Title: CONTAINER WITH ONE OR MORE CONNECTION INTERFACES FOR ATTACHING THREE-DIMENSIONAL ELEMENTS AND METHOD OF MAKING AND USING

Abstract: The invention provides for a container comprising a container body sized and configured to contain a substance. At least one connection interface is arranged on the container body. The at least one connection interface is structured and arranged to removably connect at least one three-dimensional element to the container body.
CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The instant application is a PCT International Application based on U.S. provisional application No. 61/608,956, filed March 9, 2012, the disclosure of which is hereby expressly incorporated by reference hereto in its entirety.

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0002] The invention relates to a container, e.g., a food or drink container, having at least one connection interface to which one or more three-dimensional elements can be attached as shown in the drawings and/or recited in the claims. A method of making and using the container is also disclosed as is a method of decorating the container with such parts/elements.

2. Discussion of Background Information


[0004] An improved container, however, would include a sleeve and/or other external interface to allow a user to attach, e.g., removably attach, to the same (or decorate the same with) one or more elements or parts. The container can thereby assume or be converted into a toy or decorative container.

[0005] It is submitted that there is a need for such a container and which is lacking in known devices.
SUMMARY OF THE INVENTION

[0006] In accordance with one non-limiting embodiment, there is provided a container comprising a container body sized and configured to contain a substance. At least one connection interface is arranged on the container body. The at least one connection interface is structured and arranged to removably connect at least one three-dimensional element to the container body.

[0007] In embodiments, the container is food or beverage container.

[0008] In embodiments, the at least one connection interface comprises a sleeve having plural connection elements.

[0009] In embodiments, the at least one connection interface is a sleeve and at least one of plural connection elements is arranged on the sleeve.

[0010] In embodiments, the at least one of the plural connection elements is an opening formed in the sleeve.

[0011] In embodiments, the at least one of the plural connection elements is a projection arranged on the sleeve.

[0012] In embodiments, the at least one connection interface is a sleeve comprising plural connection elements and the sleeve is axially retained in a groove formed in the container body.

[0013] In embodiments, the at least one connection interface comprises first and second sleeves or rings and wherein a first set of plural connection elements are arranged on the first sleeve or ring and a second set of plural connection elements are arranged on the second sleeve or ring.

[0014] In embodiments, some of said first or second sets of plural connection elements comprise openings.

[0015] In embodiments, some of said first or second plural connection elements comprise projections.

[0016] In embodiments, the first sleeve or ring is axially retained on one portion of the container body and the second sleeve or ring is axially retained on another portion of the container body.

[0017] In embodiments, the at least one connection interface comprises an elongated slot or groove structured and arranged to receive a connecting portion of the at least one three-dimensional element.

[0018] In embodiments, the at least one connection interface comprises plural generally axially oriented elongated slots or grooves structured and arranged to receive a connecting portion of the at least one three-dimensional element.
In embodiments, the at least one connection interface comprises plural generally axially oriented elongated slots or grooves integrally formed in an outer wall of the container body and being structured and arranged to receive a connecting portion of the at least one three-dimensional element.

In embodiments, the at least one connection interface comprises plural generally axially oriented elongated slots or grooves arranged on an outer wall of the container body and being structured and arranged to receive a connecting portion of the at least one three-dimensional element.

In embodiments, one of the plural generally axially oriented elongated slots has a generally T-shaped cross-section.

In embodiments, the at least one connection interface comprises plural blind openings or grooves arranged on an outer wall of the container body and being structured and arranged to receive a connecting portion of the at least one three-dimensional element.

In embodiments, the at least one connection interface comprises a generally axially oriented elongated slot having a generally T-shaped cross-section.

In embodiments, the at least one connection interface comprises a clip member attachable to the container body.

In embodiments, the at least one connection interface comprises a ring-shaped member slidable onto the container body.

In embodiments, the at least one connection interface comprises an elongated dove-tailed-shaped member arranged on the container body.

In embodiments, the at least one connection interface comprises at least one elongated member slidable into a groove arranged in the container body.

In embodiments, the container is one of: a cup; a can; a drink vessel; a mug; and a conventionally know container that can contain an edible drinking substance.

In embodiments, the container is one of: a food bowl; a soup bowl; a cereal bowl; and a conventionally know container that can contain an edible eating substance.

In embodiments, the at least one three-dimensional element is attachable via a snap connection.

In embodiments, the at least one three-dimensional element is attachable via insertion of one component into another component.

In embodiments, the at least one three-dimensional element is one of: a decorative element; a toy element; an object resembling a portion of a man-made structure; and an object resembling a portion of a living thing.
[0033] In embodiments, the at least one three-dimensional element is one of: a letter; a number; an inanimate object; and an object resembling an inanimate object.

[0034] In embodiments, the at least one three-dimensional element is one of: a head of an animal; a face of an animal; a body of an animal; and a portion of an animal.

[0035] In embodiments, the at least one connection interface comprises plural connection elements which comprise one of: snap connectors; projections insertable into openings; and recesses receiving projections.

[0036] According to one non-limiting embodiment, there is provided a method of decorating the container, wherein the method comprises attaching at least one three-dimensional element to the container body.

[0037] According to one non-limiting embodiment, there is provided a method of decorating a container, wherein the method comprises removably attaching at least one three-dimensional element to a container body via at least one connection interface.

[0038] According to one non-limiting embodiment, there is provided a container comprising a container body, plural connection elements arranged on an outer surface of the container body, and at least one three-dimensional element being removably connectable to the container body via at least one of the plural connection elements.

[0039] According to one non-limiting embodiment, there is provided a container comprising a container body, at least one connection interface arranged on an outer surface of the container body, plural connection elements arranged on the at least one connection interface, and at least one three-dimensional element removably connectable to the container body via at least one of the plural connection elements.

[0040] According to one non-limiting embodiment, there is provided a container comprising a container body sized and configured to contain a substance. Plural connection elements are arranged on the container body. At least one three-dimensional element is removably connectable to the container body via at least one of the plural connection elements.

[0041] In embodiments, the container is food or beverage container.

[0042] In embodiments, at least one of the plural connection elements is arranged on a sleeve.

[0043] In embodiments, at least one of the plural connection elements is arranged on a sleeve arranged on the container body.

[0044] In embodiments, the at least one of the plural connection elements is an opening formed in the sleeve.
[0045] In embodiments, the at least one of the plural connection elements is a projection arranged on the sleeve.

[0046] In embodiments, at least one of the plural connection elements is arranged on a sleeve axially retained in a groove formed in the container body.

[0047] In embodiments, some of the plural connection elements are arranged on a first sleeve or ring arranged the container body and other of the plural connection elements are arranged on a second sleeve or ring arranged the container body.

[0048] In embodiments, the some of the plural connection elements comprise openings.

[0049] In embodiments, the some of the plural connection elements comprise projections.

[0050] In embodiments, some of the plural connection elements are arranged on a first sleeve or ring axially retained on one portion of the container body and other of the plural connection elements arranged on a second sleeve or ring axially retained on another portion of the container body.

[0051] In embodiments, the at least one of the plural connection elements comprises an elongated slot or groove structured and arranged to receive a connecting portion of the at least one three-dimensional element.

