FIG. 2B is a top view of the base depicted in FIG. 2A;

[0011] FIG. 2C is a side view of the base depicted in FIG. 2A;

[0012] FIG. 3 is a top view of the insert illustrated in FIG. 1;

[0013] FIG. 4A is a top view of the cover illustrated in FIG. 1;

[0014] FIG. 4B is a side view of the cover depicted in FIG. 4A;

[0015] FIG. 4C is a cross-sectional view of the cover illustrated in FIG. 4A, taken along line 4C-4C;

[0016] FIG. 4D is a detailed view of the cover illustrated in FIG. 4C taken along section 4D;

[0017] FIG. 5 is a top view of another embodiment of an insert; and

[0018] FIG. 6 is a top view of another embodiment of a base.

DETAILED DESCRIPTION OF ILLUSTRATIVE EMBODIMENTS

[0019] Preferred structures and methods for food product stabilizing technology are described herein. An embodiment of a food product package that employs this technology is also described. The present invention is not limited to any particular packaging configuration but rather encompasses use in any packaging application. For example, while the food product package is described below as configured to store cupcakes, it should be appreciated that the scope of the present invention is not intended to be limited to the type of food product stored within the package, as the package is configured to store other food products.

[0020] As shown in FIG. 1 a food product package 10 may include a base 14, an insert 18, and a cover 22. As shown, the cover 22 may connect to the base 14 to cover cupcakes 26. The cupcakes 26 can include a cake portion 31, which can be a baked cake portion, and an upper portion 33 disposed on top of the base portion that can include, for instance frosting or other decorations.

[0021] The food package 10 is illustrated in FIG. 1 as being oriented such that the cover 22 is spaced vertically from the base, and the cupcakes 26 are spaced with respect to each other along horizontal directions. Thus, the directional terms

“vertical” and “horizontal” and derivatives thereof are used to describe the container 30 and its components with respect to the orientation illustrated in FIG. 1 merely for the purposes of clarity and illustration, it being appreciated that the actual orientation of the food package may differ during use. The directional terms “inner,” “outer,” and derivatives thereof are used herein with respect to a given apparatus to refer to directions along the directional component toward and away from the geometric center of the apparatus.

[0022] The insert 18 may be disposed between the base 14 and the cover 22, and can define one or more apertures sized to surround the cupcakes 26. A portion of the insert 18 proximate to the apertures may contact an upper surface of each cupcake 26. When the cover 22 is placed onto the base 14, a portion of the cover 22 may urge the insert 18 against the base 14 to thereby hold the cupcake 26 securely in place. Accordingly, the food product package 10 can restrict both vertical and lateral movement of the cupcakes 26 within the package 10, thereby preserving the integrity of the cupcakes 26 during distribution to customers and/or consumers. The components of the food product package will now be described.

[0023] Referring to FIGS. 2A-2C, the base 14 may be made of aluminum and may be manufactured using processes well known in the art. As shown, the base 14 may include a body 34 and a peripheral rim 36 that projects up from the body 34 to define a bead that extends around the periphery of the base 14.

[0024] The base body 34 can include a substantially planar surface 37 that can extend horizontally as illustrated, and a plurality of pockets 38 that extend down from the body 34. Four pockets 38 are illustrated as being equally spaced about the body 34, though it should be appreciated that the body 34 can alternatively include one or more pockets 38. Each pocket 38 can include at least one side wall 39 and a base 40 connected to a bottom end of the side wall 39 that can also define the base of the food product package 10. As illustrated, the curved side walls 39 can be circular in cross section, and is illustrated as being frustoconical in shape, but can alternatively be cylindrical or can include a plurality of walls that can define any alternative desired geometric shape. Each pocket 38 may thus be configured to hold an individual cupcake.

[0025] The body surface 37 can include a plurality of side support portions 41 that extend up from the body surface 37 at locations proximate to the corresponding pockets 38 and the peripheral rim 36. In one embodiment, the side support portions 41 are disposed between a pair of adjacent pockets 38. The body surface 37 can further include a central support portion 42 that is disposed proximal each pocket 38, and substantially centrally disposed with respect to the base body 34. The central support portion 42 can extend up from the body surface 37, and can further include a recessed interface member 43. The support portions 41 and 42 can define any size and shape configured to engage the insert 18 under retention forces received from the cover 22, as is described in more detail below.

