

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 November 2007 (29.11.2007)

PCT

(10) International Publication Number
WO 2007/137109 A2

(51) International Patent Classification:
B65D 85/00 (2006.01)

(21) International Application Number:
PCT/US2007/069119

(22) International Filing Date: 17 May 2007 (17.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/801,852 19 May 2006 (19.05.2006) US
11/749,483 16 May 2007 (16.05.2007) US

(71) Applicant (for all designated States except US): **INOVAR PACKAGING GROUP, LLC** [US/US]; 602 Magic Mile Street, Arlington, TX 76011-5108 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COOPER, Gary, W.** [US/US]; 3408 Moneta Ct., Arlington, TX 76001 (US). **NICHOLSON, Benjamin** [US/US]; 1122 Western Blvd., Arlington, TX 76013 (US). **SULLINS, Patrick, H.** [US/US]; 4704 El Brevo Ct., Arlington, TX 76017 (US). **SUTTON, Brett, A.** [US/US]; 1218 Mockingbird Land, Arlington, TX 76013 (US).

(74) Agents: **BECKER, Jeffrey, M.** et al.; Haynes And Boone, Llp, 301 Main Street, Suite 3100, Dallas, TX 75202 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTAINER FOR DISPENSING MATERIAL FROM A ROLL

(57) Abstract: A container for dispensing material from a roll is described.

WO 2007/137109 A2

CONTAINER FOR DISPENSING MATERIAL FROM A ROLL

Cross Reference to Related Applications

5 This application claims the benefit of the filing date of U.S. provisional patent application serial number 60/801,852, attorney docket number 36152.4, filed on May 19, 2006 and U.S. patent application serial number 11/749,483, attorney docket number 36152.9, filed on May 16, 2007, the disclosures of which are incorporated herein by reference.

10 This application is related to the following applications: (1) U.S. provisional patent application serial number 60/801,852, attorney docket number 36152.4, filed on May 19, 2006; (2) U.S. patent application no. 29/260,121, attorney docket number 36152.8, filed on May 19, 2006; and (3) U.S. patent application no. 29/272,704, attorney docket number 36152.11, filed on February 15, 2007, the disclosures of which are incorporated herein by reference.

Background

15 The present disclosure relates in general to containers and in particular to containers for storing one or more rolls comprising a material wound on a core, and dispensing the material from the roll.

Summary

20 According to one aspect of the present disclosure, a container is provided that includes a cavity defined by a top member and a bottom member, which top member and bottom member are attached for pivotal movement about an axis; wherein the bottom member comprises first and second walls extending generally parallel to the axis; and a shelf extending from the second wall in a plane generally perpendicular to the second wall and generally parallel to the axis; wherein the
25 top member comprises a lip extending over a portion of the shelf; and at least one divider disposed within the cavity and extending between the first and second walls generally perpendicular to the axis, and comprising a projection extending from the divider over at least a portion of the shelf and comprising a top edge in contact with at least a portion of the lip.

30 According to another aspect of the present disclosure, a kit is provided that includes a container comprising a cavity defined by a top member and a bottom member, which top member and bottom member are attached for pivotal movement about an axis; wherein the bottom member comprises first and second walls extending generally parallel to the axis; and a shelf extending from the second wall in a plane generally perpendicular to the second wall and generally parallel to the axis; wherein the top member comprises a lip extending over a portion of the shelf; and at least one

divider comprising at least one spindle extending from the divider; and a projection extending from the divider, wherein the projection comprises a top edge; and a bottom edge; wherein the at least one divider is adapted for disposal within the cavity such that the at least one divider extends between the first and second walls generally perpendicular to the axis, and wherein the projection is adapted to extend from the divider over at least a portion of the shelf, and the adaptation is such that the top edge is in contact with at least a portion of the lip, and the bottom edge is in contact with the shelf.

According to another aspect of the present disclosure, a method is provided that includes providing a container comprising a base and a lid coupled thereto; removably engaging a first roll of material with a first divider; removably engaging the first divider with the base; and dispensing material from the first roll of material after removably engaging the first roll of material with the first divider and removably engaging the first divider with the base.

According to another aspect of the present disclosure, a container for dispensing material from a roll comprising a core defining an internal passage is provided that includes a base; a lid coupled to the base; a first divider removably engaged with the base, the first divider comprising a wall; and at least one spindle extending from the wall and adapted to extend in the internal passage defined by the core of the roll.

According to another aspect of the present disclosure, a system is provided that includes means for providing a container comprising a base and a lid coupled thereto; means for removably engaging a first roll of material with a first divider; means for removably engaging the first divider with the base; and means for dispensing material from the first roll of material after removably engaging the first roll of material with the first divider and removably engaging the first divider with the base.

Brief Description of the Drawings

The disclosure can be more clearly understood by reference to the following drawings, which illustrate exemplary embodiments thereof, and which are not intended to limit the scope of the appended claims.

Fig. 1 is a perspective view of the front of an exemplary embodiment of a container.

Fig. 2 is a perspective view of the back of the container illustrated in Fig. 1.

Fig. 3 is a perspective view of the container illustrated in Fig. 1, in an open position.

Fig. 4a is a sectional view of the container illustrated in Fig. 1, taken along line 3-3 in Fig. 1.

Fig. 4b is a view similar to that of Fig. 4a, but depicting a roll stored in the container.

Fig. 5 is a perspective view of the container illustrated in Fig. 1, in an open position and with dividers according to an exemplary embodiment disposed therein.

Figs. 6a and 6b are perspective views of exemplary embodiments of dividers suitable for use with the container illustrated in Fig. 1.

5 Fig. 7 is a perspective view of an alternate embodiment of the container illustrated in Fig. 2.

Fig. 8 is a perspective cut-away view of additional optional features of a container as described herein.

Fig. 9 is a perspective view of a container according to yet another exemplary embodiment, the container including a base and a lid hingedly coupled thereto.

10 Fig. 10 is another perspective view of the container of Fig. 9.

Fig. 11 is a partially-exploded perspective view of the container of Fig. 9, depicting the container in an open position with a plurality of dividers disposed therein.

Fig. 12 is an elevational view of one of the dividers of Fig. 11.

Fig. 13 is a sectional view of the container of Fig. 9 taken along line 13-13.

15 Fig. 14 is a view similar to that of Fig. 11, but depicting rolls engaged with respective ones of the dividers.

Fig. 15 is a view similar to that of Fig. 13, but depicting a roll disposed in the container.

Fig. 16 is a view similar to that of Fig. 14, but depicting differently-sized rolls engaged with respective pairs of the dividers.

20 Fig. 17 is a perspective view of a divider according to another exemplary embodiment.

The disclosure can be more clearly understood by reference to some of its exemplary embodiments, described in detail below, which description is not intended to limit the scope of the claims in any way.

25 Detailed Description

In an exemplary embodiment, as illustrated in Figs. 1 – 5, a container 10 has a top member 12 pivotally connected to a bottom member 14 about an axis **a**. The top member 12 and the bottom member 14 pivot about axis **a** such that the container 10 can be opened (as illustrated in Figs. 3 and 5) and closed (as illustrated in Figs. 1 and 2). In the closed position, the top member 12 and the bottom member 14 define a cavity 18 for storing rolls 52.

30 In the exemplary embodiment illustrated in Figs. 1 – 5, the cavity 18 is generally cylindrically shaped, and the top member 12 and the bottom member 14 are pivotally connected by hinges 16a and 16b.

In an exemplary embodiment, as illustrated in Fig. 3, the bottom member 14 includes a body 30 having a front 31 and a generally semi-cylindrically-shaped inner surface 32. In other embodiments, the inner surface of the body 30 could be other than semi-cylindrical. The body 30 further includes a first wall 34 and a second wall 36, each of which extends longitudinally parallel to the axis **a**, and which define facing sides of the bottom member 14. Third wall 33 and fourth wall 35 extend between the first and second walls 34, 36 perpendicular to the axis **a**, and define enclosing sides of the bottom member 14. A shelf 46 extends between the second wall 36 and the front 31 of the body 30, in a plane perpendicular to the second wall 36, and parallel to the axis **a**.

The walls 34 and 36 have a plurality of extensions 38 and 40, respectively, defined thereon. Adjacent extensions on each of the first and second walls 34, 36 form a plurality of grooves 42 and 44, respectively. The extensions 38 and 40 are positioned on their respective walls so as to define pairs of corresponding facing grooves. The extensions 38 formed on the wall that is proximal to hinges 16a and 16b (which in the embodiment illustrated in Fig. 3 is the first wall 34) have a curvature that corresponds with the cylindrical shape of the cavity 18. The extensions 40 formed on the wall that is distal to hinges 16a and 16b (which in the embodiment illustrated in Fig. 3 is the second wall 36) are also curved to correspond with the cylindrical shape of the cavity 18. In addition, the extensions 40 extend over at least a portion of the shelf 46 so as to define a rounded edge 41 thereon. In embodiments where the cavity 18 has a shape other than cylindrical, the extensions 38 and 40 will be shaped so as to facilitate the rotational movement needed to pull material from one or more of the rolls 52.

Each wall 33 and 35 has a ridge 51a and 51b, respectively, extending upwardly therefrom, and outwardly over a portion of the shelf 46. Each ridge 51a and 51b has a top rim 53a and 53b, respectively, and terminates over a portion of the shelf 46 at a front face 55a and 55b, respectively. The front faces 55a and 55b span a gap 50 between the shelf 46 and a lip 22 of the top member 12, which are described further herein. Also, the ridges 51a and 51b support the rolls 52 stored in the container 10 in a manner similar to that which will be described with respect to Figs. 4a and 4b.

The top member 12 includes a body 20 and a lip 22, which extends from the body 20 over a portion of the shelf 46, and terminates at an edge 23 that is spaced apart from the shelf so as to define a gap 50 between the lip 22 and the shelf 46. As illustrated in Fig. 4b, when a roll 52 is stored in the container 10, material can be dispensed from the roll through the gap 50.

In the embodiment illustrated in Figs. 1 – 5, the body 20 of the top member 12 has generally semi-cylindrically shaped inner and outer surfaces, and the lip 22 is generally fillet-shaped, extending generally parallel to the axis **a**. The inner surface of the body 20 defines an upper part of

cavity 18 in the container 10. In other embodiments, one or both of the inner and outer surfaces of the body 20 could be other than semi-cylindrical.

The top member 12 also includes tabs 24a and 24b, which are pivotally connected to the top member 12 about parallel axes perpendicular to the axis **a**. In the embodiment illustrated in Figs. 1 – 5, the tabs 24a and 24b are attached to the outer surface of the top member 12 by hinges 26a and 26b. Each of the tabs 24a and 24b includes a lip 28 located on the bottom of the tabs.

Referring again to Fig. 3, the bottom member 14 includes locks 48a and 48b, which are attached to the bottom member 14 in a position so as to engage the respective lips 28 of the tabs 24a and 24b when the container 10 is in a closed position. Engaging the lips 28 with the locks 48a and 48b generally prevents the opening of the container 10. In other embodiments, the tabs 24a and 24b are attached to the bottom member 14 of the container 10, and the locks 48a and 48b are attached to the top member 12. According to such an embodiment, the lips 28 would be positioned on the top of the tabs 24a and 24b. The tabs 24a and 24b, the lips 28, and the locks 48a and 48b provide a simple and easy means for opening the container 10 so that rolls stored therein can be replaced, and for preventing the container 10 from opening unexpectedly and spilling the rolls stored therein. Other suitable means could include Velcro closure or snap closure.

Referring now to Figs. 4a, 4b and 5, at least one divider 54 is disposed within the cavity 18. The divider 54 has a first edge 57 and a second edge 58, which are removably engaged within corresponding facing grooves 42 and 44, respectively. The divider 54 has at least one spindle or axle 56 positioned thereon so as to extend from the divider 54 in a direction that is generally parallel to the axis **a**. As illustrated in Fig. 4b, a roll 52 is positioned on the axle 56. In an embodiment where the inner surface of the bottom member 14 has a shape that would interfere with the rotation of the roll about the axle 56 that occurs when material is dispensed from the roll, the axle 56 is positioned on divider 54 such that roll 52 does not contact the inner surface. In the embodiment illustrated in Figs. 1 – 5, in which the inner surface of the bottom member has a generally semi-cylindrical shape, contact between the roll and the inner surface is acceptable, but the axle 56 is located on the divider 54 so that such contact is minimal or non-existent may be preferred.

The divider 54 can have any shape that could be accommodated by the physical dimensions of the container 10. In several exemplary embodiments, a plurality of rolls will be stored in the container 10, and held in place therein by a plurality of the dividers. According to some such embodiments, the dividers have a shape so as to maintain separation between the rolls, and to support the sides of the rolls.

The axle 56 helps to hold the roll 52 in place within the container 10 such that movement of the roll 52 is substantially limited to the rotation of the roll 52 about the axle 56, which rotation occurs as material is dispensed from the roll. Dispensing material from the roll 52 can cause the core of the roll 52 to migrate or move such that the material dispensed from one roll 52 is
5 dispensed along a path that intersects with the path of material being dispensed from another roll 52 in the container 10, thereby causing the material to jam. The axle 56 reduces the potential for such jamming by holding the respective roll 52 in place.

In addition, it is noted that rolls comprised of material wound on a core that does not have supporting sides such as, for example, a roll of adhesive labels, tend to shift forward when a user
10 pulls the material through the gap in the container. This forward shifting of the roll causes the roll to jam against the inside of the container. As material is dispensed from the roll, the diameter of the roll decreases, and the jamming problems tend to increase. The axle 56 reduces the tendency of the roll 52 to shift forward, thereby reducing the potential for jamming.

In another embodiment of the container 10, the divider 54 does not have an axle 56. Such
15 an embodiment would be particularly useful with rolls comprising material wound on a core with supporting sides, such as a spool. For example, a spool of ribbon may be placed in a container such as the container 10, and the supporting sides on the spool would serve to keep the roll from shifting forward inside the container, generally achieving the same result that the axle 56 achieves for rolls without supporting sides.

An additional effect of the axle 56 is to reduce movement of a roll when container 10 is in a
20 position that would dispense material in a direction other than generally parallel with respect to the ground. For example, if the container is mounted on a wall such that material dispensed therefrom would be dispensed in a direction generally perpendicular with respect to the ground, the axle 56 helps to hold the rolls in place within the container, even when the container is in an open position.
25 As another example, if an open container fell from a countertop, the axle 56 helps to hold the rolls in place within the container.

Because the divider 54 is removably engaged within grooves 42, 44, the divider 54 can be removed from the cavity 18 by simply pulling it out. Thus, when a roll of material needs to be replaced or refilled, the divider holding that roll can be removed and the roll replaced, without the
30 need to remove any other rolls held in the container.

In addition, the divider 54 can be positioned within any pair of corresponding grooves 42 and 44 within the cavity 18, and therefore the container 10 can be configured to store rolls in a variety of sizes. In one embodiment, the shelf 46 may have markings 47, which are spaced so as to guide placement of a divider 54 for accommodating a roll of a certain size.

The divider 54 has a projection 60 extending from the second edge 58 over at least a portion of the shelf 46. The projection 60 has a top edge 70, a bottom edge 72 and a facing edge 74.

