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(54) Flower package apparatus.

(57) The package apparatus (10) includes a tapered, elongated carton portion, with a plurality of sides, and with lower portions (100,110,120) slit to define, while elongated, part of the package apparatus, and, when partially folded, legs on which the apparatus may be supported to comprise a free-standing vase, and when fully folded, a bouquet holder.

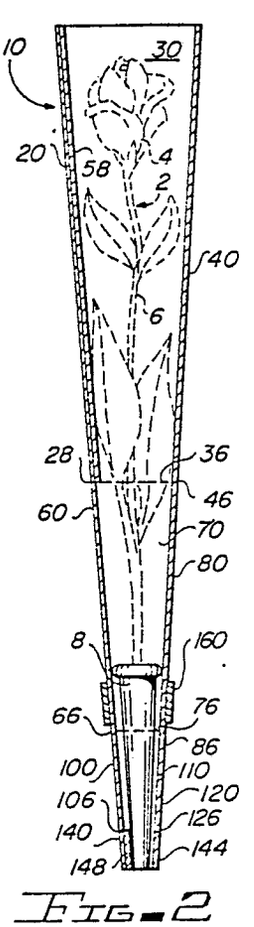

Fig. 2

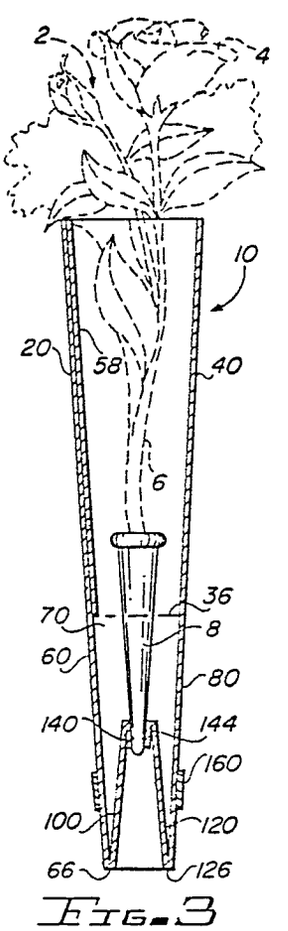

Fig. 3

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FLOWER PACKAGE APPARATUS

BACKGROUND OF THE INVENTION

Field of the Invention:

This invention relates to packages or containers for flowers, and, more particularly, to a package or container designed for holding a flower for transport purposes. The apparatus is capable of being transformed into a bouquet holder and/or into a vase which is self-supporting.

Description of the Prior Art:

The prior art includes several patents which are designed primarily for holding and transporting flowers, and thus they comprise simply containers or packages in which flowers are kept. None of the prior art patents show apparatus capable of being transformed sequentially from a transport package or container into a bouquet holder and into a vase, as part of the inherent characteristics of the basic apparatus.

U.S. Patent 1,270,554 (Rubel) discloses a combination shipping box and vase which includes generally two portions, pinned together and separable for recombination as a vase. The apparatus comprises two separate portions, a top portion and a bottom portion, both of which are tapered. The two portions are secured by a pair of screws or pins. With the pins or screws removed, the top portion is removed from the bottom portion, and the bottom portion is then inserted into the top portion in an inverted manner. The top portion then becomes a bottom or stand for the apparatus, and the apparatus can then be used as a vase.

U.S. Patent 1,606,523 (Gardner) discloses a package for containing and shipping potted bulbs. The potted bulb is braced within the package during transport. The package includes an elongated cylinder with a wall of the cylinder that opens and comprises an opening flap for the package. A pot disposed at the bottom of the package is braced therein by flaps which, ultimately, are held in place when the container is closed.

U.S. Patent 1,811,574 (Barrett) discloses a collapsible bag which may be used to transport a package. The bag is comprised of a plurality of pleated elements which collapse or close downwardly, accordian-like, to display a potted plant disposed therein. The top of the bag includes flaps which open to allow access to the potted plant within the bag when the bag collapses downwardly or accordians downwardly.

U.S. patent 2,309,742 (Ballard et al) discloses a display and shipping container for flowers. However, the apparatus does not enclose the flowers, but merely secures them together for display and shipping purposes. The apparatus, since it does not fully enclose the flowers, does not protect them from damage while the flowers are being transported. It simply is an element used to bundle a plurality of flowers together.

