ABSTRACT

A packaging blank capable of forming a display sleeve or container having rounded corners comprises in one embodiment a front panel, a rear panel, a first and second side panel, a first and second top panel, a first and second bottom panel, a first and second recess bridge panel, a pair of dust flaps, a plurality of glue release sections, a series of scores, and a plurality of cut and score lines. The packaging blank provides a partially constructed flat container that is capable of being formed into a container having rounded corners and a recessed bottom structure that automatically extends and locks upon final construction of the container.
BLANK CAPABLE OF FORMING A CONTAINER HAVING ROUNDED CORNERS

CROSS-REFERENCE TO PRIORITY APPLICATIONS

[0001] This application hereby claims the benefit of the following commonly assigned provisional patent applications: U.S. Provisional Patent Application Ser. No. 60/550,428, for Blank Capable of Forming a Stackable Sleeve, filed Mar. 5, 2004; U.S. Provisional Patent Application Ser. No. 60/577,315, for Blank Capable of Forming a Container Having Rounded Corners, filed Jun. 4, 2004; and U.S. Provisional Patent Application Ser. No. 60/599,886, for Blank Capable of Forming a Container Having Rounded Corners, filed Aug. 9, 2004. This application incorporates entirely by reference these provisional applications.

CROSS-REFERENCE TO COMMONLY ASSIGNED APPLICATIONS

[0002] This application also incorporates entirely by reference commonly assigned and concurrently filed application Ser. No. 01/123,456 for Blank Capable of Forming a Stackable Container.

FIELD OF THE INVENTION

[0003] The invention relates to a packaging blank. In particular, the invention relates to a packaging blank capable of forming a display sleeve or “container” having rounded corners. The invention also relates to a packaging blank capable of forming a container having rounded corners and a recessed bottom. The invention further relates to a container formed from the blank having rounded corners and a recessed bottom that automatically forms upon the partial construction of the container.

BACKGROUND OF THE INVENTION

[0004] As known to those skilled in the art, packaging is typically formed from packaging blanks, or blanks for short. It will be understood that as used herein the term “blank” may include cardboard, rigid paper, flexible plastic, or similar products made of paperboard or plastic. In particular, the packaging industry favors the use of one-piece flexible blanks, which are readily incorporated into automated processes for forming sleeves.

[0005] Today, the construction of packaging blanks into sleeves, and the subsequent insertion of products to be packaged in the sleeve, is managed in the product manufacturers’ facilities. Manufacturers employ automated equipment that is capable of folding the blank to form a container, inserting the product into the container, sealing the container, and then shipping the container by various means of transportation. For example, manufacturers use in-line processes for accomplishing the steps of folding, inserting, sealing, and shipping as described above. Thus, there is a need for providing a packaging blank that is capable of being formed into a container in automated processes.

[0006] Limited shelf space requires that manufacturers and storeowners maximize shelf space for displaying products. Containers that conform to the shapes of the articles stored therein are preferred because they allow the storeowner to maximize usable shelf space. Further, blanks capable of forming shaped containers (e.g., containers having rounded corners) permit the manufacturer to package articles more efficiently. For example, a container having rounded corners permits the manufacturer to package more efficiently articles having a substantially circular shape, thereby increasing manufacturing and packaging efficiencies. Thus, it is further desirable to provide a packaging blank capable of forming a container having rounded corners.

[0007] Still further, is desirable to provide a substantially rectangular container having rounded corners, whereby the rounded corners facilitate the handling of the container by consumers.

[0008] In a related aspect, it is also desirable to provide an aesthetically pleasing container, wherein the container includes gradually rounded corners, as opposed to harsh right angles.

OBJECT AND SUMMARY OF THE INVENTION

[0009] It is therefore an object of the present invention to provide a blank suitable for use in automated processing.

[0010] Another object of the invention is the provision of a blank that is capable of forming a sleeve having rounded corners.

[0011] A further object of the invention is to provide a packaging blank capable of forming a sleeve that promotes manufacturing and packaging efficiencies.

[0012] Still another object of the invention is to provide a container having rounded corners that facilitates handling by a consumer and that promotes an aesthetically pleasing appearance.

[0013] The invention meets these objectives with a packaging blank capable of forming a container (also referred to as “sleeve”) having rounded corners. In particular, the invention is a packaging blank and a container having a body panel, a first top panel connected to an upper edge of the body panel, a second top panel connected to an upper edge of the body panel and spaced apart from the first top panel, a first bottom panel connected to a lower edge of the body panel, and a second bottom panel connected to a lower edge of the body panel and spaced apart from the first bottom panel.

[0014] The foregoing and other objects and advantages of the invention and the manner in which the same are accomplished will become clearer based on the following detailed description taken in conjunction with the accompanying drawings in which:

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] FIG. 1 is a perspective view of a sleeve formed from a preferred embodiment of the blank.

[0016] FIG. 2 is a side elevation view of the sleeve formed from a preferred embodiment of the blank.

[0017] FIG. 3 is a top plan view of a preferred embodiment of the sleeve taken along lines 3-3 in FIG. 2.