5 The top edge 70 is proximate or in contact with at least a portion of the top member lip 22 proximal to the terminal edge 23 of the lip 22. In several exemplary embodiments, the top edge 70 may be proximate or in contact with the terminal edge 23, and/or the lip 22. The bottom edge 72 is in contact with the shelf 46.

10 The facing edge 74 terminates proximal to the terminal edge 23 of the lip 22, and in some embodiments, may terminate so as to be in contact with the terminal edge 23. The facing edge 74 has a lower portion that spans the gap 50 between the shelf 46 and the lip 22, and therefore defines one side of a portal in the gap 50. The other side of the portal can be defined by any of ridge 51a, ridge 51b, or the facing edge 74 of an adjacent divider 54. The portal serves to guide material being dispensed from the container 10 through the gap 50.

15 In addition, the extension of the ridges 51a, 51b and the projection 60 over at least a portion of the shelf 46, and the spanning of the front faces 55a and 55b, and the facing edge 74 between the shelf 46 and the lip 22, prevents material from being dispensed through the gap 50 in an area other than the defined portal. For example, in an embodiment where a plurality of rolls are being stored in the container 10, it could be desirable to dispense material from one roll without interference from adjacent roll(s), and to prevent material being dispensed through a portal in gap 20 50 from becoming intertwined with material being dispensed through an adjacent portal. According to such an embodiment, the top, bottom and facing edges of the projection 60 operate to keep the material in its corresponding portal, and prevent the material from crossing over into an adjacent portal.

25 Figs. 6a and 6b illustrate exemplary configurations for the dividers 54. In Figs. 6a and 6b, each of dividers 64a and 64b have a first edge 66a and 66b, a second edge 68a and 68b, and projections 100a and 100b, respectively. The projections 100a and 100b each have a top edge 80a, 80b, a bottom edge, 82a, 82b, and a facing edge 84a, 84b, respectively.

30 The divider 64a has spindles or axles 62a and 63 positioned on opposing sides thereof so as to extend from the divider 64a in a direction that would be generally parallel with respect to the axis **a** of a container. The divider 64b has a spindle or axle 62b positioned thereon so as to extend from the divider 64b in a direction that would be generally parallel with respect to the axis **a** of a container.

The container 10 can be sized and provided with the grooves 42 and 44 so as to accommodate a plurality of dividers 54 for a varying numbers of rolls and a variety of sizes. For example, seven rolls of labels, each label bearing a day of the week, could be accommodated in the container 10 with a divider configuration comprising five one-axle dividers, such as illustrated in Fig. 6b, and one two-axle divider, such as illustrated in Fig. 6a.

The container 10 can be mounted on a wall, cabinet, or any vertical surface by a variety of methods. One suitable method is illustrated in Fig. 7. As illustrated in Fig. 7, the container 10 further comprises mounting means 90a and 90b, which are spaced longitudinally along axis **a**. In the embodiment illustrated in Fig. 7, the mounting means 90a and 90b could be referred to as slotted tabs. The mounting means 90a and 90b can be located on either the top member 12 or the bottom member 14. Using the mounting means 90a and 90b, the container 10 can be hung on a wall, cabinet, or any vertical surface with nails, hooks, pegs and the like.

Referring now to Fig. 8, another suitable method for mounting the container 10 is illustrated. According to the embodiment illustrated in Fig. 8, the inner surface of the bottom member body 30 comprises mounting means 92, which in the embodiment illustrated in Fig. 8 could be referred to as slots. Using the mounting means 92, the container 10 can be hung on a wall, cabinet, or any vertical surface with nails, hooks, pegs and/or the like.

The container 10 can also be simply carried from one work station to another work station or area. Fig. 8 also illustrates features for such an embodiment. As illustrated in Fig. 8, the bottom member 14 comprises frictional areas 94 on its bottom surface. The frictional areas 94 provide traction so that if the container 10 is placed on a table, counter top, or other flat work space, the potential for the container 10 to slide or move around is minimized.

In an exemplary embodiment, as illustrated in Figs. 9, 10, 11, 12 and 13, a container is generally referred to by the reference numeral 102 and includes a bottom member or base 104 and a top member or lid 106 hingedly coupled thereto via axially-aligned hinges 108a, 108b and 108c. The lid 106 is pivotable about the hinges 108a, 108b and 108c so as to place the container 102 in either an open position, which is shown in Fig. 11, or a closed position, which is shown in Figs. 9, 10 and 13.

The base 104 includes walls 104a and 104b, and parallel-spaced walls 104c and 104d extending between corresponding ends of the walls 104a and 104b, respectively, so that the walls 104a, 104b, 104c and 104d generally form a four-sided open box. A pair of generally coplanar walls or shelves 104e and 104f extend from corresponding edges of the walls 104a and 104b, respectively. A pair of parallel-spaced walls 104g and 104h extend within the open box generally formed by the walls 104a, 104b, 104c and 104d, and are generally parallel to the wall 104b. A

round 104i extends between the shelf 104e and the wall 104g, and a round 104j extends between the shelf 104f and the wall 104h. Generally coplanar walls or shelves 104k and 104l extend within the open box generally formed by the walls 104a, 104b, 104c and 104d, and are generally parallel to the shelves 104e and 104f. A fillet 104m extends between the wall 104g and the shelf 104k, and
5 a fillet 104n extends between the wall 104h and the shelf 104l. An arcuate wall 104o extends between the shelves 104k and 104l.

A plurality of parallel-spaced ribs 104p extend between the walls 104a and 104b, and are parallel to the walls 104c and 104d. Protrusions 104q and 104r having keyhole slots 104qa and 104ra, respectively, formed therein extend from the arcuate wall 104o. Tabs 104s and 104t having
10 through-holes 104sa and 104ta, respectively, extend from wall 104b and are generally aligned with the hinges 108a, 108b and 108c. Tubular protrusions 104u and 104v defining internal passages 104ua and 104va, respectively, and including protrusions 104ub and 104vb, respectively, extending within the passages 104ua and 104va, respectively, extend from the arcuate wall 104o and the shelves 104k and 104l, respectively. The tubular protrusions 104u and 104v are aligned along one
15 of the ribs 104p. The base 104 further includes tubular protrusions 104w and 104x, which are aligned along another of the ribs 104p. The tubular protrusions 104w and 104x are aligned with, and substantially similar to, the tubular protrusions 104u and 104v, respectively, and therefore will not be described in further detail.

A plurality of extensions or fins 104y extend from the shelf 104e, the round 104i, the fillet 104m and the shelf 104k, and adjacent fins 104y define a plurality of grooves 104z. Similarly, a
20 plurality of extensions or fins 104aa extend from the shelf 104f, the round 104j, the fillet 104n and the shelf 104l, and adjacent fins 104aa define a plurality of grooves 104bb. The fins 104y and 104aa are positioned so as to define pairs of corresponding facing grooves 104z and 104bb, one pair of which is shown in Fig. 13. A lip 104cc extends from, and along, the walls 104c, 104b and 104d, and includes a pair of opposing upside-down-L-shaped protrusions 104dd, one of which is
25 shown in Figs. 9, 10 and 11.

The lid 106 includes parallel-spaced side walls 106a and 106b, and an arcuate wall 106c extending therebetween. A generally fillet-shaped lip 106d extends from one side of the arcuate wall 106c and between corresponding ends of the side walls 106a and 106b, and a generally fillet-
30 shaped lip 106e extends from the other side of the arcuate wall 106c and between the corresponding other ends of the side walls 106a and 106b. A wall 106f extends downward from an edge of the lip 106d, and a wall 106g extends downward from an edge of the lip 106e. Tabs 106h and 106i are hingedly connected to the walls 106a and 106b, respectively, and include snap-fit protrusions 106ha and 106ia extending from the inside surfaces thereof, respectively. A recess

106j is formed in the outside surface of the arcuate wall 106c and is adapted to, for example, receive a label and/or an embossing to identify the container 102 and/or one or more of the contents therein.

When the container 102 is in the closed position, as illustrated in Figs. 9, 10 and 13, a generally cylindrically-shaped cavity 109 is generally defined by the respective inside surfaces of the arcuate wall 104o of the base 104 and the arcuate wall 106c of the lid 106.

Tubular bodies 110aa and 110ba of suction cups 110a and 110b, respectively, are received within the passages 104ua and 104va, respectively, of the tubular protrusions 104u and 104v, respectively, of the base 104. The suction cups 110a and 110b further include cupped heads 110ab and 110bb, respectively, from which the tubular bodies 110aa and 110ba, respectively, extend, and tubular portions 110ac and 110bc, respectively, extending within the bodies 110aa and 110ab, respectively, and within which the protrusions 104ub and 104uv, respectively, of the base 104 extend. As a result, the suction cups 110a and 110b are coupled to the tubular protrusions 104u and 104v, respectively, of the base 104.

Suction cups 110c and 110d are coupled to the tubular protrusions 104w and 104x, respectively, of the base 104. The suction cups 110c and 110d are substantially similar to the suction cups 110a and 110b, respectively, and therefore neither the suction cups 110c and 110d, nor the couplings between the tubular protrusions 104w and 104x and the suction cups 110c and 110d, respectively, will be described in further detail.

The container 102 further includes dividers 112a, 112b, 112c, 112d, 112e, 112f and 112g, which are generally spaced in a parallel relation and supported by the base 104, and which are disposed within the cavity 109 when the container 102 is in the closed position.

The divider 112a includes a vertically-extending wall 112aa and a generally cylindrical axle or spindle 112ab extending from one side of the wall 112aa. As shown in Fig. 12, the divider 112a is symmetric about a plane 113 that is perpendicular to the wall 112aa and passes through the center of the spindle 112ab. The wall 112aa defines symmetric end portions 112ac and 112ad in which symmetric notches 112ae and 112af, respectively, are formed. The end portion 112ac defines a contour 112aca that generally matches the contour defined by each of the grooves 104z of the base 104, that is, the contour defined by the shelf 104e, the round 104i, the fillet 104m and the shelf 104k of the base 104. Similarly, the end portion 112ad defines a contour 112ada that generally matches the contour defined by each of the grooves 104aa of the base 104, that is, the contour defined by the shelf 104f, the round 104j, the fillet 104n and the shelf 104l of the base 104. The notches 112ae and 112af define corner portions 112ag and 112ah, respectively.

The dividers 112b, 112c, 112d, 112e, 112f and 112g are substantially similar to the divider 112a and therefore the dividers 112b, 112c, 112d, 112e, 112f and 112g will not be described in detail. Reference numerals used to refer to features of the dividers 112b, 112c, 112d, 112e, 112f and 112g will correspond to the reference numerals for the divider 112a, except that the prefix for the reference numerals used to describe the divider 112a, that is, 112a, will be replaced with the numeric prefix of the applicable divider 112b, 112c, 112d, 112e, 112f or 112g, that is, 112b, 112c, 112d, 112e, 112f or 112g.

As noted above, the divider 112a is supported by the base 104. More particularly, and as shown in Fig. 13, the end portions 112ac and 112ad are received within corresponding facing grooves 104z and 104bb. The contour 112aca permits at least a portion and/or edge of the end portion 112ac to contact or engage the shelf 104e and/or the shelf 104k, and the contour 112ada permits at least a portion and/or edge of the end portion 112ad to contact or engage the shelf 104f and/or the shelf 104l. As a result, the spindle 112ab of the divider 112a extends in a direction that is generally parallel to the axis along which the hinges 108a, 108b and 108c are aligned. The arrangement of each of the dividers 112b, 112c, 112d, 112e, 112f and 112g in the container 102 is substantially similar to the arrangement of the divider 112a in the container 102. Therefore, the respective arrangements of the dividers 112b, 112c, 112d, 112e, 112f and 112g in the container 102 will not be described in detail.

In an exemplary embodiment, as illustrated in Fig. 13, when the container 102 is in the closed position, a gap 114 is defined between the shelf 104e of the base 104 and the distal end of the wall 106f, and the wall 106f extends into the notches 112ae, 112be, 112ce, 112de, 112ee, 112fe and 112ge of the dividers 112a, 112b, 112c, 112d, 112e, 112f and 112g, respectively. The corner portions 112ag, 112bg, 112cg, 112dg, 112eg, 112fg and 112gg of the dividers 112a, 112b, 112c, 112d, 112e, 112f and 112g, respectively, and/or one or more edges or portions of the respective dividers proximate or at the respective corner portions, contact the inside surface of the lid 106 at or near the interface between the wall 106f and the lip 106d. In an exemplary embodiment, the distal end of the wall 106f extends into the notches 112ae, 112be, 112ce, 112de, 112ee, 112fe and 112ge, and rests against portions of the end portions 112ac, 112bc, 112cc, 112dc, 112ec, 112fc and 112gc defined by the notches 112ae, 112be, 112ce, 112de, 112ee, 112fe and 112ge, respectively, of the dividers 112a, 112b, 112c, 112d, 112e, 112f and 112g, respectively.

In an exemplary embodiment, as illustrated in Figs. 14 and 15, rolls 116a, 116b, 116c, 116d, 116e, 116f and 116g are disposed in the container 102 and removably engaged with, and supported by, the dividers 112a, 112b, 112c, 112d, 112e, 112f and 112g, respectively.

In an exemplary embodiment, as illustrated in Fig. 15, the roll 116a includes material 116aa, which is wound around a core 116ab defining an internal passage 116aba. The spindle 112ab of the divider 112a extends within the internal passage 116aba of the core 116ab of the roll 116a, thereby contacting the core 116ab and supporting the roll 116a within the container 102. As a result of its support by the divider 112a, the roll 116a is generally suspended within the generally cylindrically-shaped cavity 109. An end 116aaa of the material 116aa of the roll 116a extends from the remainder of the material 116aa and over the shelf 104e of the base 104. When the container 102 is in the closed position, as shown in Fig. 15, the end 116aaa of the material 116aa extends through the gap 114 defined between the end of the wall 106f of the lid 106 and the shelf 104e of the base 104. In an exemplary embodiment, the roll 116a abuts the wall 112aa of the divider 112a.

The rolls 116b, 116c, 116d, 116e, 116f and 116g are substantially similar to the roll 116a and therefore the rolls 116b, 116c, 116d, 116e, 116f and 116g will not be described in detail. Reference numerals used to refer to features of the rolls 116b, 116c, 116d, 116e, 116f and 116g will correspond to the reference numerals for the roll 116a, except that the prefix for the reference numerals used to describe the roll 116a, that is, 116a, will be replaced with the numeric prefix of the applicable roll 116b, 116c, 116d, 116e, 116f or 116g, that is, 116b, 116c, 116d, 116e, 116f or 116g.

The rolls 116b, 116c, 116d, 116e, 116f and 116g are disposed within the container 102 and supported by the dividers 112b, 112c, 112d, 112e, 112f and 112g, respectively, in a manner substantially similar to the manner in which the roll 116a is disposed within the container 102 and supported by the divider 112a.

