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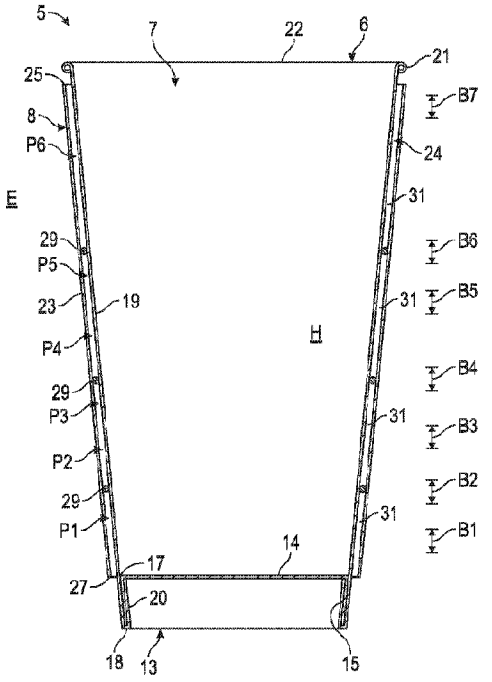

FIG. 2

(57) Abrégé/Abstract:
A container for containing a fluid. The container includes a sidewall construct that includes an inner sidewall extending at least partially around an interior of the container, an outer sleeve attached to the inner sidewall, and a cavity defined between the inner sidewall and the outer sleeve. The container also includes a closed bottom defining a bottom of the interior of the container, and insulating features that include the cavity and a plurality of annular bands. Each annular band of the plurality of annular bands incudes a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve.

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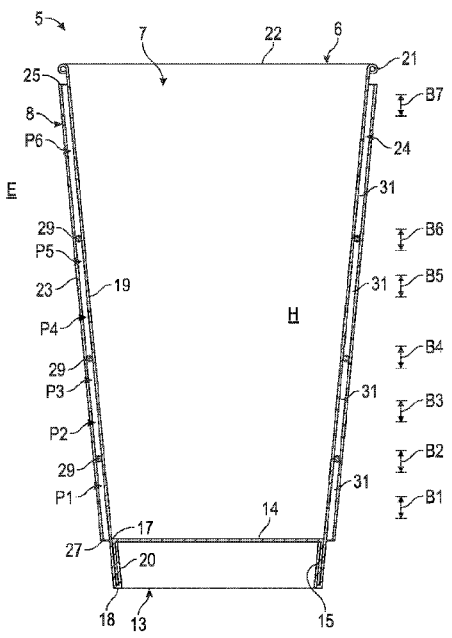

FIG. 2

(57) Abstract: A container for containing a fluid. The container includes a sidewall construct that includes an inner sidewall extending at least partially around an interior of the container, an outer sleeve attached to the inner sidewall, and a cavity defined between the inner sidewall and the outer sleeve. The container also includes a closed bottom defining a bottom of the interior of the container, and insulating features that include the cavity and a plurality of annular bands. Each annular band of the plurality of annular bands incudes a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve.

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CONTAINER WITH INSULATING FEATURES

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of each of U.S. Provisional Patent Application No. 62/657,246, filed on April 13, 2018, U.S. Provisional Patent Application No. 62/674,834, filed on May 22, 2018, and U.S. Provisional Patent Application No. 62/794,131, filed on January 18, 2019.

INCORPORATION BY REFERENCE

[0002] The disclosures of each of U.S. Provisional Patent Application No. 62/657,246, filed on April 13, 2018, U.S. Provisional Patent Application No. 62/674,834, filed on May 22, 2018, and U.S. Provisional Patent Application No. 62/794,131, filed on January 18, 2019, are hereby incorporated by reference for all purposes as if presented herein in their entirety.

BACKGROUND OF THE DISCLOSURE

[0003] The present disclosure generally relates to containers for containing fluids, for example, beverage containers. In one embodiment, the present disclosure relates to a container for heated fluids that includes insulating features.

SUMMARY OF THE DISCLOSURE

[0004] According to one aspect of the disclosure, a container for containing a fluid comprises a sidewall construct, a closed bottom, and insulating features. The sidewall construct comprises an inner sidewall extending at least partially around an interior of the container, an outer sleeve attached to the inner sidewall, and a cavity defined between the inner sidewall and the outer sleeve. The closed bottom defines a bottom of the interior of the container. The insulating features comprise the cavity and a plurality of annular bands, each annular band of the plurality of annular bands comprises a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve.

[0005] According to another aspect of the disclosure, a sidewall construct for forming a fluid container comprises an inner sidewall for extending at least partially around an interior of a fluid container formed from the sidewall construct, an outer sleeve attached to the inner sidewall, and a cavity defined between the inner sidewall and the outer sleeve. The sidewall construct further comprises insulating features comprising the cavity and a plurality of annular bands, each annular band of the plurality of annular bands comprises a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve.

[0006] According to another aspect of the disclosure, a method of forming a container for containing a fluid comprises obtaining an inner sidewall and an outer sleeve and attaching the outer sleeve to the inner sidewall to form a sidewall construct with a cavity defined between the inner sidewall and the outer sleeve. The attaching comprises forming insulating features in the sidewall construct, the insulating features comprise the cavity and a plurality of annular bands, each annular band of the plurality of annular bands comprises a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve. The method further comprises forming an interior of the fluid container by positioning the sidewall construct so that the inner sidewall extends at least partially around the interior. The method further comprises positioning a closed bottom relative to the sidewall construct to define a bottom of the interior.

[0007] According to common practice, the various features of the drawings discussed below are not necessarily drawn to scale. Dimensions of various features and elements in the drawings may be expanded or reduced to more clearly illustrate the embodiments of the disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] Fig. 1 is a perspective view of a container according to a first exemplary embodiment of the disclosure.

[0009] Fig. 2 is a schematic cross-sectional view of the container of Fig. 1.

[0010] Fig. 3 is a front view of the container of Fig. 1 with an outer sleeve removed.

[0011] Fig. 4 is a schematic cross-sectional view of a pair of containers, each as shown in Fig. 1, in a nested configuration.

[0012] Corresponding parts are designated by corresponding reference numbers throughout the drawings.