U.S. Patent 3,376,666 (Leonard) discloses a package for holding a plurality of flowers in a bunch. The apparatus consists of a generally truncated conical configurationed element which includes a plurality of holes to allow for the flow of air for flowers disposed within the apparatus. The stems of the flowers extend below the apparatus, and the buds or petal portions of the flowers are held in the largest diameter portion of the apparatus.

U.S. Patent 3,767,104 (Bachman et al) discloses another type of packaging apparatus for flowers. The apparatus consists of a generally conically shaped container. At the upper portion, or widest diameter portion of the cone, is a transversely extending disc element having a plurality of holes or apertures extending through it. The stems of the flowers held by the apparatus extend through the holes in the disc.

It does not appear that the apparatus of the '742, the '666 of the '104 patents have alternate embodiments or are designed to provide a plurality of functions, as is the apparatus of the present invention, or as is the '554 patent.

U.S. Patent 4,113,094 (Collin) discloses a shipping and display container for cut flowers. The container includes a stackable box and, within the box, a support to hold a pot for the plant, and in a second embodiment a plastic flower bucket. The plastic flower bucket is a separate element, stackable by itself, and inserted into the box or container as required.

German Patent 631,054 (Hansen) discloses a band box for displaying various elements. The apparatus includes several different embodiments. It includes a top frame and a bottom frame and panels between the two frames which are movable relative to each other to provide different embodiments for the apparatus. When the panels are aligned vertically with the frames, a ring is disposed about the panels to hold the panels in place.

SUMMARY OF THE INVENTION

The invention described and claimed herein comprises a package or container for a flower having a plurality of panels, separable and foldable, capable of being changed from a transport mode or embodiment sequentially to either or both a bouquet holder embodiment and/or a self-supporting, free-standing vase mode or embodiment by folding the panels in different ways. The basic transport package is readily changed back and forth to and from any of its three embodiments without tools or the like.

Among the objects of the present application are the following:

To provide new and useful package apparatus for flowers;

To provide new and useful container apparatus for flowers capable of being transformed into a bouquet holder and/or into a self-supporting vase;

To provide new and useful container apparatus having a plurality of slots at one end, and a slotted portion capable of being folded to define a plurality of feet for supporting the upper portion of the apparatus;

To provide new and useful apparatus for holding a flower for transport purposes and for display purposes; and

To provide new and useful package apparatus for a flower and including a generally tapered configuration for supporting a flower having an upper portion and a lower, slotted portion capable of being folded to comprise a stand for supporting the upper portion of the apparatus and a flower.

BRIEF DESCRIPTION OF THE DRAWING

Figure 1 is a perspective view of the apparatus of the present invention.

Figure 2 is a view in partial section of the apparatus of Fig. 1, taken generally along line 2-2 of Fig. 1.

Figure 3 is a view in partial section showing the apparatus of Fig. 1 in a different embodiment.

Figure 4 is a view in partial section of the apparatus of the present invention showing still another embodiment.

Figure 5 is a plan view of the apparatus of the present invention.

Figure 6 is a perspective view illustrating the assembly of the apparatus of the present invention.

Figure 7 is a perspective view illustrating the beginning of the transformation of the apparatus of the present invention from one embodiment to another.

Figure 8 is a perspective view of the apparatus of the present invention showing sequentially the transformation of the apparatus following the showing of Fig. 7.

Figure 9 is a perspective view of the apparatus of the present invention illustrating sequentially the transformation of the apparatus of the present invention following the showing of Fig. 8 and as shown in Fig. 4.

Figure 10 is a perspective view showing the nearly completed transformation of the apparatus of the present invention following the showing of Fig. 9 into the embodiment shown in Fig. 3.

Figure 12 is a perspective view showing another alternate embodiment of the apparatus of the present invention.

Figure 13 is a perspective view of a portion of another alternate embodiment of the apparatus of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Figure 1 is a perspective view of flower package apparatus 10 of the present invention. The flower package apparatus 10 comprises a generally conically cylindrical container having four primary sides, with each side composed of a plurality of panels. The conically cylindrical container is relatively long or elongated, and is relatively narrow. It is designed primarily to hold a single flower and a stem tube for providing nutrients for the flower. However, in a larger form, obviously several flowers could be held by the apparatus. The container or package apparatus 10, as shown in the drawing, is in the general configuration of an elongated or truncated pyramid. The apparatus is preferably made of relatively lightweight material, such as heavy paper or thin carboard, or the like.