In an exemplary embodiment, the container 102 may be installed by hanging the container 102 against a wall by inserting fasteners through the holes 104sa and 104ta of the tabs 104s and 104t, respectively; in an exemplary embodiment, the container 102 may be hung and pressed against the wall so that the suction cups 110a, 110b, 110c and 110d operate to resist relative movement between the container 102 and the wall. In an exemplary embodiment, the container 102 may be installed by placing the container 102 on a flat, horizontal surface; in an exemplary embodiment, the container 102 may be pressed against the horizontal surface so that the suction cups 110a, 110b, 110c and 110d operate to resist relative movement between the container 102 and the horizontal surface. In an exemplary embodiment, the container 102 may be installed by engaging the keyhole slots 104qa and 104ra with fasteners or protrusions extending from a wall or surface; in an exemplary embodiment, the container may be pressed against the wall or surface so that the suction cups 110a, 110b, 110c and 110d operate to resist relative movement between the container 102 and the wall or surface. In an exemplary embodiment, the container 102 may be

hung from peg board using the tabs 104s and 104t, and/or the keyhole slots 104qa and 104ra. In an exemplary embodiment, the container 102 may be installed on a shelf.

In an exemplary embodiment, after the rolls 116a, 116b, 116c, 116d, 116e, 116f and 116g are disposed within the container 102 as described above, the container 102 is placed in the closed position by closing the lid 106 and engaging the snap-fit protrusions 106ha and 106ia of the lid 106 with the respective L-shaped protrusions 104dd of the base 104, thereby forming snap-fit engagements to secure the lid 106 in place. As a result, the material ends 116aaa, 116baa, 116caa, 116daa, 116eaa, 116faa and 116gaa extend through the gap 114 to permit the dispensing of the material 116aa, 116ba, 116ca, 116da, 116ea, 116fa and 116ga, respectively.

In operation, in an exemplary embodiment and as illustrated in Fig. 15, the material 116aa is dispensed from the roll 116a by pulling on the end 116aaa of the material 116aa. In response, the roll 116a rotates in place about the spindle 112ab. Since the roll 116a extends within the cavity 109 and is suspended by the divider 112a, the other parts of the container 102 do not interfere with the rotation of the roll 116a and thus do not interfere with the dispensing of the material 116aa.

During operation, in an exemplary embodiment, the lid 106 and the base 104, and the secure engagement therebetween, protect the roll 116a from damage such as, for example, physical damage, and/or exposure to contaminants and/or messes associated with kitchens and/or food-preparation activities.

During operation, in an exemplary embodiment, the spindle 112ab helps to hold the roll 116a in place within the container 102 such that movement of the roll 116a is substantially limited to the rotation of the roll 116a about the spindle 112ab, which rotation occurs as the material 116aa is dispensed from the roll 116a, as noted above. Since the spindle 112ab generally holds the roll 116a in place, the potential for jamming, and/or interference with adjacent roll 116b, is reduced.

During operation, in an exemplary embodiment, any movement of the material 116aa, including the end 116aaa, in a direction generally transverse to the dispensing direction and along the shelf 104e of the base 104, is limited to the portion of the gap 114 extending between the wall 106h of the lid 106 and the wall 112aa of the divider 112a. That is, the material 116aa, as it is being dispensed from the roll 116a, is prevented from sliding along the shelf 104e by the wall 106h of the lid 106 and the wall 112aa of the divider 112a. Moreover, the above-described contact between the inside surface of the lid 106, and the corner portion 112ag of the divider 112a and/or a portion of the divider 112a near the corner portion 112ag, prevents, or at least resists, the material 116aa from sliding over the divider 112a and into the portion of the gap 114 that extends between the divider 112a and the divider 112b. As a result, the potential for any interference between,

and/or jamming of, the rolls 116a and 116b is further reduced, thereby further facilitating the dispensing of the material 116aa from the roll 116a.

An additional effect of the spindle 112ab is to reduce the movement of the roll 116a when the container 102 is in a position that would dispense material in a direction other than generally parallel with respect to the ground. For example, if the container 102 is mounted on a wall such that the material 116aa is dispensed in a direction generally perpendicular with respect to the ground, the spindle 112ab helps to hold the roll 116a in place within the container 102, even when the container 102 is in the open position. As another example, if the container 102 falls from a countertop, the spindle 112ab helps to hold the roll 116a in place within the container 102, regardless of whether the container 102 is in the open or closed position.

Because the divider 112a is removably engaged within corresponding facing grooves 104z and 104bb, the divider 112a can be removed from the cavity 109 by simply pulling it out of the base 104. Thus, when the roll 116a needs to be replaced or refilled with additional material, the divider 112a and the roll 116a can be removed together and the roll 116a can then be replaced with another roll, without the need to remove any other of the rolls 116b, 116c, 116d, 116e, 116f and 116g held in the container 102.

The roll 116b is held in place by the spindle 112bb of the divider 112b, and the walls 112aa and 112ba of the dividers 112a and 112b, respectively, prevent any appreciable movement and/or migration of the material 116ba of the roll 116b, including the end 116baa of the material, in a manner substantially similar to the above-described manner in which the wall 106a and the wall 112aa prevent and/or limit any appreciable movement and/or migration of the material 116aa of the roll 116a. Similarly, the rolls 116c, 116d, 116e, 116f and 116g are held in place by the spindles 112cb, 112db, 112eb, 112fb and 112gb, respectively, and appreciable movement of the respective materials of these rolls are prevented by the walls 112ba and 112ca, the walls 112ca and 112da, the walls 112da and 112ea, the walls 112ea and 112fa, and the walls 112fa and 112ga, respectively, in a manner substantially similar to the manner in which the walls 112aa and 112ba prevent and/or limit any appreciable movement and/or migration of the material 116ba of the roll 116a.

The operation of the container 102 with respect to each of the rolls 116b, 116c, 116d, 116e, 116f and 116g is substantially similar to the above-described operation of the container 102 with respect to the roll 116a, and therefore will not be described in detail.

In several exemplary embodiments, the container 102 may be configured to hold a wide variety of rolls of material having a wide variety of sizes by, for example, adding additional dividers

to hold smaller-sized rolls of materials, and/or removing dividers in order to hold larger-sized rolls of materials.

In an exemplary embodiment, each of the rolls 116a, 116b, 116c, 116d, 116e, 116f and 116g is 2 inches wide.

5 In an exemplary embodiment, as illustrated in Fig. 16, the container 102 only includes the dividers 112a, 112b, 112f and 112g. Rolls 118 and 119 including material 118a and 119a, respectively, are disposed within the container 102. The respective widths of the rolls 118 and 119 are larger than the respective widths of the rolls 116a, 116b, 116c, 116d, 116e, 116f and 116g. Moreover, the width of the roll 119 is larger than the width of the roll 118.

10 The roll 119 includes a core 119b, which defines an internal passage 119ba. The dividers 112f and 112g support the roll 119, with the spindle 112fb of the divider 112f extending into the internal passage 119ba at one end of the core 119b, and the spindle 112gb of the divider 112g extending into the internal passage 119ba at the other end of the core 119b. Since the divider 112f is symmetric about a plane in the same manner as the divider 112a is symmetric about the plane
15 113, the divider 112f is able to be rotated 180 degrees so that the end portions 112fc and 112fd are received within corresponding facing grooves 104bb and 104z, respectively, as shown in Fig. 16. Similarly, the dividers 112a and 112b support the roll 118, with the spindle 112ab of the divider 112a extending into an internal passage defined by a core (not shown) of the roll 118 at one end thereof, and the spindle 112bb of the divider 112b extending into the internal passage at the other
20 end of the core of the roll 118. Since the divider 112a is symmetric about the plane 113, the divider 112a is able to be rotated 180 degrees so that the end portions 112ac and 112ad are received within corresponding facing grooves 104bb and 104z, respectively, as shown in Fig. 16. The dispensing of the material 118a and 119a from the rolls 118 and 119, respectively, is substantially similar to the dispensing of any of the material 116aa, 116ba, 116ca, 116da, 116ea, 116fa and
25 116ga from the container 102, as described above, and therefore will not be described in further detail.

In an exemplary embodiment, as illustrated in Fig. 17, a divider is generally referred to by the reference numeral 120 and includes a wall 120a and an axle or spindle 120b extending from one side of the wall 120a. The divider 120 is substantially similar to the divider 116a, except that
30 the length of extension of the spindle 120b from the wall 120a of the divider 120 is less than the length of extension of the spindle 112ab from the wall 112aa of the divider 112a; therefore, the remainder of the divider 120 will not be described in detail.

In several exemplary embodiments, the dimensions of the base 104 and the lid 106 may be increased or decreased, and one or more of the dimensions of the dividers 112a, 112b, 112c, 112d, 112e, 112f, 112g and 120 may also be correspondingly increased or decreased.

In several exemplary embodiments, the containers 10 and/or 102 can be used in a variety of industries such as, for example, the food service industry. In an exemplary embodiment, the container 10 or 102 has a plurality of dividers sufficient to hold seven rolls of labels, i.e., one roll of labels for each day of the week. A label corresponding to the day on which food is prepared or is stored is pulled from the container 10 and/or 102 and applied to the surface of a container or wrapping holding the food.

In an exemplary embodiment, the top of the container 10 could have a raised or indented portion for receiving a company name or logo, either by embossing or by receiving a label.

In several exemplary embodiments, the containers 10 and/or 102, and all of the parts thereof, can be made from a variety of materials, including but not limited to plastic, cardboard and metal. Suitable plastics include but are not limited to polyvinyl chloride, polyethylene, polyethylene terephthalate, polypropylene and cellulose propionate. In several exemplary embodiments, the containers 10 and/or 102 can be made from a plastic using methods such as, for example, thermal molding and injection molding.

In several exemplary embodiments, in addition to, or instead of dispensing labels, any type of material can be dispensed from a roll using one or more of the above-described exemplary embodiments of containers, including the containers 10 and/or 102.

A container has been described that includes a cavity defined by a top member and a bottom member, which top member and bottom member are attached for pivotal movement about an axis; wherein the bottom member comprises first and second walls extending generally parallel to the axis; and a shelf extending from the second wall in a plane generally perpendicular to the second wall and generally parallel to the axis; wherein the top member comprises a lip extending over a portion of the shelf; and at least one divider disposed within the cavity and extending between the first and second walls generally perpendicular to the axis, and comprising a projection extending from the divider over at least a portion of the shelf and comprising a top edge in contact with at least a portion of the lip. In an exemplary embodiment, the bottom member further comprises a first plurality of grooves defined on the first wall; and a second plurality of grooves defined on the second wall; wherein the at least one divider is engaged within facing ones of the first and second pluralities of grooves. In an exemplary embodiment, the bottom member further comprises a first plurality of extensions defined on the first wall; a second plurality of extensions defined on the second wall; wherein the at least one divider is engaged between adjacent ones of

the first plurality of extensions and adjacent ones of the second plurality of extensions. In an exemplary embodiment, the container comprises first and second tabs pivotally connected to the top member about parallel axes that are perpendicular to the axis about which the top member and the bottom member are connected; and first and second locks connected to the bottom member at a position so as to engage the first and second tabs, respectively. In an exemplary embodiment, the container comprises a plurality of dividers disposed within the cavity; and a plurality of cores disposed within the cavity between adjacent ones of the plurality of dividers. In an exemplary embodiment, the bottom member further comprises at least one of a plurality of frictional areas and a plurality of mounting means located on the bottom of the bottom member. In an exemplary embodiment, the container comprises a plurality of mounting means spaced longitudinally along the axis of the container. In an exemplary embodiment, the at least one divider further comprises at least one spindle extending from the divider parallel to the axis. In an exemplary embodiment, the container comprises at least one core disposed on the spindle of the at least one divider. In an exemplary embodiment, the at least one divider further comprises at least one spindle positioned on each of opposing sides of the divider, and extending from the divider in a direction generally parallel to the axis of the container. In an exemplary embodiment, the cavity has a generally cylindrical shape. In an exemplary embodiment, the divider is symmetric about at least one plane, the at least one plane being generally parallel to the axis and generally perpendicular to both the divider and the shelf.

A container has been described that includes a cavity defined by a top member and a bottom member, which top member and bottom member are attached for pivotal movement about an axis; wherein the bottom member comprises first and second walls extending generally parallel to the axis; and a shelf extending from the second wall in a plane generally perpendicular to the second wall and generally parallel to the axis; wherein the top member comprises a lip extending over a portion of the shelf, and terminating at an edge that is spaced apart from the shelf so as to define a gap between the shelf and the lip; and at least one divider disposed within the cavity and extending between the first and second walls generally perpendicular to the axis, and comprising a projection extending from the divider over at least a portion of the shelf and comprising a top edge in contact with at least a portion of the lip proximal to the terminal edge of the lip; a bottom edge in contact with the shelf; and a facing edge that spans the gap between the shelf and the lip. In an exemplary embodiment, the bottom member further comprises a first plurality of grooves defined on the first wall; and a second plurality of grooves defined on the second wall; wherein the at least one divider is engaged within facing ones of the first and second pluralities of grooves. In an exemplary embodiment, the bottom member further comprises a first plurality of extensions defined on the first

wall; a second plurality of extensions defined on the second wall; wherein the at least one divider is engaged between adjacent ones of the first plurality of extensions and adjacent ones of the second plurality of extensions. In an exemplary embodiment, the container comprises first and second tabs pivotally connected to the top member about parallel axes that are perpendicular to the axis about which the top member and the bottom member are connected; and first and second locks connected to the bottom member at a position so as to engage the first and second tabs, respectively. In an exemplary embodiment, the container comprises a plurality of dividers disposed within the cavity; and a plurality of cores disposed within the cavity between adjacent ones of the plurality of dividers. In an exemplary embodiment, the bottom member further comprises at least one of a plurality of frictional areas and a plurality of mounting means located on the bottom of the bottom member. In an exemplary embodiment, the container comprises a plurality of mounting means spaced longitudinally along the axis of the container. In an exemplary embodiment, the at least one divider further comprises at least one spindle extending from the divider parallel to the axis. In an exemplary embodiment, the container comprises at least one core disposed on the spindle of the at least one divider. In an exemplary embodiment, the at least one divider further comprises at least one spindle positioned on each of opposing sides of the divider, and extending from the divider in a direction generally parallel to the axis of the container. In an exemplary embodiment, the cavity has a generally cylindrical shape.

A kit has been described that includes a container comprising a cavity defined by a top member and a bottom member, which top member and bottom member are attached for pivotal movement about an axis; wherein the bottom member comprises first and second walls extending generally parallel to the axis; and a shelf extending from the second wall in a plane generally perpendicular to the second wall and generally parallel to the axis; wherein the top member comprises a lip extending over a portion of the shelf; and at least one divider comprising at least one spindle extending from the divider; and a projection extending from the divider, wherein the projection comprises a top edge; and a bottom edge; wherein the at least one divider is adapted for disposal within the cavity such that the at least one divider extends between the first and second walls generally perpendicular to the axis, and wherein the projection is adapted to extend from the divider over at least a portion of the shelf, and the adaptation is such that the top edge is in contact with at least a portion of the lip, and the bottom edge is in contact with the shelf. In an exemplary embodiment, the kit comprises first and second tabs pivotally connected to the top member about parallel axes that are perpendicular to the axis about which the top member and the bottom member are connected; and first and second locks connected to the bottom member at a position so as to engage the first and second tabs, respectively. In an exemplary embodiment, the kit

comprises at least one divider having at least one spindle positioned on each of opposing sides thereof the divider.