DETAILED DESCRIPTION OF THE EXEMPLARY EMBODIMENTS

[0013] Containers according to the present disclosure can accommodate fluids, e.g., beverages, of different sizes and compositions. For the purpose of illustration and not for the purpose of limiting the scope of the disclosure, the following detailed description describes a container for heated fluids, e.g., coffee or coffee-based products, tea, hot chocolate, cider, soup, etc. It will be understood that the containers described herein can hold cold beverages or room temperature beverages, and can hold at least partially solid food products, without departing from the disclosure.

[0014] In this specification, the terms "lower," "bottom," "upper," and "top" indicate orientations determined in relation to fully erected and upright containers. As described herein, containers can be formed from blanks by overlapping multiple portions, panels, and/or end flaps. Such portions, panels, and/or end flaps may be designated herein in terms relative to one another, e.g., "first", "second", "third", etc., in sequential or non-sequential reference, without departing from the disclosure.

[0015] Fig. 1 is a perspective view, and Fig. 2 is a schematic cross-sectional view, of a fluid vessel or fluid container 5 according to a first exemplary embodiment of the disclosure. In one embodiment, the container 5 is a cup having the general shape of a truncated cone, with an open top 6, a closed bottom 13, and a sidewall construct 8 extending from a bottom edge to a top edge of the container 5. The closed bottom 13 and the sidewall construct 8 define an interior space 7 of the container 5 that is for holding fluids, e.g. hot beverages such as tea, coffee, cider, hot chocolate, etc.

[0016] In the illustrated embodiment, the sidewall construct 8 comprises an annular inner sidewall 19 (broadly, "inner wall") and an outer sleeve 23 (broadly, "outer wall") attached to the inner sidewall 19 such that the sidewall construct 8 can be referred to as a double wall structure. As described herein, the container 5 includes insulating features in the sidewall construct 8 that include radially adjacent spacers 29 separated by respective radial gaps 31. The spacers 29 can be at least partially formed from an adhesive, such as a hot melt glue or other glue, and can extend from the inner sidewall 19 to the outer sleeve 23 to adhesively attach the outer sleeve 23 to the inner sidewall 19. In one embodiment, the spacers 29 can be formed from a different polymeric material.

[0017] As discussed further herein, the insulating features of the container 5 are arranged such that cost and materials savings can be realized, and so that an insulation profile of the container 5 can be selected so as to be enhanced, for example, so that the fluid in the container 5 can be maintained at a selected or desired temperature or temperature range, and such that a customer can be provided with a more comfortable surface about which to grasp the container 5.

[0018] As shown in Fig. 2, the bottom 13 of the container 5 includes a generally circular bottom panel 14 and an annular leg 15 foldably connected to and downwardly-depending from the bottom panel 14 at a circular line of weakening 17. The annular inner sidewall 19 extends upwardly from the bottom panel 14 to define the interior 7 of the container 5. As also shown, the inner sidewall 19 extends downwardly below the bottom panel 14 to define a lower edge margin 20 thereof, along a portion of which the annular leg 15 is adhesively attached to secure the bottom panel 14 to the inner sidewall 19 and to form the bottom 13 of the interior 7 of the container 5.

[0019] As shown, the lower edge margin 20 of the inner sidewall 19 extends along the outer surface of the annular leg 15, wraps under a bottom edge or lower edge thereof, and extends upwardly along the interior surface of the annular leg 15 toward the bottom panel 14. The lower edge margin 20 of the inner sidewall 19 can be an at least partially flexible portion of the inner sidewall 19 configured to engage the annular leg 15, and can include surface features to facilitate such engagement, for example, an adhesive treatment and/or frictionally-enhancing patterning. As described herein, the portion of the lower edge margin 20 of the inner sidewall 19 overlying the lower edge of the annular leg 15 will define a bottom edge or lower edge 18 of the inner sidewall 19. In one embodiment, the lower edge of the annular leg 15 can define the lower edge of the coupled inner sidewall 19 and the bottom 13. The bottom 13 can be secured to the sidewall construct 8 in a different configuration without departing from the disclosure.

[0020] As shown, an upper portion of the inner sidewall 19 is curved or curled to define a top or upper rim 21 of the container 5 that circumscribes an opening 22 in communication with the interior 7 of the container 5. The rim 21 and/or an upper portion of the container 5 can be flanged or otherwise configured to engage a lid or other top container closure structure.

[0021] In one embodiment, the bottom 13 of the container 5 can be integrally formed with the inner sidewall 19, e.g., such that the annular leg 15 is integrally formed with the inner sidewall 19, or the bottom 13 can be otherwise attached to a portion of the inner sidewall 19 by other attachment means, for example, crimping, heat sealing, etc.

[0022] In one embodiment, the illustrated configuration of the truncated conical shape of the container 5 can be achieved by forming the inner sidewall 19 from a flat blank that is folded around a mandrel such that an overlapping seam is provided, and which can be secured, for example, with an adhesive such as glue. The generally truncated conical shape of the sleeve 23 can be formed in a similar manner, or can be formed through a different process without departing from the disclosure.

[0023] The arrangement of the bottom panel 14 and the annular leg 15 of the closed bottom 13 of the container 5 can be formed, in one example, by providing a generally circular blank having an outer periphery that is downwardly folded to provide the annular leg 15 that intersects the bottom panel 14 at the line of weakening 17. It will be understood that the container 5 can have a different configuration and can be formed by other methods and mechanisms without departing from the disclosure.

[0024] Still referring to Figs. 1 and 2, the outer sleeve or sleeve 23, e.g., a wrap or other layer, is disposed in at least partial circumferential engagement with the inner sidewall 19 such that the sleeve 23 presents an outer surface of the container 5 for engagement by a customer, e.g., such that the

customer can wrap his or her fingers around a portion of the sleeve 23. The sleeve 23 can be formed, for example, from materials that include single layer structures, multi-layer structures (with or without inserts therebetween), corrugated materials, etc.

[0025] As shown, the sleeve 23 includes an upper edge 25 proximate the rim 21 and a lower edge 27 proximate the lower portion of the inner sidewall 19 generally adjacent the bottom 13. As described herein, at least the interface between the sleeve 23 and the inner sidewall 19 provide insulating features of the container 5 that include a cavity 24 defined between the inner sidewall 19 and the outer sleeve 23. The insulating features of the container 5 can also include one or more portions of the inner sidewall 19 and/or the sleeve 23.