Figure 2 is a view in partial section taken generally along line 2-2 of Fig. 1, showing the flower package apparatus 10 with a flower 2 shown in phantom disposed within the package apparatus 10. The flower 2 includes a bud or petal portion 4, and a stem 6. The bottom of the stem 6 is disposed within a stem tube 8. The stem tube 8 is disposed at the bottom of the package apparatus 10. The top of the package apparatus 10 is preferably open for air circulation purposes.

Figure 3 is a view in partial section of the apparatus 10 illustrating the package apparatus 10 in a folded position so that the bud or petal portion 4 of the flower 2 is disposed outwardly from, or above, the package apparatus 10. In the configuration shown in Fig. 3, the package apparatus 10 is in its bouquet configuration or embodiment.

Figure 4 is a view in partial section of another configuration of the package apparatus 10 in which the package apparatus 10 defines a self-supporting or free-standing vase. The stem tube 8 is disposed at the bottom of the apparatus, and the petal or flowering portion 4 of the flower 2 is also disposed outwardly and above the apparatus 10, as in the bouquet embodiment of Fig. 3.

In Figs. 1 and 2, the package apparatus 10 comprises a transport embodiment or configuration; in Fig. 3 the apparatus 10 is illustrated in its bouquet embodiment or version; and in Fig. 4 the apparatus 10 is in its stand or vase configuration. The differences among the three different versions or embodiments is in the manner in which the apparatus is folded. These will be explained in detail below.

Figure 5 is a plan view of the apparatus 10, illustrating the blank from which the apparatus 10 is made. The blank is disposed flat in its cut configuration prior to folding the blank into the package configuration. Figure 6 is a perspective view of the package apparatus 10, illustrating the assembly of the apparatus 10 from the original, blank configuration illustrated in Fig. 5.

Figure 7 is a perspective view of the apparatus 10 illustrating the initial folding procedure of a portion of the package apparatus 10 in order to transform the package apparatus 10 from its transport version or embodiment, as illustrated in Figs. 1 and 2, to either the bouquet version or embodiment illustrated in Fig. 3 or the free-standing vase version or embodiment illustrated in Fig. 4. Figure 8 is a sequential view, illustrating the next step sequentially, after the step illustrated in Fig. 7. Figure 9 is a continuing sequential step illustrating, in a perspective, a portion of the apparatus 10, the continued folding of the apparatus 10. Finally, Fig. 10 shows the last sequential step illustrating the completion of the folding of the lower part of the package apparatus 10 to its fully folded position, which defines the bouquet version or embodiment, as shown in Fig. 3.

For the following explanation of the package apparatus 10, reference will be made primarily to Figs. 1-10.

The package apparatus 10 includes four upper panels, including an upper panel 20, an upper panel 30, an upper panel 40, and an upper panel 50. The upper panel 20 includes a top edge 22, a free edge 24, which is a side edge, a side edge or fold line 26, and a bottom edge or fold line 28. The upper panel 30 includes a top edge 32, and a bottom edge or fold line 36. It also includes a side edge or folded line 34. The fold line 26 is common to both the panels 20 and 30.

The upper panel 40 includes a top edge 42 and a bottom edge or fold line 46. The panel 40 also includes a side edge or fold line 44. The side edge or fold line 34 is common to both the upper panel 30 and the upper panel 40.

The upper panel 50 includes an upper edge 52 and a lower edge or fold line 56. The panel 50 also includes a side edge or fold line 54. The side edge or fold line 44 is common to both the upper panel 40 and the upper panel 50.

Secured to the upper panel 50 by virtue of the side edge or fold line 54 is a fastening tab 58. The fastening tab 58 is substantially the same overall length or height as the panels 20, 30, 40, and 50, but its width is much narrower. The purpose of the fastening tab 58 is to secure the apparatus 10 together, as best illustrated in Fig. 6. Appropriate adhesive may be disposed on the outer side of the fastening tab 58. The inside of the upper panel 20, adjacent to the outer or free edge 24, is then disposed against the fastening tab 58, with the free outer edge 24 of the upper panel 20 disposed adjacent to the fold line or outer edge 54 of the panel 50. When the four upper panels 20, 30, 40, and 50 are secured together by the fastening tab 58, the package apparatus 10 assumes a generally elongated pyramidal or cylindrical configuration, with the "cylinder" having four sides.