A method has been described that includes providing a container comprising a base and a lid coupled thereto; removably engaging a first roll of material with a first divider; removably
5 engaging the first divider with the base; and dispensing material from the first roll of material after removably engaging the first roll of material with the first divider and removably engaging the first divider with the base. In an exemplary embodiment, the method comprises securing the lid to the base to define a cavity; suspending the first roll of material within the cavity; and rotating the first
10 roll of material in place within the cavity in response to dispensing material from the first roll of material, while maintaining the suspension of the first roll of material within the cavity. In an exemplary embodiment, the method comprises resisting any sliding of material from the first roll of material over the first divider during dispensing material from the first roll of material. In an exemplary embodiment, the method comprises securing the lid to the base to define a gap
15 therebetween; wherein material is dispensed from the first roll of material through the gap. In an exemplary embodiment, the method comprises removably engaging a second divider with the base; wherein the first and second dividers comprise respective walls; and wherein the respective walls of the first and second dividers are spaced in a parallel relation after removably engaging the first divider with the base and removably engaging the second divider with the base. In an exemplary embodiment, material is dispensed from the first roll of material in a first direction; and
20 wherein the method further comprises limiting any movement of material from the first roll of material in a second direction to a portion of the gap extending between the first and second dividers during dispensing material from the first roll of material, wherein the second direction is generally transverse to the first direction. In an exemplary embodiment, the method comprises resisting any sliding of material from the first roll of material over the first divider during dispensing
25 material from the first roll of material; and resisting any sliding of material from the first roll of material over the second divider during dispensing material from the first roll of material. In an exemplary embodiment, the method comprises removably engaging a second roll of material with the second divider; and dispensing material from the second roll of material through the gap after removably engaging the second roll of material with the second divider and removably engaging
30 the second divider with the base. In an exemplary embodiment, the method comprises removably engaging the first roll of material with the second divider; wherein the first roll of material is suspended within the cavity by the first and second dividers. In an exemplary embodiment, the first divider is symmetric about at least one plane.

A container for dispensing material from a roll comprising a core defining an internal passage has been described that includes a base; a lid coupled to the base; a first divider removably engaged with the base, the first divider comprising a wall; and at least one spindle extending from the wall and adapted to extend in the internal passage defined by the core of the roll. In an exemplary embodiment, the base comprises a first plurality of grooves; and a second plurality of grooves facing the first plurality of grooves; wherein the at least one divider is removably engaged within facing ones of the first and second pluralities of grooves. In an exemplary embodiment, the container comprises an open position; and a closed position in which a cavity is defined by the bottom member and the top member; a gap is defined between the top member and the bottom member, wherein the material is adapted to be dispensed from the roll through the gap; and the divider contacts the top member, wherein the contact between the divider and the lid is adapted to resist any sliding of the material over the divider. In an exemplary embodiment, the spindle is adapted to suspend the roll of material within the cavity defined by the bottom member and the top member so that the roll of material is permitted to rotate in place when the material is dispensed from the roll of material. In an exemplary embodiment, the material is adapted to be dispensed through the gap in a first direction; and wherein the at least one divider at least partially defines a portion of the gap to which movement of the material in a second direction generally transverse to the first direction is adapted to be limited when the material is being dispensed from the roll of material. In an exemplary embodiment, the at least one divider is symmetric about at least one plane.

A system has been described that includes means for providing a container comprising a base and a lid coupled thereto; means for removably engaging a first roll of material with a first divider; means for removably engaging the first divider with the base; and means for dispensing material from the first roll of material after removably engaging the first roll of material with the first divider and removably engaging the first divider with the base. In an exemplary embodiment, the system comprises means for securing the lid to the base to define a cavity; means for suspending the first roll of material within the cavity; and means for rotating the first roll of material in place within the cavity in response to dispensing material from the first roll of material, while maintaining the suspension of the first roll of material within the cavity. In an exemplary embodiment, the system comprises means for resisting any sliding of material from the first roll of material over the first divider during dispensing material from the first roll of material. In an exemplary embodiment, the system comprises means for securing the lid to the base to define a gap therebetween; wherein material is dispensed from the first roll of material through the gap. In an exemplary embodiment, the system comprises means for removably engaging a second divider with the base; wherein the

first and second dividers comprise respective walls; and wherein the respective walls of the first and second dividers are spaced in a parallel relation after removably engaging the first divider with the base and removably engaging the second divider with the base. In an exemplary embodiment, the system comprises material is dispensed from the first roll of material in a first direction; and
5 wherein the system further comprises means for limiting any movement of material from the first roll of material in a second direction to a portion of the gap extending between the first and second dividers during dispensing material from the first roll of material, wherein the second direction is generally transverse to the first direction. In an exemplary embodiment, the system comprises means for resisting any sliding of material from the first roll of material over the first divider during
10 dispensing material from the first roll of material; and means for resisting any sliding of material from the first roll of material over the second divider during dispensing material from the first roll of material. In an exemplary embodiment, the system comprises means for removably engaging a second roll of material with the second divider; and means for dispensing material from the second roll of material through the gap after removably engaging the second roll of material with the
15 second divider and removably engaging the second divider with the base. In an exemplary embodiment, the system comprises means for removably engaging the first roll of material with the second divider; wherein the first roll of material is suspended within the cavity by the first and second dividers. In an exemplary embodiment, the first divider is symmetric about at least one plane.

20 A container for dispensing material from a roll comprising a core defining an internal passage has been described that includes a bottom member and a top member attached to the bottom member for pivotal movement about an axis, the bottom and top members defining a cavity having a generally cylindrical shape, the bottom member comprising first and second walls extending generally parallel to the axis, a shelf extending from the second wall in a plane generally
25 perpendicular to the second wall and generally parallel to the axis, a first plurality of grooves defined on the first wall, and a second plurality of grooves defined on the second wall, the top member comprising a lip extending over a portion of the shelf; at least one divider disposed within the cavity and engaged within facing ones of the first and second pluralities of grooves, the at least one divider extending between the first and second walls generally perpendicular to the axis, the at
30 least one divider comprising a projection extending from the divider over at least a portion of the shelf and comprising a top edge in contact with at least a portion of the lip, and a bottom edge in contact with the shelf; and at least one spindle extending from the divider generally parallel to the axis, the spindle being adapted to extend within the internal passage defined by the core of the roll; wherein the spindle suspends the roll within the cavity defined by the bottom member and the top

member so that the roll is permitted to rotate in place when the material is dispensed from the roll.

It is understood that variations may be made in the foregoing without departing from the scope of the disclosure. Furthermore, the elements and teachings of the various illustrative embodiments may be combined in whole or in part in some or all of the illustrative embodiments. In addition, one or more of the elements and teachings of the various illustrative embodiments may be omitted, at least in part, and/or combined, at least in part, with one or more of the other elements and teachings of the various illustrative embodiments.

Any spatial references such as, for example, "upper," "lower," "above," "below," "between," "vertical," "horizontal," "angular," "upwards," "downwards," "side-to-side," "left-to-right," "right-to-left," "top-to-bottom," "bottom-to-top," "top," "bottom," "bottom-up," "top-down," etc., are for the purpose of illustration only and do not limit the specific orientation or location of the structure described above.

In several exemplary embodiments, one or more of the operational steps in each embodiment may be omitted. Moreover, in some instances, some features of the present disclosure may be employed without a corresponding use of the other features. Moreover, one or more of the above-described embodiments and/or variations may be combined in whole or in part with any one or more of the other above-described embodiments and/or variations.

Although several exemplary embodiments have been described in detail above, the embodiments described are exemplary only and are not limiting, and those skilled in the art will readily appreciate that many other modifications, changes and/or substitutions are possible in the exemplary embodiments without materially departing from the novel teachings and advantages of the present disclosure. Accordingly, all such modifications, changes and/or substitutions are intended to be included within the scope of this disclosure as defined in the following claims. In the claims, means-plus-function clauses are intended to cover the structures described herein as performing the recited function and not only structural equivalents, but also equivalent structures.

Claims

What is claimed is:

- 5 1. A container comprising:
a cavity defined by a top member and a bottom member, which top member and bottom member are attached for pivotal movement about an axis;
wherein the bottom member comprises:
first and second walls extending generally parallel to the axis; and
10 a shelf extending from the second wall in a plane generally perpendicular to the second wall and generally parallel to the axis;
wherein the top member comprises:
a lip extending over a portion of the shelf;
and
15 at least one divider disposed within the cavity and extending between the first and second walls generally perpendicular to the axis, and comprising:
a projection extending from the divider over at least a portion of the shelf and comprising a top edge in contact with at least a portion of the lip.
- 20 2. The container of claim 1 wherein the bottom member further comprises:
a first plurality of grooves defined on the first wall; and
a second plurality of grooves defined on the second wall;
wherein the at least one divider is engaged within facing ones of the first and second pluralities of grooves.
- 25 3. The container of claim 1 wherein the bottom member further comprises:
a first plurality of extensions defined on the first wall;
a second plurality of extensions defined on the second wall;
wherein the at least one divider is engaged between adjacent ones of the first plurality of
30 extensions and adjacent ones of the second plurality of extensions.

4. The container of claim 1 further comprising:
first and second tabs pivotally connected to the top member about parallel axes that are perpendicular to the axis about which the top member and the bottom member are connected;
and
- 5 first and second locks connected to the bottom member at a position so as to engage the first and second tabs, respectively.
5. The container of claim 1 further comprising:
a plurality of dividers disposed within the cavity; and
- 10 a plurality of cores disposed within the cavity between adjacent ones of the plurality of dividers.
6. The container of claim 1 wherein the bottom member further comprises at least one of a plurality of frictional areas and a plurality of mounting means located on the bottom of the bottom
- 15 member.
7. The container of claim 1 further comprising a plurality of mounting means spaced longitudinally along the axis of the container.
- 20 8. The container of claim 1 wherein the at least one divider further comprises:
at least one spindle extending from the divider parallel to the axis.
9. The container of claim 8 further comprising:
at least one core disposed on the spindle of the at least one divider.
- 25 10. The container of claim 1 wherein the at least one divider further comprises:
at least one spindle positioned on each of opposing sides of the divider, and extending from the divider in a direction generally parallel to the axis of the container.
- 30 11. The container of claim 1 wherein the cavity has a generally cylindrical shape.
12. The container of claim 1 wherein the divider is symmetric about at least one plane, the at least one plane being generally parallel to the axis and generally perpendicular to both the divider and the shelf.

13. A kit comprising:

a container comprising a cavity defined by a top member and a bottom member, which top member and bottom member are attached for pivotal movement about an axis;

wherein the bottom member comprises:

first and second walls extending generally parallel to the axis; and

a shelf extending from the second wall in a plane generally perpendicular to the second wall and generally parallel to the axis;

wherein the top member comprises:

a lip extending over a portion of the shelf;

and

at least one divider comprising:

at least one spindle extending from the divider; and

a projection extending from the divider, wherein the projection comprises:

a top edge; and

a bottom edge;

wherein the at least one divider is adapted for disposal within the cavity such that the at least one divider extends between the first and second walls generally perpendicular to the axis, and

wherein the projection is adapted to extend from the divider over at least a portion of the shelf, and the adaptation is such that the top edge is in contact with at least a portion of the lip, and the bottom edge is in contact with the shelf.

14. The kit of claim 13 further comprising:

first and second tabs pivotally connected to the top member about parallel axes that are perpendicular to the axis about which the top member and the bottom member are connected;

and

first and second locks connected to the bottom member at a position so as to engage the first and second tabs, respectively.

15. The kit of claim 13 further comprising:

at least one divider having at least one spindle positioned on each of opposing sides thereof the divider.

16. A method comprising:
providing a container comprising a base and a lid coupled thereto;
removably engaging a first roll of material with a first divider;
removably engaging the first divider with the base; and
5 dispensing material from the first roll of material after removably engaging the first roll of material with the first divider and removably engaging the first divider with the base.
17. The method of claim 16 further comprising:
securing the lid to the base to define a cavity;
10 suspending the first roll of material within the cavity; and
rotating the first roll of material in place within the cavity in response to dispensing material from the first roll of material, while maintaining the suspension of the first roll of material within the cavity.
18. The method of claim 16 further comprising:
resisting any sliding of material from the first roll of material over the first divider during dispensing material from the first roll of material.
19. The method of claim 16 further comprising:
20 securing the lid to the base to define a gap therebetween;
wherein material is dispensed from the first roll of material through the gap.
20. The method of claim 19 further comprising:
removably engaging a second divider with the base;
25 wherein the first and second dividers comprise respective walls; and
wherein the respective walls of the first and second dividers are spaced in a parallel relation after removably engaging the first divider with the base and removably engaging the second divider with the base.
21. The method of claim 20 wherein material is dispensed from the first roll of material in a first direction; and wherein the method further comprises:
limiting any movement of material from the first roll of material in a second direction to a portion of the gap extending between the first and second dividers during dispensing material from the first roll of material, wherein the second direction is generally transverse to the first direction.

22. The method of claim 20 further comprising:
resisting any sliding of material from the first roll of material over the first divider during
dispensing material from the first roll of material; and
resisting any sliding of material from the first roll of material over the second divider during
5 dispensing material from the first roll of material.
23. The method of claim 20 further comprising:
removably engaging a second roll of material with the second divider; and
dispensing material from the second roll of material through the gap after removably
10 engaging the second roll of material with the second divider and removably engaging the second
divider with the base.
24. The method of claim 20 further comprising:
removably engaging the first roll of material with the second divider;
15 wherein the first roll of material is suspended within the cavity by the first and second
dividers.
25. The method of claim 16 wherein the first divider is symmetric about at least one plane.
- 20 26. A container for dispensing material from a roll comprising a core defining an internal
passage, the container comprising:
a base;
a lid coupled to the base;
a first divider removably engaged with the base, the first divider comprising:
25 a wall; and
at least one spindle extending from the wall and adapted to extend in the internal
passage defined by the core of the roll.
27. The container of claim 26 wherein the base comprises:
30 a first plurality of grooves; and
a second plurality of grooves facing the first plurality of grooves;
wherein the at least one divider is removably engaged within facing ones of the first and
second pluralities of grooves.

28. The container of claim 26 further comprising:
an open position; and
a closed position in which:
a cavity is defined by the bottom member and the top member;
5 a gap is defined between the top member and the bottom member, wherein the material is adapted to be dispensed from the roll through the gap; and
the divider contacts the top member, wherein the contact between the divider and the lid is adapted to resist any sliding of the material over the divider.
- 10 29. The container of claim 28 wherein the spindle is adapted to suspend the roll of material within the cavity defined by the bottom member and the top member so that the roll of material is permitted to rotate in place when the material is dispensed from the roll of material.
- 15 30. The container of claim 28 wherein the material is adapted to be dispensed through the gap in a first direction; and
wherein the at least one divider at least partially defines a portion of the gap to which movement of the material in a second direction generally transverse to the first direction is adapted to be limited when the material is being dispensed from the roll of material.
- 20 31. The container of claim 26 wherein the at least one divider is symmetric about at least one plane.
- 25 32. A system comprising:
means for providing a container comprising a base and a lid coupled thereto;
means for removably engaging a first roll of material with a first divider;
means for removably engaging the first divider with the base; and
means for dispensing material from the first roll of material after removably engaging the first roll of material with the first divider and removably engaging the first divider with the base.