[0026] Referring additionally to Fig. 3, a front view of the container 5 with the sleeve 23 removed is illustrated. As shown, a plurality of annular bands B1, B2, B3, B4, B5, B6, and B7 of adhesive are applied around the circumference of the inner sidewall 19 and are positioned between the inner sidewall 19 and the outer sleeve 23 to attach the outer sleeve 23 to the inner sidewall 19 and to form the spacers 29. One or more of the annular bands B1, B2, B3, B4, B5, B6, and B7 can be a discontinuous pattern of adhesive such that the bands comprise adhesive that form the spacers 29 that each extend from the inner sidewall 19 to the outer sleeve 23, and the gaps 31 are radially spaced between adjacent spacers 29 along the circumferential length of each of the respective bands around the inner sidewall 19. In one embodiment, the gaps 31 are sections of each respective band that can be voids, interruptions, or discontinuities of the material that forms the spacers 29 along the bands B1, B2, B3, B4, B5, B6, and B7. It will be understood that a different numbers of bands of spacers 29 can be provided without departing from the disclosure.

[0027] The spacers 29, as shown, can be elongate members, for example, beads, dots, dashes, tracks, trails, and/or other arrangements of material. The spacers 29 can be formed of a composite material or polymeric material, such as a hot melt adhesive or other type of adhesive or glue, though the spacers 29 could be material other than adhesive and the outer sleeve 23 could be attached to the inner wall 19 by means other than the annular bands without departing from the disclosure.

[0028] In the illustrated embodiment, the spacers 29 can provide and/or maintain spacing between the inner sidewall 19 and the sleeve 23, and can additionally provide an attachment, e.g., adhesion, between the inner sidewall 19 and the sleeve 23. As shown, the spacers 29 have a length L1 corresponding to the length of an arc around the circumference of the portion of the inner sidewall 19 covered by the spacer 29, with the length L1 extending between respective first and second ends 29a, 29b of a spacer 29. Similarly, the gaps 31 have a length L2 corresponding to the length of an arc around the circumference of the portion of the inner sidewall 19 corresponding to the location of the gap that is a portion of the corresponding band that is void of the material that forms the spacers 29,

with the length L2 extending from a second end 29b to a first end 29a of adjacent spacers 29. In one embodiment, the length L1 can be greater than the length L2. In another embodiment, the length L2 can be greater than the length L1.

[0029] The sum of the lengths L2 of respective gaps 31 of a respective annular band of spacers 29 can correspond to a materials savings of the respective annular band, and by extension, the container 5. Such material savings can be represented as a percentage of the material of a comparative annular band having a continuous spacer (i.e., with substantially no gaps therealong), for example, between about 20% and about 80% of such material, such as 20%, 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, 80%, or other integer or non-integer numbers therebetween. Accordingly, the materials savings of the entire container 5 can be determined by the summation of the material corresponding to the respective lengths L2 of all gaps 31 in the annular bands B1, B2, B3, B4, B5, B6, B7, and can represented as a percentage of material of a summed comparative set of annular bands having respective continuous spacers as described above.

[0030] While the spacers 29 and the gaps 31 have been shown as having a generally uniform configuration along the container 5, it will be understood that one or more spacers 29 and/or gaps 31 can have a different configuration without departing from the disclosure.

[0031] Still referring to Figs. 1-3, the spacers 29 and the gaps 31 of the bands B1, B2, B3, B4, B5, B6, B7 are arranged along the inner sidewall 19 such that a plurality of fluid pathways F1, F2 are presented around the spacers 29 and through respective gaps 31 between the upper edge 25 of the sleeve 23 and the lower edge 27 of the sleeve 23 (shown with broken lines in Fig. 3 for reference). While two fluid pathways F1, F2 are illustrated, the configuration of the annular bands B1, B2, B3, B4, B5, B6, B7 provide much more than two possible fluid pathways. The configuration of the fluid pathways F1, F2 can be at least partially defined by the arrangement and relative offset of spacers 29 and gaps 31 in adjacent bands B1, B2, B3, B4, B5, B6, B7, which can be uniform or non-uniform, such that the fluid pathways F1, F2 can have a substantially linear (e.g., vertical or oblique) or curved configuration. As shown, vertically-adjacent gaps 31 are generally offset from one another, though vertically adjacent gaps 31 in one or more of the bands B1, B2, B3, B4, B5, B6, B7 can be aligned without departing from the disclosure. In one embodiment, the fluid pathways F1, F2 can follow a substantially torturous or serpentine path. It will be understood that the fluid pathways F1, F2 can be defined around spacers 29 through gaps 31 that are not necessarily adjacent, e.g., such that fluid pathways F1, F2 can extend at least partially around the inner sidewall 19 between one or more of bands B1, B2, B3, B4, B5, B6, B7 before traveling through a vertically-adjacent gap 31 without departing from the disclosure.

[0032] In one embodiment, the configuration of the bands B1, B2, B3, B4, B5, B6, B7 that create the tortious pathways F1, F2 help create resistance to air flow from the cavity 24 between the inner sidewall 9 and the outer sleeve 23, to the environment outside the cavity 24 which helps maintain the temperature of the beverage in the container by reducing the amount of heat transfer from the cavity 24 to the atmosphere E (Fig. 2).

[0033] As shown in Fig. 2, a pocket P1 is formed in the cavity 24 between the inner sidewall 19 and the sleeve 23 between the band B1 and the band B2, a pocket P2 is formed in the cavity 24 between the inner sidewall 19 and the sleeve 23 between the band B2 and the band B3, a pocket P3 is formed in the cavity 24 between the inner sidewall 19 and the sleeve 23 between the band B3 and the band B4, a pocket P4 is formed in the cavity 24 between the inner sidewall 19 and the sleeve 23 between the band B4 and the band B5, a pocket P5 is formed in the cavity 24 between the inner sidewall 19 and the sleeve 23 between the band B5 and the band B6, and a pocket P6 is formed in the cavity 24 between the inner sidewall 19 and the sleeve 23 between the band B6 and the band B7. At least the pockets P1, P2, P3, P4, P5, P6 provide insulating gaps or spaces between the inner sidewall 19 and the sleeve 23.