As best shown in Fig. 5, the panels 20, 30, 40, and 50 are substantially identical in configuration and dimension, and accordingly a relatively long or elongated square cone, or pyramidal cylinder, results.

Extending downwardly from the bottom or lower portions of the four upper panels, and secured thereto by the respective bottom edges or fold lines 28, 36, 46, and 56, are four middle or center panels. The four middle or center panels include a panel 60, a panel 70, a panel 80, and a panel 90.

The panel 60 includes a side edge 62 and a side edge 64, and a bottom edge or fold line 66. The upper edge of the panel 60 is the fold line 28.

The fold line 36 of the panel 30 is common with the middle panel 70. In addition to its upper edge or fold line 36, the middle panel 70 includes a side edge 74 and a side edge 72, and a bottom edge or fold line 76.

The middle panel 80 includes a pair of side edges 82 and 84 and an upper edge or fold line 46, which it shares with the panel 40. The middle panel 80 also includes a lower edge or fold line 86.

The panel 90 includes a pair of side edges 92 and 94 and an upper edge or fold line 56. The upper edge or fold line 56 is, of course, common with the panel 50. The panel 90 also includes a bottom edge or fold line 96.

The four middle panels 60, 70, 80, and 90 are substantially identical in configuration and dimension, and continue the generally tapered configuration of the upper panels 20, 30, 40, and 50, from which they extend. The side edges of the panels are generally aligned.

The package apparatus 10 also includes four lower or bottom panels, including a lower or bottom panel 100, a lower or bottom panel 110, a lower or bottom panel 120, and a lower or bottom panel 130. The panels 100, 110, 120, and 130 are substantially identical in configuration and in dimensions, and they continue the tapering configuration of their respective upper panels 20 and 60, 30 and 70, 40 and 80, and 50 and 90.

The lower or bottom panel 100 includes a pair of outer edges 102 and 104. The panel 100 also includes an upper edge or fold line 66, which it shares with the middle panel 60. At the bottom of the panel 100 is a bottom edge or fold line 106.

The panel 110 includes a pair of side edges 112 and 114, and an upper edge or fold line 76. The panel 110 shares the fold line 76 with the panel 70. The panel 110 also includes a bottom edge or fold line 116.

The panel 120 includes a pair of side edges 122 and 124. The panel 120 also includes an upper edge or fold line 86, which it shares with the panel 80. The panel 120 further includes a bottom edge or fold line 126.

The panel 130 includes a pair of side edges 132 and 134, and an upper edge or fold line 96. The upper edge or fold line 96 is shared with the panel 90. The panel 130 also includes a bottom edge or fold line 136.

At the bottom of the lower panels 100, 110, 120, and 130, are four cup panels or tabs 140, 142, 144 and 146, respectively. The fold line 106 is shared between the lower panel 100 and the cup panel 140. The fold line 116 is shared between the lower panel 110 and the cup panel 142. The fold line 126 is shared between the lower panel 120 and the cup panel 144. The fold line 136 is shared between the lower panel 130 and the cup panel 146.

Extending outwardly from the cup panel 146 is a fastening tab 148. The fastening tab 148 is appropirately secured to the inside of the cup panel 140, substantially the same as the fastening tab 58 is secured to the inside of the upper panel 20. The fastening tab 58 accordingly secures the bottom four cup panels 140, 142, 144, and 146 together. The two fastening tabs 58 and 148 comprise the elements that secure together the flower package apparatus 10.

It will be noted that the four upper panels 20, 30, 40, and 50 define a four-sided element that is closed at its four outer edges. However, the four middle panels 60, 70, 80, and 90 are each separated at their side edges, as are the four lower or bottom panels 100, 110, 120, and 130. The four middle panels 60...90 and the four lower panels 100...130 are secured to their respective adjacent panels by the fold lines.

The side edges of all of the panels are aligned, as shown best in Fig. 5 and as can be understood from Figs. 1 and 6. The four cup panels 140...146 define a cup at the bottom of the package apparatus 10. The cup defined by the four cup panels comprises a receptacle for receiving the bottom of the stem tube 8. This is best shown in Figs. 2, 3, and 4.