33. The system of claim 32 further comprising:

means for securing the lid to the base to define a cavity;

means for suspending the first roll of material within the cavity; and

means for rotating the first roll of material in place within the cavity in response to

5 dispensing material from the first roll of material, while maintaining the suspension of the first roll of material within the cavity.

34. The system of claim 32 further comprising:

means for resisting any sliding of material from the first roll of material over the first divider

10 during dispensing material from the first roll of material.

35. The system of claim 32 further comprising:

means for securing the lid to the base to define a gap therebetween;

wherein material is dispensed from the first roll of material through the gap.

15

36. The system of claim 35 further comprising:

means for removably engaging a second divider with the base;

wherein the first and second dividers comprise respective walls; and

wherein the respective walls of the first and second dividers are spaced in a parallel relation

20 after removably engaging the first divider with the base and removably engaging the second divider with the base.

37. The system of claim 36 wherein material is dispensed from the first roll of material in a first direction; and wherein the system further comprises:

25 means for limiting any movement of material from the first roll of material in a second direction to a portion of the gap extending between the first and second dividers during dispensing material from the first roll of material, wherein the second direction is generally transverse to the first direction.

30 38. The system of claim 36 further comprising:

means for resisting any sliding of material from the first roll of material over the first divider during dispensing material from the first roll of material; and

means for resisting any sliding of material from the first roll of material over the second divider during dispensing material from the first roll of material.

39. The system of claim 36 further comprising:

means for removably engaging a second roll of material with the second divider; and

means for dispensing material from the second roll of material through the gap after
removably engaging the second roll of material with the second divider and removably engaging
5 the second divider with the base.

40. The system of claim 36 further comprising:

means for removably engaging the first roll of material with the second divider;

wherein the first roll of material is suspended within the cavity by the first and second
10 dividers.

41. The system of claim 32 wherein the first divider is symmetric about at least one plane.

42. A container for dispensing material from a roll comprising a core defining an internal
15 passage, the container comprising:

a bottom member and a top member attached to the bottom member for pivotal movement
about an axis,

the bottom and top members defining a cavity having a generally cylindrical shape,
the bottom member comprising:

20 first and second walls extending generally parallel to the axis,

a shelf extending from the second wall in a plane generally perpendicular to
the second wall and generally parallel to the axis,

a first plurality of grooves defined on the first wall, and

a second plurality of grooves defined on the second wall,

25 the top member comprising:

a lip extending over a portion of the shelf;

at least one divider disposed within the cavity and engaged within facing ones of the first
and second pluralities of grooves, the at least one divider extending between the first and second
walls generally perpendicular to the axis, the at least one divider comprising:

30 a projection extending from the divider over at least a portion of the shelf and
comprising:

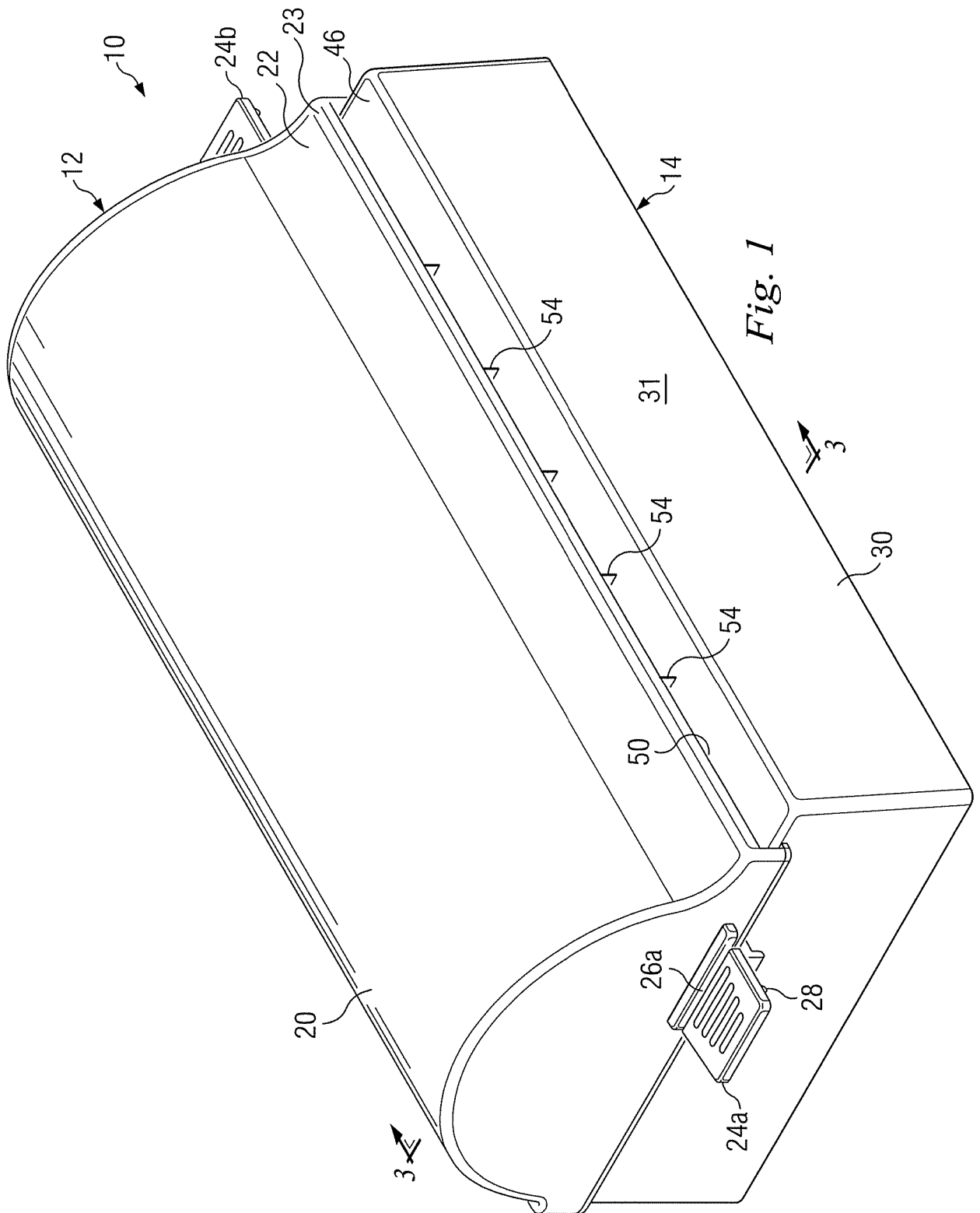
a top edge in contact with at least a portion of the lip, and

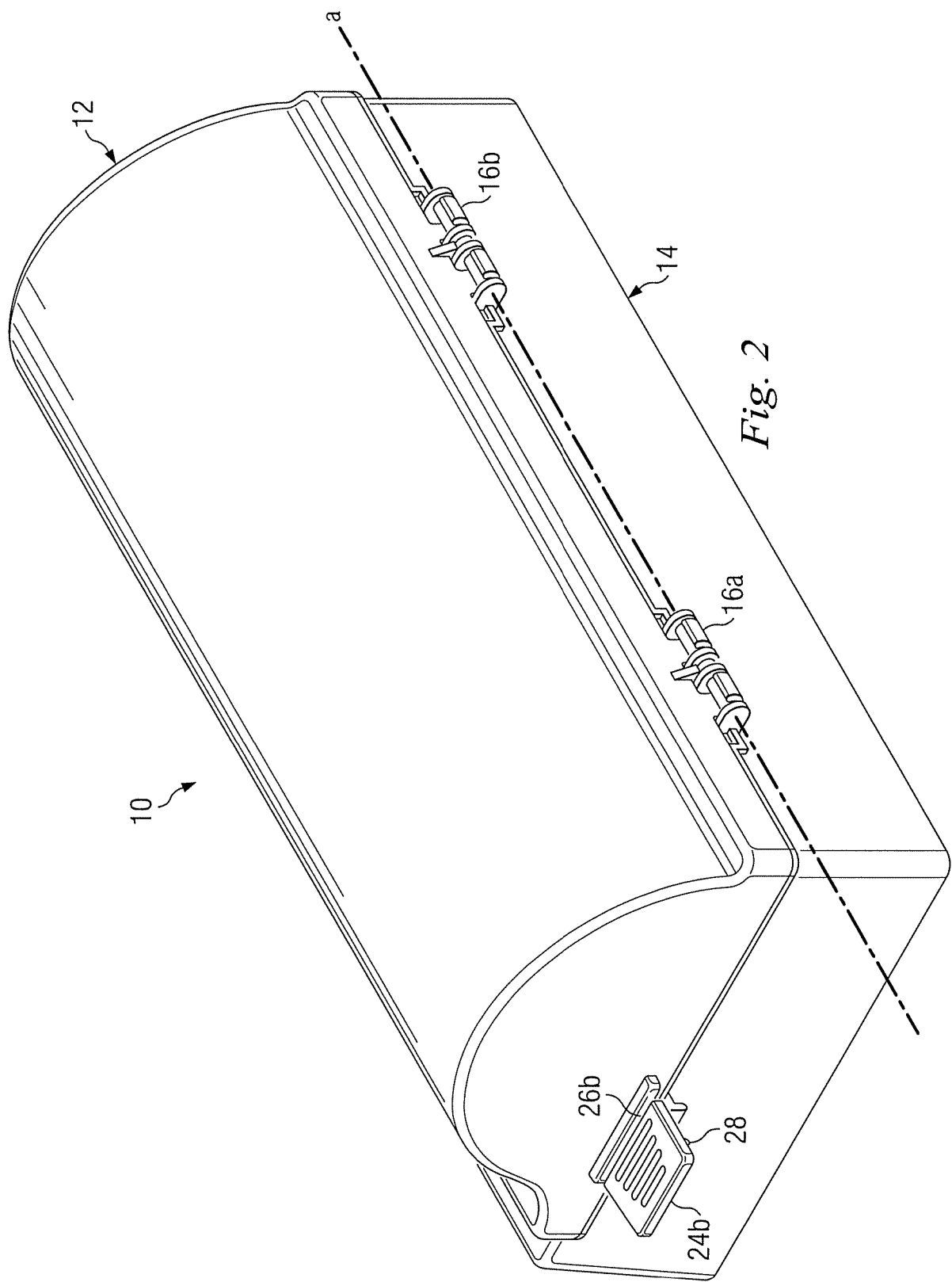
a bottom edge in contact with the shelf;

and

at least one spindle extending from the divider generally parallel to the axis, the spindle being adapted to extend within the internal passage defined by the core of the roll;

wherein the spindle suspends the roll within the cavity defined by the bottom member and the top member so that the roll is permitted to rotate in place when the material is dispensed from
5 the roll.





