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(54) **CONTAINER**

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(76) Inventors: **James P. Perry**, Gahanna, OH (US); **Ashley A. Gohlke**, Dublin, OH (US); **William J. Hook**, Galena, OH (US); **Katherine J. Jordan**, Pickerington, OH (US); **Frank S. Walczak**, Galena, OH (US); **J. Kevin Clay**, Milford, CT (US); **Richard C. Darr**, Medina, OH (US); **Jack E. Elder**, Rochester, MI (US); **Marc A. Pedmo**, Litchfield, OH (US); **Charles R. Schotthoefer**, Bloomfield, MI (US)

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(57) **ABSTRACT**

A container comprising a top wall, a bottom wall, a front wall, a rear wall, a first side wall, and a second side wall. Each of the walls has a substantially rectangular shape. The rectangular shape of each wall enables the container to be stored easily on a shelf or counter-top. The top wall and portions of the front wall, the rear wall, the first side wall, and the second side wall form a lid. The lid is pivotally attached to the rear wall by a hinge. The lid can be opened by rotation thereof about the hinge. The front wall has at least one recess and the rear wall has at least one recess. The at least one recess of the front wall and the at least one recess of the rear wall are adjacent to the first side wall. The recesses provide a grip feature, which enables the user to manipulate the lid of the container with one hand when the container rests on a flat surface, e.g., a tabletop or a counter top. The container is suitable for holding granular material or powdered material, the container having a scoop furnished therewith.

Correspondence Address:

PAUL D. YASGER
ABBOTT LABORATORIES
100 ABBOTT PARK ROAD, DEPT. 377/AP6A
ABBOTT PARK, IL 60064-6008

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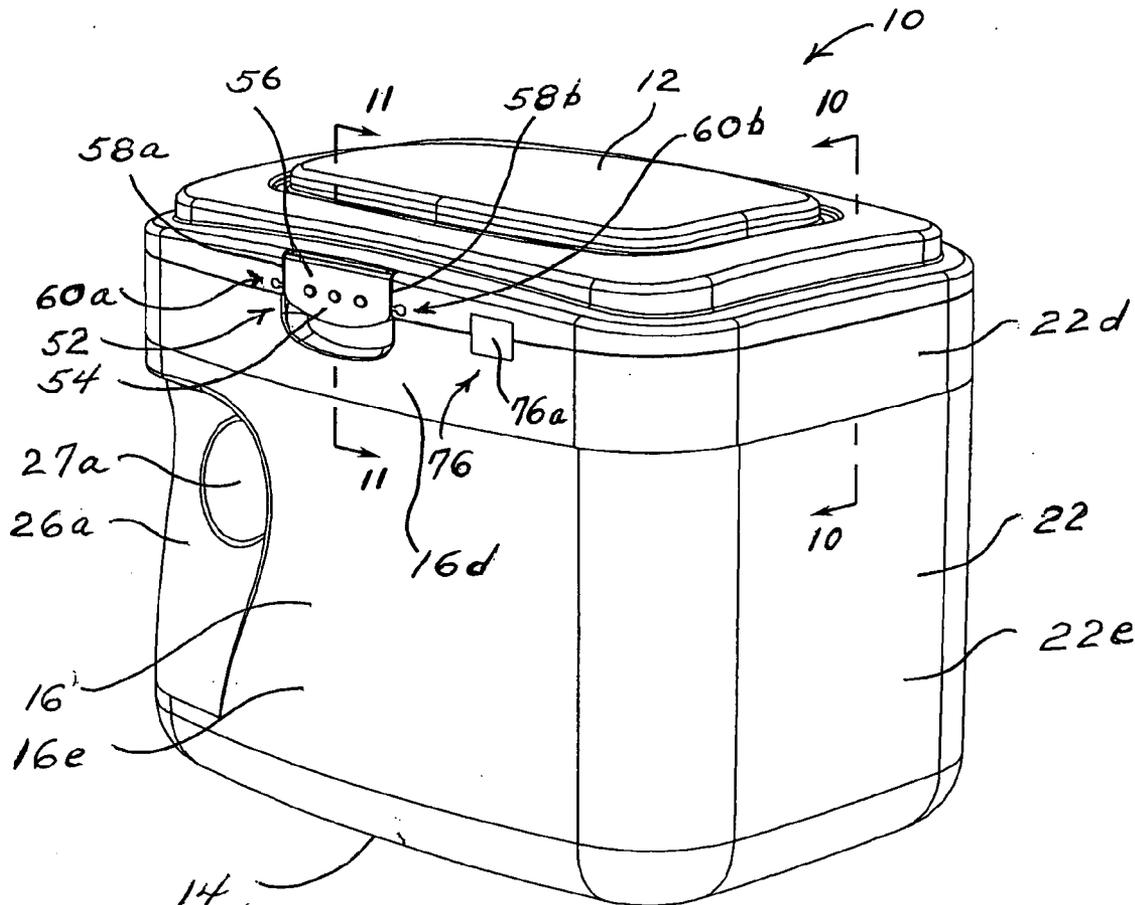
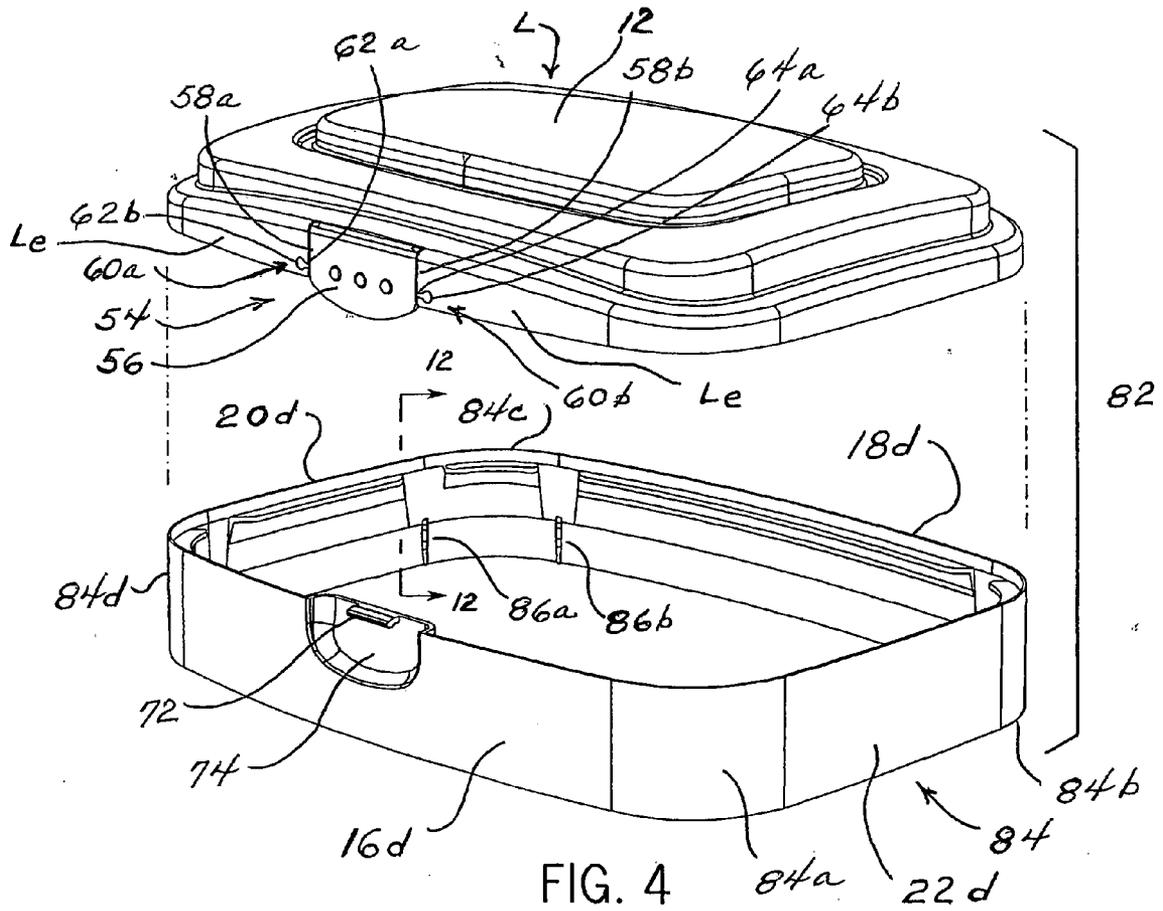
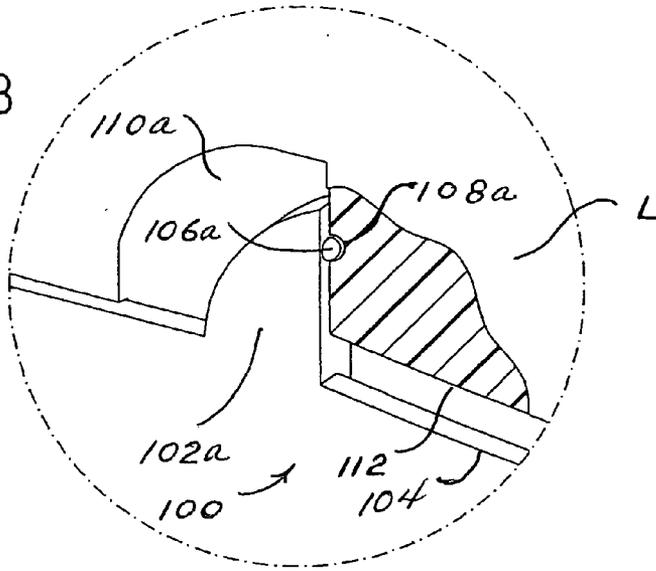