When the blank of the apparatus 10, as shown in Fig. 5, is appropriately folded along the side fold lines 26, 34, 44, and 54, and with the fastener tab 58 secured to the panel 20, so that the edge 24 of the panel 20 is adjacent to the fold line or edge 54 of the panel 50, and when the fastener tab 148 is appropriately secured to the cup tab 140, the apparatus 10 is in the general configuration shown in Fig. 1. In this configuration, with the upper panels 20... 80, the middle panels 60...90, and the lower panels 100...130 appropriately aligned, the container apparatus 10 is in its transport mode or embodiment. In that mode or embodiment, a flower, such as the flower 2, together with a stem tube 8, may be placed into the package apparatus 10 for transport purposes.

As indicated above, the top, defined by the four top edges 22, 32, 42, and 52 of the upper panels 20, 30, 40, 50, respectively, is left open. If desired, a covering of some type may be disposed thereon. However, it is deemed preferable, in most cases, to leave the top open. The flower 2, as disposed within the apparatus 10 in its transport configuration, as shown in Fig. 2, is well protected.

In order to maintain the apparatus 10 in its transport configuration, a band or ring 160 is slipped over the bottom end of the apparatus and moved upwardly until it is disposed over or around the middle panels 60...90. This is shown in Figs. 1 and 2. The band or ring 160 is, of course, a four-sided band, with the width of the sides appropriately dimensioned to fit snugly around the lower portion of the center panels. The ring 160 includes sides or side panels 162, 164, 166, and 168, as shown in Fig. 6.

The band or ring 160 applies tension to secure the lower portion, comprising the middle and bottom panels, together. Otherwise, since the middle nad bottom panels are open on the sides, they could fold outwardly, as will be discussed below in conjunction with the embodiments of Figs. 3 and 4, and as illustrated in Figs. 6, 7, 8, 9, and 10.

The ring 160 also applies tension to the panels and through the panels to the stem tube 8. This helps to hold the stem tube 8 securely within the package apparatus 10.

In addition to being a securing ring to hold the apparatus together, the ring or band 60 may be used for a third purpose. Before the ring or band 160 is placed on the package, it, of course, may be flat, with its four side edges or fold lines pre-scored for easy folding. In such configuration, or while flat, with at least two adjacent sides of the band available for writing, the ring or band 160 may be used as a note, or the like, on which a message may be written.

For displaying the flower 2, with the bloom or bud 4 disposed out of the container 10, the bottom panels 100...130 may be folded upwardly and disposed within the lower panels 60...90. This is shown in Fig. 3. In such configuration, the stem tube 8 is supported upwardly on the four cup panels 140...146, so that the bloom or bud 4 of the flower 2 is disposed upwardly or out of the package apparatus 10. In this fashion, the apparatus 10 becomes a bouquet holder.

To insure that the apparatus 10 remains in the bouquet configuration or embodiment, the ring 160 is placed over the middle panels 60...90, after the bottom panels have been folded upwardly. In order to accomplish the upward folding of the bottom panels 100...130, the ring 160 must be removed from the middle panels so that the middle panels may flex outwardly. The outward folding of the middle panels allows the lower or bottom panels to fold upwardly, as shown in Figs. 7 and 8. After such folding has taken place, and the middle panels 60...90 are again in their aligned positions, as shown in Fig. 3, appropriately aligned with their respective upper panels 20...50, the ring 160 is again slipped into place over the middle panels 60...90. The ring 160 then holds the package apparatus 10 in the bouquet configuration by applying tension on the panels 60...90.

To comprise a self-supporting or free-standing vase, the band 160 is removed and the middle or center panels 60...90 are moved outwardly. The outward movement allows the panels 60...90 to pivot on their respective fold lines 28, 36, 46, and 56, relative to their respective upper panels 20, 30, 40, and 50, as shown in Fig. 5. The bottom panels 100...130 also pivot outwardly and downwardly. Depending on the extent or degree of outward movement of the middle panels, the bottom panels 100, 110, 130, and 140, may be in any of several positions. The positions range from the maximum down or bottom position of the lower panels, as shown in solid line in Fig. 4, which is also a maximum outward pivoting of the middle panels 60...90, to a minimum outward pivoting of the panels 60...90. The minimum outward pivoting of the panels 60...90 results in the maximum upward pivoting of the bottom panels 100...130. This is shown in phantom or dotted line in Fig. 4. The maximum upward pivoting of the lower panels 100...130 depends on the extent of the stability of the apparatus 10. In other words, depending on the particular flower, the free-standing vase embodiment of Fig. 4 may actually vary between the position shown in solid line in Fig. 4 to the position shown in dotted line in Fig. 4. The stability and the desired vertical lifting of the flower are the two primary factors involved in determining the precise position of the middle and lower panels in the vase embodiment. The wider the spread of the middle panels 60...90, the lower the flower, and the narrower the spread of the panels 60...90, the higher the flower.