[0034] In one embodiment, each pocket P1, P2, P3, P4, P5, P6 can have a width measured from the inner sidewall 19 to the sleeve 23 and at least partially determined by the size of the spacers 29, which can also have such width, for example, between about 30 mils to about 40 mils, e.g. about 30 mils, about 31 mils, about 32 mils, about 33 mils, about 34 mils, about 35 mils, about 36 mils, about 37 mils, about 38 mils, about 39 mils, or about 40 mils, or non-integer numbers therebetween.

[0035] The arrangement of the spacers 29 and the gaps 31 along the inner sidewall 19 is such that the gaps 31 provides for fluid communication/air flow between the respective pockets at various locations along the container 5. In one embodiment, the fluid pathways F1, F2 comprise one or more of the respective pockets P1, P2, P3, P4, P5, P6.

[0036] In this regard, the arrangement of the spacers 29 and the gaps 31 of the annular bands B1, B2, B3, B4, B5, B6, B7 provide the one or more fluid pathways. The disclosed arrangement of insulating features is such that heat H generated or held by a fluid in the interior 7 of the container 5 can transfer, for example, through conduction, convection, and/or radiation, through the inner sidewall 19 and/or spacers 29 into one or more of the pockets P1, P2, P3, P4, P5, P6, and can be released into the external environment E via the one or more fluid pathways, e.g., F1, F2. Such insulating features can maintain the temperature of the fluid inside the container 5 by resisting heat transfer from the cavity 24 between the inner sidewall 19 and the sleeve 23 to the atmosphere E while still maintaining a desired surface temperature of the sleeve 23 to facilitate grasping by a customer.

[0037] Further, in one embodiment, the surface temperature of the sleeve 23 can be higher at points along the sleeve 23 that are aligned with the spacers 29, for example, due to thermal conduction of heat H through the solid material of the spacers 29, i.e., such that the spacers 29 are formed of a thermally-conductive material. Accordingly, regions of the sleeve 23 aligned with the gaps 31 and/or the pockets P1, P2, P3, P4, P5, P6 present surface regions of lower temperature at which a user can grasp the sleeve 23, for example, by shifting the placement of his or her fingers along the sleeve 23 to provide for more comfortable use of the container 5. In this regard, the dimensioning and arrangement of the spacers 29 and the gaps 31 can be selected to provide a desired thermal profile along the outer surface of the sleeve 23 when the container 5 is filled with a hot fluid such as tea, coffee, cider, hot chocolate, etc. In one embodiment, the fluid in the container 5 can have a temperature up to, including, or greater than about 190°F.

[0038] The aforementioned reduction in material for forming the annular bands B1, B2, B3, B4, B5, B6, B7 of spacers 29 with gaps 31 can provide material and cost-saving benefits as compared to annular bands of continuous spacers with no gaps, e.g., by reducing the cost and materials required to form the container 5, and can also provide streamlining in product production and waste management. In addition to or in the alternative, the relative configuration of the spacers 29 and the gaps 31 can impart desired structural properties to the container 5, for example, by providing a desired pattern of rigidity such that an optimal pattern of flexion is provided to the container 5 during use. For example, upon grasping of the sidewall construct 8 by a customer, portions of the sleeve 23/inner sidewall 19 can bend or flex inwardly into one or more of the gaps 31 or pockets P1, P2, P3, P4, P5, P6 to provide a textured or irregular surface configuration to enhance the customer's grip on the container 5. In one embodiment, the rigidity of the container 5 can be between about 1.30 kgf and about 2.30 kgf, for example, 1.30 kgf, 1.40 kgf, 1.50 kgf, 1.60 kgf, 1.70 kgf, 1.80 kgf, 1.90 kgf, 2.0 kgf, 2.1 kgf, 2.2 kgf, 2.3 kgf, or other integer or non-integer values therebetween, with the rigidity being the amount of force applied to the container 5 to cause bending or flexing of the sidewall construct 8.

[0039] In addition to the insulative and materials-saving properties of the container 5 described above, the container 5 is further provided with a configuration that can realize significant space savings, for example, during storage and transport. Referring additionally to Fig. 4, the inner sidewall 19 (and the sleeve 23 disposed therearound) of the container 5, as shown, have a tapered configuration such that the inner sidewall 19 and the sleeve 23 extend at an α relative to a vertical centerline CL of the container 5. The arrangement of the inner sidewall 19, the sleeve 23, and the bottom 13 can be such that, upon nesting of multiple containers 5, e.g., such that a container 5 is at least partially disposed in the interior space 7 of a respective container 5 below, the bottom edge 18 of the inner sidewall 19 of the upper container 5 contacts the bottom panel 14 of the lower container

5 before the respective sidewall constructs 8 substantially frictionally engage one another. In this regard, uncoupling of the nested containers 5 is not substantially inhibited by frictional resistance. Accordingly, such a nested arrangement of containers 5 provides significant space savings for the transport and/or storage of multiple containers 5 because the interior 7 of a respective container 5 can be utilized to at least partially receive the sidewall construct 8 and bottom 13 of a vertically-adjacent container 5. It will be understood that the container 5 can have a different configuration and can be formed by other methods and mechanisms without departing from the disclosure.

[0040] The containers and/or the blanks that form the containers according to the present disclosure can be, for example, formed from coated paperboard and similar materials. For example, the interior and/or exterior sides of the blanks can be coated with a clay coating. The clay coating may then be printed over with product, advertising, price coding, and other information or images. The blanks may then be coated with a varnish to protect any information printed on the blank. The blanks may also be coated with, for example, a moisture barrier layer, on either or both sides of the blank. In accordance with the above-described embodiments, the blanks may be constructed of paperboard of a caliper such that it is heavier and more rigid than ordinary paper. The blanks can also be constructed of other materials, such as cardboard, hard paper, or any other material having properties suitable for enabling the container to function at least generally as described herein. The blanks can also be laminated or coated with one or more sheet-like materials at selected panels or panel sections.

[0041] In accordance with the above-described embodiments of the present disclosure, a fold line can be any substantially linear, although not necessarily straight, form of weakening that facilitates folding there along. More specifically, but not for the purpose of narrowing the scope of the present disclosure, fold lines include: a score line, such as lines formed with a blunt scoring knife, or the like, which creates a crushed portion in the material along the desired line of weakness; a cut that extends partially into a material along the desired line of weakness, and/or a series of cuts that extend partially into and/or completely through the material along the desired line of weakness; and various combinations of these features.