[0052] In embodiments, the plural connection elements comprise plural generally axially oriented elongated slots or grooves structured and arranged to receive a connecting portion of the at least one three-dimensional element.

[0053] In embodiments, the plural connection elements comprise plural generally axially oriented elongated slots or grooves integrally formed in an outer wall of the container body and being structured and arranged to receive a connecting portion of the at least one three-dimensional element.

[0054] In embodiments, the plural connection elements comprise plural generally axially oriented elongated slots or grooves arranged on an outer wall of the container body and being structured and arranged to receive a connecting portion of the at least one three-dimensional element.

[0055] In embodiments, one of the plural generally axially oriented elongated slots has a generally T-shaped cross-section.

[0056] In embodiments, the plural connection elements comprise plural blind openings or grooves arranged on an outer wall of the container body and being structured and arranged to receive a connecting portion of the at least one three-dimensional element.

[0057] In embodiments, one of the plural generally axially oriented elongated slots has a generally T-shaped cross-section.
[0058] In embodiments, at least one of the plural connection elements is arranged on a clip member attachable to the container body.

[0059] In embodiments, at least one of the plural connection elements is arranged on a ring-shaped member slidable onto the container body.

[0060] In embodiments, at least one of the plural connection elements is arranged on at least one elongated dove-tailed-shaped member arranged on the container body.

[0061] In embodiments, at least one of the plural connection elements is arranged on at least one elongated member slidable into a groove arranged in the container body.

[0062] In embodiments, the container is one of: a cup; a can; a drink vessel; a mug; and a conventionally know container that can contain an edible drinking substance.

[0063] In embodiments, the container is one of: a food bowl; a soup bowl; a cereal bowl; and a conventionally know container that can contain an edible eating substance.

[0064] In embodiments, the at least one three-dimensional element is attachable via a snap connection.

[0065] In embodiments, the at least one three-dimensional element is attachable via insertion of one component into another component.

[0066] In embodiments, the at least one three-dimensional element is one of: a decorative element; a toy element; an object resembling a portion of a man-made structure; and an object resembling a portion of a living thing.

[0067] In embodiments, the at least one three-dimensional element is one of: a letter; a number; an inanimate object; an object resembling an inanimate object.

[0068] In embodiments, the at least one three-dimensional element is one of: a head of an animal; a face of an animal; a body of an animal; a portion of an animal.

[0069] In embodiments, the plural connection elements comprise one of: snap connectors; projections insertable into openings; and recesses receiving projections.

[0070] In embodiments, there is provided a method of decorating the container of claim 1, the method comprising attaching at least one three-dimensional element to the container body.

[0071] In embodiments, there is provided a method of decorating a container, the method comprising removably attaching at least one three-dimensional element to a container body via at least one of a plural connection elements.

[0072] According to one non-limiting embodiment, there is provided a container comprising a container body, plural connection elements arranged on an outer surface of the container body, and at
least one three-dimensional element being removably connectable to the container body via at least one of the plural connection elements.

[0073] Other exemplary embodiments and advantages of the present invention may be ascertained by reviewing the present disclosure and the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

[0074] The present invention is further described in the detailed description which follows, in reference to the noted plurality of drawings by way of non-limiting examples of exemplary embodiments of the present invention, in which like reference numerals represent similar parts throughout the several views of the drawings, and wherein:

Fig. 1 shows a side view of an exemplary container which can be used to practice the invention which in this non-limiting embodiment is a due-wall container;

Fig. 2 shows a top view of Fig. 1;

Fig. 3 shows a side cross-section view of a bottom portion of the container of Fig. 1;

Fig. 4 shows a side view of an exemplary container sleeve which can be used to practice the invention which in this non-limiting embodiment includes round or circular openings, recesses and/or depressions forming connecting interfaces for attaching one or more 3-dimensional elements. The sleeve can be synthetic resin foam type material which is also resilient and/or capable of providing floatation to the container;

Fig. 5 shows a top view of Fig. 4;

Fig. 6 shows one non-limiting way in which the sleeve of Fig. 4 can be installed on or slid onto the container of Fig. 1;

Fig. 7 shows the container sleeve of Fig. 4 fully installed on the container of Fig. 1;

Fig. 8 shows the container Fig. 7 and two 3-dimensional elements which are about to be mounted onto the container sleeve. In this non-limiting embodiment, one 3-diemsnsional element has the form of a bent right arm and has a male or projecting interface that can be inserted and/or snapped into one of the openings of the container sleeve and another 3-diemsnsional element has the form of a bent left arm and has a male or projecting interface that can be inserted and/or snapped into another oppositely arranged one of the openings of the container sleeve;

Fig. 9 shows a side view of another exemplary container which can be used to practice the invention which in this non-limiting embodiment includes projecting ribs arranged on an outer surface of the container. The ribs can function to facilitate installation of the sleeve as well as make it easier to reconfigure, e.g., rotate it and/or moved it axially, without requiring that it be removed. The ribs in combination with the sleeve can also function to insulate the container;
Fig. 10 shows another non-limiting container embodiment and two 3-dimensional elements which are about to be mounted onto the container. In this non-limiting embodiment, an outer wall of the container has one or more circumferential grooves formed therein as well as one or more hoop-shaped or ring elements which can be slid onto the container and seated within each groove. Each ring element has an outer surface which includes equally spaced openings, recesses and/or depressions which each function as a female connecting interface and can receive therein a male or projecting interface of a 3-diemsional element. Two 3-dimensional elements are shown in a ready to install position;

Fig. 11 shows a side cross-section of a portion of the container of Fig. 10 and shows how each ring element is seated and axially retained in each groove;

Fig. 12 shows another non-limiting container embodiment and two 3-dimensional elements which are about to be mounted onto the container. In this non-limiting embodiment, an outer wall of the container has one or more circumferential grooves formed therein as well as plural ring elements which can be slid onto the container and seated within each groove. One ring element has an outer surface which includes equally spaced openings, recesses and/or depressions which each function as a female connecting interface and can receive therein a male or projecting interface of a 3-diemsional element. Another ring element has an outer surface which includes equally spaced connecting projections which each function as a male connecting interface and can receive thereon a female connecting interface of a 3-diemsional element. Two 3-dimensional elements are shown in a ready to install position on the ring with the male or projecting connecting interfaces;

Fig. 13 shows a side cross-section of a portion of the container of Fig. 12 and shows how each ring element is seated and axially retained in each groove;

Fig. 14 shows one non-limiting way in which another exemplary sleeve can be installed on or slid onto another exemplary container. In this example, the container is a single wall container having projecting ribs arranged on an outer surface. As in a previous embodiment, the ribs can function to facilitate installation of the sleeve as well as make it easier to reconfigure, e.g., rotate it and/or moved it axially, without requiring that it be removed. The ribs in combination with the sleeve can also function to insulate the container;