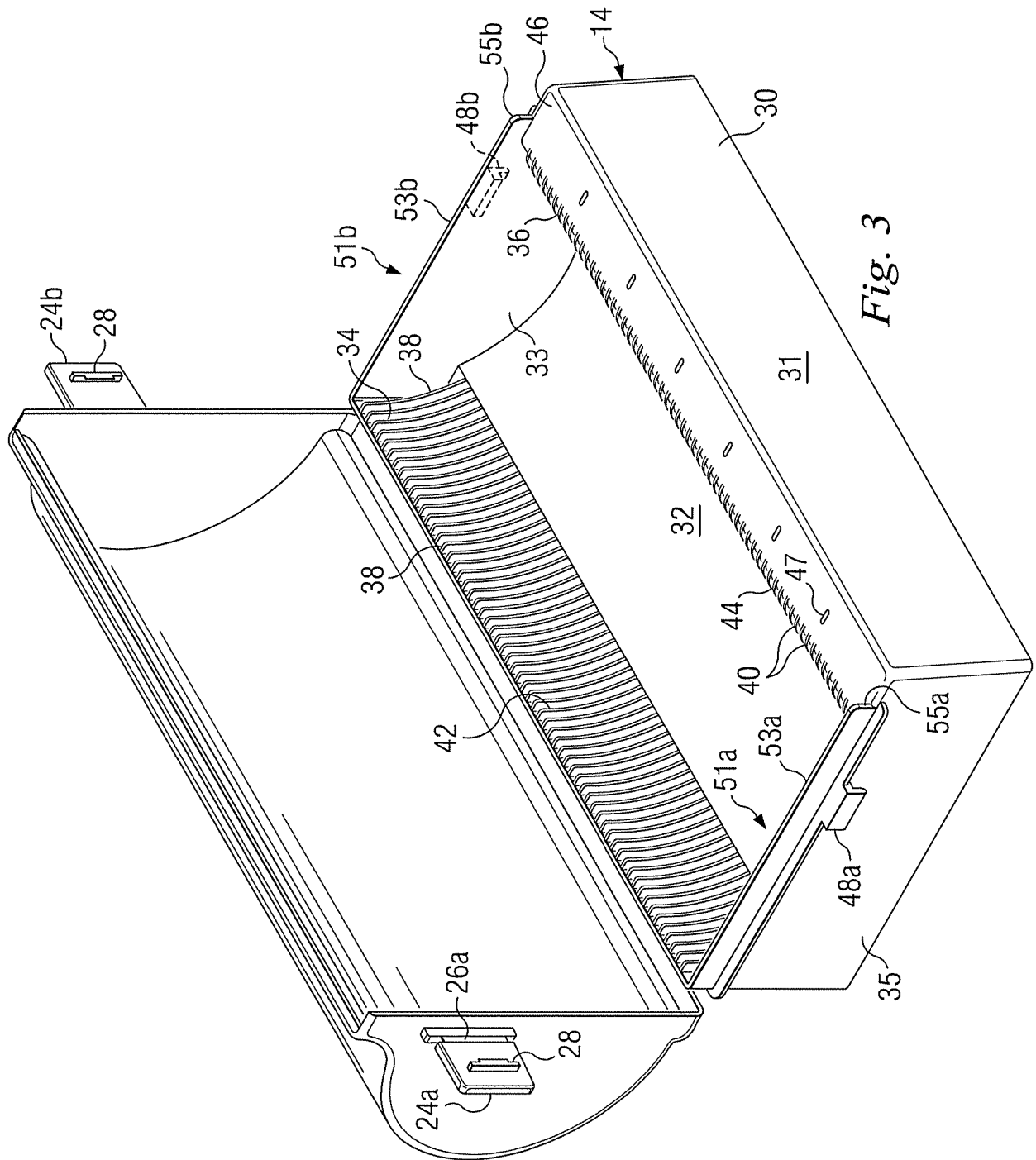


Fig. 3

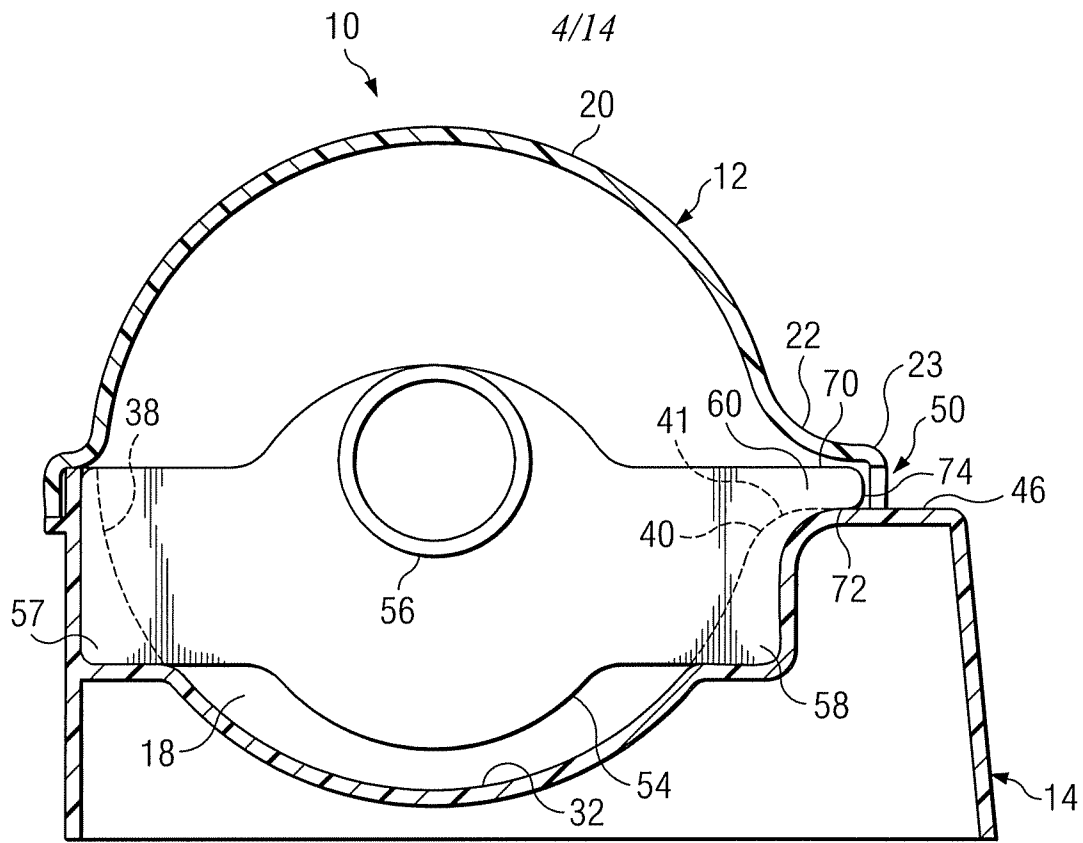


Fig. 4a

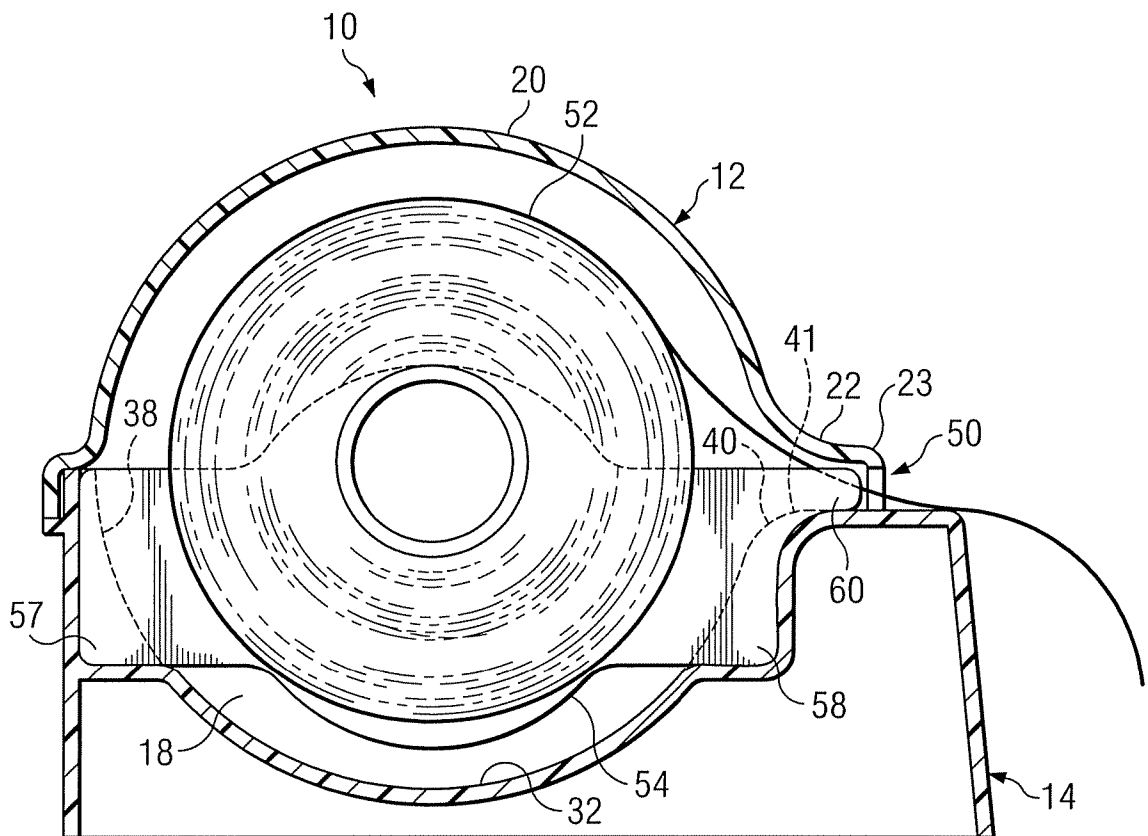


Fig. 4b

5/14

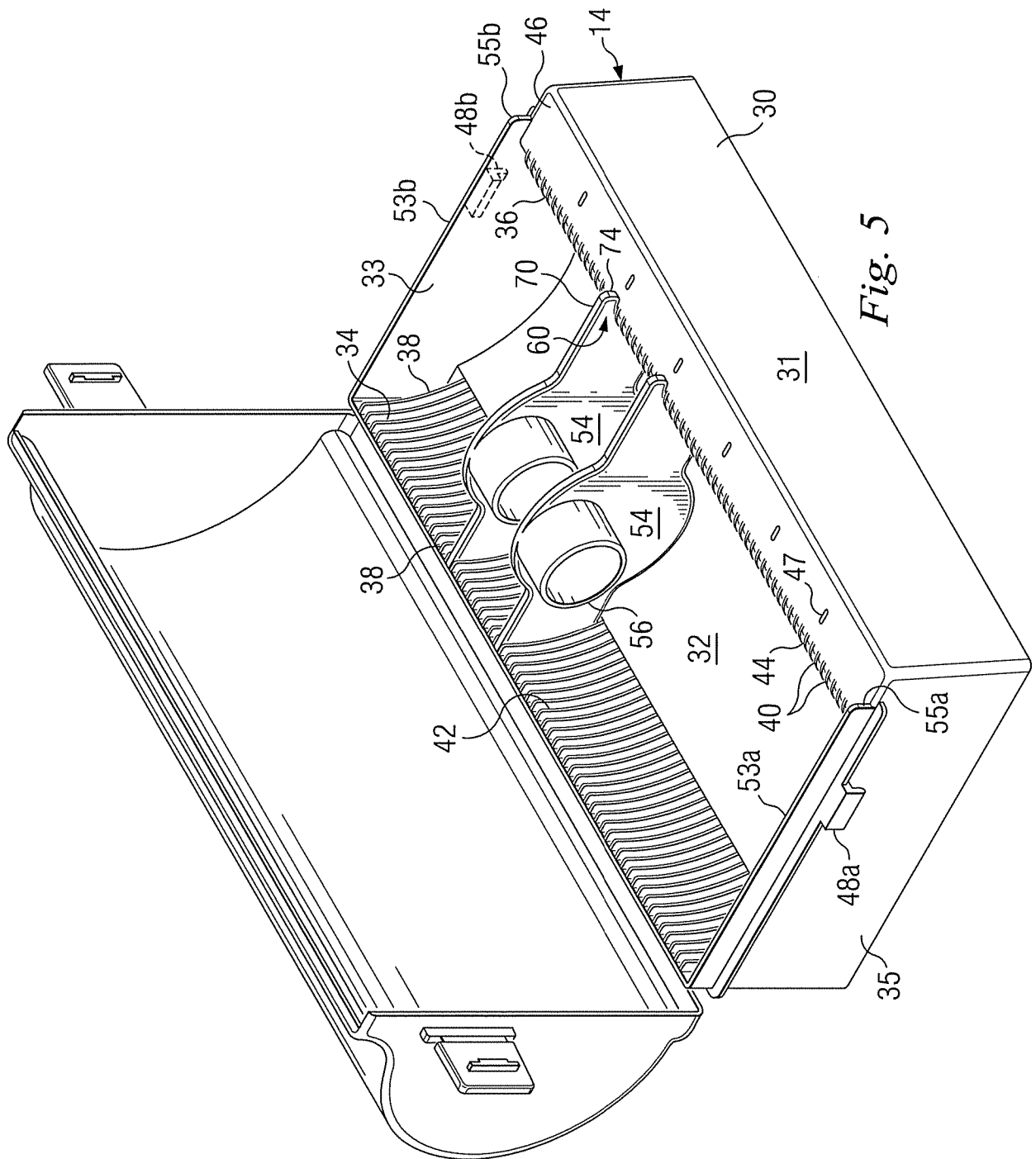
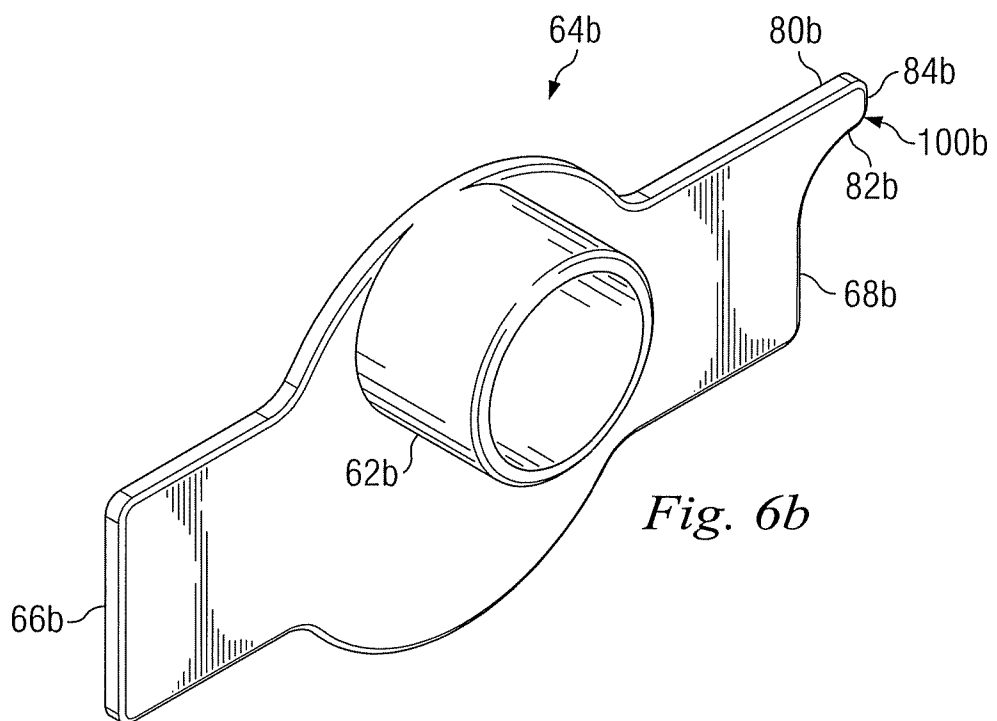
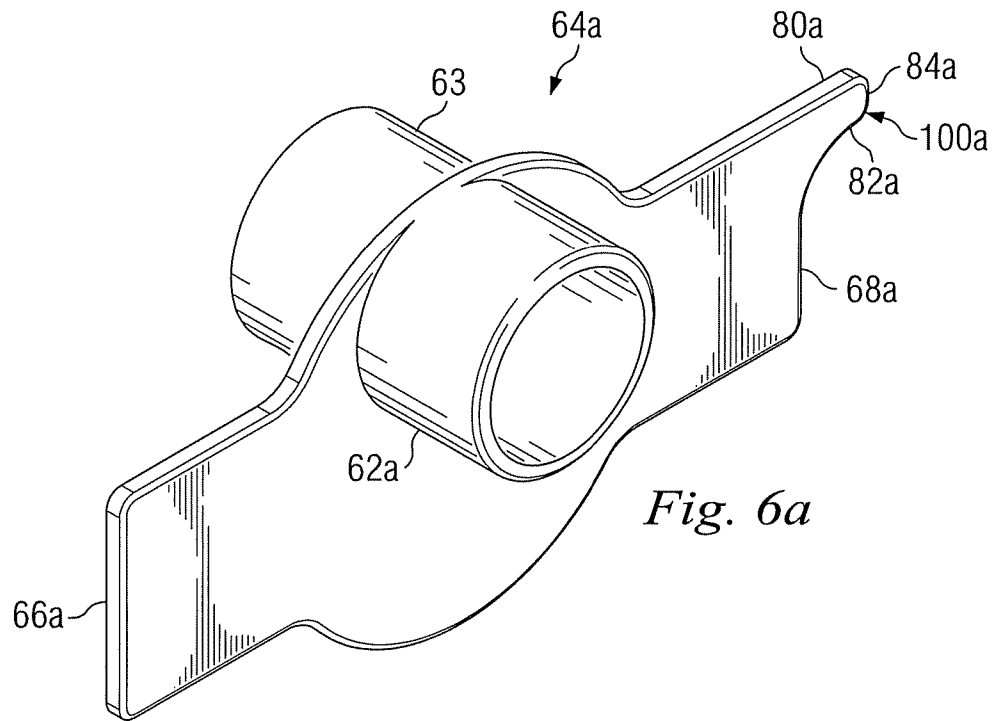
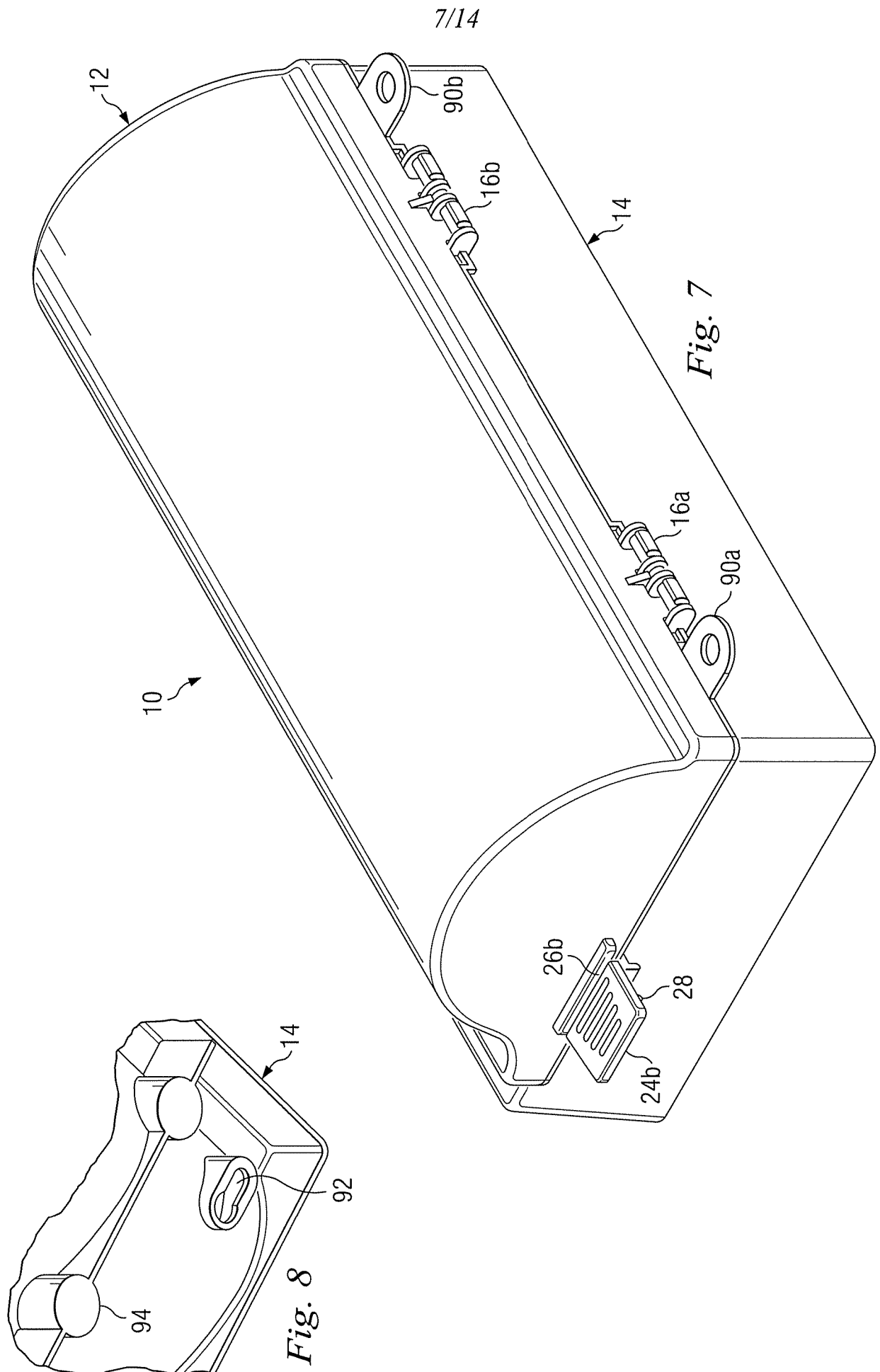