[0018] FIG. 4 is a bottom plan view of a preferred embodiment of the sleeve taken along lines 4-4 in FIG. 2.
FIG. 5 is a perspective view of a preferred embodiment of the sleeve as partially constructed yet capable of being formed into a substantially rectangular container having rounded corners.

FIG. 6 is a top plan view of the sleeve taken along lines 6-6 of FIG. 1 illustrating the packaging of articles therein.

FIG. 7 is a top plan view of a preferred embodiment of the blank.

FIG. 8 is a perspective view of an alternative embodiment of the sleeve.

FIG. 9 is top plan view of the sleeve taken along lines 9-9 of FIG. 8 illustrating the packaging of articles therein.

FIG. 10 is a top plan view of another alternative embodiment of the blank that is capable of forming the sleeve in FIG. 8.

FIG. 11 is a perspective view of another alternative embodiment of the sleeve.

FIG. 12 is a top plan view of the sleeve taken along lines 12-12 of FIG. 11 illustrating the packaging of articles therein.

FIG. 13 is a top plan view of another alternative embodiment of the blank that is capable of forming the sleeve in FIG. 11.

FIG. 14 is a top plan view of another alternative embodiment of the blank.

FIG. 15 is a bottom plan view of a sleeve formed from the blank in FIG. 14 illustrating the packaging of articles therein.

FIG. 16 is a perspective view of another alternative embodiment of the sleeve.

FIG. 17 is a top plan view of the sleeve taken along lines 17-17 of FIG. 16 illustrating the packaging of articles therein.

FIG. 18 is a top plan view of another alternative embodiment of the blank that is capable of forming the sleeve in FIG. 16.

FIG. 19 is a perspective view of another alternative embodiment of the sleeve.

FIG. 20 is a top plan view of the sleeve taken along lines 20-20 of FIG. 19 illustrating the packaging of articles therein.

FIG. 21 is a top plan view of another alternative embodiment of the blank that is capable of forming the sleeve in FIG. 19.

FIG. 22 is a top plan view of another alternative embodiment of the sleeve.

FIG. 23 is a top plan view of the sleeve taken along the lines 23-23 of FIG. 22 illustrating the packaging of articles therein.

FIG. 24 is a top plan view of another alternative embodiment of the blank that is capable of forming the sleeve in FIG. 22.

DETAILED DESCRIPTION OF THE INVENTION

The present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which a preferred embodiment of the invention is shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. Rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout.

As used herein, the term “panel” is used in conjunction with the packaging blank of the present invention and refers to sections of the blank. With reference to the orientation of the blank in FIG. 7, it will be understood that the term “width” refers to a distance measured from the leftmost portion of the blank to the rightmost portion of the blank. Further, it will also be understood by those skilled in the art that as used herein, the concept of a panel being “between” two other panels does not necessarily imply that the three panels or flaps are contiguous (i.e., in intimate contact). Rather, as used herein, the concept of one panel being between two other panels is meant to describe the relative positions of the panels within the blank structure, respectively. It will be understood by those skilled in the art that the terms “sleeve” and “container” as used herein refer to various embodiments of the present structure for retaining a variety of articles as formed from the various embodiments of the blank described below. Thus the terms “sleeve” and “container” may be used interchangeably.

Similarly, the concept of a first panel being connected to a second panel by a third panel, “opposite” the second panel, merely describes the relative positions of the first and second panels within the blank structure. It will further be understood that the term “finished” means coated with a material to produce an attractive glossy finish. The term “finished” will also be understood to mean the inclusion of printed material or other identifying indicia (e.g., a company’s logo). Those skilled in the art will also appreciate that panels include edges defined as the line of intersection of two surfaces or a border.

It will be understood by those skilled in the art that the term “score” refers to a crease along which the adjacent elements of the blank are folded without cracking or breaking to form a sleeve or container. It will also be understood by those skilled in the art that the term “cut-score” refers to an impression formed by a cutting tool (e.g., a punch, die, or blade) that extends partially through a sheet of paperboard or the like. It will be understood by those skilled in the art that the term “perforations” refers to a series of holes or impressions formed by a cutting tool (e.g., a punch or die) that permits easy separation of, for example, panels. Those skilled in the art will appreciate that the term “combo rule” or “cut and score” refers to a series of alternating impressions formed by a cutting tool and creases formed by a rule that facilitate the folding of panels. With respect to embodiments of the present invention depicted in FIGS. 7, 10, 13, 14, 18, 21, and 24, the cut and score lines permit the folding of a blank to form a substantially flat container that is capable of being formed into a substantially rectangular container. Those skilled in the art will also appreciate that
the term “glue release section” refers to a portion of, for example, a panel to which an adhesive is applied such that another panel can be secured against the panel having the glue release section and bearing the adhesive.

[0043] It will also be understood that the term “substantially rectangular” and “substantially trapezoidal” is meant to succinctly describe simple geometric shape approximating a rectangle and trapezoid, respectively. Similarly, the term “substantially parallel” is meant to describe the spatial relationship between, for example, one edge of a panel to another edge of a panel, wherein the relationship is approximately parallel.