[0026] Referring now to FIG. 3, the insert 18 may be made of an inexpensive material such as cardboard, paperboard, or the like. The insert 18 may help securely hold a cupcake in place when the package is assembled. The insert 18 may be substantially square in shape corresponding to the shape of the package 10, and can be sized slightly smaller than the base 14 such that the insert can fit on top of the base 14, and can be disposed inside the peripheral rim 36. It should be appreciated that the insert 18 could assume any geometric shape without departing from the spirit and scope of the present invention.

[0027] The insert 18 may include a flexible body 46 that defines one or more apertures 50 and one or more side regions 51 and central engagement portions 52 disposed proximate to the apertures 50. The engagement portions 51 and 52 can be vertically aligned with the support portions 41 and 42 of the base 14, respectively, when the insert 18 is disposed on top of the base 14.

[0028] Each aperture 50 can extend through the body portion at locations aligned with the pockets 38 when the insert 18 is disposed on top of the base 14. The apertures 50 can thus correspond in number to the pockets 38. As illustrated, the apertures 50 can be circular, or can define any alternative geometric shape as desired. Each aperture 50 can be sized slightly smaller than the corresponding pockets 38 if desired, can thus also be sized smaller than the food product 26 disposed in the corresponding pockets 38. Each aperture 50 can be sized such that a portion of an upper surface of the food product 26 (for instance the baked portion 31) is in contact with the insert 18 at a location proximate to the corresponding aperture 50, such as a curved edge portion of the insert 18 that defines the aperture 50.

[0029] It should be appreciated that the insert 18 can be said to fit or be disposed “on top” of the base 14 even though a portion of all of the insert 18 can be spaced above the body surface 37 of the base 14 due to interference between the insert and food product 26. For example, when the food product 26 is a cupcake, the insert 18 can rest against the upper surface of the baked cake portion 31. Accordingly, the cover 22 can apply a retention force to one or more of the engagement portions 51 and 52 of the insert 18 to thereby press the flexible insert body 46 of the insert 18 against the base 14. The insert body 46 can in turn apply a slight force to the upper surface of the food product 26 to hold the food product 26 securely in place once the package 10 is assembled.

[0030] With further reference to FIG. 3, the insert body 46 can include a main portion 53 and one or more break-away sections 54 that can be removed from the main portion 53. Each break-away section 54 can be associated with one of the apertures 50, and thus can correspond in number to the apertures 50. As illustrated, the break-away sections 54 may be disposed at the corners of the insert 18.

[0031] The insert body portion 46 can further include tear portions 55 which can be perforated as illustrated or otherwise weakened relative to the main portion 53. For instance, the tear portions 55 can be of a reduced thickness relative to the insert body 46, or can be alternatively configured in any desirable manner so as to facilitate the tearing of the insert 18 along a predetermined direction. Each tear portion 55 may extend from a peripheral edge 58 of the insert body 46 to a respective aperture 50. As shown, a pair of spaced tear portions 55 can be associated with each aperture 50, such that the break-away section 54 is defined by the tear portions 55, the aperture 50, and the peripheral edge 58 of the body portion 46.

[0032] During operation, the tear portions 55 may be easily torn to remove the break-away section 54 from the insert body 46 and provide access to a respective aperture 50. As a result, individually stored food products 26 may be removed from the package 10 without interfering with the insert body 46 once the associated break-away section 54 has been removed. Alternatively, all break-away sections 54 may be removed to allow for removal of the insert 18 without compromising the cupcakes stored in the package 10.

[0033] To facilitate easy removal of each break-away section 54, the body portion 46 can include a tear tab 66 disposed between perforated portions 55 of adjacent apertures 50. The tear tab 66 may include a grip 70 that is defined by a transition 72 of the peripheral edge 58 that extends horizontally inward to each tear portion 54. Accordingly, the grip 70 may be easily grabbed and forced towards a center of the insert 18 to tear away each tear portion 55, so that the associated break-away sections may be removed to thereby provide easy access to each aperture 50.

[0034] Referring now to FIGS. 4A and 4B, the cover 22 may be made of plastic and may be transparent, semi-transparent, or opaque if desired. The cover 22 preferably is designed to press the insert 18 against the base 14 so that the food product 26 may be stabilized within the package 10. As shown, the cover 22 may include a body portion 84 and a peripheral edge 88 extending from the body portion 84.