In Fig. 6, the blank of Fig. 5 is shown being assembled, with the fastening tabs 58 and 148 being positioned adjacent to the inner surfaces of the upper panel 30 and the cup panel 140, respectively. The stippling on the fastener tabs 58 and 148 indicates that an adhesive may be placed on the fastening tabs for securing the apparatus 10 together. The ring 160, with its four sides 162, 164, 166, and 168, is shown spaced apart from the bottom or lower portion of the apparatus 10.

After the apparatus 10 is assembled, the apparatus may sequentially be folded by movement of the middle and lower panels to either the free-standing vase configuration, as shown in Fig. 4, or to the maximum folded bouquet position shown in Fig. 3. This folding procedure is illustrated sequentially in Figs. 8, 9, and 10. As indicated above, for the folding procedure, the ring 160 is removed from the package cylinder. In use, the package cylinder, with the ring 160 secured thereto, is used to transport a flower. When the flower is to be presented to its recipient, or is to be displayed, then the user has the option of removing the flower completely, or of using the package apparatus 10 as a bouquet holder or as a free-standing vase. To transform the package cylinder into either the free-standing vase or the bouquet versions, the steps of folding the apparatus are shown sequentially in Figs. 7, 8, 9, and 10.

As shown in Fig. 7, the cup receptacle at the bottom of the cylinder, defined by the four panels 140, 142, 144, and 146, are moved directly upwardly, substantially coaxially with the center of the upper four panels. The four upper panels 20...50

remain in their secured-together state. The middle and lower panels fold or pivot on their respective fold lines so that the middle panels 60... 90 pivot outwardly from their upper portions, and the lower panels 100...130 pivot outwardly from their lower portions.

A continued upward movement of the lower cup receptacle, as shown in Fig. 8, leads to the vase embodiment, as shown in Fig. 9. A continuing upward movement of the cup receptacle and the lower panels 100...130 from the position shown in Fig. 9 results in the inward pivoting of the middle panels 60...90 once the maximum outward pivoting of the middle panels has been accomplished. The maximum outward pivoting of the upper panels is accomplished when the bottom panels are substantially horizontal, or about as shown in Figs. 4 and 9. From the position shown in Figs. 4 and 9, an upward movement of the cup receptacle, the four cup panels 140...146, causes the lower portion of the middle panels to move inwardly to their regular, aligned position, as shown in Figs. 1, 2, and 3. In this position, the cup receptacle is at its highest, and thus any flower disposed within the apparatus 10 will be extending above the apparatus 10 to a maximum height. As indicated above, to insure that the apparatus 10 remains in this, the bouquet embodiment, the ring 160 is again fitted onto the middle panels, as shown in Fig. 3.

Figure 11 is a top view of a three-sided container apparatus 200. The package apparatus 200 includes three upper panels 210, 212, and 214, and three middle panels 220, 222, and 224. and three lower panels 230, 232, and 234. The configuration of a triangular cylinder or pyramid is the minimum panel configuration that would provide a stable base. That is, a minimum of three legs are required to provide a stable base in the vase configuration. It will be noted that the four-sided embodiment of package 10 includes four legs, or one leg for each side. The triangular or three-sided package apparatus of Fig. 10 provides three rows of aligned panels, vertically, of which the bottom two sets of panels, or the middle and lower panels, on each side, define the three supporting legs in the vase configuration or embodiment. A cup receptacle at the bottom, not shown, will also be provided in the three-sided embodiment 200.