[0044] Those skilled in the art will also appreciate that the term “adjacent” refers to two or more, for example, panels, that have a common border or are in close proximity to one another. Nevertheless, it will be understood that adjacent may or may not imply contact, but always implies the absence of anything of the same kind in between. Furthermore, as used herein, it will be understood that the term “article” will refer primarily to consumer products that are packaged for shipment (e.g., consumables, bottles, cans, etc.). It will be understood, however, that “article” may also refer to any number of goods such as individually packaged consumables for humans and animals, as well as individually packaged non-consumables.

[0045] It will also be understood that the term “automatic” and “automatically” refers to elements of the blank and container that are self-acting or self-regulating mechanisms. For example, the automatic bottom structure of the blank and container is formed when the blank is partially constructed into a container. Subsequently, the automatic bottom structure forms into a completed recessed bottom structure upon final construction of the partially constructed container formed from the blank.

[0046] An overview of a preferred embodiment of a packaging blank 10 which incorporates features of the present invention is set forth in FIG. 7. As illustrated in FIG. 7, the packaging blank 10 includes a body panel 11, a first top panel 12 (also referred to as inner top panel) connected to an upper edge of the body panel, a second top panel 13 (also referred to as outer top panel) connected to an upper edge of the body panel, a first bottom panel 14 (also referred to as outer bottom panel) connected to a lower edge of the body panel 11, and a second bottom panel 15 (also referred to as inner bottom panel) connected to a lower edge of the body panel. The body panel 11 is comprised of a front panel 16, a rear panel 17, first side panel 18, first panel section 19 of the second side panel 12, and a second panel section 20 of the second side panel 21.

[0047] The blanks 10, 40, 41, 42, 43, 44, 45 also provide a first recess bridge panel 25, a second recess bridge panel 26, a pair of dust flaps 27, and a plurality of glue release sections 28. A tab lock 29 may also be provided on the second top panel 13. Further, the blanks 10, 40, 41, 42, 43, 44, 45 further provide a slot 30 in the first top panel 12, a first glue tab 35 of the first bottom panel 14, and a second glue tab 36 of the second bottom panel 15. The second bottom panel 15 may also provide a slot 37 as described in further detail below.

[0048] In a preferred embodiment of the blanks 10, 40, 41, 42, 43, 44, 45, a series of scores 38 are provided in the front panel 16, rear panel 17, first side panel 18, and first and second panel sections 19, 20 of the second side panel 21. Still further, preferred embodiments of the blanks 10, 40, 41, 42, 43, 44, 45 may provide a plurality of cut and score lines 39 in the recess bridge panels 25, 26 first side panel 18, and first and second panel sections 19, 20 of the second side panel 21. Advantageously, the blanks 10, 40, 41, 42, 43, 44, 45 are capable of forming a variety of containers 1, 49, 50, 51, 52, 53, 54, 55 having rounded corners 59.

[0049] Having identified a majority of elements of the present invention, a detailed description of their positioning and functionality follows. The front panel 16 is connected to the first side panel 18, and the rear panel 17 is connected to the first panel section 19 of the second side panel 21. The first panel section 19 is connected to the rear panel 17 opposite the first side panel 18, and the second panel section 20 is connected to the first panel section 19 of the second side panel 21. The substantially rectangular first top panel 12 is connected to an upper edge of the rear panel 17 and the substantially rectangular second top panel 13 is connected to an upper edge of the front panel 16. As configured, the second top panel 13 is spaced apart from the front top panel 12.

[0050] The first recess bridge panel 25 is connected to the rear panel 17 opposite the first top panel 12, and the second recess bridge panel 26 is connected to the front panel 16 opposite the second top panel 13. The first bottom panel 14 is connected to the rear panel 17 by the first recess bridge panel 25. The first bottom panel 14 preferably includes substantially rounded corners. The second bottom panel 15 is connected to the front panel 16 by the second recess bridge panel 26. As depicted in FIGS. 6, 7, 10, 13, 14, 18, 21, and 24, the first and second bottom panels 14, 15 are spaced apart from one another.

[0051] It will be understood that preferred embodiments of the first and second bottom panels 14, 15 are substantially rectangular in shape, yet include rounded corners. Thus, the first and second bottom panels 14, 15 of FIGS. 6, 7, 10, 13, 14, 18, 21, and 24 appear somewhat more rectangular in appearance that the first and second bottom panels 14, 15 of FIGS. 7, 10, 13, 14, and 18. Although the first bottom panels 14 of FIGS. 7, 10, and 13 include less surface area that the bottom panels of FIGS. 14, 18, 21, and 24, it will be understood that the first bottom panel 14 space substantially rectangular aptly describes the overall appearance of the bottom panels as a result of the shape connote by the rounded corners.