Fig. 15 shows the container sleeve and container of Fig. 14 in a fully assembled condition and one 3-dimensional element which is about to be mounted onto the container sleeve along an insertion direction indicated by an arrow. In this non-limiting embodiment, the 3-diemsional element has the form of a straight right arm and has a male or projecting interface that can be inserted and/or snapped into one of the openings of the container sleeve;
Fig. 16 shows another non-limiting container embodiment and one 3-dimensional element which is about to be mounted onto the container. In this non-limiting embodiment, an outer wall of the container has numerous circumferential grooves formed therein as well as numerous hoop-shaped or ring elements which can be expanded and snapped onto the container and seated within each respective groove. One or more of ring elements can frictionally engage with one of the grooves in order to prevent them from rotating in the groove. Alternatively or additionally, one or more of ring elements can be loosely engage with one of the grooves in order to allow them to rotate in the groove (along a direction indicated by an arrow) so that a user can adjust their rotational position. Each ring element has an outer surface which includes equally spaced openings, recesses and/or depressions which each function as a female connecting interface and can receive therein a male or projecting interface of a 3-diemsnsional element. One 3-dimensional element, having the form of a straight or outstretched arm, is shown in a ready to install position along an insertion direction indicated by an arrow;

Fig. 17 shows a partial cross-section view of another non-limiting container embodiment and of a portion of one 3-dimensional element which is about to be mounted onto the container. In this non-limiting embodiment, an outer wall of the container has numerous circumferential grooves formed therein as well as numerous hoop-shaped or ring elements which can be expanded and snapped onto the container and seated within each respective groove. Each ring element has an outer surface which includes equally spaced connecting projections which each function as a male connecting interface and can receive thereon a female or receiving interface of a 3-diemsnsional element. One 3-dimensional element is shown in a ready to install position;

Fig. 18 shows a partial cross-section view of another non-limiting container embodiment and of a portion of one 3-dimensional element which is about to be mounted onto the container. In this non-limiting embodiment, an outer wall of the container has numerous circumferential grooves formed therein as well as numerous hoop-shaped or ring elements which can be expanded and snapped onto the container and seated within each respective groove. Each ring element has an outer surface which includes equally spaced connecting openings or recesses like certain previous embodiments and each groove has a stepped configuration, i.e., a shallow an axially longer groove section for axially retaining each ring and a deeper generally centrally arranged groove section having a shorter axial length and forming a space beneath the ring;

Fig. 19 shows another non-limiting container embodiment and one 3-dimensional element which is shown in two positions, i.e., one position wherein it is about to be mounted onto the container along an installation direction indicated by an arrow and an installed position. In this non-
limiting embodiment, an outer wall of the container has two or more oppositely arranged elongate axial grooves formed or integrally formed thereon. The axial grooves or slots are arranged on the container body. The connecting interface section of each 3-dimensional element has the configuration of a clip. Installation of the 3-dimensional element causes the free ends of the clip section to expand outwardly until a projection located at each respective free end snaps into one of the oppositely arranged elongate axial grooves of the container. The user can then slide the 3-dimensional element up and down axially to adjust its axial position on the container;

Figs. 20 and 21 show another non-limiting embodiment of a container system with Fig. 20 showing a container body and Fig. 21 showing a two part C-clip. In this non-limiting embodiment, an outer wall of a generally cylindrical container has two or more oppositely arranged elongate axial grooves formed or integrally formed thereon which extend to an upper end. Two C-clips are shown about to be slid onto the container. Installation of the 3-dimensional element begins either before or after the two C-clips are installed or slid onto the oppositely arranged elongate axial grooves of the container. The user can then slide the 3-dimensional element and/or the C-clips up and down axially to adjust its axial position on the container. Generally equally spaced projections are provided on a bottom surface of each groove to assist in releasably retaining the C-clips in desired axial positions;

Fig. 22 shows an enlarged portion of one of the axial grooves of Fig. 20 and shows two of the generally equally spaced projections provided on a bottom surface of each groove;

Fig. 23 shows another non-limiting container embodiment and one 3-dimensional element which is shown in two positions, i.e., one position wherein it is about to be mounted onto the container along an installation direction indicated by an arrow and an installed position. In this non-limiting embodiment, an outer wall of the container has plural generally T-shaped elongate axial grooves formed or integrally formed thereon and extending to and/or opening out at a bottom end. The connecting interface section of each 3-dimensional element has the configuration of a nail-head. Installation of the 3-dimensional element occurs when a user aligns the nail-head interface of the 3-dimensional element with one of the T-shaped grooves and the slides the 3-dimensional element up and down axially to adjust its axial position on the container. The shape of the nail-head connecting interface can be such as to provide for a twist-lock connection by, e.g., forming the head portion into an oval shape;

Fig. 24 shows a bottom side perspective view of Fig. 23 and shows how the container can have four equally spaced axial T-shaped grooves which extend to the bottom of the container;

Fig. 25 shows another non-limiting container embodiment and one 3-dimensional element which is shown in an installed position. In this non-limiting embodiment, an outer wall of the
container has plural generally T-shaped elongate axial grooves formed or integrally formed thereon and but not extending to and/or opening out at either the upper or the bottom ends. The connecting interface section of each 3-diemsnsional element is generally T-shaped. Installation of the 3-dimensional element occurs when a user rotatably aligns the T-shaped interface of the 3-dimensional element with one of the T-shaped grooves, inserts the same, then slides the 3-dimensional element up and down axially to adjust its axial position on the container, and finally rotates the same to lock it in place. This connection interface forms releasable twist-lock connection. Removal of the 3-dimensional element occurs by rotating the 3-dimensional element about 90 degrees and sliding it out of the groove;

Fig. 26 shows an enlarged side view of a portion of Fig. 25 and shows both an insertion direction and a rotatably locking direction both indicated by arrows;

Fig. 27 shows another non-limiting container embodiment and one 3-dimensional element which is shown in an installed position. In this non-limiting embodiment, an outer wall of the container has plural spaced apart generally key-shaped openings formed or integrally formed therein. The connecting interface section of each 3-diemsnsional element is generally key-shaped. Installation of the 3-dimensional element occurs when a user rotatably aligns the key-shaped interface of the 3-dimensional element with one of the key-shaped openings, inserts the same, and then rotates the same to lock it in place. This connection interface forms releasable twist-lock connection. Removal of the 3-dimensional element occurs by rotating the 3-dimensional element between about 45 and 90 degrees and then sliding it out of the opening;

Fig. 28 shows an enlarged side view of a portion of Fig. 27 and shows both an insertion direction and a rotatably locking direction both indicated by arrows;

Fig. 29 shows another non-limiting container embodiment, an installable barrel stave type connecting interface and one 3-dimensional element – both of which are shown in an about to be installed position. One barrel stave clip is shown already installed on the container. In this non-limiting embodiment, an outer wall of the container is formed by first installing plural barrel stave type clips having generally circular openings formed or integrally formed therein. Each clip has a upper end that can releasably engage with the container lip so as to form a snap connection therewith. The connecting interface section of each 3-diemsnsional element is generally pin-shaped and which can have a slight taper. Installation of the 3-dimensional element occurs when a user inserts the pin-shaped interface into one of the openings so as to form a wedged-in connection;