[0035] The body portion 84 may include a retention post 92 and may be separated into chambers 96. The post 92 may extend down from a center of the body portion 84. The post 92 may extend down a distance such that when the cover 22 is fastened to the base, the post 92 may abut the insert 18, for instance, at the central engagement portion, to thereby apply a retention force that urges the central engagement portion 52 down against the interface member 24 disposed at the central support portion 42 of the base 14 when the cover 22 is attached to the base 14. The retention post 92 and central support portion 42 of the base thus retain the insert 18 in place.

[0036] Each chamber 96 may be defined by one or more walls 102. As shown in FIG. 4A, each wall 102 may be separated from an adjacent wall 102 by a recess 106. Because the cover 22 may be separated into chambers 96, individual cupcakes stored in respective pockets 38 of the base 14 may be separated from each other. Accordingly, adjacent cupcakes 26 may not compromise each other during movement of the food product package.

[0037] As shown in FIGS. 4A and 4C, the cover 22 may include a plurality of protrusions 110 extending down from the body portion 84 proximate to the peripheral edge 88. As shown in FIG. 4A, the cover 22 can include four protrusions 110, each extending down from the body portion 84 proximate to the peripheral edge 88 and between adjacent chambers 96. As shown in FIG. 4C, the protrusions 110 may extend down a distance configured to apply a retention force against the engagement portions 51 of the insert 18 to urge a respective engagement portion 51 against a corresponding side support portion 41 of the base 14 when the cover 22 is attached to the base 14. Accordingly, like the post 92, when the cover 22 is fastened to a base, each protrusion 110 may contact the insert 18 to thereby urge the insert 18 down against the base 14. Because the cover 22 may be designed to urge the insert against the base 14 at a plurality of locations (five as illustrated), different points, the food product 26 contained within the package 10 may be securely held in place.

[0038] As shown in FIG. 4A, the peripheral edge 88 of the cover may extend around the entire perimeter of the body portion 84 and may include a lift portion 112. The lift portion 112 may be located proximate to one of the corners of the cover 22, and may extend out from a peripheral edge of a base a distance that is greater than the remainder of the peripheral edge 88. For example, the lift portion 112 may extend horizontally out from the underlying base 14 a sufficient distance such that a pocket 114 may be formed in the lift portion 112.

The pocket 114 may be spaced above the base 14 so as to allow a consumer access to the peripheral edge of the base. For instance, the consumer may insert his/her finger into the pocket 114 and easily lift or pop the cover 22 off of the base.

[0039] As shown in FIG. 4D, the peripheral edge 88 may also include a recess 118 for receiving the peripheral rim 36 of the base 14. The recess 118 may be defined by a top wall 122, an outer wall 126 and a bottom flange 130 that can extend in from the outer wall 126 at an angle so that the peripheral rim 36 of the base 14 can easily slide into the recess 118 to attach the cover 22 to the base 14. The peripheral edge 88 is flexible so as to cam over the peripheral rim 36 when a separation force 22 is applied to the cover 22 that is sufficient to cause the cover 22 to separate from the base 14 in the manner described above.

[0040] FIG. 5 shows another embodiment of an insert 218 that does not include break-away portions. As shown, the insert 218 may include a flexible body 246 that defines one or more side regions 251 and central engagement portion 252. The engagement portions 251 and 252 can be vertically aligned with the support portions 41 and 42 of the base 14, respectively, when the insert 218 is installed on top of the base 14.

[0041] Insert 218 operates in a similar manner as insert 18. For example, like with insert 18, the cover 22 can apply a retention force to one or more of the engagement portions 251 and 252 of insert 218 to thereby press the flexible insert body 246 of insert 218 against the base 14. The insert body 246 can in turn apply a slight force to the upper surface of the food product 26 to hold the food product 26 securely in place once the package is assembled.

[0042] It should be understood that while insert 218 defines edge portions of the insert body 246, such as curved edge portions 256, that contact a portion of an upper surface of the food product to retain the food product in place.

[0043] FIG. 6 shows another embodiment of a base that includes access points to facilitate easy removal of the food product from the base. As shown, a base 270 may include pockets 274 and access points (or dig-outs) 278 formed in the base proximate to an edge of each pocket 274. Access points 278 may each define a recess or an angled section of the base that extends downward into a respective pocket 274. The recess and/or angled section may make it easier for a user to access the food product and remove the food product from the base.