[0052] In each embodiment of the blanks 40, 41, 42, 43, 44, 45, the second bottom panel 15 and second glue tab 36 define a slot 37. As illustrated in alternative embodiments shown in FIGS. 14, 18, 21, and 24, the first bottom panel 14 and first glue tab 35 define a slot 36. In similar fashion, the second bottom panel 15 and second glue tab 36 of the blanks 40, 41, 42, 43, 44, 45 in FIGS. 14, 18, 21, and 24 define a slot 37, although somewhat larger than the slot 37 appearing in the blanks 10, 40, 41 (see FIGS. 7, 10, and 13). The larger slots 37 of blanks 40, 42, 43, 44, 45 promote ease of construction of the containers 14, 18, 21, 24 formed from the blanks 42, 43, 44, 45. The increased surface area of the first bottom panel 14 in blanks 42, 43, 44, 45 ensures the structural integrity of the containers 52, 53, 54, 55. In other words, the blanks 42, 43, 44, 45 provide containers 52, 53, 54, 55 having a structurally enhanced bottom panel as compared to the blanks 10, 40, 41. Referring to FIGS. 7, 10, 13, 14, 18, 21,
24, the first glue tab 35 of the first bottom panel 14 is connected at a free edge of the first bottom panel such that only one edge of the first bottom panel is adjacent to the first glue tab.

[0053] As depicted in FIGS. 7, 10, 13, 14, 18, 21, and 24, the body panel 11 is substantially rectangular and includes a series of scores 38. The scores 38 are substantially parallel to one another and extend from portions of the body panel 11 adjacent to the first and second top panels 12, 13 to portions of the body panel adjacent to the first and second bottom panels 14, 15. Preferably the scores 38 extend from an upper edge of the body panel 11 to a lower edge of the body panel. Further, the body panel 11 may be a one-piece flexible blank 10 formed from a paperboard.

[0054] Accordingly, the front panel 16, rear panel 17, first side panel 18, first and second panel sections 19, 20 of the second side panel 21 are foldable along the series of scores 38 formed in the blank 10. In particular, the scores 38 facilitate the folding of the first side panel 18 and first and second panel sections 19, 20 toward the rear panel 17 and the front panel 16, respectively, during construction of the blanks into the sleeves. Further, the series of scores 38 in the front panel 16, rear panel 17, first side panel 18, and first and second panel sections 19, 20 of the second side panel 21 facilitate the formation of rounded corners 59 (also referred to as radius corners) upon construction of the containers 49, 50, 51, 52, 53, 54, 55. The scores 38 may be formed by perforations or similar indentations sufficient to permit the folding of the first side panel 18 and first and second panel sections 19, 20 to form the second side panel 21 of the container.

[0055] The first and second bottom panels 14, 15 and the first and second recess bridge panels 25, 26 of the blanks 10, 40, 41, 42, 43, 44, 45 of FIGS. 7, 10, 13, 14, 18, 21, and 24 are constructed to form a recessed bottom structure 58 (see FIG. 5). The recessed bottom structure 58 of the containers 49, 50, 51, 52, 53, 54, 55 is also referred to as a two-tab automatic bottom or recessed two-tab automatic bottom structure as discussed herein. The bottom structure 58 automatically forms upon final construction of the containers 49, 50, 51, 52, 53, 54, 55.

[0056] Specifically, the blanks 10, 40, 41, 42, 43, 44, 45 are formed into partially constructed containers by folding the first and second sections 19, 20 of the second side panel 21 towards one another and then adhering the sections together. Next, the first recess bridge panel 25 is folded against and secured to the rear panel 17 such that the first bottom panel 14 is substantially perpendicular to the rear panel. Stated differently, the first recess bridge panel 25 is folded against and secured to the rear panel 17 and the first bottom panel 14 is folded along the cut and score lines 39 between the first bottom panel and the first recess bridge panel. In similar fashion, the second recess bridge panel 26 is folded against and secured to the front panel 16 such that the second bottom panel 15 is substantially perpendicular to the front panel.

[0057] The first and second bottom panels 14, 15 of the blanks 10, 40, 41, 42, 43, 44, 45 are then connected by and secured to one another. More specifically, the first and second bottom panels 14, 15 are brought together such that the first glue tab 35 of the first bottom panel 14 overlaps portions of the second bottom panel 15 and the second glue tab 36 of the second bottom panel overlaps portions of the first bottom panel. In this fashion, the slot 37 formed in the second bottom panel 15 receives a portion of the first bottom panel 14—and specifically the first glue tab 35—to form the automatic bottom structure 58 of the containers 49, 50, 51, 52, 53, 54, 55. The partially constructed containers are then folded flat for shipment such that the bottom structure 58 (i.e., first and second bottom panels 14, 15 and first and second recess bridge panels 25, 26) are folded against the interior surfaces of the front and rear panels 16, 17 as illustrated in FIG. 5.

[0058] Referring to FIG. 10, the series of cut and score lines 39 in the first side panel 18 and second panel section 20 of the second side panel 21 permit the folding of the blanks 10, 40, 41, 42, 43, 44, 45 into partially constructed substantially flat containers. The cut and score lines 39 are substantially parallel to one another and extend from portions of the body panel 11 adjacent to the first and second top panels 12, 13 to portions of the body panel adjacent to the first and second bottom panels 14, 15. Preferably the cut and score lines 39 extend from an upper edge of the body panel 11 to a lower edge of the body panel. Advantageously, the flat containers are capable of being formed into substantially rectangular containers. The series of cut and score lines 39 in the first and second recess bridge panels 25, 26 and cut and score lines 39 in the first and second bottom panels 14, 15 permit the folding and subsequent opening of the bottom structure 58 (see FIGS. 4 and 5).