Fig. 30 shows the container of Fig. 29 after all of the barrel stave type clips are installed and with the 3-dimensional element installed in one of the openings;
Fig. 31 shows another non-limiting container embodiment which utilizes installable elongate dove-tailed elements whose openings all for installation of 3-dimensional elements. Each dove tail element is sized and configured to slide into an elongate axial dove-tail groove from an upper end of the container;

Fig. 32 shows a rear perspective view of a portion of one of the dove-tail elements;

Fig. 33 shows an enlarged side view of a portion of Fig. 31 and shows both how each dove-tail element can be inserted into a respective dove-tailed groove of the container and how a 3-dimensional element can be inserted into an opening of the element - both indicated by arrows;

Fig. 34 shows another non-limiting container embodiment. In this non-limiting embodiment, an outer wall of the container is sized and configured to receive thereon numerous hoop-shaped or ring elements which can be slid onto a bottom end after a user removes a screw-on bottom. The one or more of ring elements can frictionally engage with the outer surface in order to prevent them from rotating. Alternatively or additionally, one or more of ring elements can be loosely engage with the outer surface. Alternatively or additionally, the ring elements has portions that can engage with each other so that they nest together. Each ring element has an outer surface which includes equally spaced openings, recesses and/or depressions which each function as a female connecting interface and can receive therein a male or projecting interface of a 3-dimensional element. Once all of the ring elements are installed, the screw-on bottom can be threaded onto the container (as indicated by an arrow) and the container flipped over so that its open upper end is disposed upwards. The user can also un-screw the bottom to allow for rotational repositioning of each ring as indicated by an arrow and then re-tighten the screw-on bottom; and

Fig. 35 shows the container of Fig. 34 after all of the ring elements are installed and the screw-on bottom is fully threaded onto the container and the container flipped over so that its open upper end is disposed upwards. Also shows is one 3-dimensional element, having the form of an out-stretched arm, connected to one of the openings formed in one of the ring elements.

DETAILED DESCRIPTION OF THE INVENTION

Figs. 1-8 show a first exemplary container in accordance with the invention. The container includes two main components. A first component is a container body and the second main component is sleeve member. The container body can be a duel wall container body which includes an open upper end or rim and a close bottom end formed by an inner container wall and can be made of any material fit for its intended purpose. If the container is a food or beverage container, the inner wall can be of any material user for such containers such as synthetic resin or stainless steel. The outer wall of the container body also includes an open upper end or rim and
a close bottom end, and can be made of any material fit for its intended purpose. If the container 1 is a food or beverage container, the outer wall 12 can be of any material user for such containers such as synthetic resin or stainless steel. A space 13 is arranged between the walls 11 and 12 which can have any number of functions such as providing insulation and/or serving as a space to place decorations, indicia, or other information indicating substrates or coatings. This latter variation can be enhanced by making at least part of the outer wall 12 transparent or translucent.

[0076] The sleeve member 20 can have open upper and lower ends and a generally tapered configuration that generally corresponds to a portion of the outer wall 12 of the container body 10. This allows the sleeve 20 to more snugly fit over the container body 10. In this embodiment, the sleeve member 20 has an axial length that is substantially similar to or slightly less than a sleeve receiving space 14 arranged on an outer surface of the container body 10. This space 14 is defined by an upper shoulder 15 and a lower shoulder 16. The sleeve member 20 can be made of synthetic resin material such as PVC. In an exemplary embodiment, the material is a foam type synthetic resin material such as closed cell foam resin, e.g., Croslite and/or a material similar to that used to make a Crocs-type sandal. In embodiments, the sleeve member 20 is made of an antimicrobial material, is a one-piece or integrally formed member, and has a thickness greater than that of one or more of the container body walls. Non-limiting thickness ranges include between about 1/8 inch to about 1/2 inch as well as any 1/64 value between this range. The material of the sleeve member 20 can also be such that it allows for easy installation onto the container body 10, i.e., it can be resilient, allow for radial expansion, and have sufficient memory to return to a relaxed or original position after being expanded. In embodiments, the sleeve 20 would hold its shape when laid sideways and yet be capable of being squeezed out of shape when gripped and squeezed by a user. This flexible and resilient configuration can facilitate its installation onto the container body 10 as shown in Figs. 6 and 7, with the sleeve member 10 being seated within the space 14 and being axially retained between the shoulders 15 and 16.

[0077] With reference to Fig. 8, it can be seen that the installed sleeve 20 of the container 1 can advantageously also serve as a connecting interface for the container 1. In this embodiment, the sleeve member 20 includes plural openings, recesses or depressions 30 which in this case are generally circular and extend into the sleeve member 20 by an amount sufficient to allow one or more 3-dimensional elements 50 to be attached to the container 1. Furthermore, in the embodiment of Fig. 8, the openings 30 are arranged on the sleeve member 20 in a desired pattern such as equally spaced rows of openings 30 and equally spaced openings within each row. Although the openings 30 are shown round or circular in shape, they can be any desired shape or size provided they function to
secure and removably receive therein the male connecting interface of the 3-dimensional elements 50. Each 3-dimensional element 50 includes a male connecting interface 60 which, in this embodiment, is at least one projection that can slide into and frictionally engage with a female connecting interface which has the form of one of the openings 30. In embodiments, this frictional engagement is releasable, but sufficient to ensure that the element 50 does not fall out of the opening 30 until a user desired to pull it off of the container 1. Moreover, the shaped or configuration of the projection 60 and openings 30 can be such, e.g., can be generally complimentary, that once the element(s) 50 is inserted, its orientation is maintained until the user repositions or reorients it. However, the frictional engagement should not be one that results in damage to the wall of the opening 30 from repeated insertion or removal of the element(s) 50. The material of the sleeve 20 should thus be capable of allowing the openings 30 to deflect or deform slightly when receiving the projection 60 and generally return to an original shaped when the projection is removed. A material such as, e.g., a closed-cell foam of the type described above can thus be advantageous in this regard.

As can be seen in Fig. 8, in this embodiment, a user can install 3-dimensional elements 50 having the form of bent arms in order to decorate the container 1. This transforms the container 1 into one that can personalized, decorated and/or transformed into a toy - which can be appealing to children and adults alike. Each 3-dimension element 50 (even if completely different in size, shape and/or appearance) can be positioned into any one of the numerous same-sized openings 30, and can have or share the same or common male connecting interface 60 to facilitate the same. As the number, size and shape of possible 3-dimnsional elements 50 is almost limitless, a user provided with many 3-dimensionnal elements can entertain him or herself by decorating and/or redecorating the container 1 in a fashion that suits his or her will. The material of the element(s) 50 can generally be a more rigid synthetic resin material. As exemplary material would be that used to make lego-type elements and/or attachable elements used in the classic Mr. Potato-head toy.