FIG. 3



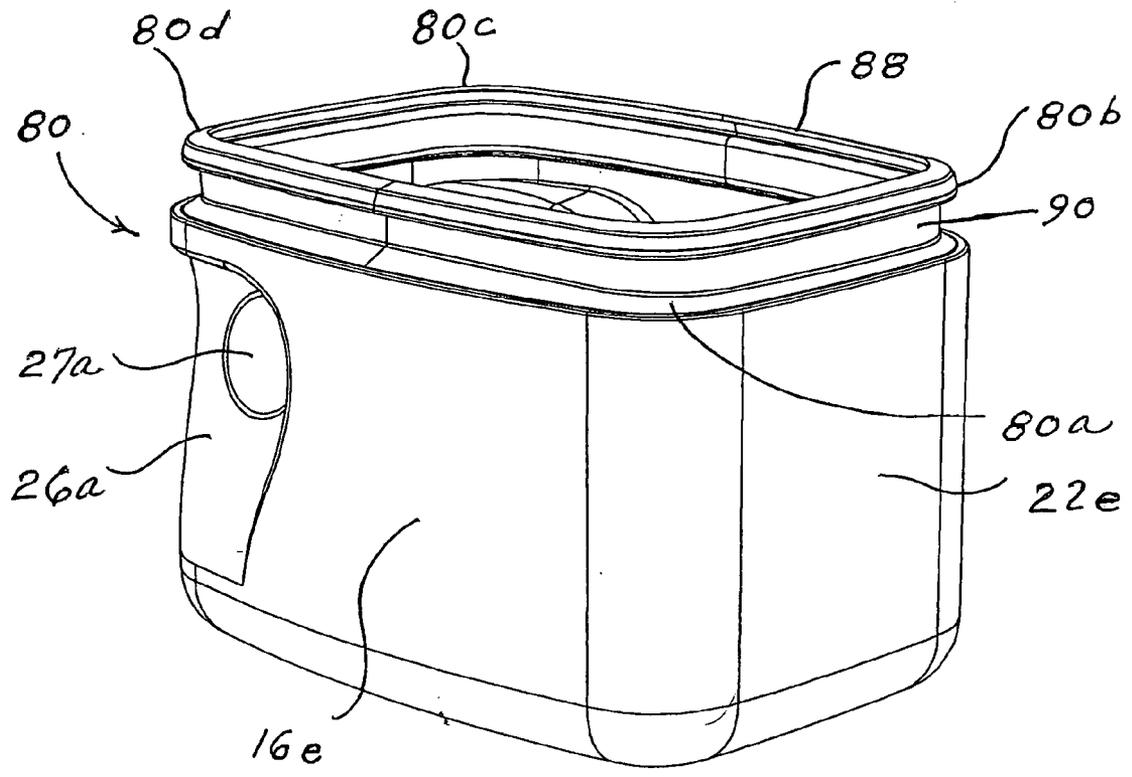


FIG. 5

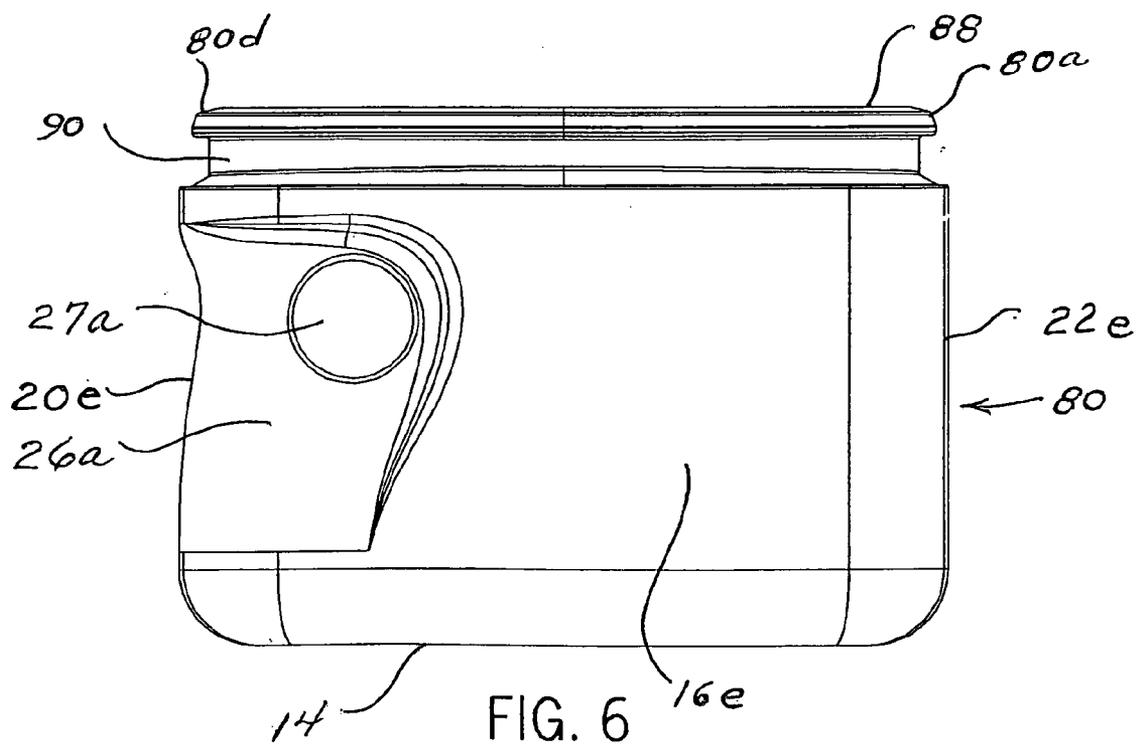


FIG. 6

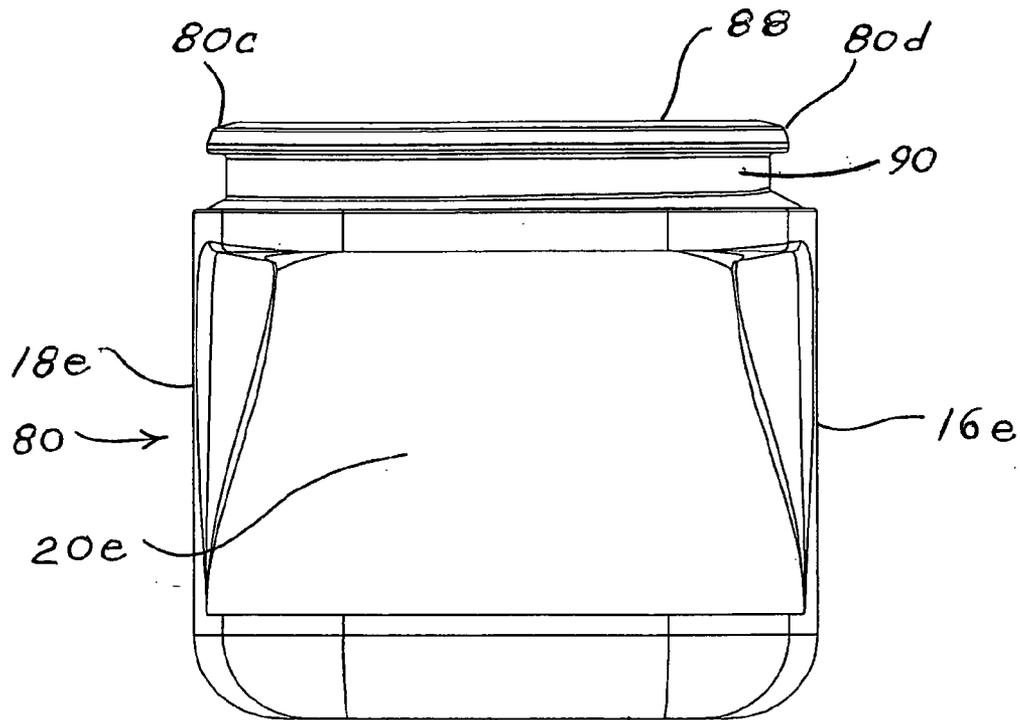


FIG. 7

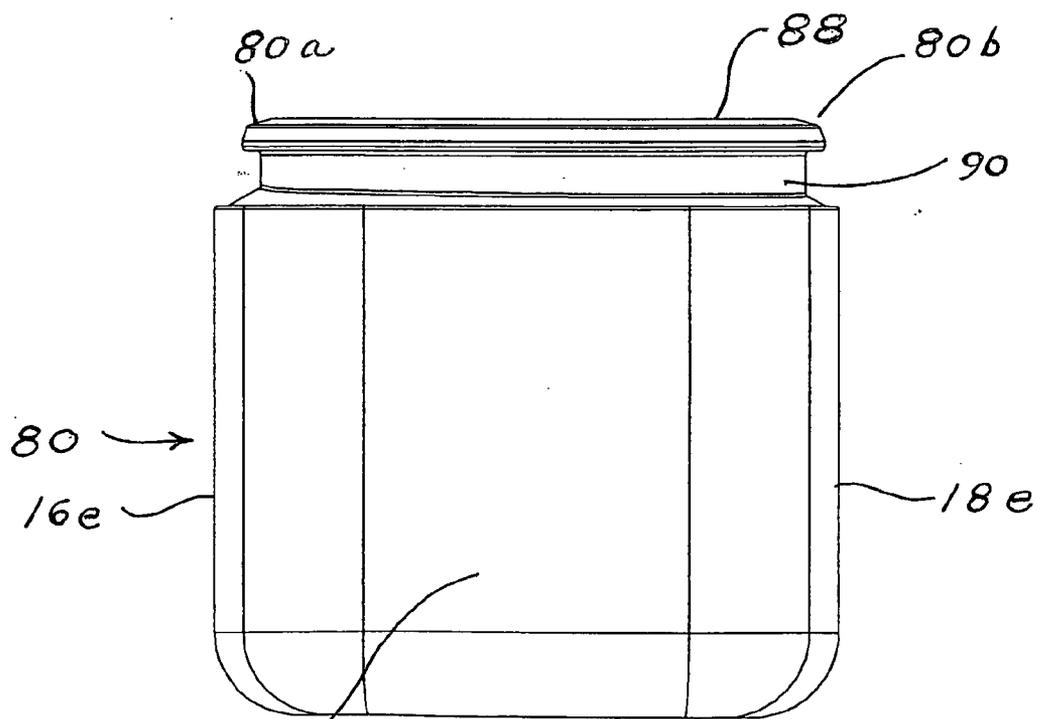


FIG. 8

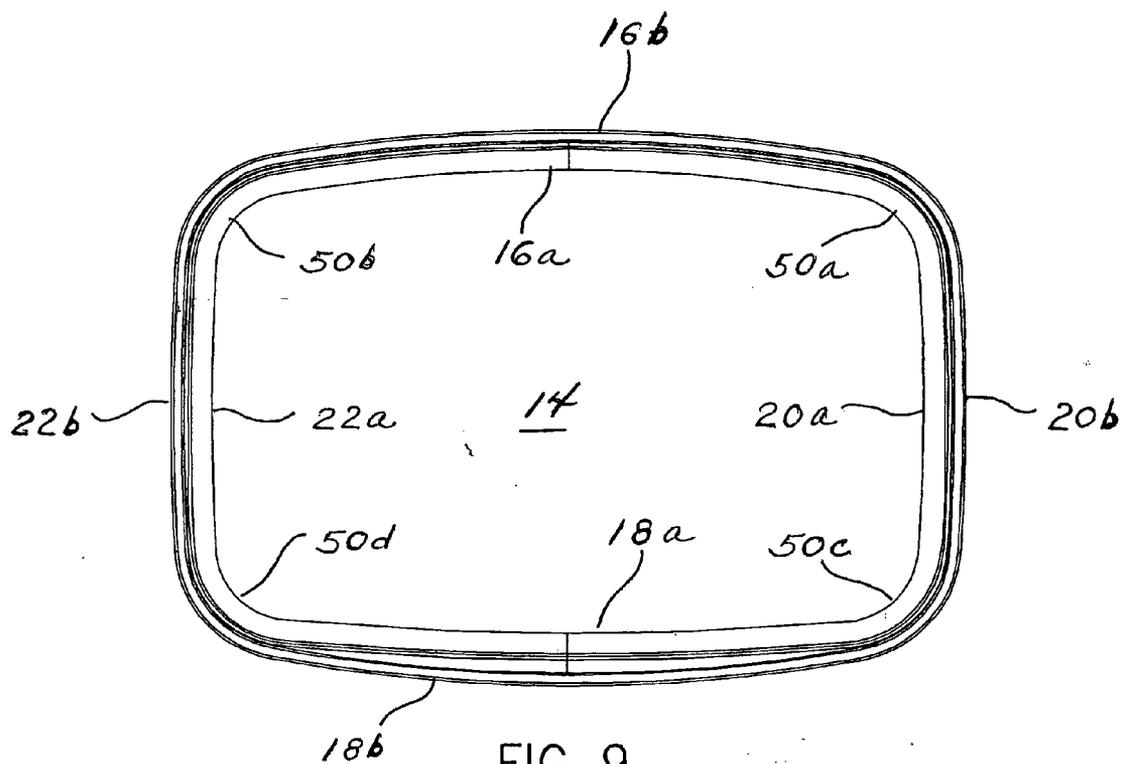