[0059] Advantageously, the folding of the first and second recess bridge panels 25, 26 against the rear and front panels 17, 16, respectively, provide for a recessed bottom panel wherein the automatic bottom structure 58 is spaced inward of the edges of the front and rear panels, and the edges of first and second side panels 18, 21. The recessed configuration of the automatic bottom structure 58 enhances the structural integrity of the containers 49, 50, 51, 52, 53, 54, 55 as compared to known containers. The recessed configuration further permits the bottom structure 58 to sag under increased loads while preventing packaged articles 22 from exiting the containers 49, 50, 51, 52, 53, 54, 55.

[0060] As described, any one of the substantially flat partially constructed containers 49, 50, 51, 52, 53, 54, 55 may then be constructed and filled with a variety of articles 22 by the article manufacturer. For example, the article manufacturer may insert a plunger device into the interior space of the container to thereby advance the automatic bottom structure 58 downward. The downward advancement of the automatic bottom structure 58 forms a substantially planar surface that is substantially perpendicular to the front panel 16, rear panel 17, and side panels 18, 21 of the containers 49, 50, 51, 52, 53, 54, 55. Advantageously, the bottom structure 58 automatically locks into position to form the bottom of the containers 49, 50, 51, 52, 53, 54, 55.

[0061] With reference to the blanks 10, 40, 41, 42, 43, 44, 45, at least one of the first and second bottom panels 14, 15 and at least one of the first and second top panels 12, 13 are preferably rectangular (see FIGS. 7, 10, 13, 14, 18, 21, 24). The rectangular shape of these panels 12, 13, 14, 15 in conjunction with the substantially rectangular shape of the rear panel 17 and front panel 16 ensures the substantially rectangular shape of the containers 49, 50, 51, 52, 53, 54, 55. As known to those skilled in the art, a rectangular shaped container is preferred for shipping and stacking purposes.
Nevertheless, it will be understood that the rear panel 17, front panel 16, first side panel 18, and first and second side panel sections 19, 20 of the second side panel 21 are not limited to a rectangular shape and may be trapezoidal or triangular in shape. It will also be understood that the first and second bottom panels 14, 15 and first and second top panels 12, 13 are not limited to a rectangular shape and may be trapezoidal in shape.

The blank 10 also includes an external planar side 32 and an internal planar side 31 as shown in FIG. 10. For advertising and promotional considerations, the external planar side 32 is preferably finished (i.e., includes printed material or related identifying indicia).

The preferred embodiments of the blanks 10, 10A, 40A, 42, 43, 44, 45 also provides a tab lock 29 connected to the second top panel 13 opposite the front panel 16. The tab lock 29 promotes the opening and secure closing of the containers 49, 50, 51, 52, 53, 54, 55. A preferred tab lock 29 is substantially rectangular, but it will be understood that the tab lock 29 is not limited to a rectangular shape, and may be, for example, trapezoidal in shape. The blanks 10 and 40 depicted in FIGS. 7 and 10 may also include a tab 33 of the first top panel 12.

The first top panel 12 may also provide a slot 30 that is configured to receive at least a portion of the tab lock 29 when the blank 10 is formed into the sleeve. The slot 30 is positioned adjacent to a free edge of the first top panel 12. Thus, the sleeve can be opened by raising the first and second top panels 12, 13 and then closed by lowering the first top panel 12 and second top panel 13, respectively, and inserting the tab lock 29 into the slot 30.

The blanks 10, 10A, 40A, 42, 43, 44, 45 also include a pair of dust flaps 27 connected to upper edges of the first side panel 18 and the second panel section 20. In a preferred embodiment, the dust flaps 27 are substantially rectangular, but it will be understood that the dust flaps are not limited to a rectangular shape, and may be trapezoidal in shape.

A preferred embodiment of the dust flaps 27 define glue release sections 28, wherein the glue release sections are preferably oval in shape (see FIG. 7). The glue release sections 28 secure the first top panel 12 to the dust flaps 27 with, for example, an adhesive, when the blanks 10, 40A, 42, 43, 44, 45 are formed into the containers 49, 50, 51, 52, 53, 54, 55. As configured, external portions of the blanks are separated from the dust flaps 27 when the first and second top panels 12, 13 are separated from each other and the container is opened (i.e., when the first and second top panels of the container are raised).

As briefly described above, another aspect of the present invention includes sleeves or containers 49, 50, 51, 52, 53, 54, 55 formed from the packaging blanks 10, 40A, 42, 43, 44, 45 (see FIGS. 1, 8, 11, 16, 19, and 22). The majority of the elements of the containers are those embodied in the blanks. For the sake of a complete and accurate description, those elements are described below.

A preferred embodiment of the sleeve formed from the blanks 10, 40A, 42, 43, 44, 45 include first and second bottom panels 14, 15, first and second side panels 18, 21, a rear panel 17, a front panel 16, and first and second top panels 12, 13. The container is preferably formed from a one-piece flexible blank 10 formed from paperboard. It will be understood that the containers 49, 50, 51, 52, 53, 54, 55 include at least one top panel and at least one bottom panel, but may include any number of panels that cooperate to seal the container. Further, those skilled in the art will appreciate that any number of known mechanisms for releasably engaging one or more top panels may be incorporated into the invention.