[0042] The above embodiments may be described as having one or more portions adhered together by glue during erection of the container embodiments. The term "glue" is intended to encompass all manner of adhesives commonly used to secure containers in place.

[0043] The foregoing description of the disclosure illustrates and describes various exemplary embodiments. Various additions, modifications, changes, etc., could be made to the exemplary embodiments without departing from the spirit and scope of the disclosure. It is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense. Additionally, the disclosure shows and

describes only selected embodiments of the disclosure, but the disclosure is capable of use in various other combinations, modifications, and environments and is capable of changes or modifications within the scope of the inventive concept as expressed herein, commensurate with the above teachings, and/or within the skill or knowledge of the relevant art. Furthermore, certain features and characteristics of each embodiment may be selectively interchanged and applied to other illustrated and non-illustrated embodiments of the disclosure.

What is claimed is:

1. A container for containing a fluid, comprising:

a sidewall construct comprising an inner sidewall extending at least partially around an interior of the container, an outer sleeve attached to the inner sidewall, and a cavity defined between the inner sidewall and the outer sleeve; and

a closed bottom defining a bottom of the interior of the container,

the container comprises insulating features comprising the cavity and a plurality of annular bands, each annular band of the plurality of annular bands comprises a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve.

2. The container of claim 1, wherein the gaps of the respective annular bands define a plurality of fluid paths through the cavity.

3. The container of claim 2, wherein the respective gaps of respective adjacent annular bands are offset from one another.

4. The container of claim 3, wherein at least one fluid path of the plurality of fluid paths extends from a lower edge of the outer sleeve to an upper edge of the outer sleeve.

5. The container of claim 1, wherein a respective plurality of pockets are defined between respective adjacent annular bands.

6. The container of claim 5, wherein the plurality of pockets provide a respective plurality of insulating spaces between the inner sidewall and the outer sleeve.

7. The container of claim 1, wherein each respective annular band of the plurality of annular bands extends around the circumference of the inner sidewall and is discontinuous in that the gaps comprise sections of each annular band that is void of material that forms the spacers.

8. The container of claim 1, wherein the plurality of spacers comprise a polymeric material.

9. The container of claim 8, wherein the polymeric material is an adhesive that adheres the outer sleeve to the inner sidewall.

10. The container of claim 9, wherein the adhesive is a thermally conductive material.

11. The container of claim 1, wherein the closed bottom comprises a bottom panel and an annular leg foldably connected to the bottom panel.

12. The container of claim 11, wherein the annular leg extends downwardly from the bottom panel, the annular leg is attached to a lower edge margin of the inner sidewall.

13. The container of claim 1, wherein an upper portion of the inner sidewall defines a flanged rim, the rim is configured to interengage a container closure.

14. The container of claim 1, wherein one or more of the spacers has a width between about 30 mils and about 40 mils.

15. A sidewall construct for forming a fluid container, the sidewall construct comprising:

an inner sidewall for extending at least partially around an interior of a fluid container formed from the sidewall construct;

an outer sleeve attached to the inner sidewall;

a cavity defined between the inner sidewall and the outer sleeve; and

insulating features comprising the cavity and a plurality of annular bands, each annular band of the plurality of annular bands comprises a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve.

16. The sidewall construct of claim 15, wherein the gaps of the respective annular bands define a plurality of fluid paths through the cavity.

17. The sidewall construct of claim 16, wherein the respective gaps of respective adjacent annular bands are offset from one another.

18. The sidewall construct of claim 17, wherein at least one fluid path of the plurality of fluid paths extends from a lower edge of the outer sleeve to an upper edge of the outer sleeve.

19. The sidewall construct of claim 15, wherein a respective plurality of pockets are defined between respective adjacent annular bands.

20. The sidewall construct of claim 19, wherein the plurality of pockets provide a respective plurality of insulating spaces between the inner sidewall and the outer sleeve.

21. The sidewall construct of claim 15, wherein each respective annular band of the plurality of annular bands extends around the circumference of the inner sidewall and is discontinuous in that the gaps comprise sections of each annular band that is void of material that forms the spacers.

22. The sidewall construct of claim 15, wherein the plurality of spacers comprise a polymeric material.

23. The sidewall construct of claim 22, wherein the polymeric material is an adhesive that adheres the outer sleeve to the inner sidewall.

24. The sidewall construct of claim 23, wherein the adhesive is a thermally conductive material.

25. The sidewall construct of claim 15, wherein an upper portion of the inner sidewall defines a flanged rim, the rim is configured to interengage a container closure.

26. The sidewall construct of claim 15, wherein one or more of the spacers has a width between about 30 mils and about 40 mils.

27. A method of forming a container for containing a fluid, comprising;

obtaining an inner sidewall and an outer sleeve;

attaching the outer sleeve to the inner sidewall to form a sidewall construct with a cavity defined between the inner sidewall and the outer sleeve, the attaching comprises forming insulating features in the sidewall construct, the insulating features comprise the cavity and a plurality of annular bands, each annular band of the plurality of annular bands comprises a plurality of spacers and a plurality of gaps separating respective adjacent spacers in a respective annular band, each spacer extends in the cavity from the inner sidewall to the outer sleeve;

forming an interior of the fluid container by positioning the sidewall construct so that the inner sidewall extends at least partially around the interior; and

positioning a closed bottom relative to the sidewall construct to define a bottom of the interior.

28. The method of claim 27, wherein the gaps of the respective annular bands define a plurality of fluid paths through the cavity.

29. The method of claim 28, wherein the respective gaps of respective adjacent annular bands are offset from one another.

30. The method of claim 29, wherein at least one fluid path of the plurality of fluid paths extends from a lower edge of the outer sleeve to an upper edge of the outer sleeve.

31. The method of claim 27, wherein a respective plurality of pockets are defined between respective adjacent annular bands.

32. The method of claim 31, wherein the plurality of pockets provide a respective plurality of insulating spaces between the inner sidewall and the outer sleeve.

33. The method of claim 27, wherein each respective annular band of the plurality of annular bands extends around the circumference of the inner sidewall and is discontinuous in that the gaps comprise sections of each annular band that is void of material that forms the spacers.

34. The method of claim 27, wherein the plurality of spacers comprise a polymeric material.

35. The method of claim 34, wherein the polymeric material is an adhesive that adheres the outer sleeve to the inner sidewall.