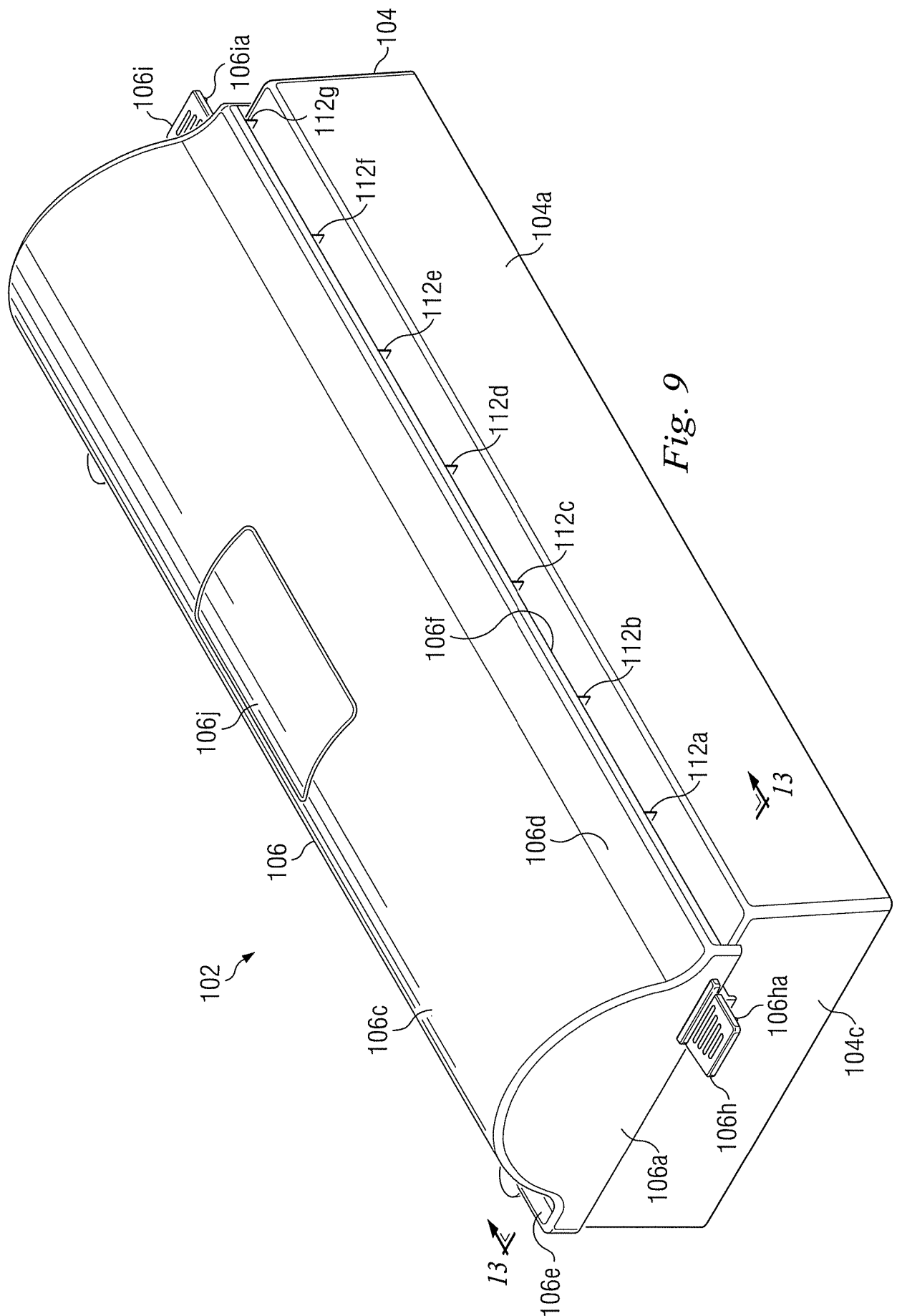
Fig. 5

6/14





8/14



9/14

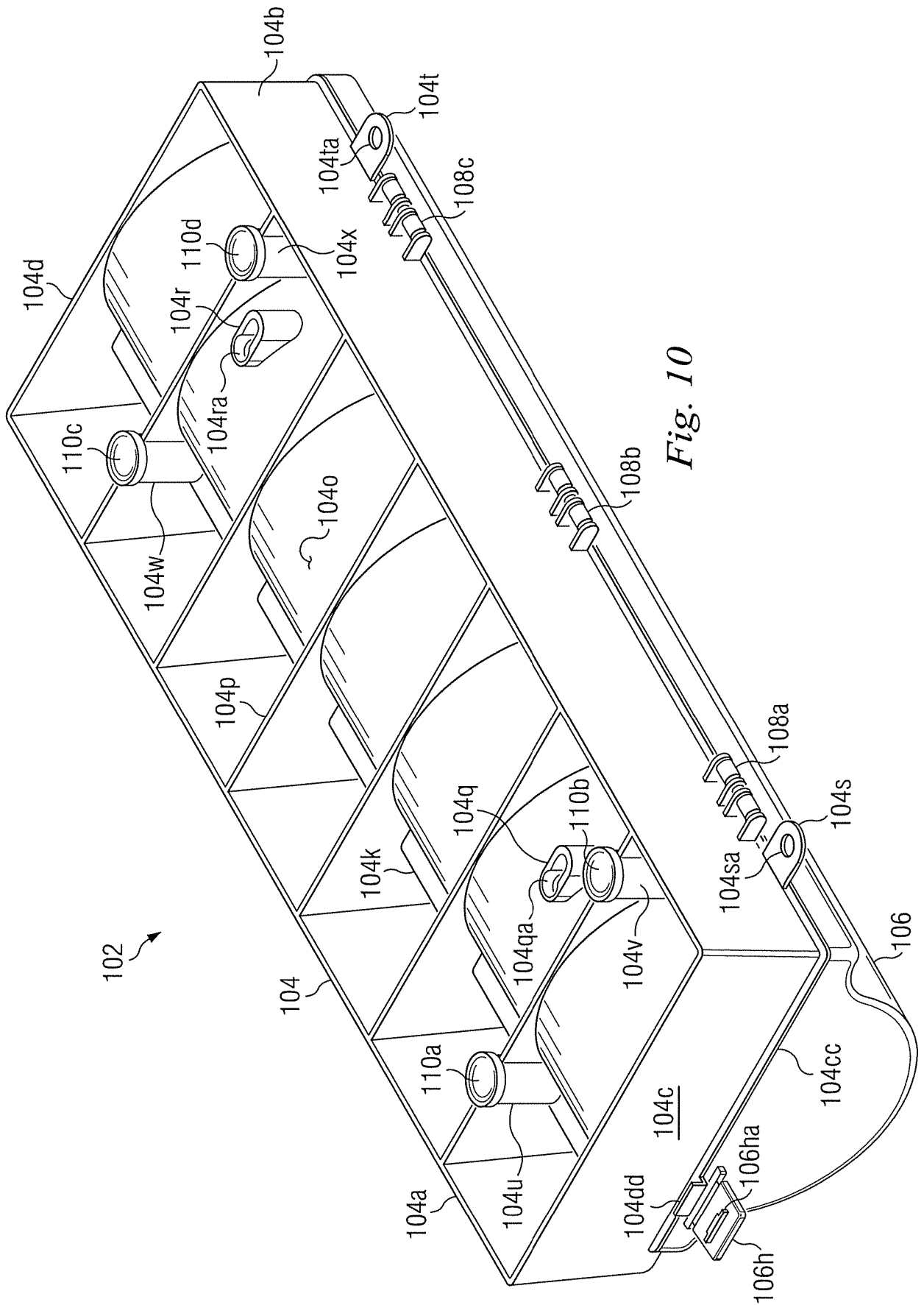
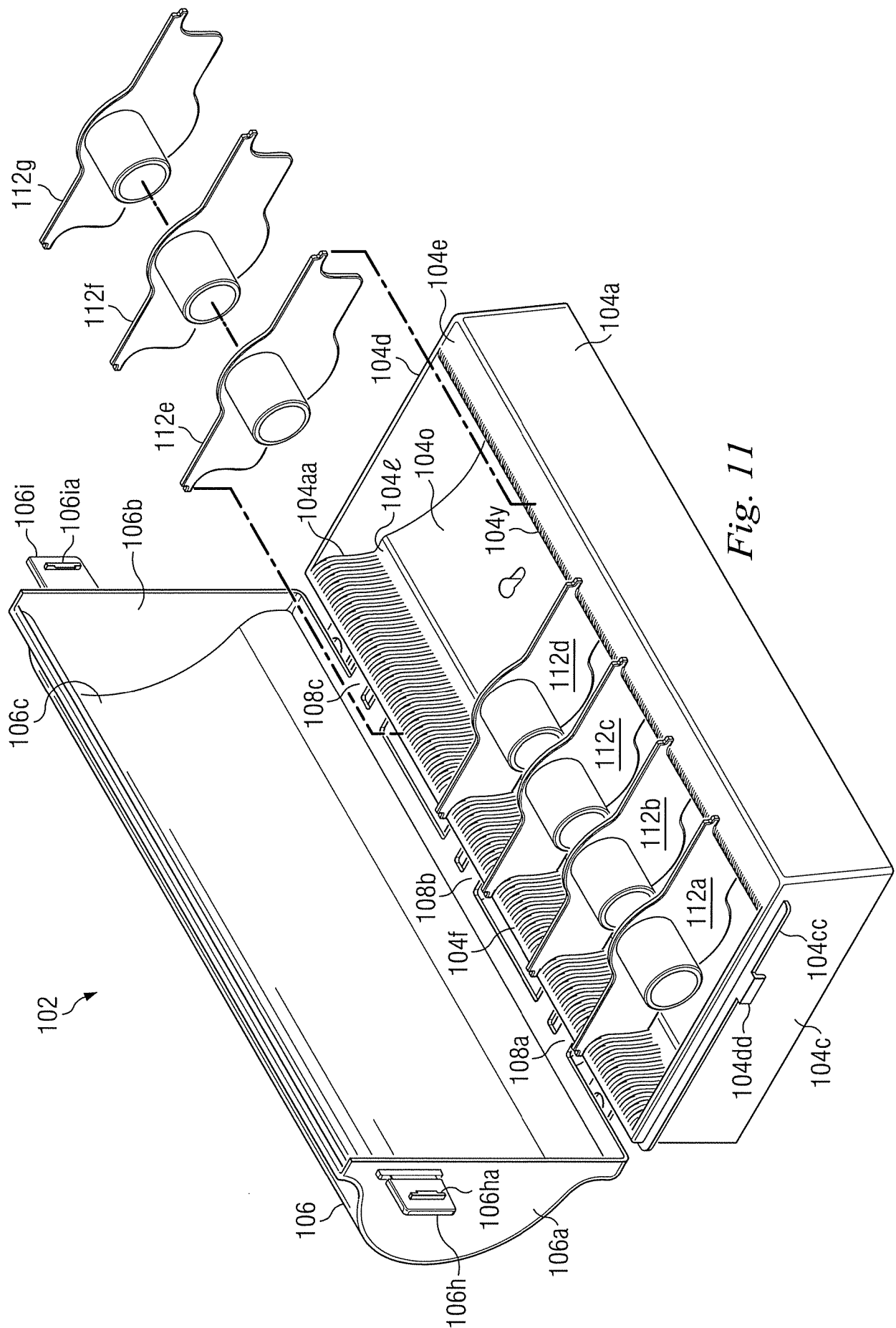