Fig. 9 shows another exemplary container which can be used to practice the invention which in this non-limiting embodiment includes two or more projecting ribs 17' arranged on an outer surface of the container body 10' in the sleeve receiving space disposed between upper shoulder 15' and lower shoulder 16'. The ribs 17' can be between, e.g., 3 and 10 or more, equally angularly spaced rings and can function to facilitate installation of the sleeve, e.g., sleeve 20, as well as make it easier to reconfigure, e.g., rotate it and/or moved it axially, without requiring that it be removed from the body 10'. The ribs 17' in combination with the sleeve can also function to insulate the container. Although not shown, the sleeve which can be used with this embodiment can be similar to the sleeve 20 used in the previous embodiment and also include axially oriented grooves (arranged on an inside
surface thereof) corresponding to and sized and shaped to receive therein the ribs 17' in order to prevent rotation of the sleeve with respect to the body 10'.

Figs. 10 and 11 show another non-limiting embodiment of a container 100 and two 3-dimensional elements 150 which are about to be mounted onto one of plural container rings 120. In this non-limiting embodiment, an outer wall or surface of the container body 110 has two circumferential grooves 140 formed therein as well as one hoop-shaped or ring element 120 arranged in each groove 140 and which can be slid onto the container body 110 and seated within each groove 140. Each ring element 120 has a generally C-shaped configuration to provide a projecting receiving space 121 and an outer surface which includes equally spaced openings, recesses and/or depressions 130 which each function as a female connecting interface and can receive therein a male or projecting interface of a 3-diemsnsional element 150. Two 3-dimensional elements 150 having the form of bent arms are shown in a ready to install position. In embodiments, one or more of the rings 120 can be loosely arranged (or be lightly frictionally engaging therewith) in the groove 140 to allow it to rotate therein so that the user can control the rotational position of the openings 130. As with the previous embodiment, each opening 130 is sized and configured to receive therein the male or projecting connecting interface 160 of the 3-dimensional element 150.

Figs. 12 and 13 show another non-limiting embodiment of a container 100' and two 3-dimensional elements 150' which are about to be mounted onto one of plural container rings 120'. In this non-limiting embodiment, an outer wall or surface of the container body 110' has two circumferential grooves 140' formed therein as well as one hoop-shaped or ring element 120' arranged in each groove 140' and which can be slid onto the container body 110' and seated within each groove 140'. Each ring element 120' can have a generally C-shaped configuration to provide an optional space 121'. As the ring 120' in this embodiment has connecting projections 130', however, the space 121' need not be utilized or provided. At least one of the rings 120' has an outer surface which includes equally spaced connecting projections 130' which each function as a male connecting interface and can receive thereon a female or receiving interface 160' of a 3-diemsnsional element 150'. The receiving interface 160' (shown is shown in cross-section) includes a receiving space 161' and an opening 162'. Two 3-dimensional elements 150' having the form of bent arms are shown in a ready to install position. In embodiments, one or more of the rings 120' can be loosely arranged (or be lightly frictionally engaging therewith) in the groove 140' to allow it to rotate therein so that the user can control the rotational position of the projections 130'. An exemplary bottom ring 120 can optionally include openings 130 sized and configured to receive therein the male or projecting connecting interface 160 of the 3-dimensional element 150 instead of utilizing projections like the
upper ring 120". It should be appreciated that one can configure the container to utilize additional variations of the rings 120/120" and grooves 140/140" in order to provide a common interface or at least two common connecting interfaces 130/130".

Figs. 14 and 15 show another exemplary container which can be used to practice the invention which in this non-limiting embodiment includes plural projecting ribs 117" arranged on an outer surface of the container body 110" in the sleeve receiving space disposed between upper shoulder and lower shoulder. The ribs 117" can be between, e.g., 3 and 10 or more, equally angularly spaced rings and can function to facilitate installation of the sleeve 120" (installation direction indicated by arrows) as well as make it easier to reconfigure, e.g., rotate it and/or moved it axially, without requiring that it be removed from the body 110". The ribs 117" in combination with the sleeve 120" can also function to insulate the container 100". The sleeve 120" can be similar to the sleeve 20 used in a previous embodiment and also have an axial length that is slightly longer than the sleeve receiving space 114". In this way, when the sleeve 120" is fully installed on the body 110" (as shown in Fig. 15), it can bow out slightly in the center. As with certain previous embodiments, each opening 130" is sized and configured to receive therein (along the insertion direction indicated by an arrow) the male or projecting connecting interface of the 3-dimensional element 150". In which case is an out-stretched arm. Furthermore, in this embodiment, a user may be able to remove the sleeve 120" and replace it with another one as well as install the 3-dimensional element 150" onto the sleeve 120" before the sleeve 120" is installed as shown in Fig. 14 or alternatively a user may install the 3-dimensional element 150" onto the sleeve 120" after the sleeve 120" is installed as shown in Fig. 15. Moreover, in this embodiment, the container 100" can be a single-wall one-piece container.

Figs. 16 and 17 show another non-limiting embodiment of a container 100" and a 3-dimensional element 150" which is about to be mounted onto one of the openings of one of plural container rings 120". In this non-limiting embodiment, an outer generally cylindrical wall or surface of the container body 110" has three circumferential grooves 140" formed therein as well as one hoop-shaped or ring element 120" arranged in each groove 140" and which can be slid onto the container body 110" and seated within each groove 140". Each ring element 120" can have a generally sleeve shaped configuration to provide a space 121". The ring 120" in this embodiment has connecting through openings 130" and is seated in the groove 140" which has a stepped groove configuration defined by an outer groove section sized to receive therein the ring 120" and a deeper central groove section forming the space 121". Although not shown, at least one of the rings 120" can alternatively have an outer surface which includes equally spaced connecting projections which each function as a male connecting interface and can receive thereon a female or receiving
interface of a 3-diemsnsional element (similar to that shown in Fig. 12). In embodiments, one or more of the rings 120** can be loosely arranged (or be lightly frictionally engaging therewith) in the groove 140*** to allow it to rotate therein (along rotation direction indicated by an arrow) so that the user can control the rotational position of the openings 130**. It should be appreciated that one can configure the container 100*** to utilize additional variations of the rings 120*** and grooves 140*** in order to provide a common interface or at least two common connecting interfaces similar to that shown in Fig. 12.

[0084] Fig. 18 shows another non-limiting embodiment of a container 100IV to which one or more 3-dimensional elements 150IV can be mounted. In this non-limiting embodiment, an outer wall of the single-wall container body 110IV has numerous shallower circumferential grooves 140IV formed therein as well as numerous hoop-shaped or ring elements 120IV which can be expanded and snapped onto the container body 110IV and seated within each respective groove 140IV. Each ring element 120IV has an outer surface which includes equally spaced connecting projections 130IV to which the female connecting interface of the 3-dimensional element 150IV can be connected.