FIG. 9

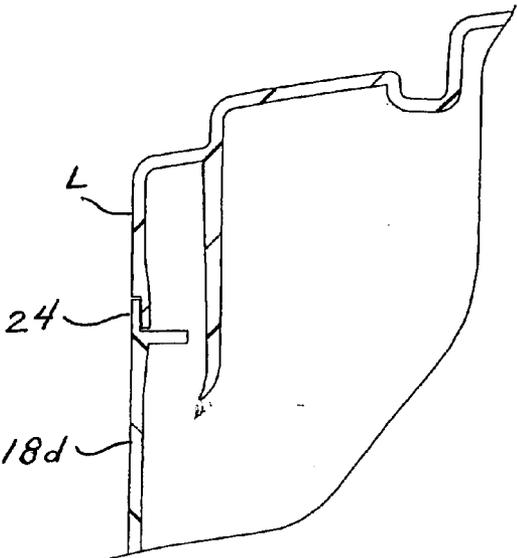


FIG. 10

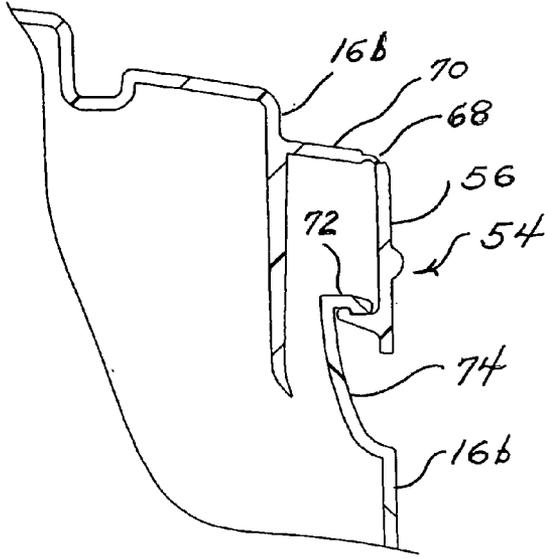


FIG. 11

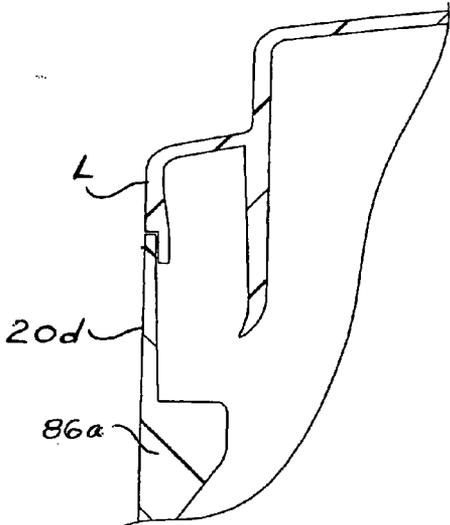
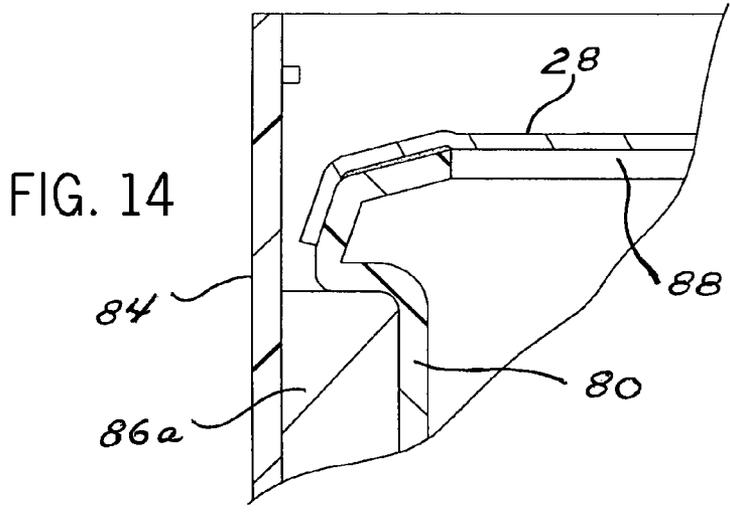
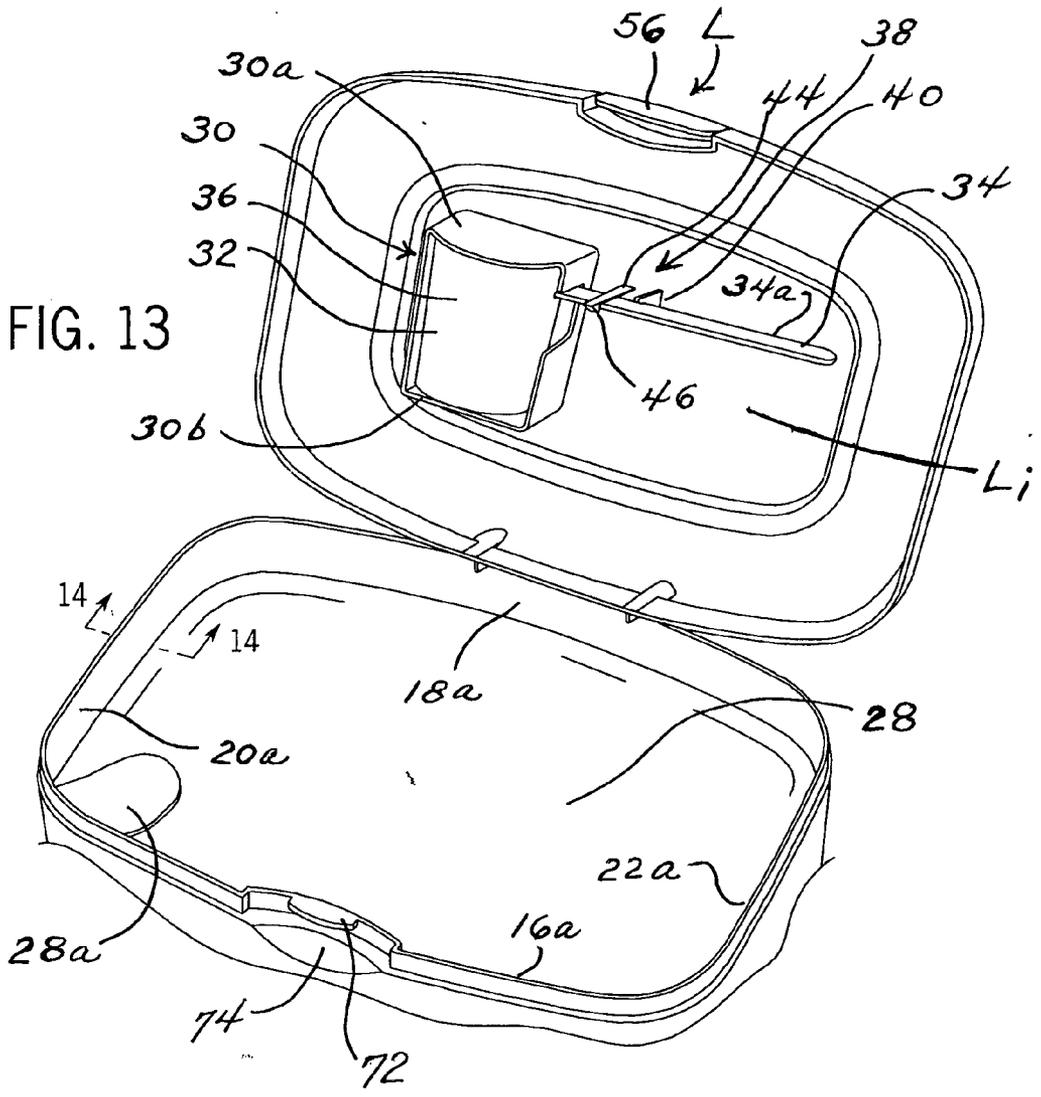


FIG. 12