36. The method of claim 35, wherein the adhesive is a thermally conductive material.

37. The method of claim 27, wherein the closed bottom comprises a bottom panel and an annular leg foldably connected to the bottom panel.

38. The method of claim 37, wherein the annular leg extends downwardly from the bottom panel, the annular leg is attached to a lower edge margin of the inner sidewall.

39. The method of claim 27, wherein an upper portion of the inner sidewall defines a flanged rim, the rim is configured to interengage a container closure.

40. The method of claim 27, wherein one or more of the spacers has a width between about 30 mils and about 40 mils.

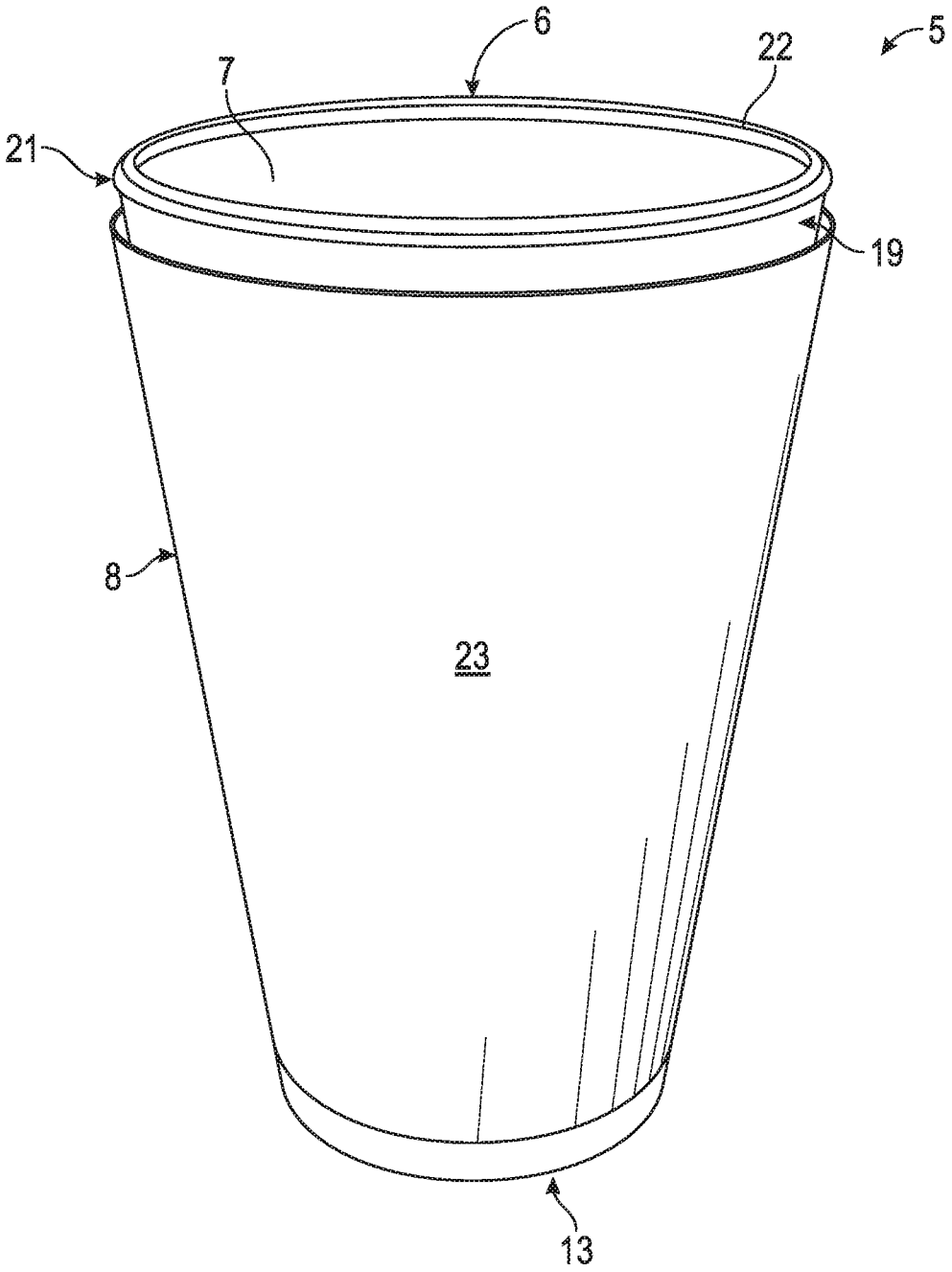

FIG. 1

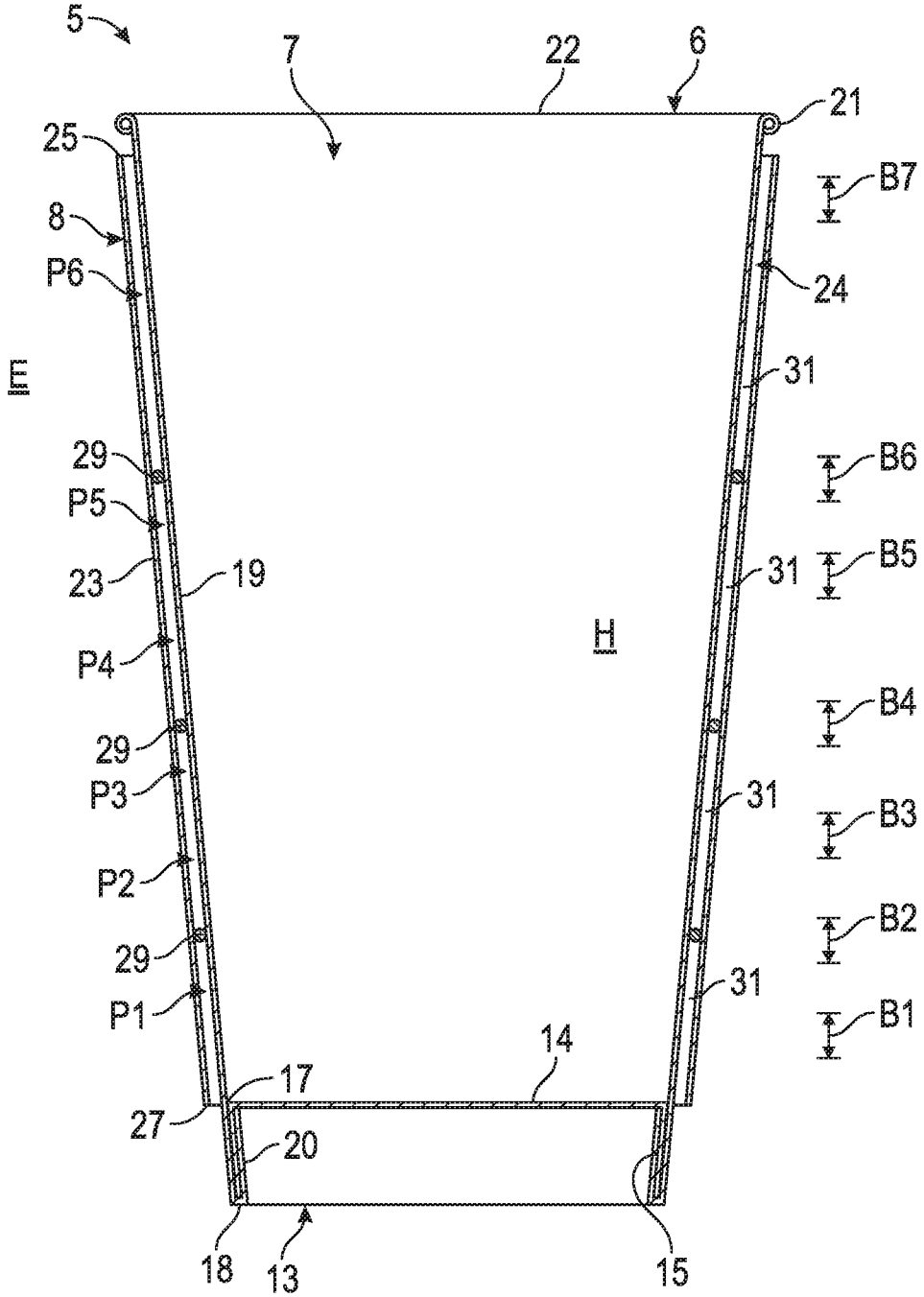
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FIG. 2

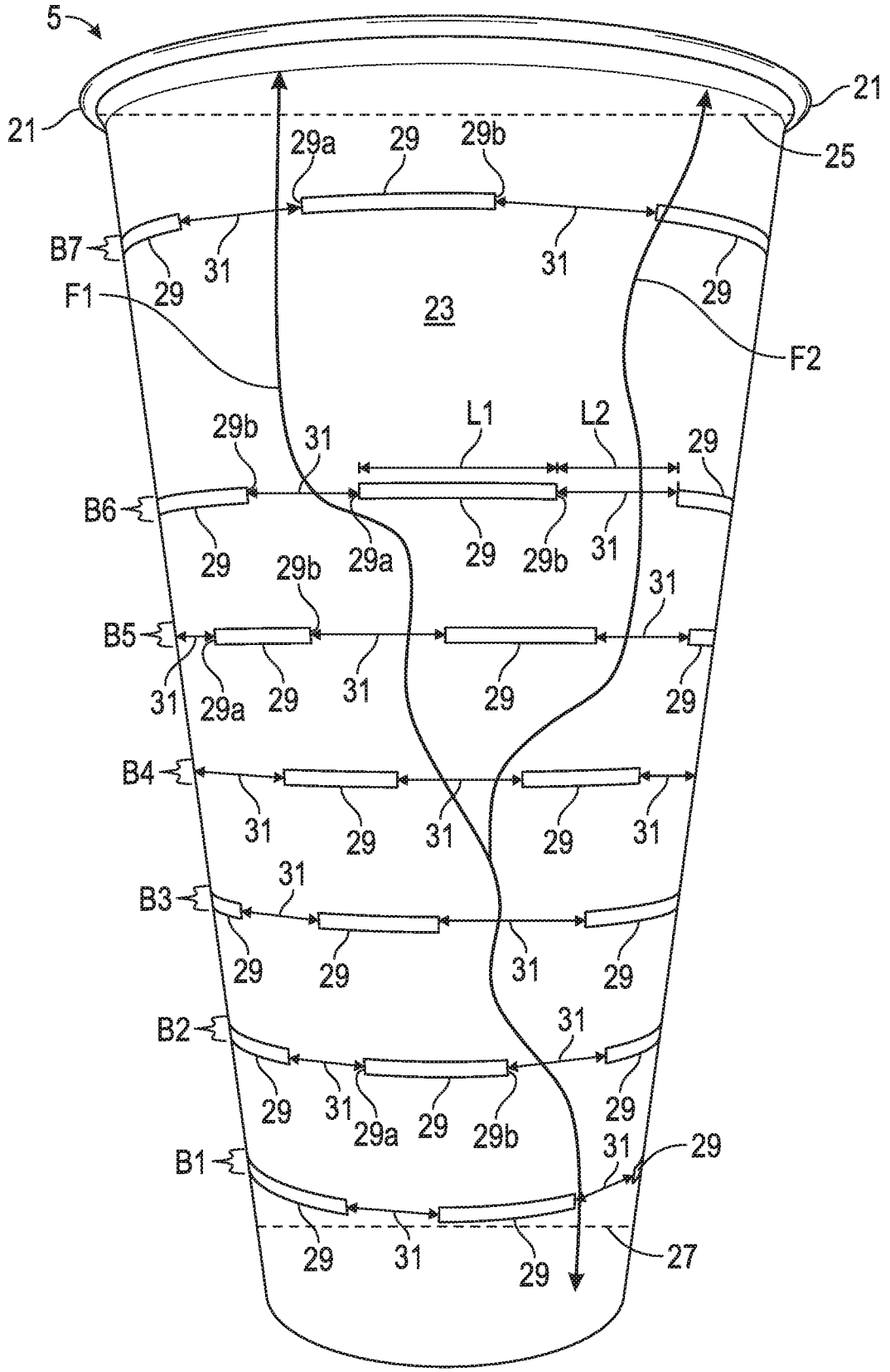
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FIG. 3