[0085] Fig. 19 shows another non-limiting embodiment of a container 100V and one 3-dimensional element 150V which is shown in two positions, i.e., one position wherein it is about to be mounted onto the container 100V along an installation direction indicated by an arrow and an installed position. In this non-limiting embodiment, an outer generally cylindrical wall of the container body 110V has two or more oppositely arranged elongate axial grooves 130V formed thereon or integrally formed therein. The connecting interface section 160V of each 3-diemsnsional element 150V has the configuration of a clip and/or is C-shaped. The clip section 160V has a half-circular space 161V sized to receive a sidewall portion of the body 110V as well as two inward projecting connecting projections 162V. During installation of the 3-dimensional element 150V, the free ends having the projections 162V of the clip section 160V are caused to expand outwardly until each projection 162V snaps into one of the oppositely arranged elongate axial grooves 130V of the container body 110V. The user can then slide the 3-dimensional element 150V up and down axially to adjust its axial position on the container. As may be apparent from this embodiment, the size and shape of the groove 130V can be (i.e., have a receiving width which is approximately twice that needed to receive therein the projection 162V) such that two elements 150V can be mounted in a manner that is directly opposite one another. To remove each element 150V a user need only pull on the element 150V until the clip section 160V disengages (i.e., until the section 160V expands radially outwardly and the projections 162V come out of engagement with the grooves 130V) from the container body 110V.
[0086] Figs. 21 and 22 show another non-limiting embodiment of a container system. In this non-limiting embodiment, an outer wall of a generally cylindrical container 110⁷ has two or more oppositely arranged elongate axial grooves 130⁷ extending to an upper rim and formed therein or integrally formed thereon. Two C-clip type connecting members 120a and 120b are shown about to be slid (along an insertion direction indicated by an arrow) onto the container body 110⁷. Installation of a 3-dimensional element 150⁷ begins either before or after the two C-clips 120a and 120b are installed or slid onto the oppositely arranged elongate axial grooves 130⁷ of the container body 110⁷. The user can then slide the 3-dimensional element 150⁷ while attached to one of the C-clips 120a and 120b up and down axially to adjust its axial position on the container body 110⁷. Generally equally spaced projections 131⁷ are provided on a bottom surface of each groove 130⁷ to assist in releasably retaining the C-slips 120a and 120b in desired axial positions. When the C-slips 120a and 120b are both placed in the same axial position, they can form a ring having plural surrounding connecting interfaces. In this exemplary embodiment, the C-slips 120a and 120b have plural female connecting interfaces or openings 170 sized to receive therein a male connecting interface or projection 160⁷ of the 3-dimensional element 131⁷.

[0087] Figs. 23 and 24 show another non-limiting embodiment of a container 100⁷ with Fig. 23 showing one 3-dimensional element 150⁷ in two positions, i.e., one position wherein it is about to be mounted onto the container body 110⁷ along an installation direction indicated by an arrow as well as an installed position. In this non-limiting embodiment, an outer wall of the container body 110⁷ has plural generally T-shaped elongate axial grooves 130⁷ formed therein or integrally formed thereon and extending to and/or opening out at a bottom end of the container body 110⁷. The connecting interface section 160⁷ of each 3-diemsional element 150⁷ has the configuration of a nail-head, i.e., a configuration that can slide within the T-shaped groove 130⁷ with a slight or small amount of friction or frictional engagement and also allow the element 150⁷ to rotate within the groove 130⁷. Installation of the 3-dimensional element 150⁷ occurs when a user aligns the nail-head interface 160⁷ of the 3-dimensional element 150⁷ with the open end of one of the T-shaped grooves 130⁷ and the slides the 3-dimensional element 150⁷ up and down axially to adjust its axial position on the container body 110⁷. The shape of the nail-head connecting interface 160⁷ can also optionally be such as to provide for a twist-lock connection by, e.g., forming the head portion into an oval shape instead of being round or generally circular.

[0088] Figs. 25 and 26 show another non-limiting embodiment of a container 100⁷ and one 3-dimensional element 150⁷ which is shown in an installed position. In this non-limiting embodiment, an outer wall of the container body 110⁷ has one or more generally T-shaped elongate
axial grooves 130^VIII formed therein or integrally formed thereon and but not extending to and/or opening out at either the upper or the bottom ends of the container body 110^VIII. The connecting interface section 160^VIII of each 3-dimensional element 150^VIII is generally T-shaped. Installation of the 3-dimensional element 150^VIII occurs when a user rotatably aligns the T-shaped interface 160^VIII of the 3-dimensional element 150^VIII with one of the T-shaped grooves 130^VIII, inserts the same therein, then slides the 3-dimensional element 150^VIII up and down axially to adjust its axial position on the container body 110^VIII, and finally rotates or twists the same by a predetermined amount, e.g., about a quarter turn, to lock it in place. This connection system forms a releasable twist-lock connection. Removal of the 3-dimensional element 150^VIII occurs by rotating the 3-dimensional element 150^VIII about 90 degrees and sliding it out of the groove 130^VIII.

[0089] Figs. 27 and 28 show another non-limiting embodiment of a container 100^IX and one 3-dimensional element 150^IX which is shown in an installed position. In this non-limiting embodiment, an outer wall of the container body 110^IX has plural spaced apart generally key-shaped openings 130^IX formed therein or integrally formed thereon and can include plural rows of such openings 130^IX. Alternatively, the openings 130^IX can be arranged on the container body 110^IX is a more random pattern, or any other desired pattern. The connecting interface section 160^IX of each 3-dimensional element 150^IX is generally key-shaped. Installation of the 3-dimensional element 150^IX occurs when a user rotatably aligns the key-shaped interface 160^IX of the 3-dimensional element 150^IX with one of the key-shaped openings 130^IX, inserts the same therein, and then rotates or twists the same by a predetermined amount, e.g., about a quarter turn, to lock it in place. This connection interface 160^IX forms releasable twist-lock connection with each opening 130^IX. Removal of the 3-dimensional element 150^IX occurs by rotating the 3-dimensional element 150^IX between about 45 and 90 degrees and then sliding it out of the opening 130^IX.

[0090] Figs. 29 and 30 show another non-limiting embodiment of a container 100^X and one 3-dimensional element 150^X which is shown in an installed position in Fig. 30. In this non-limiting embodiment, an outer wall of the container body 110^X is shaped in a manner to allow for the installation of barrel stave type connecting interface segments 120^X. One barrel stave clip 120^X is shown in Fig. 29 already installed on the container body 110^X. In this non-limiting embodiment, an outer wall of the container body 110^X is formed by first installing plural barrel stave type clips 120^X having generally circular openings 130^X formed therein or integrally formed thereon. Each clip 120^X has a upper end 121^X that can, in embodiments, enter into and releasably engage with the container lip of the container body 110^X and also a lower end 122^X connectable to the bottom of the container body 110^X as to form a snap connection therewith. A main section 123^X of the clip 120^X includes
plural openings 130\textsuperscript{X} serving as female connecting interfaces for connecting with a connecting interface 160\textsuperscript{X} of each 3-diemsnsional element 150\textsuperscript{X}, which is generally pin-shaped and can have a slight taper as in the embodiment of Fig. 21. Installation of the 3-dimensional element 150\textsuperscript{X} occurs when a user inserts the pin-shaped interface 160\textsuperscript{X} into one of the openings 130\textsuperscript{X} so as to form a wedged-in connection. In embodiments, the section 121\textsuperscript{X} can include one or more projections or recesses to provide a releasable connection with the container body lip. Similarly, the section 122\textsuperscript{X} can include one or more projections or recesses to provide a releasable connection with the bottom of the container body 110\textsuperscript{X}. In embodiments, each section 120\textsuperscript{X} is individually removable and installable from the container body 110\textsuperscript{X}. In embodiments, each section 120\textsuperscript{X} can have a different color, shade of color or outer surface texture. In embodiments, each section 120\textsuperscript{X} can function as a 3-dimensional element by including one or more symbols, text, indicia, printing or a picture of a 3-dimensional element such as, e.g., a eye, nose, ear, etc., so as to serve as the devices used to decorate the container 100\textsuperscript{X}. In embodiments, the sections 120\textsuperscript{X} are non-removably attached in a factory setting, for example, and cannot be removed. In such an embodiment, they function to provide the outer wall of a duel wall container body.