The bottom panels 14, 15 preferably include substantially rounded corners. The first and second side panels 18, 21 are secured to respective opposing edges of the bottom panels 14, 15 such that the first and second side panels 18, 21 define substantially parallel planes. The first and second side panels 18, 21 and portions of the front panel 16 and rear panel 17 include a series of scores 38. It will be understood that respective portions of the first side panel 18, and first panel section 19 and second panel section 20 of the second side panel 21, form the first and second side panels 18, 21 of the sleeve upon construction.

The rear panel 17 of the sleeve is connected to the first bottom panel 14 and to respective opposing edges of the first and second side panels 18, 21. The rear panel 17 of the sleeve includes a series of scores 38. The front panel 16 of the sleeve is connected to the second bottom panel 15 and to respective opposing edges of the first and second side panels 18, 21. As constructed, the front panel 16 and rear panel 17 define substantially parallel planes.

The front panel 16 may also include a series of scores 38. The scores of scores 38 in the first and second side panels 18, 21, the rear panel 17, and the front panel 16 facilitate the formation of rounded corners 59 in the container. The top panels 12, 13 are positioned opposite the bottom panels 14, 15 and releasably connect the rear panel 17 and the front panel 16.

As constructed, the bottom panels 14, 15 are positioned inwardly of the edges of the first side panel 18, second side panel 21, rear panel 17, and front panel 16. Stated differently, the bottom panels 14, 15 are recessed relative to the edges of the side panels 18, 21, rear panel 17, and front panel 16.

The top panels 12, 13 are connected at one edge to the rear and front panels 16, 17, respectively, and are positioned opposite the bottom panels 14, 15. As configured, the top panels 12, 13 and bottom panels 14, 15 define substantially parallel planes, thereby defining a portion of the enclosure formed by the first and second side panels 18, 21 and top and bottom panels 12, 13.

In the preferred embodiment, the containers 49, 50, 51, 52, 53, 54, 55 consist essentially of a one-piece flexible blank 40, 41, 42, 43, 44, 45 having an external planar side 32 and an internal planar side 31, wherein the external planar side is finished.

Preferably, the first and second side panels 18, 21, rear panel 17, and front panel 16 of the containers are substantially rectangular as illustrated in FIGS. 1, 8, 19, and 22. Nevertheless, it will be understood that in alternative embodiments the side panels 18, 21 are rounded (i.e., bow outwardly from the interior compartment of the container) to define rounded corners 59 as illustrated in FIGS. 11, 12, 15, 16, and 17.

The containers 49, 50, 51, 52, 53, 54, 55 further include a first recess bridge panel 25 and a second recessed
bridge panel 26. The first recess bridge panel 25 is secured to the rear panel 17 and connects an edge of the first bottom panel 14 to the rear panel 17. The second recess bridge panel 26 is secured to the front panel 16 opposite the first recess bridge panel 25. The second recess bridge panel 26 connects an edge of the second bottom panel 15 to the front panel 16 opposite the edge to which the rear panel 17 is connected to the first bottom panel 14.

[0078] In like fashion with respect to the blanks, the first and second top panels 12, 13 and first and second and bottom panels 14, 15 of the container are substantially rectangular. The substantially rectangular shape of these panels, in conjunction with the substantially rectangular shape of the rear panel 17, front panel 16, and first and second side panels 18, 21, ensures the substantially rectangular shape of the container. The first and second top panels 12, 13 and first and second bottom panels 14, 15 of the preferred embodiment of the container likewise include substantially rounded corners, thereby facilitating the formation of a container having rounded corners 59.

[0079] Nevertheless, it will be understood that the rear panel 17, front panel 16, first side panel 18, and second side panel 21 are not limited to a rectangular shape and may be trapezoidal or triangular in shape. It will also be understood that the first and second top panels 12, 13 and first and second bottom panels 14, 15 are not limited to a rectangular shape and may be trapezoidal in shape.

[0080] The preferred embodiment of the sleeve also provides a tab lock 29 connected to one of the top panels 12, 13, and preferably to the second top panel 13. The tab lock 29 promotes the opening and secure closing of the sleeve and releasably engages a slot 30 provided in the first top panel 12. A preferred tab lock 29 is substantially rectangular, but it will be understood that the tab lock 29 is not limited to a rectangular shape, and may be, for example, trapezoidal in shape.

[0081] The sleeve further provides a pair of opposing dust flaps 27 connected to respective opposing edges of the first and second side panels 18, 21. The dust flaps 27 are preferably rectangular and positioned adjacent to the top panels 12, 13.

[0082] A preferred embodiment of the dust flaps 27 define glue release sections 28, wherein the glue release sections are preferably oval in shape (see FIG. 7). The glue release sections 28 secure the first and second top panels 12, 13 to the dust flaps 27 with, for example, an adhesive, when the blanks 10, 40, 41, 42, 43, 44, 45 are formed into the containers 49, 50, 51, 52, 53, 54, 55. As configured, external portions of the blanks, and specifically external portions of first and second top panels 12, 13, are separated from the dust flaps 27 when the first and second top panels are separated from each other and the container is opened (i.e., when the first and second top panels of the container are raised).

[0083] In the drawings and specification, there have been disclosed typical embodiments of the invention and, although specific terms have been employed, they have been used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being set forth in the following claims.