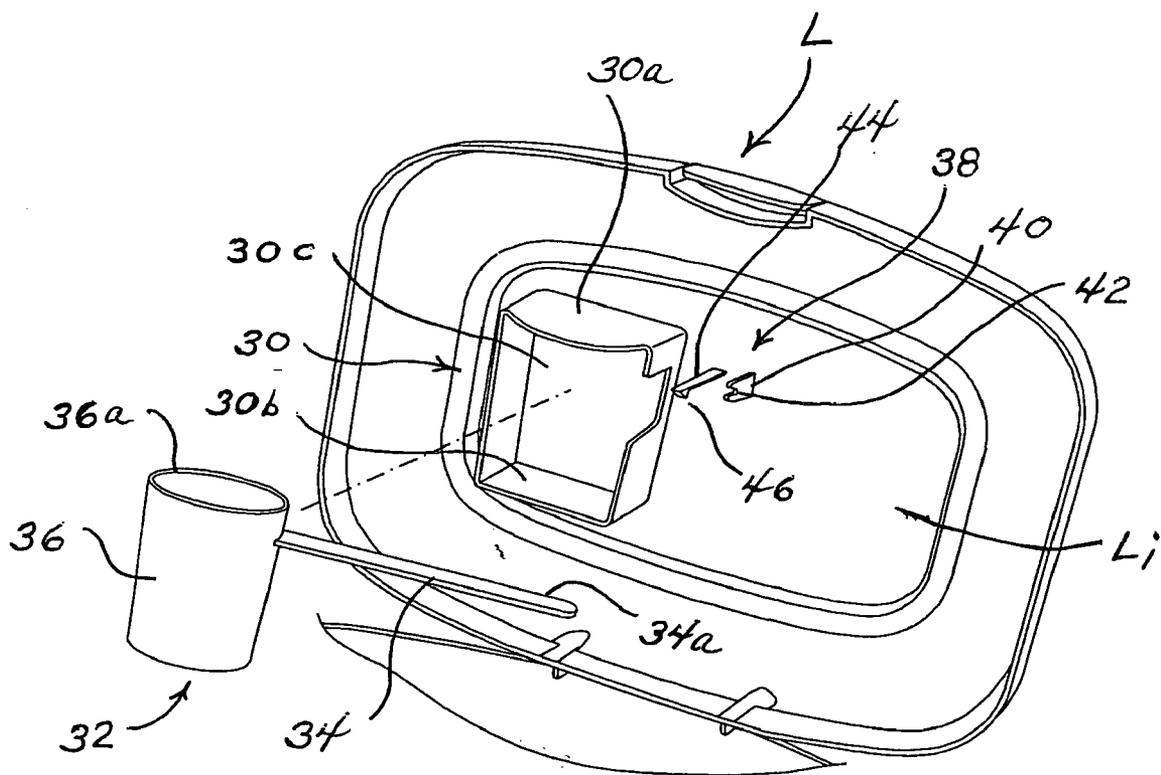


FIG. 15

CONTAINER

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] This invention relates to the field of packaging, and more particularly, packaging for granulated products, such as for example, a powder.