Figs. 31-33 show another non-limiting embodiment of a container 100\textsuperscript{XI} and one 3-dimensional element 150\textsuperscript{XI} which is shown (partially) in an about to be installed position in Fig. 33. In this non-limiting embodiment, an outer wall of the container body 110\textsuperscript{XI} includes plural dove-tail type axial grooves 140\textsuperscript{XI}. Each groove 140\textsuperscript{XI} allows for the installation of a dove-tail connecting interface member or segment 120\textsuperscript{XI}. Two segments 120\textsuperscript{XI} are shown in Fig. 31 already installed on the container body 110\textsuperscript{XI}. In this non-limiting embodiment, an outer wall of the container body 110\textsuperscript{X} is defined by plain portions of the container body 110\textsuperscript{XI} and the members 120\textsuperscript{XI} having generally circular openings 130\textsuperscript{XI} formed therein or integrally formed thereon. Each member 120\textsuperscript{XI} can be slid (along an axial direction indicated by an arrow in Fig. 33) into one of the correspondingly shaped grooves 140\textsuperscript{XI} from an upper end of the container body 110\textsuperscript{XI} and may also be secured therein via a frictional engagement or a snap connection (not shown). A main section of each member 120\textsuperscript{XI} includes plural openings 130\textsuperscript{XI} serving as female connecting interfaces for connecting with a connecting interface 160\textsuperscript{XI} of each 3-diemsnsional element 150\textsuperscript{XI}, which is generally pin-shaped and can have a slight taper as in the embodiment of Fig. 21. Installation of the 3-dimensional element 150\textsuperscript{XI} occurs when a user inserts the pin-shaped interface 160\textsuperscript{XI} into one of the openings 130\textsuperscript{XI} so as to form a wedged-in connection. In embodiments, each member 120\textsuperscript{XI} can include a space 121\textsuperscript{XI} (as shown in Fig. 32) for receiving or accommodating a free end of the interface 160\textsuperscript{XI}. In embodiments, each member or section 120\textsuperscript{XI} is individually removable and installable from the container body 110\textsuperscript{XI}. In
embodiments, each section 120\text{XI} can have a different color, shade of color or outer surface texture than one another and/or than the remainder portion of the container body 110\text{XI}. In embodiments, each member or section 120\text{XI} can function as a 3-dimensional element (if generally made wider that that shown in Fig. 31) by including one or more symbols, text, indicia, printing or a picture of a 3-dimensional element such as, e.g., an eye, nose, ear, etc., so as to serve as the devices used to decorate the container 100\text{XI}. In embodiments, the member or sections 120\text{XI} are non-removably attached in a factory setting, for example, and cannot be removed. In such an embodiment, they function to provide distinct areas for attaching elements to the outer wall of the container body 110\text{XI}.

[0092] Fig. 34 and 35 show another non-limiting embodiment of a container 1000 and one 3-dimensional element 1050 which is shown in an installed position in Fig. 35. In this non-limiting embodiment, an outer wall of the container body 1010 is sized and configured to receive thereon numerous hoop-shaped or ring elements 1020 which can be slid onto a bottom end after removing a screw-on bottom 1040. The one or more of ring elements 1020 can engage or nest with the outer surface in order to prevent them from rotating when the bottom 1040 is installed. Alternatively or additionally, the one or more ring elements 1020 can be loosely engage with the outer surface and one another to allow for their individual rotation. Alternatively or additionally, the ring elements 1020 have projecting and receiving portions that can engage with each other so that they nest together sufficiently to provide the appearance of a continuous outer wall. Each ring element 1020 has an outer surface which includes equally spaced openings, recesses and/or depressions 1030 which each function as a female connecting interface and can receive therein a male or projecting interface of a 3-dimensional element 1050. In embodiments, the ring elements 1020 are installable by a user along with the screw-on bottom 1040 so as to be interchangeable before the bottom 1040 is threaded onto the container body 1010 (as indicated by an arrow) and the container body 1010 flipped over so that its open upper end is disposed upwards. In embodiments, the user can also un-screw the bottom 1040 to allow for rotational repositioning of each ring 1020 as indicated by an arrow and then re-tighten the screw-on bottom 1040. In the embodiment of Fig. 35, the 3-dimensional element 1050 has the form of an out-stretched arm, connected to one of the openings 1030 formed in one of the ring elements 1020. In embodiments, each section 1020 can have a different color, shade of color or outer surface texture than one another and/or than the remainder portion of the container body 1010. In embodiments, each member or section 1020 can function as a 3-dimensional element by including one or more symbols, text, indicia, printing or a picture of a 3-dimensional element such as, e.g., an eye, nose, ear, etc., so as to serve as the devices used to decorate the container 1000. In embodiments, the member or sections 1020 are non-removably attached in a factory setting, for
example, and cannot be removed. In such an embodiment, they function to provide distinct areas for attaching elements to the outer wall of the container body 1010.

Although various embodiments utilize external openings arranged on the container body, or on one or more elements connectable to the container body, that can connect to one or more projections arranged on one or more attachment elements and other embodiments show external projections arranged on the container body that can connect to openings, recesses or depressions formed in one or more attachment elements, the invention also contemplates a container with various combinations of the same. Moreover, any one or more features of one embodiment may be used on any one or more of the other embodiments and vice versa. Furthermore, although many of the herein disclosed exemplary 3-dimensional attachment element utilizes a single connecting interface, each 3-dimensional element may also utilize two or more connecting interfaces.

Additional features can be utilized on the sleeve, rings, external connecting elements and/or container such one, more than one, or all of those described in US Patent Application No. 13/264,886 filed on February 2, 2012 (Attorney Docket P41286), the disclosure of which is hereby expressly incorporated by reference in its entirety.

Further additional features can be utilized on the container such as one, more than one, or all of the features or elements described in US Provisional Patent Application No. 13/715,288 filed on December 14, 2012 (Attorney Docket P42967), the disclosure of which is hereby expressly incorporated by reference in its entirety.

It is noted that the foregoing examples have been provided merely for the purpose of explanation and are in no way to be construed as limiting of the present invention. While the present invention has been described with reference to an exemplary embodiment, it is understood that the words which have been used herein are words of description and illustration, rather than words of limitation. Changes may be made, within the purview of the appended claims, as presently stated and as amended, without departing from the scope and spirit of the present invention in its aspects. Although the present invention has been described herein with reference to particular means, materials and embodiments, the present invention is not intended to be limited to the particulars disclosed herein; rather, the present invention extends to all functionally equivalent structures, methods and uses, such as are within the scope of the appended claims.
WHAT IS CLAIMED IS:

1. A container comprising:
   a container body sized and configured to contain a substance;
   at least one connection interface arranged on the container body,
   wherein the at least one connection interface is structured and arranged to removably connect at least one three-dimensional element to the container body.