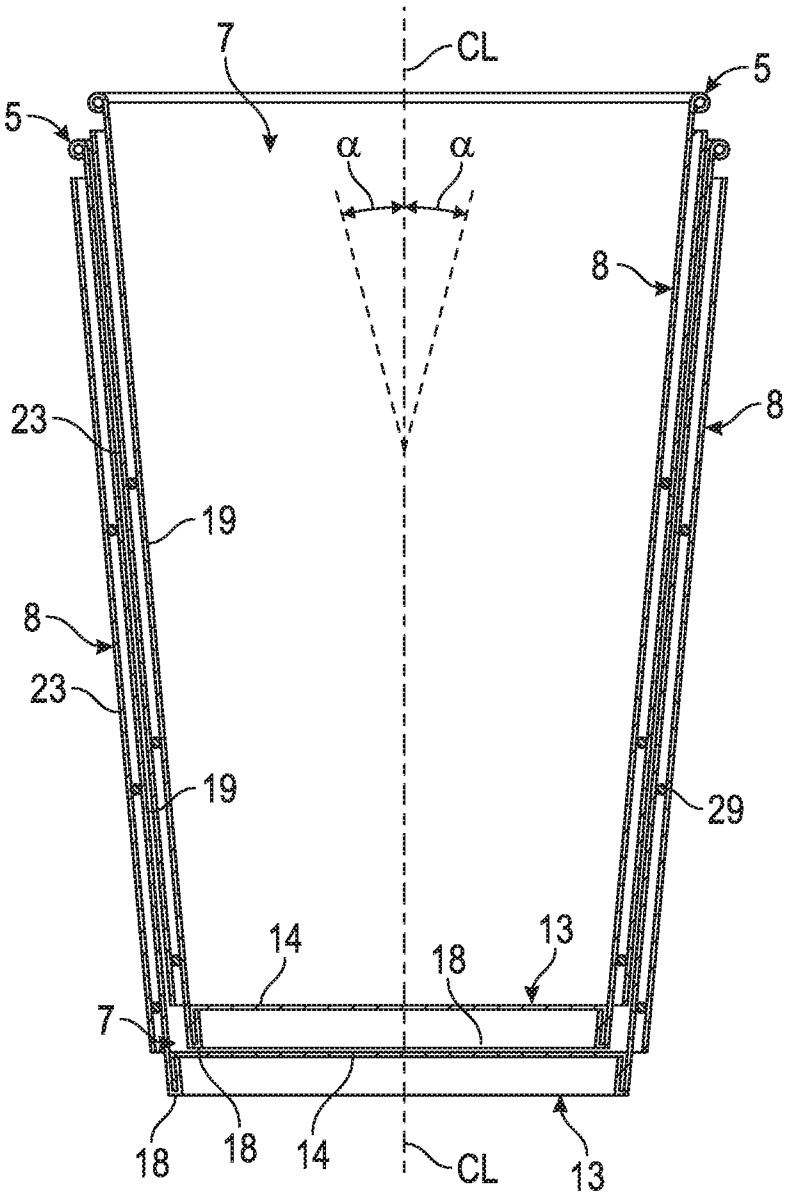

FIG. 4

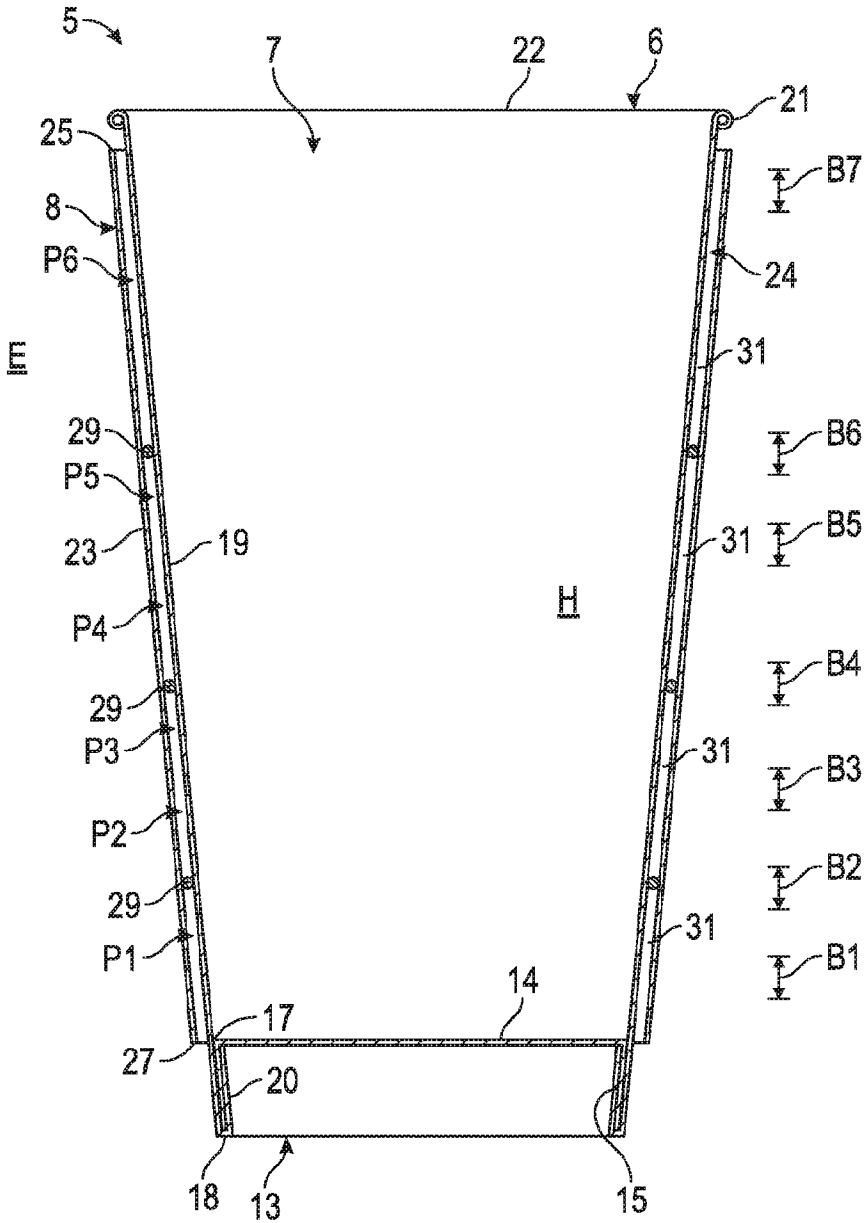
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FIG. 2