[0003] 2. Discussion of the Art

[0004] Currently, products in granular or powdered form, such as, for example, infant formula, flour, coffee, sugar, are packaged in canisters. Scoops are provided within the package for measured dispensing. Consumers have found that the current packaging is difficult to handle with a single hand, have found that it is difficult to remove the scoop out from the packaging upon the first use, and have found that it is difficult to remove the last bit of powder from the package on account of the shape of the container. When the user wishes to withdraw a portion of the product from the container, he or she must first root around in the interior of the container with his or her fingers to find the scoop. Once located, the scoop is withdrawn so that it can be used. The scoop, having been buried in the granular product, is usually covered with the product. The product may soil the hands of the user. Often, the product is spilled onto a countertop or table upon which the container is resting. In addition to waste of the product and the mess on the countertop or table, the product may also be contaminated by contact with the hands of the user. Once the scoop is located and gripped by the user, it can be used to withdraw the desired amount of product. Typically, the scoop is then placed back into the container and the lid is replaced. The next time the product is to be withdrawn from the container, the process is repeated. U.S. Pat. No. 5,706,974 addresses the problem of storage of the scoop outside of the granular or powdered product.

[0005] It would be desirable to provide a container that enables access to the last bit of powder in a container. It would also be desirable to provide a container that enables access to a scoop for dispensing the powder. It would further be desirable to provide a package that can be easily manipulated by one hand. It would be still further desirable to provide a container that is easy to handle, grip, and store on a shelf.

SUMMARY OF THE INVENTION

[0006] This invention provides a container comprising a top wall, a bottom wall, a front wall, a rear wall, a first side wall, and a second side wall. Each of the walls has a substantially rectangular shape. The rectangular shape of each wall enables the container to be stored easily on a shelf or countertop. The top wall and portions of the front wall, the rear wall, the first side wall, and the second side wall form a lid. The lid is pivotally attached to the rear wall by a hinge. The lid can be opened by rotation thereof about the hinge. The front wall has at least one recess and the rear wall has at least one recess. The at least one recess of the front wall and the at least one recess of the rear wall are adjacent to the first side wall. The recesses provide a grip feature, which enables the user to manipulate the lid of the container with one hand when the container rests on a flat surface, e.g., a tabletop or a counter top. The container is preferably made of a polymeric material.

[0007] The container provided herein is suitable for holding granular material or powdered material, the container having a scoop furnished therewith. The scoop has a handle and a bowl. The interior of the container is characterized by

having corners that are congruent with the bowl of the scoop furnished with the container. The congruency of the bowl of the scoop with the corners of the container enables the user to remove the last bit of powder remaining in the container. A flexible seal can be applied to the interior of the container to provide a substantially moisture-impervious, oxygen-impervious seal for the granular material or powdered material.

[0008] The lid is furnished with a scoop holder, whereby the scoop can be stored outside the bulk of the contents of the container to enable easy, clean access to the contents of the container. The container can be opened and closed with a single hand.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 is perspective view of one embodiment of the container described herein. In this figure, the lid of the container is closed. This figure shows a side of the container having a grip feature.

[0010] FIG. 2 is a perspective view of the embodiment of the container shown in FIG. 1. In this figure, the lid of the container is closed. This figure shows sides of the container not shown in FIG. 1. This figure shows a side of the container having a grip feature.

[0011] FIG. 3 is a perspective view, greatly enlarged, of the area designated by the line 3-3 in FIG. 2. This figure shows a cut-away view of a mechanical hinge.

[0012] FIG. 4 is an exploded perspective view of an assembly comprising a collar and a lid. The assembly of the collar and the lid can be applied to a tub-shaped receptacle to form the container described herein.

[0013] FIG. 5 is a perspective view of a tub-shaped receptacle to which the assembly comprising the collar and the lid, shown in FIG. 4, can be applied to form the container described herein.

[0014] FIG. 6 is a side view in elevation of the embodiment of the container shown in FIG. 1. This figure shows the front wall of the container, which has a grip feature.

[0015] FIG. 7 is an end view in elevation of the embodiment of the container shown in FIG. 1. This figure shows the first side wall of the container, which is adjacent to the grip features of the front wall and the rear wall of the container.

[0016] FIG. 8 is an end view in elevation of the embodiment of the container shown in FIG. 1. This figure shows the second side wall of the container, which is not adjacent to the grip features of the front wall and the rear wall of the container.

[0017] FIG. 9 is a top plan view of the interior of the embodiment of the container shown in FIG. 1. In this figure, the lid is removed from the container.

[0018] FIG. 10 is a cross-sectional view taken along line 10-10 in FIG. 1. This figure illustrates the lid attached to the collar of the assembly comprising the collar and the lid by means of a living hinge.

[0019] FIG. 11 is a cross-sectional view taken along line 11-11 in FIG. 1. This figure illustrates a latch that can be used to maintain the lid in a closed position.

[0020] FIG. 12 is a cross-sectional view taken along line 12-12 in FIG. 4. This figure illustrates the lid attached to the collar of the assembly comprising the collar and the lid.

[0021] FIG. 13 is a perspective view of the lid attached to the collar. This figure shows the interior surface of the lid to which is attached the scoop holder and a restraint for the handle of the scoop. This figure further shows a substantially moisture-impervious, oxygen-impervious seal attached to the rim of the tub-shaped receptacle.

[0022] FIG. 14 is cross-sectional view taken along line 14-14 in FIG. 13. This figure illustrates attachment of the substantially moisture-impervious, oxygen-impervious seal to the rim of the tub-shaped receptacle.

[0023] FIG. 15 is an exploded perspective view of the interior surface of the lid showing the scoop removed from the scoop holder and the restraint for the handle of the scoop.

DETAILED DESCRIPTION

[0024] As used herein, the expression “top wall” means the side of the container exclusive of the bottom wall, the first side wall, the second side wall, the front wall, and the rear wall of the container. The term “lid” means a hinged cover for a hollow receptacle and is intended to include the top wall of the container plus the upper portion of the first side wall, the upper portion of the second side wall, the upper portion of the front wall, and the upper portion of the rear wall of the container. As used herein, the term “bracket” means a wall-anchored fixture adapted to support a load.

[0025] Referring now to FIGS. 1, 2, 5, 6, 7, 8, and 9, a container 10 comprises a top wall 12, a bottom wall 14, a front wall 16, a rear wall 18, a first side wall 20, a second side wall 22. The front wall 16 comprises an interior major surface 16a, an exterior major surface 16b, an upper portion 16d, and a lower portion 16e. The rear wall 18 comprises an interior major surface 18a, an exterior major surface 18b, an upper portion 18d, and a lower portion 18e. The first side wall 20 comprises an interior major surface 20a, an exterior major surface 20b, an upper portion 20d, and a lower portion 20e. The second side wall 22 comprises an interior major surface 22a, an exterior major surface 22b, an upper portion 22d, and a lower portion 22e. As can be seen in FIGS. 1, 2, and 4, the lid of the container 10 comprises the top wall 12 and the upper portion 16d of the front wall 16, the upper portion 18d of the rear wall 18, the upper portion 20d of the first side wall 20, and the upper portion 22d of the second side wall 22. The lid will hereinafter be referred to by the reference character “L”. The lid “L” has an interior surface, which will hereinafter be referred to by the reference character “L_i”. The lid also has an exterior surface, which will hereinafter be designated by the reference character “L_e”. A hinge 24 attaches the lid “L” to the rear wall 18. The front wall 16 has a recess 26a positioned to facilitate gripping of the container 10 by the left thumb of the user. The rear wall 18 also has a recess 26b positioned to facilitate gripping of the container 10 by the fingers of the left hand of the user. The recess 26a can further have an additional recess 27a to indicate the precise location in the recess 26a for the placement of the thumb of the user. The recess 27a is smaller in area than the recess 26a. The recess 27a is preferably circular in shape, but other shapes are also acceptable. The recess 26b can further have an additional recess 27b to indicate the precise location in the recess 26b for the placement of the desired finger of the user. The recess 27b is smaller in area than the recess 26b. The recess 27b is preferably circular in shape, but other shapes are also acceptable. The recesses 26a and 26b are positioned adjacent to the first side wall 20 of the container 10. In an alternative embodiment (not shown), the recesses 26a, 27a, 26b, and 27b can be positioned to facilitate gripping of the container 10 by the right thumb of the user and by the fingers of the right hand of the user. In this alternative embodiment, the recesses would be positioned adjacent to the second side wall 22 of the container 10. In still another alternative (not shown), the front wall 16 can have two recesses and the rear wall 18 can have

two recesses, one recess on the front wall 16 and one recess on the rear wall 18 positioned to facilitate gripping of the container 10 by the left thumb and the fingers of the left hand of the user and one recess on the front wall 16 and one recess on the rear wall 18 positioned to facilitate gripping of the container 10 by the right thumb and the fingers of the right hand of the user. In this embodiment, pairs of recesses would be positioned adjacent to both the first side wall 20 and the second side wall 22.