[0044] The food product package thus includes a base, an insert, and a cover that may be combined to securely package several cupcakes. For example, an individual may place cake batter in each pocket of the base. The base may then be placed into an oven, and the cake batter may be baked. Once the cake has finished baking, the insert may be placed onto base, such that at least a portion of each cake is exposed. Once the insert is in place, a decoration, such as frosting, may be placed on top of each of the baked cakes. Once the cupcakes are completed, the cover may be fastened to the base. When the cover is fastened to the base, post and protrusions may press the insert against the base to thereby securely hold each cupcake in place. Accordingly, when the completed food product package is distributed to a consumer, the cupcakes stored within the package may not be compromised during transit.

What is claimed:

1. A food product package comprising:
a base including a body and a peripheral rim, the body having at least one pocket formed therein;

a cover fastened to the peripheral rim of the base; and an insert disposed between the cover and the base, wherein (i) the pocket is configured to hold a food product, (ii) the insert is positioned such that an edge portion of the insert is in contact with the food product, and (iii) a portion of the cover urges the insert against the base when the cover is fastened to the peripheral rim of the base to thereby securely hold the food product in place.

2. The package of claim 1, wherein the cover comprises a post and the post urges the insert against the base when the cover is fastened to the peripheral rim of the base.

3. The package of claim 2, wherein the post extends from a center of the cover, and the post contacts a central portion of the insert when the cover is fastened to the peripheral rim of the base.

4. The package of claim 1, wherein the cover comprises a protrusion extending proximate to a peripheral rim of the cover and the protrusion urges a side portion of the insert against the base when the cover is fastened to the peripheral rim of the base.

5. The package of claim 4, wherein (i) the cover is substantially square shaped and includes four side portions, (ii) the cover comprises a protrusion extending down from each side portion proximate to a peripheral rim of the cover, and (iii) each protrusion urges a respective side portion of the insert against the base when the cover is fastened to the peripheral rim of the base.

6. The package of claim 1, wherein (i) the base has four pockets formed therein and the insert has four apertures extending therethrough, (ii) each pocket is adapted to hold an individual food product, and (iii) the insert is positioned such that each food product extends through a respective aperture of the insert.

7. The package of claim 6, wherein (i) the cover has five points of contact with the insert, (ii) a first point of contact being proximate to the center of the insert, a second point of contact being proximate to a first edge of the insert between two of the apertures, a third point of contact being proximate to a second edge of the insert between two of the apertures, a fourth point of contact being proximate to a third edge of the insert between two of the apertures, and a fifth point of contact being proximate to a fourth edge of the insert between two of the apertures, and (iii) the cover presses the insert against the base at the five points of contact.

8. The package of claim 1, wherein the cover includes a lift portion that extends out beyond the peripheral rim of the base.

9. The package of claim 1, wherein the cover includes a recess and the peripheral rim of the base mates with the recess when the cover is fastened to the base.

10. The package of claim 1, wherein the insert defines at least one aperture and a dimension of the aperture is smaller than a dimension of the food product held in the pocket.

11. The package of claim 1, wherein the food product is a cake having a topping.

12. The package of claim 11, wherein the cake is in contact with the insert and the topping extends through the aperture.

13. The package of claim 11, wherein the edge portion is curved.

14. A stabilizing insert to be used in a package having a cover and a base, the insert comprising:
 a body; and
 at least one aperture extending through the body, the aperture being large enough for a food product being contained in the base to extend therethrough,
 wherein the body includes a perforated portion extending from an edge of the body to the aperture.

15. The stabilizing insert of claim 14, further comprising a second perforation extending from a second edge of the body to the aperture.

16. The stabilizing insert of claim 14, wherein a corner of the body can be removed to provide access to the aperture.

17. The stabilizing insert of claim 14, wherein each aperture is circular.

18. A method of packaging cupcakes, the method comprising the steps of:
 placing a cake batter into a pocket of a base;
 baking the cake batter;
 placing an insert onto the base, the insert being positioned such that an edge portion of the insert is in contact with the baked cake; and
 placing a cover over the base such that a portion of the cover presses the insert against the base to thereby hold the baked cake in place.

19. The method of claim 18, further comprising the step of decorating a top of the baked cake with a decoration.

20. The method of claim 18, wherein the decorating step occurs after the insert has been placed onto the base.

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