That which is claimed is:
1. A packaging blank that is capable of forming a container, said blank comprising:
   a substantially rectangular body panel having a series of scores that facilitate the folding of said blank into a container;
   a substantially rectangular first top panel connected to an upper edge of said body panel;
   a substantially rectangular second top panel connected to an upper edge of said body panel, said second top panel spaced apart from said first top panel;
   a first bottom panel connected to a lower edge of said body panel, said bottom panel having substantially rounded corners; and
   a second bottom panel connected to a lower edge of said body panel, said second bottom panel having substantially rounded corners, said second bottom panel spaced apart from said first bottom panel;
wherein said blank is capable of forming a container having rounded corners.
2. A packaging blank according to claim 1, wherein said body panel comprises:
   a first side panel;
   a front panel connected to said first side panel, said front panel positioned between said second top panel and said second bottom panel;
   a rear panel connected to said front panel by said first side panel, said rear panel positioned between said first top panel and said first bottom panel;
   a first panel section of a second side panel connected to said rear panel opposite said first side panel; and
   a second panel section of said second side panel connected to said front panel opposite said first side panel.
3. A packaging blank according to claim 1, wherein said series of scores in said body panel are substantially parallel to one another and extend from portions of said body panel adjacent to said first top panel and said second top panel to portions of said body panel adjacent to said first bottom panel and said second bottom panel.
4. A packaging blank according to claim 1, wherein:
   said second top panel defines a tab lock positioned opposite the edge of said second top panel to which said body panel is connected; and
   said first top panel defines a slot for receiving a portion of said tab lock.
5. A packaging blank according to claim 1, wherein said first bottom panel is substantially rectangular.
6. A packaging blank according to claim 1, wherein said second bottom panel is substantially rectangular.
7. A packaging blank according to claim 1, further comprising:
   a first recess bridge panel connected to said body panel opposite said first top panel, said first recess bridge panel connecting said first bottom panel to said body panel, and
a second recess bridge panel connected to said body panel opposite said second top panel; said second recess bridge panel connecting said second bottom panel to said body panel.

8. A packaging blank according to claim 7, wherein said first and second bottom panels, and said first and second recess bridge panels, form a recessed bottom structure in a partially constructed container formed from said blank.

9. A packaging blank according to claim 7, wherein said first and second bottom panels, and said first and second recess bridge panels, form a recessed bottom structure that automatically forms upon final construction of said blank into the container.

10. A packaging blank according to claim 1, further comprising:

a first glue tab connected to a free edge of said first bottom panel opposite said body panel; and

a second glue tab connected to a free edge of said second bottom panel opposite said body panel, said second bottom panel and said second glue tab defining a slot.

11. A packaging blank according to claim 1, further comprising:

a first glue tab connected to a free edge of said first bottom panel opposite said body panel, said first bottom panel and said first glue tab defining a slot; and

a second glue tab connected to a free edge of said second bottom panel opposite said body panel, said second bottom panel and said second glue tab defining a slot.

12. A packaging blank according to claim 1, further comprising a pair of dust flaps connected to upper edges of said body panel, said dust flaps spaced apart from one another.

13. A packaging blank according to claim 1, further comprising a plurality of cut and score lines in said body panel, said cut and score lines facilitating the folding flat of a partially constructed container formed from said blank.

14. A packaging blank according to claim 14, wherein said cut and score lines are substantially parallel to one another and extend from portions of said body panel adjacent to said first top panel to portions of said body panel adjacent to said first bottom panel and said second bottom panel.

15. A packaging blank that is capable of forming a container, said blank comprising:

a first side panel;

a front panel connected to said first side panel;

a rear panel connected to said front panel by said first side panel;

a first panel section of a second side panel connected to said rear panel opposite said first side panel;

a second panel section of said second side panel connected to said front panel opposite said first side panel;

a substantially rectangular first top panel connected to an upper edge of said rear panel;

a substantially rectangular second top panel connected to an upper edge of said front panel;

a first bottom panel connected to said rear panel opposite said first top panel; and

a second bottom panel connected to said front panel opposite said second top panel;

wherein said blank is capable of forming a container having rounded corners and a recessed bottom panel.

16. A packaging blank according to claim 15, wherein said first bottom panel is substantially rectangular.

17. A packaging blank according to claim 15, wherein said second bottom panel is substantially rectangular.

18. A packaging blank according to claim 15, wherein said first and second bottom panels include substantially rounded corners.

19. A packaging blank according to claim 15, wherein:

said second top panel defines a tab lock positioned opposite the edge of said second top panel to which said front panel is connected; and

said first top panel defines a slot for receiving a portion of said tab lock.

20. A packaging blank according to claim 15, further comprising:

a first recess bridge panel connected to said rear panel opposite said first top panel, said first recess bridge panel connecting said first bottom panel to said rear panel; and

a second recess bridge panel connected to said front panel opposite said second top panel, said second recess bridge panel connecting said second bottom panel to said front panel.

21. A packaging blank according to claim 20, wherein said first and second bottom panels, and said first and second recess bridge panels, form a recessed bottom structure in a partially constructed container formed from said blank such that said recessed bottom structure automatically forms upon final construction of said blank into the container.