[0026] The hinge 24 prevents the lid “L” from descending when the product is being accessed by the user, which would cause a nearly empty container to tip over. The hinge 24 can be a living hinge or a conventional mechanical hinge. A living hinge is a thin flexible web of material that joins two rigid bodies together. In this case, the living hinge connects two segments of an object, i.e., the lid “L” and the rear wall 18 of the container 10, to keep the segments together and allow the object to be opened and closed. The material used to make a living hinge is preferably a very flexible polymeric material, such as, for example, polypropylene and polyethylene. Living hinges can be flexed numerous times without failure. Living hinges are described in more detail at http://www.efunda.com/designstandards/plastic_design/hinge.cfm, Nov. 6, 2006, pages 1-3 and at http://enr.bd.psu.edu/pkoch/plasticdesign/living_hinge.htm, Nov. 6, 2006, pages 1-8, both of which are incorporated herein by reference. Conventional mechanical hinges include, but are not limited to, hinge assemblies comprising a first panel having two or more sockets mounted on an edge thereof and a second panel having two or more pins mounted on an edge thereof, the aforementioned pins mating with the aforementioned sockets to join the edge of the first panel to the edge of the second panel, the pins and the sockets allowing rotation of the first panel about the second panel. Conventional mechanical hinges are described in more detail in <http://www.hardware.com/index.asp>, see “other hinges”, Dec. 26, 2006, incorporated herein by reference.

[0027] The hinge 24 is designed in such a manner that when the lid “L” of the container 10 is opened to enable the user to obtain access to the contents of the container 10, the lid “L” will not fall forward to the closed position. Further, the lid “L” will not fall too far backward beyond the open position desired, which would cause a container 10, when nearly empty, to tip over onto the rear wall 18.

[0028] The top wall 12, the bottom wall 14, the front wall 16, the rear wall 18, the first side wall 20, and the second side wall 22 enclose a hollow interior space into which a product can be inserted. While the hollow interior space can hold any solid or liquid product, the particular product for which the container 10 is designed is typically a flowable solid material, such as, for example, a powdered product or a granular product. Representative examples of such a powdered product or granular product include, but are not limited to, infant formula, flour, coffee, and sugar.

[0029] Referring now to FIGS. 13 and 14, a substantially moisture-impervious, oxygen-impervious seal 28 is attached to the interior major surfaces 16a, 18a, 20a, 22a of the front wall 16, the rear wall 18, the first side wall 20, and the second side wall 22, respectively. Optionally, the substantially moisture-impervious, oxygen-impervious seal 28 can also be impervious to light. A pull-tab 28a on the substantially moisture-impervious, oxygen-impervious seal 28 can be used to facilitate removal of the seal 28 by the user. The substantially moisture-impervious, oxygen-impervious seal 28 can be

formed from a sheet of material substantially impervious to oxygen, moisture, and light. A material suitable for use in preparing the substantially moisture-impervious, oxygen-impervious seal 28 can be a sheet of foil, such as, for example, aluminum foil, or a foil made of some other metallic material. In one embodiment, the substantially moisture-impervious, oxygen-impervious seal 28 be applied at a position near the edges of the upper portion 16d of the front wall 16, the upper portion 18d of the rear wall 18, the upper portion 20d of the first side wall 20, and the upper portion 22d of the second side wall 22 on the interior major surfaces 16a, 18a, 20a, 22a, of the front wall 16, the rear wall 18, the first side wall 20, and the second side wall 22, respectively, of the container 10. The substantially moisture-impervious, oxygen-impervious seal 28 can be removed by pulling the pull-tab 28a of the seal 28 and removing the seal 28 from the positions of attachment to the interior major surfaces 16a, 18a, 20a, 22a, of the front wall 16, the rear wall 18, the first side wall 20, and the second side wall 22, respectively, of the container 10.

[0030] Referring now to FIGS. 13 and 15, attached to the interior surface “L_i” of the lid “L” is a scoop holder 30. The scoop holder 30 comprises a first bracket 30a and a second bracket 30b. The scoop holder 30 is capable of retaining a scoop 32 in such a position so as to be separated from the product. The scoop 32 comprises a handle 34 attached to a bowl 36. The scoop 32 is positioned in the first bracket 30a and the second bracket 30b in such a manner that the user is induced to remove the scoop 32 by the handle 34, rather than by the bowl 36. Furthermore, the first bracket 30a and the second bracket 30b are positioned so that the scoop 32 is held by the first bracket 30a and the second bracket 30b in such a manner as to prevent the powdered product or granular product from entering the bowl 36 of the scoop 32. The first bracket 30a of the scoop holder 30 covers the opening in the bowl 36 of the scoop 32, thereby preventing the product in the container from entering the bowl 36 of the scoop 32, which could lead to scattering product outside of the container upon removal of the scoop 32 from the scoop holder 30. The bowl 36 of the scoop 32 does not interfere with substantially moisture-impervious oxygen-impervious seal 28 when the scoop 32 is positioned in the scoop holder 30.

[0031] The scoop holder 30 is positioned in such a manner that the handle 34 of the scoop 32 is prevented from contacting the substantially moisture-impervious, oxygen-impervious seal 28 positioned over the contents of the container, thereby protecting the integrity of the seal 28. In addition, the scoop holder 30 prevents the handle 34 from being dislodged and maintains the position of the scoop 32 during shipping and storage. As shown in FIGS. 13 and 15, the scoop 32 can be inserted into the scoop holder 30 by sliding the bowl 36 of the scoop 32 into the opening 30c between the first bracket 30a and the second bracket 30b. When inserted into the scoop holder 30, the scoop 32 is retained by the first bracket 30a and the second bracket 30b by means of a friction fit. The scoop 32 can be attached to the lid “L” by aligning the bowl 36 of the scoop 32 with the first bracket 30a and the second bracket 30b of the scoop holder 30 and sliding the bowl 36 of the scoop 32 against the first bracket 30a and the second bracket 30b of the scoop holder 30, thereby generating a friction fit between the bowl 36 of the scoop 32 and the scoop holder 30.

[0032] An optional, but desirable, feature of the lid “L” is a restraint 38 for preventing the handle 34 of the scoop 32 from rotating if the connection (i.e., the friction fit) between the scoop holder 30 and the bowl 36 of the scoop 32 loosens

sufficiently to allow the bowl 36 of the scoop 32 to rotate in the scoop holder 30, thereby allowing the handle 34 of the scoop 32 to contact the substantially moisture-impervious, oxygen-impervious seal 28 and possibly puncture the seal 28. As shown in FIGS. 13 and 15, the aforementioned restraint 38 comprises a first projection 40 rising upwardly from the interior surface “L_i” of the lid “L” and having a notch 42 at one end thereof for receiving an edge 34a of the handle 34 of the scoop 32. The aforementioned restraint 38 further comprises a second projection 44 positioned between the scoop holder 30 and the first projection 40 and rising upwardly from the interior surface “L_i” of the lid “L”. The second projection 44, which is of greater length than the first projection 40, has a keeper 46 formed at one end thereof to prevent the handle 34 of the scoop 32 from moving downwardly toward the substantially moisture-impervious, oxygen-impervious seal 28 if the bowl 36 of the scoop 32 rotates in the scoop holder 30. The first projection 40 need not exhibit any level of flexibility, but the second projection 44 should be sufficiently flexible that it can be moved sufficiently by the handle 34 of the scoop 32 when the scoop 32 is being returned to the scoop holder 30 and the restraint 38.

[0033] The bowl 36 of the scoop 32 has a rim 36a that is shaped to be congruent with the corners 50a, 50b, 50c, and 50d, formed by the junctions between the front wall 16 and the first side wall 20 and the bottom wall 14, the front wall 16 and the second side wall 22 and the bottom wall 14, the rear wall 18 and the first side wall 20 and the bottom wall 14, and the rear wall 18 and the second side wall 22 and the bottom wall 14, respectively. The corners 50a, 50b, 50c, and 50d are shown in FIG. 9. The shape of the corners 50a, 50b, 50c, and 50d and the shape of the rim 36a of the bowl 36 of the scoop 32 enable the maximum quantity of product to be removed from the container 10 by the scoop 32, without having to turn the container 10 over to pour out the product. As shown in FIG. 9, the corners 50a, 50b, 50c, and 50d are rounded, with the radius of each corner 50a, 50b, 50c, and 50d being approximately equal to the radius of the rim 36a of the bowl 36 of the scoop 32. In an alternative embodiment (not shown), the corners can have other shapes, e.g., the corners 50a, 50b, 50c, and 50d can meet to form right angles. In still another embodiment (not shown), the corners 50a, 50b, 50c, and 50d can have three sides, with two 120° angles forming each corner. In these alternative embodiments, the bowl 36 of the scoop 32 would have a shape that would be congruent with the shape of each corner 50a, 50b, 50c, and 50d.