2. The container of claim 1, wherein the container is food or beverage container.

3. The container of claim 1, wherein at least one of:
   the at least one connection interface comprises a sleeve having plural connection elements;
   and
   the at least one connection interface comprises at least one ring and at least one of plural connection elements are arranged on the at least one ring.

4. The container of claim 1, wherein the at least one connection interface is an opening formed in an outer surface of the container body.

5. The container of claim 1, wherein the at least one connection interface is a projection arranged on an outer surface of the container body.

6. The container of claim 1, wherein the at least one connection interface comprises at least two spaced apart grooves arranged on an outer surface of the container body.

7. The container of claim 1, wherein the at least one connection interface is one of:
   a sleeve comprising plural connection elements arranged to surround a portion of the container body; and
   a ring comprising plural connection elements and being axially retained in a groove arranged on the container body.

8. The container of claim 1, wherein the at least one connection interface comprises first and second rings mounted to an outer surface of the container body, wherein a first set of plural connection
elements are arranged on the first ring and a second set of plural connection elements are arranged on the second ring.

9. The container of claim 8, wherein some of said first or second sets of plural connection elements comprise openings.

10. The container of claim 8, wherein some of said first or second plural connection elements comprise projections.

11. The container of claim 8, wherein the first ring is axially retained on one portion of the container body and the second ring is axially retained on another portion of the container body.

12. The container of claim 1, wherein the at least one connection interface comprises an elongated slot or groove formed in the container body that is structured and arranged to receive a connecting portion of the at least one three-dimensional element.

13. The container of claim 1, wherein the at least one connection interface comprises plural generally axially oriented elongated slots or grooves structured and arranged to receive a connecting portion of the at least one three-dimensional element.

14. The container of claim 1, wherein the at least one connection interface comprises plural generally axially oriented blind elongated slots or grooves integrally formed in an outer wall of the container body and being structured and arranged to receive a connecting portion of the at least one three-dimensional element.

15. The container of claim 14, wherein one of the plural generally axially oriented elongated slots has a generally T-shaped cross-section.

16. The container of claim 1, wherein the at least one connection interface comprises a clip member attachable to the container body.

17. The container of claim 1, wherein the at least one connection interface comprises an elongated dovetailed-shaped member arranged on the container body.
18. The container of claim 1, wherein the at least one three-dimensional element is one of:
   a decorative element;
   a toy element;
   an object resembling a portion of a man-made structure;
   an object resembling a portion of a living thing;
   a letter;
   a number;
   an inanimate object;
   an object resembling an inanimate object;
   a portion of head of an animal;
   a facial feature of an animal;
   a body part of an animal;
   a portion of a human.

19. A method of decorating the container of claim 1, the method comprising:
   attaching at least one three-dimensional element to the container body.

20. A container comprising:
   a container body;
   plural connection elements arranged on an outer surface of the container body and comprising one of:
      an opening;
      a recess;
      a depression;
      a projection;
      a slot; and
      a blind groove; and
   at least two three-dimensional elements having a common connecting interface and being removably
   connectable to the container body via at least one of the plural connection elements.
FIG. 15
## INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

- **IPC(8) - B65D 23/12 (2013.01)**
- **USPC - 215/386**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

- Minimum documentation searched (classification system followed by classification symbols)
  - IPC(8): B65D 23/12 (2013.01)
  - USPC: 215/386

- Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
  - IPC(8): B65D 23/12
  - USPC: 215/386, 382, 383, 385; 446/77, 304, 71, 73, 74

- Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
  - PatBase, PGPB, USPT, EPAB, JPAB; Google Scholar; Google Patent; Search Terms: planter pot vessel container barrel beverage drink lower bottom side wall attach configure inner outer second rim lip socket joint dovetail groove slot inside outside planter mold plastic PET HDPE universal joint ball

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>US 5,803,306 A (LEWIS) 08 September 1998 (08.09.1998), Fig 5-8, col 4, In 31-67</td>
<td>1-2, 5, 17-20</td>
</tr>
<tr>
<td>X</td>
<td>US 4,713,900 A (Calloway Jr. et al) 22 December 1987 (22.12.1987), Figs. 4-5, col 2, In 22-34</td>
<td>1, 3, 7</td>
</tr>
<tr>
<td>Y</td>
<td>US 2004/0031496 A1 (Thornell et al.) 19 February 2004 (19.02.2004) para. [0035]-[0055], Fig. 1-11</td>
<td>1, 4, 12</td>
</tr>
<tr>
<td>X</td>
<td>US 3,229,398 A (Kopatch) 18 January 1966 (18.01.1966), Figs. 1-3, col. 2, In 22-60</td>
<td>1, 6, 13, 14</td>
</tr>
<tr>
<td>Y</td>
<td>US 2010/0176140 A1 (Bergman) 15 July 2010 (15.07.2010) para. [0030]-[0053], Fig. 1-15</td>
<td>15</td>
</tr>
<tr>
<td>X</td>
<td>US 4,656,566 A (Kelley) 07 April 1987 (07.04.1987) Fig 1, 3 col 1, In 37-48; col 2, In 5-26</td>
<td>1, 8-11</td>
</tr>
<tr>
<td>X</td>
<td>US 5,409,145 A (PAYNE) 25 April 1995 (25.04.1995), Fig 1, col 5, In 66 to col 6, In 11</td>
<td>1, 16</td>
</tr>
<tr>
<td>A</td>
<td>US 5,031,803 A (CHEN) 16 July 1991 (16.07.1991), Fig 6, 7; col 2, In 38-41</td>
<td>1-20</td>
</tr>
<tr>
<td>A</td>
<td>US 2007/0262047 A1 (Agrawal et al.) 15 November 2007 (15.11.2007) para. [0059], Fig. 15-17</td>
<td>1-20</td>
</tr>
<tr>
<td>A</td>
<td>JP 2005/319016 A (ikuta) 17 November 2005 (17.11.2005), Figs. 1-11</td>
<td>1-20</td>
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* Further documents are listed in the continuation of Box C.

**D. Other information**

- Special categories of cited documents:
  - "A" - document defining the general state of the art which is not considered to be of particular relevance
  - "E" - earlier application or patent but published on or after the international filing date
  - "L" - document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  - "O" - document referring to an oral disclosure, use, exhibition or other means
  - "P" - document published prior to the international filing date but later than the priority date claimed

- Document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- Later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- Document member of the same patent family

**Date of the actual completion of the international search**

16 April 2013 (16.04.2013)

**Date of mailing of the international search report**

20 MAY 2013

**Name and mailing address of the ISA/US**

- Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
- P.O. Box 1450, Alexandria, Virginia 22313-1450
- Facsimile No. 571-273-3201

**Authorized officer:**

Lee W. Young

PCT Helpdesk: 571-272-4000
PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)
<table>
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<td>A</td>
<td>US 5,967,307 A (Wang) 19 October 1999 (19.10.1999), entire document</td>
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