22. A packaging blank according to claim 15, further comprising:

a first glue tab connected to a free edge of said first bottom panel opposite said rear panel; and

a second glue tab connected to a free edge of said second bottom panel opposite said front panel, said second bottom panel and said second glue tab defining a slot.

23. A packaging blank according to claim 15, further comprising:

a first glue tab connected to a free edge of said first bottom panel opposite said rear panel, said first bottom panel and said first glue tab defining a slot; and

a second glue tab connected to a free edge of said second bottom panel opposite said front panel, said second bottom panel and said second glue tab defining a slot.

24. A packaging blank according to claim 15, further comprising:

a series of scores in said front panel, said rear panel, said first side panel, and said first and second panel sections of said second side panel, said scores facilitating the folding of said blank into a container; and

a plurality of cut and score lines in said first side panel, said first panel section, and said second panel section, said cut and score lines facilitating the folding flat of a partially constructed container formed from said blank.
25. A packaging blank according to claim 24, wherein:
said series of scores are substantially parallel to one
another and extend from portions of said body panel
adjacent to said first top panel and said second top panel
to portions of said body panel adjacent to said first
bottom panel and said second bottom panel; and
said cut and score lines are substantially parallel to one
another and extend from portions of said body panel
adjacent to said first top panel and said second top panel
to portions of said body panel adjacent to said first
bottom panel and said second bottom panel.

26. A container having rounded corners, said container
comprising:

at least one bottom panel having substantially rounded
corners;

first and second side panels secured against respective
opposing edges of said bottom panel, said first and
second side panels defining substantially parallel
planes and having a series of scores;

a rear panel connected to said bottom panel and to
respective opposing edges of said first and second side
panels, said rear panel having a series of scores;

a front panel connected to said bottom panel and to
respective opposing edges of said first and second side
panels, said front panel having a series of scores, said
front panel and said rear panel defining substantially
parallel planes; and

at least one top panel relesably connecting said rear
panel and said front panel, said top panel positioned
opposite said bottom panel;

wherein said series of scores in said first and second side
panels, said rear panel, and said front panel facilitates
the formation of rounded corners in said container.

27. A container according to claim 26, wherein said
bottom panel is positioned inwardly of edges of said first and
second side panels, said rear panel, and said front panel.

28. A container according to claim 26, further comprising:
a first recess bridge panel secured to said rear panel, said
first recess bridge panel connecting an edge of said
bottom panel to said rear panel; and

a second recess bridge panel secured to said front panel
opposite said first recess bridge panel, said second
recess bridge panel connecting an edge of said bottom
panel to said front panel opposite the edge to which said
rear panel is connected.

29. A container according to claim 28, wherein said
bottom panel and said first and second recess bridge panels
form a recessed bottom structure, said recessed bottom
structure facilitating the folding flat of a partially con-
structed container for shipment such that said bottom struc-
ture is folded inwardly against interior surfaces of the said
front panel and said rear panel.

30. A container according to claim 28 wherein said bottom
panel and said first and second recess bridge panels form a
recessed bottom structure that automatically forms upon
final construction of said container.

31. A container having rounded corners, said container
comprising:

a first bottom panel having substantially rounded corners;
a second bottom panel having substantially rounded cor-
ers, portions of said first and second bottom panels
connected to one another;

first and second side panels secured against respective
opposing edges of said first and second bottom panels,
said first and second side panels defining substantially
parallel planes and having a series of scores;

a rear panel connected to said first bottom panel and to
respective opposing edges of said first and second side
panels, said rear panel having a series of scores;

a front panel connected to said second bottom panel and
to respective opposing edges of said first and second side
panels, said front panel having a series of scores, said
front panel and said rear panel defining substantially
parallel planes;

a first top panel connected to said rear panel, said first top
panel positioned opposite said first and second bottom
panels; and

a second top panel connected to said front panel, said
second top panel cooperating with said first top panel to
relesably connect said rear panel and said front panel,
said second top panel positioned opposite said first and
second bottom panels.

32. A container according to claim 31, wherein said first
and second bottom panels are positioned inwardly of edges
of said first and second side panels, said rear panel, and said
front panel.

33. A container according to claim 31, wherein said series
of scores in said first and second side panels, said rear panel,
and said front panel facilitates the formation of rounded
 corners in said container.

34. A container according to claim 31, further comprising:
a first recess bridge panel secured to said rear panel, said
first recess bridge panel connecting an edge of said
bottom panel to said rear panel; and

a second recess bridge panel secured to said front panel
opposite said first recess bridge panel, said second
recess bridge panel connecting an edge of said second
bottom panel to said front panel opposite the edge to
which said rear panel is connected to said first bottom
panel.

35. A container according to claim 34, wherein said first
and second bottom panels, and said first and second recess
bridge panels, form a recessed bottom structure, said
recessed bottom structure facilitating the folding flat of a
partially constructed container for shipment such that said
bottom structure is folded inwardly against interior surfaces
of the said front panel and said rear panel.

36. A container according to claim 34, wherein said first
and second bottom panels, and said first and second recess
bridge panels, form a recessed bottom structure that auto-
matically forms upon final construction of said container.