[0034] The shape of the bottom wall 14 of the container 10 and the shape of the top wall 12 of the container 10 can be designed to enable a plurality of containers 10 to be stacked, one upon another, such as, for example, on a shelf in a grocery store. It is preferred that the shape of the perimeter of the bottom wall 14 of the container 10 be substantially similar to the shape of the perimeter of the top wall 12 of the container 10. The top wall 12 can be flat or contoured and the bottom wall 14 can be flat or contoured. Generally, if the top wall 12 is contoured, the bottom wall 14 must also be contoured in such a manner as to be substantially congruent with the top wall 12, so that a plurality of containers 10 can be stacked one on top of another. However, so long as the lid “L” is flat, the containers will be stackable even if the bottom wall 14 of the container 10 is not flat, provided that the bottom wall 14 of the container 10 is designed so that the top wall 12 of the container 10 remains in a horizontal orientation relative to a horizontal shelf. In FIGS. 1, 2, 4, 10, 11, and 12, it can be seen

that the top wall 12 of the container 10 is convex in shape. Accordingly, for the embodiment shown in FIGS. 1 and 2, the bottom wall 14 of the container 10 is preferably concave in shape, so that a plurality of containers 10 can be stacked one upon another.

[0035] The rectangular shape of the container 10, in combination with the recesses 26a and 26b for gripping, enables the user to hold the container 10 with one hand, while using the scoop 32 with the other hand. The shape of the container 10 enables ease of access to the product during the act of removing the product from the container 10 by means of the scoop 32.

[0036] The shape of the container 10 enables the lid "L" to be securely fitted to the upper portions 16d, 18d, 20d, and 22d, of the front wall 16, the rear wall 18, the first side wall 20, and the second side wall 22, respectively, of the container 10.

[0037] Referring now to FIGS. 1, 4, and 11, a container-locking feature 52 associated with the lid "L" and the front wall 16 enables the lid "L" to be securely, robustly fitted to the edges of the upper portions 16d, 18d, 20d, and 22d, of the front wall 16, the rear wall 18, the first side wall 20, and the second side wall 22, respectively, of the container 10 over a range of the dimensional tolerances of the container 10. The container-locking feature 52 comprises a latch 54 having a tab or flap 56, a first edge 58a and a second edge 58b. A first bridge 60a and a second bridge 60b project from the first edge 58a and the second edge 58b of the latch 54, respectively. The first bridge 60a comprises a small stem 62a at one end of which is a knob 62b; the second bridge 60b comprises a small stem 64a at one end of which is a knob 64b. The knobs 62b and 64b and portions of the small stems 62a and 64a fit into small recesses (not shown) in the exterior surface "L_e" of the lid "L", which small recesses are congruent with the bridges 60a and 60b, and are prevented from being removed from the recesses (not shown) by friction, until the latch 54 is opened for the first time. The function of the bridges 60a and 60b is to indicate any tampering with the latch 54. Referring now to FIG. 11, the tab or flap 56 of the latch 54 is attached to the front wall 16 by a hinge 68, typically a living hinge, which connects the tab or flap 56 to an element 70 projecting from the exterior major surface 16b of the front wall 16. When the latch 54 is in a non-tampered state, the first bridge 60a and the second bridge 60b retain their integrity. Prior to being used, the tab or flap 56 is maintained in a closed position by gripping a keeper 72, which is formed into a recessed portion 74 of the exterior major surface 16b of the front wall 16. When the latch 54 is opened by rotating the tab or flap 56 from its initial unopened position to a second position away from the keeper 72, the pull force breaks the small stems 62a and 64a, thereby allowing the lid "L" of the container 10 to be lifted upwardly so that the lid "L" can be rotated about the hinge 24 (see FIG. 2) to enable the user to obtain access to the interior of the container 10. If the user finds that extremely little pulling force is required to break the small stems 62a and 64a of the bridges 60a and 60b, respectively, the consumer will suspect that tampering with the latch 54 has taken place. After the small stems 62a and 64a are broken, the knobs 62b and 64b help to retain the remaining portions of the broken bridges 60a and 60b in the recesses in the exterior surface "L_e" of the lid "L". In order to close the lid "L" of the container 10 after a given use, the lid "L" is rotated downwardly so that the edges of the lid "L" come into contact with the edges of the upper portions 16d, 18d, 20d, and 22d of the front wall 16, the rear wall 18, the first side wall 20, and the

second side wall 22, respectively, of the container 10, whereupon the tab or flap 56 of the latch 54 can grip the keeper 72 to maintain the container 10 in a closed position until the user desires to open the container 10 at a later time.

[0038] As shown in FIG. 1, a tamper-indicating seal 76 can be adhered to both the front wall 16 and the lid "L" of the container 10 to provide a visual indication as to whether the container 10 has been opened prior to being sold. In one embodiment, the tamper-indicating seal 76 comprises a backing 76a adhered to a layer of adhesive (not shown). The backing 76a can be a sheet of tearable paper or tearable polymeric material. The adhesive can be a moderately to highly aggressive adhesive. It is preferred that a score line or a line of perforations be present in the backing 76a of the tamper-indicating seal 76 at the line where the lid "L" meets the upper portion 16d of the front wall 16 of the container 10. An attempt to open the container 10 will result in tearing the backing 76a along the score line or the line of perforation, thereby indicating visually an unauthorized attempt to open or an actual opening of the container 10.

[0039] The dimensions of the container 10 and the components thereof are not critical. However, for the purpose of illustration, typical dimensions of the various components can be as follows:

[0040] Top wall 12 and bottom wall 14: 4 in. to 5 in.×5.5 in. to 6.5 in.

[0041] Front wall 16 and rear wall 18: 5.5 in. to 7.5 in.×5.5 in. to 6.5 in.

[0042] First side wall 20 and second side wall 22: 4 in. to 5 in.×5.5 in. to 7.5 in.

[0043] Volume of container 10: 23 oz. to 34 oz.

[0044] There are numerous methods of making the container 10 described herein. However, in order to facilitate mass production of containers having a variety of volumes, the container 10 can be assembled in the following manner. Referring now to FIGS. 4, 5, 6, 7, and 8, a tub-shaped receptacle 80 comprising the bottom wall 14, the lower portion 16e of the front wall 16, the lower portion 18e of the rear wall 18, the lower portion 20e of the first side wall 20, and the lower portion 22e of the second side wall 22 can be provided by a supplier. The lower portion 16e of the front wall 16, the lower portion 18e of the rear wall 18, the lower portion 20e of the first side wall 20, and the lower portion 22e of the second side wall 22 typically comprise about from about 60% to about 90% of the height of the aforementioned front wall 16, rear wall 18, first side wall 20, and second side wall 22, respectively.

[0045] An assembly 82 comprising a collar 84 and the lid "L" (alternatively referred to herein as "collar/lid assembly 82") can be provided by a supplier. The collar/lid assembly 82 comprises the top wall 12, the upper portion 16d of the front wall 16, the upper portion 18d of the rear wall 18, the upper portion 20d of the first side wall 20, and the upper portion 22d of the second side wall 22. The upper portion 16d of the front wall 16, the upper portion 18d of the rear wall 18, the upper portion 20d of the first side wall 20, and the upper portion 22d of the second side wall 22 typically comprise from about 10% to about 40% of the height of the front wall 16, rear wall 18, first side wall 20, and second side wall 22, respectively. The ratios for the lower portion 16e of the front wall 16, the lower portion 18e of the rear wall 18, the lower portion 20e of the first side wall 20, and the lower portion 22e of the second side wall 22 and the ratios for the upper portion 16d of the front wall 16, the upper portion 18d of the rear wall 18, the upper

portion **20d** of the first side wall **20**, and the upper portion **22d** of the second side wall **22** primarily depend upon the volume of the container **10**, which in turn depends upon the volume of the tub-shaped receptacle **80**. The size of the assembly of the collar/lid essentially **82** remains constant, but the volume of the tub-shaped receptacle **80** varies to provide containers of various volumes.