Fig. 10

10/14



11/14

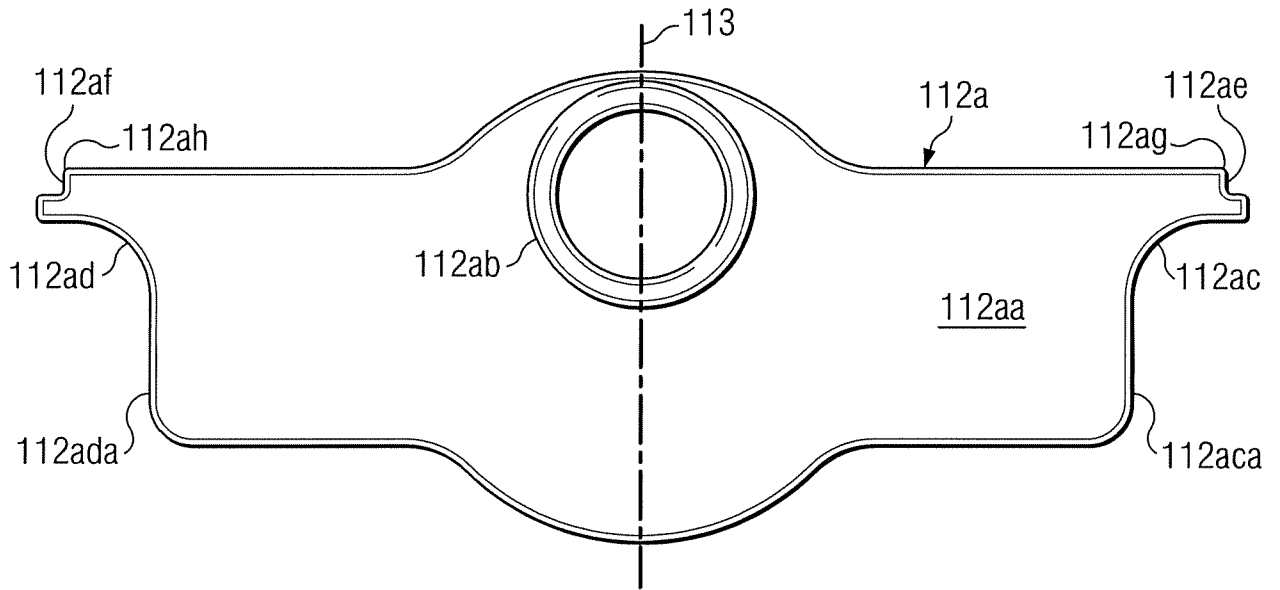


Fig. 12

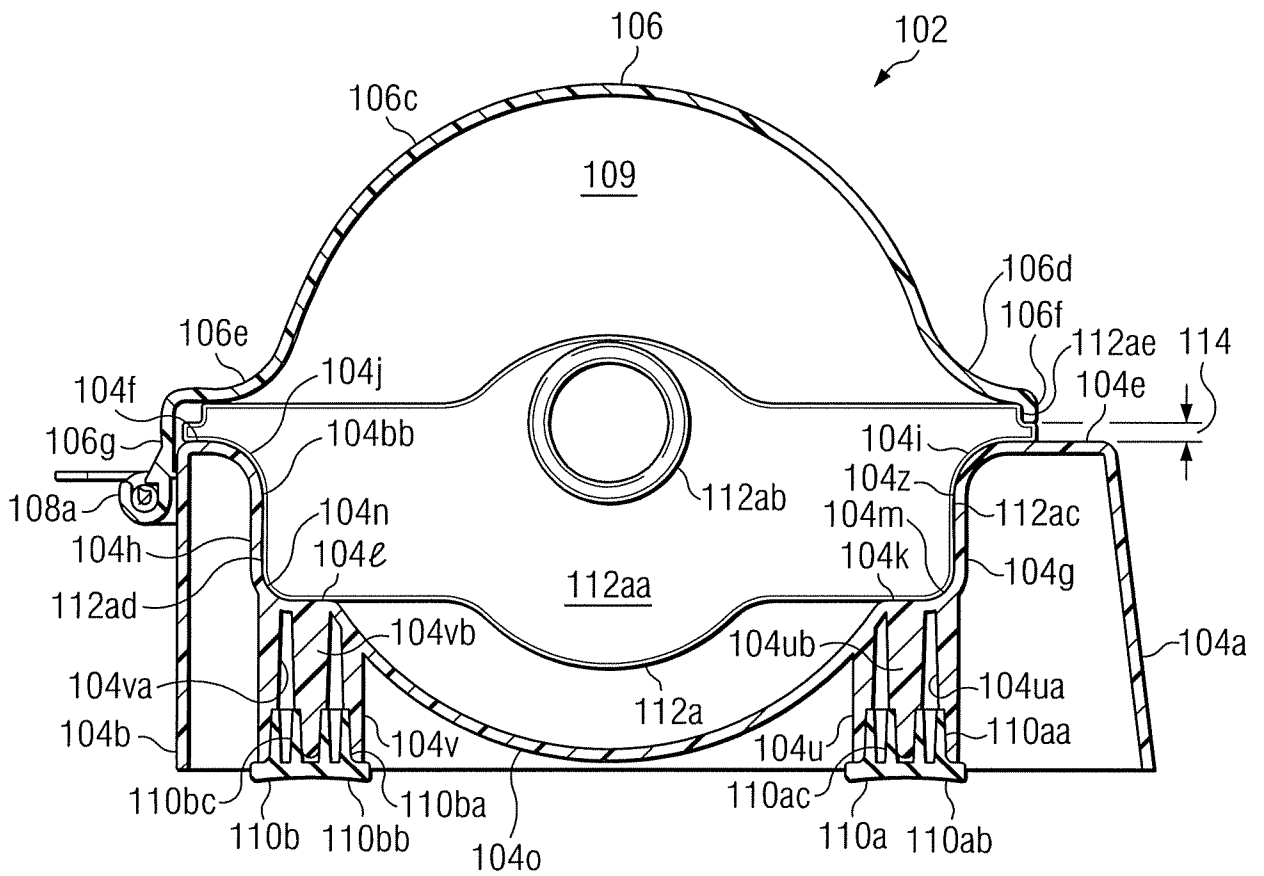
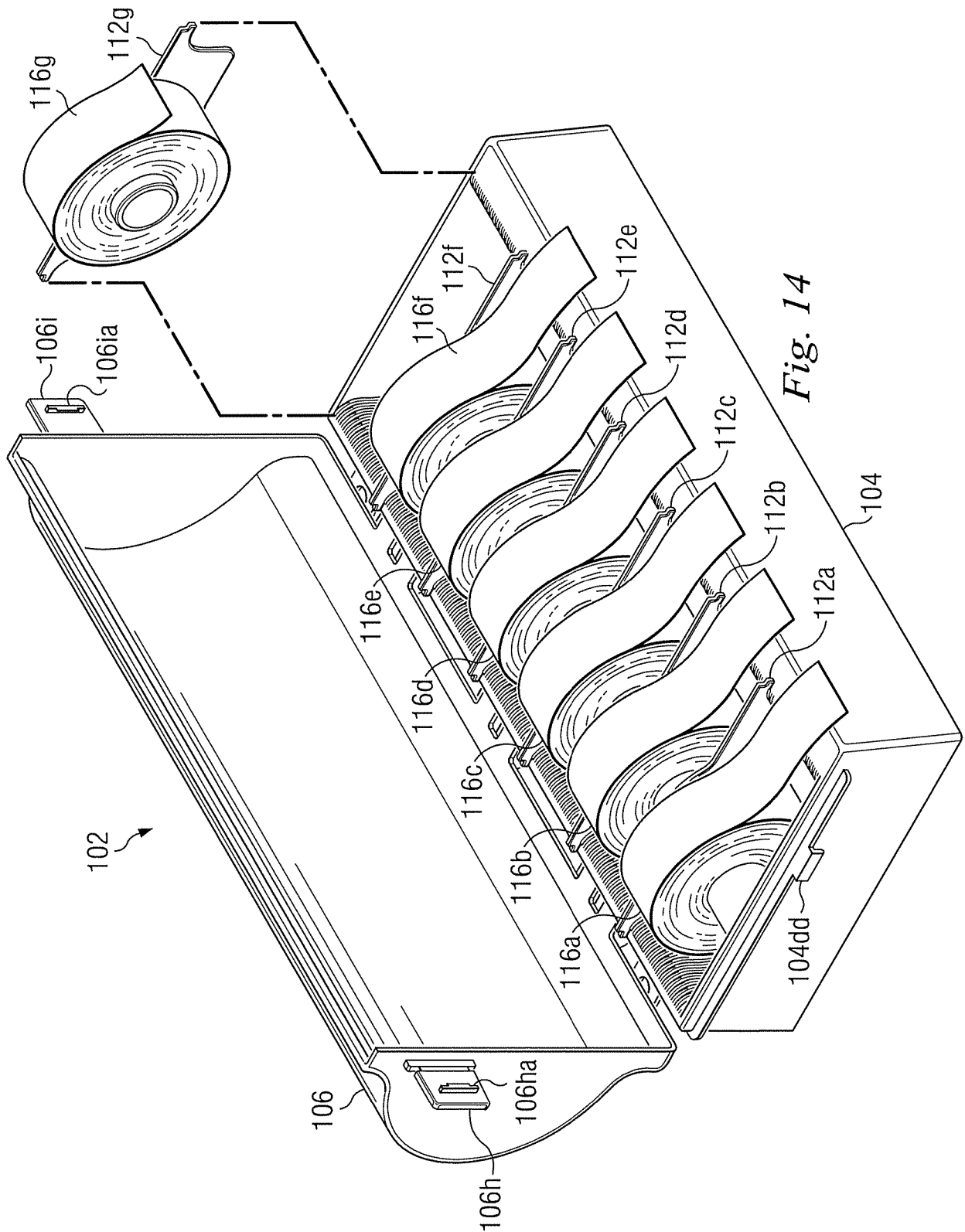


Fig. 13

12/14



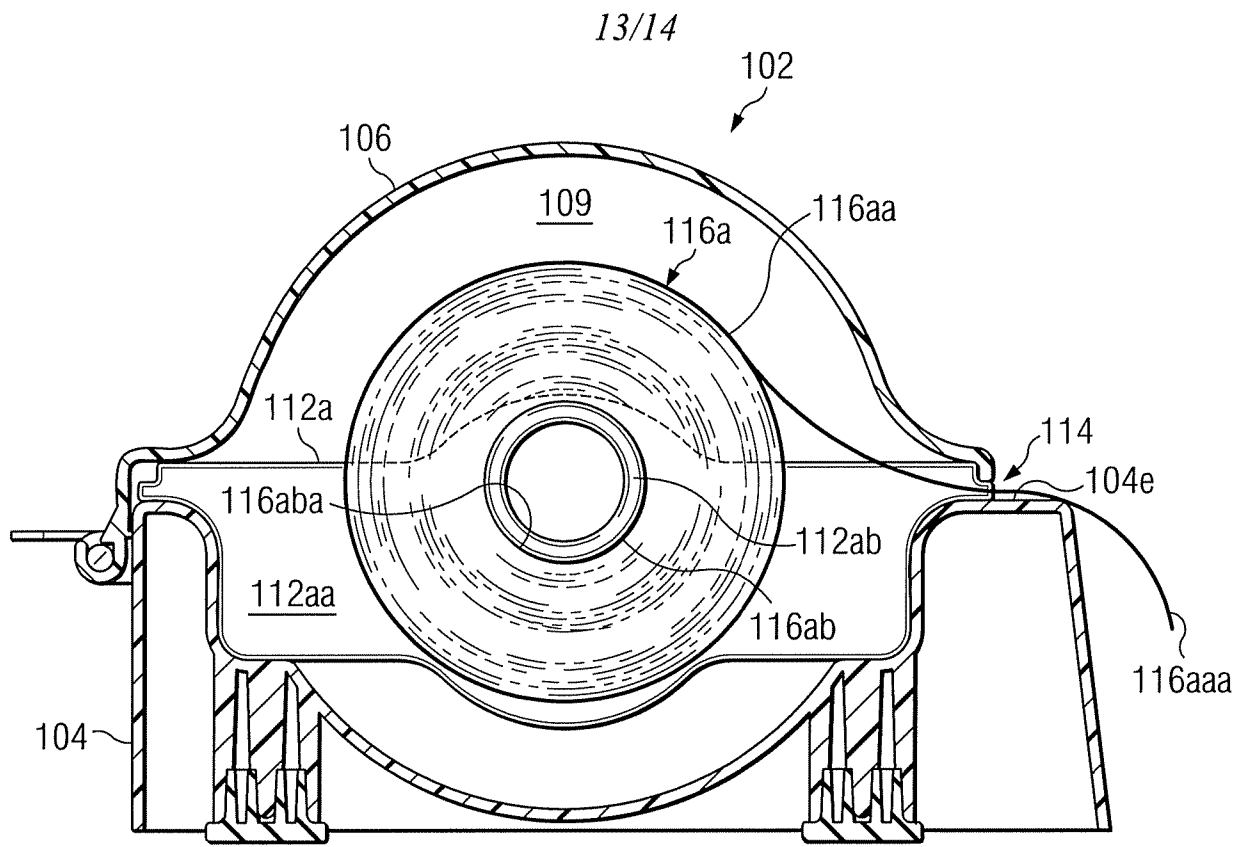


Fig. 15

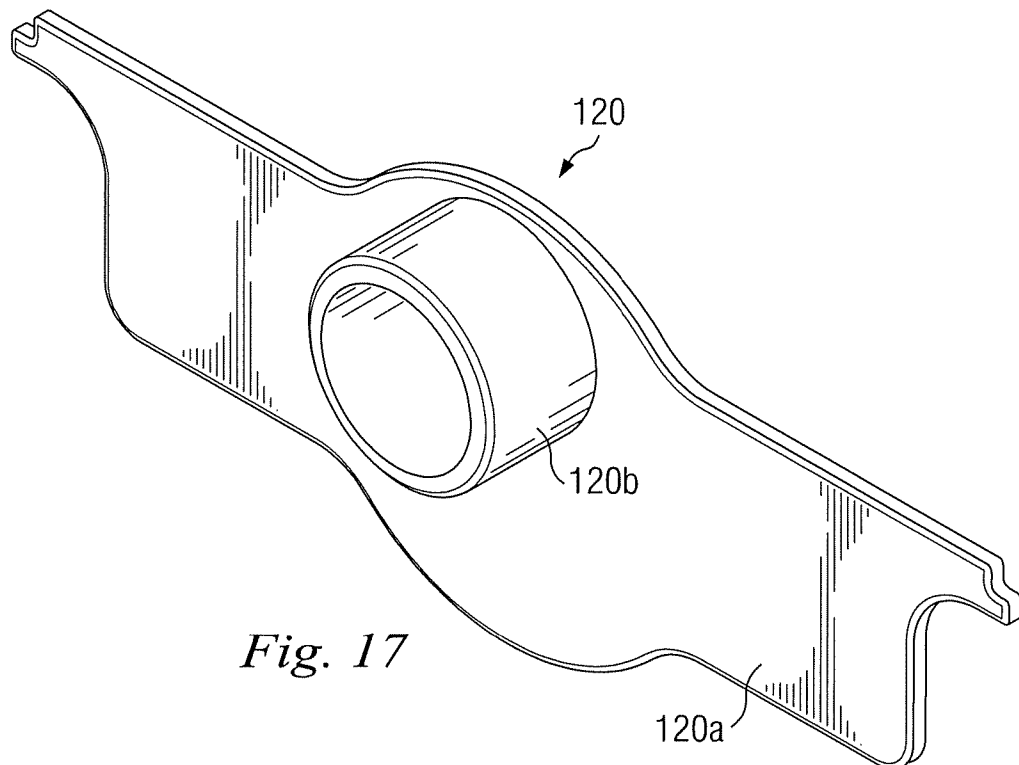


Fig. 17