[0046] Each corner **84a**, **84b**, **84c**, and **84d** of the collar **84** has at least one guide fin **86a**, and preferably two guide fins **86a**, **86b**, to properly align the collar **84** with the tub-shaped receptacle **80**. The tub-shaped receptacle **80** is made up of the bottom wall **14** and those portions of the front wall **16**, the rear wall **18**, the first side wall **20**, and the second side wall **22** that are not made up of the upper portions **16d**, **18d**, **20d**, and **22d** of the front wall **16**, the rear wall **18**, the first side wall **20**, and the second side wall **22**, respectively, which upper portions **16d**, **18d**, **20d**, and **22d** make up the collar **84**. The collar **84** is joined to the tub-shaped receptacle **80** by aligning the guide fins **86a**, **86b** in each corner **84a**, **84b**, **84c**, and **84d** of the collar **84** with the corners **80a**, **80b**, **80c**, and **80d** located at the rim **88** of the tub-shaped receptacle **80** and press-fitting the collar **84** to the tub-shaped receptacle **80**. The guide fins **86a**, **86b** in each corner **84a**, **84b**, **84c**, and **84d** of the collar **84** snugly fit into a groove **90** running around the exterior periphery of the tub-shaped receptacle **80**. After the collar **84** is joined to the tub-shaped receptacle **80**, the tamper-indicating seal **76** is applied to the front wall **16** and the lid "L" of the container **10**.

[0047] The position of the substantially moisture-impervious, oxygen-impervious seal **28** inside of the container **10** is a matter of choice. In one embodiment, the substantially moisture-impervious, oxygen-impervious seal **28** can be applied directly to the rim **88** running around the periphery of the tub-shaped receptacle **80** by means of an adhesive, typically a heat-sealable adhesive. See FIG. **14**. In another embodiment, the seal **28** can be applied to the interior walls **16a**, **18a**, **20a**, and **22a** of the front wall **16**, the rear wall **18**, the first side wall **20**, and the second side wall **22**, respectively, of the container **10** at a position lower than the rim **88** running around the periphery of the tub-shaped receptacle **80** of the container **10**, such as, for example, at a point approximately midway or lower on the groove **90** that runs around the periphery of the tub-shaped receptacle **80**. This embodiment may call for custom attaching equipment, but may be desirable because movement of granular product into cracks and fissures between the tub-shaped receptacle **80** and the collar **84** can be reduced.

[0048] The use of a living hinge or a mechanical hinge for pivotally joining the lid "L" to the collar **84** is also a matter of choice. Referring now to FIGS. **2** and **3**, in one embodiment employing a mechanical hinge **100** (see FIG. **3**), pins can be molded into projections **102a**, **102b**, respectively, rising upwardly from the upper rear edge **104** of the collar **84**. These projections **102a**, **102b** can be molded so as to be flush with the exterior surface of the collar **84**. FIG. **3** shows the projection **102a** in greater detail. The projection **102a** has a pin **106a** formed thereon by molding. The projection **102b** also has a pin formed thereon by molding. While the pin on the projection **102b** is not shown, it is the mirror image of the pin **106a**. Sockets can be formed in the lid "L" to receive and retain the pins of the projections **102a**, **102b**. FIG. **3** shows the socket **108a** for receiving the pin **106a**. While the socket for receiving the pin of the projection **102b** is not shown, it is the mirror image of the socket **108a**. The lid "L" can be molded in such

a manner that the sockets are not visible from the exterior of the container **10**. In addition, the lid "L" can be molded in such a manner that recesses **110a**, **110b** are provided therein so that the pin-bearing projections **102a**, **102b** can be flush with the exterior surface of the lid "L". In addition, the shape of the rear edge **112** of the lid "L" and the shape of the upper rear edge **104** of the collar **84** can be designed in such a manner that when the lid "L" is fully opened, the lid "L" will be supported by the upper rear edge **104** of the collar **84** at a specified angle, such as, for example, 120° , so that the user can obtain access to the contents of the container **10** without being restricted by the presence of the lid "L". In the particular embodiment shown in FIG. **2**, two projections, each projection bearing a pin, and two sockets can be used.

[0049] The materials of the components of the container **10** are not critical. However, certain materials for the components of the container are preferred on account of, for example, such considerations as manufacturing considerations, economic considerations, and consumer considerations. The tub-shaped receptacle typically comprises a multiple-layer material, wherein the multiple-layer material comprises an inner layer, an outer layer and a regrind layer between the inner layer and the outer layer. Such a multiple layer-material is described in U.S. Patent Application Publication No. 2004/0161558, published Aug. 19, 2004, incorporated herein by reference. The assembly comprising the collar **84** and the lid "L" typically comprises a polymeric material, such as, for example, polypropylene, high-density polyethylene. The scoop typically comprises a polymeric material, such as, for example, polypropylene, high-density polyethylene.

Operation

[0050] The container **10** is opened by means of the latch **54** and the user retrieves the scoop **32** from the lid "L" of the container **10**. The substantially moisture-impervious, oxygen-impervious seal **28** is then removed from the container **10**. The user can then use the scoop **32** to remove a portion of the contents of the container. After the scoop **32** has been used, the scoop **32** can be reattached to the scoop holder **30** on the lid "L" for all subsequent times the scoop is to be used. Accordingly, the granular or powdered product will not be spilled, wasted, or contaminated by contact with the hand of the user.

[0051] Various modifications and alterations of this invention will become apparent to those skilled in the art without departing from the scope and spirit of this invention, and it should be understood that this invention is not to be unduly limited to the illustrative embodiments set forth herein.

What is claimed is:

1. A container comprising a top wall, a bottom wall, a front wall, a rear wall, a first side wall, a second side wall, said top wall and a portion of said front wall, a portion of said rear wall, a portion of said first side wall, and a portion of said second side wall forming a lid, said lid pivotally attached to said rear wall by a hinge, said front wall having at least one recess, said rear wall having at least one recess, said at least one recess of said front wall and said at least one recess of said rear wall being adjacent to said first side wall.
2. The container of claim 1, wherein the hinge is a living hinge.
3. The container of claim 1, wherein the hinge is a mechanical hinge.

4. The container of claim 1, wherein said front wall, said rear wall, said first side wall, and said second side wall of said container are formed from (a) an assembly comprising a collar and said lid and (b) a tub-shaped receptacle.

5. The container of claim 1, wherein said collar comprises a plurality of fins for aligning said collar with said tub-shaped receptacle, and said tub-shaped receptacle has a groove running around the periphery thereof to receive a projection running around the periphery of said collar.

6. The container of claim 1, further including a holder attached to the interior surface of said lid, said holder capable of retaining a scoop, said scoop having a bowl and a handle, said bowl of said scoop having a rim.

7. The container of claim 6, wherein said holder is capable of retaining said scoop by means of said bowl of said scoop.

8. The container of claim 6, wherein said holder comprises a pair of brackets, said pair of brackets holding said scoop by said bowl of said scoop.

9. The container of claim 8, wherein the brackets hold the scoop in such a manner that the contents of the container cannot enter the bowl of the scoop.

10. The container of claim 6, wherein the interior surface of said lid further includes a restraint for preventing said handle of said scoop from moving when said scoop is retained in said holder.

11. The container of claim 6, wherein the corners formed by the intersection of the bottom wall, the first side wall, the second side wall, the front wall, and the rear wall are congruent with the rim of the bowl of the scoop.

12. The container of claim 10, wherein the rim of the bowl of the scoop is rounded.

13. The container of claim 1, wherein the lid includes a tamper indicating latch and the front wall has a keeper for said latch.

14. The container of claim 1, wherein a tamper-indicating seal is attached to the lid and the front wall.

15. The container of claim 1, wherein the front wall has one recess and the rear wall has one recess.

16. The container of claim 15, wherein the at least one recess in the front wall has a second recess and the at least one recess in the rear wall has a second recess.

17. The container of claim 1, wherein the front wall has two recesses and the rear wall has two recesses, one of said two recesses of said front wall and one of said two recesses of said rear wall adjacent to said first side wall and the other said two recesses of said front wall and the other of said two recesses of said rear wall adjacent to said second side wall.

18. The container of claim 1, wherein at least a portion of the first side wall, at least a portion of the second side wall, at least a portion of the front wall, at least a portion of the rear wall, and the bottom wall are made of a multiple layer material.

19. The container of claim 1, wherein the bottom wall is concave and the top wall is convex, wherein the top wall of a given container fits snugly against the bottom wall of a like container.

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