While three sides is the minimum for providing a stable base or stand for the vase position, it is also the minimum sided figure that will provided a container, or which defines a package for receiving a flower. On the other hand, the four-sided container apparatus 10, as illustrated in Figs. 1-10, is not the maximum number of sides which may be used. For example, in Fig. 12, and in Fig. 13, respectively, six and eight sides are shown. Obviously, the number of sides may be increased, as desired, to provide both a larger container or package and a more nearly conically shaped container apparatus. That is, as the number of sides increases, the more nearly round or conical shaped the apparatus becomes. Thus, from a minimum triangular cylindrical container of Fig. 11, to a four-sided container from Figs. 1-10, to a six-sided cylindrical container of Fig. 12, and up to an eight-sided cylindrical configuration of Fig. 13, the number of sides may increase as desired. However, for practical purposes, or practical considerations, perhaps a six-sided package apparatus, as shown in Fig. 12, or an eight-sided package or container as shown in Fig. 3, may be the maximum number of sides desired.

In Fig. 12, a six-sided package apparatus 250 is shown. The package apparatus 250 includes upper panels 251, 252, 253, 254, 255, and 256. Obviously, the upper panels 251...256 have their middle and lower counterparts, and the apparatus 250 also includes a bottom cup receptacle. A fastener tab 257 is used to fasten the panels 251...256 together.

In Fig. 13, an eight-sided package apparatus 260 is shown. The eight-sided apparatus 260 includes eight upper panels 261, 262, 263, 264, 265, 266, 267, and 268. In addition, a fastening tab 269 is shown secured against the inside of the panel 261.

The upper panels of the apparatus embodiments 250 and 260 include corresponding middle and lower panels and cup receptacles at the bottom of the lower panels, where the lower panels are fastened together. The primary differences between the embodiments of Figs. 1-10, Fig. 11, Fig. 12, and Fig. 13, lies in the number of sides for the flower package apparatus there illustrated. The general philosophy of the secured-together upper panels and the aligned middle and lower panels, with their free side edges, and secured together only at the bottom edges of the lower panels, continues with the embodiments of Figs. 11, 12, and 13.

As will be understood, while package apparatus showing five and seven sides is not illustrated, such package apparatus may be constructed, if desired. Again, as with the package apparatus illustrated in Figs. 1-13, the five and seven-sided embodiments would also include secured together upper panels, with folding or pivoting middle and lower panels with free sides or edges, and a cup receptacle at the bottom of each of the embodiments. The folding or pivoting panel arrangement of all such embodiments defines a free-standing vase, a bouquet holder, and a transport package.

Moreover, a ring would be used for both the package or transport package embodiments and the bouquet embodiments to secure each package apparatus together.

Returning again to Fig. 5, the phantom or dotted line panels adjacent to the panels 20, 60, and 100, indicate the possible additions of panels as, for example, the embodiment illustrated in Fig. 13. For illustrative purposes, four sets of additional panels are shown, suggesting the embodiment of Fig. 13. For convenience, the dotted line upper panels in Fig. 5 have been given the reference numbers corresponding to the final four panels 265, 266, 267, and 268 of Fig. 13. Thus, Fig. 5 is correlated with Fig. 13 to illustrate an eight-sided or octagonal package apparatus. In addition, the middle, bottom, and cup panels for the eighth row of panels have been given the respective reference numerals 278, 288, and 298. The aligned panels 268, 278, 288, and 298 define the eighth side of an octagonal package apparatus, such as the apparatus 260. The reference numeral 260, with phantom dotted lines, is also shown in Fig. 5 adjacent to the dotted line panels.

It may be possible to have a circular conical upper portion instead of having discrete panels for the upper portion. From the circular conical upper portion, there would be a transition to tapering or rectangular panels for the number of legs desired, such as three or four, etc. The transition from circular to tapering or rectangular portions would be rather difficult to provide in an inexpensive and aesthetically pleasing manner.

It will also be noted that the panels need not be tapered, as shown in the drawing. If desired, the panels could be rectangular. Such rectangular configuration would probably not be aesthetically pleasing, but may be desirable under some circumstances. The tapering panels, as shown, appear to be preferable for reasons of both aesthetics and practicality.

It will further be noted that in the transport configuration of all the embodiments, the upper, middle, and lower panels are appropriately aligned. This is shown in Figs. 1, 2, 5, and 6. In the bouquet holder configuration, the upper and middle panels are appropriately aligned. This is shown in Figs. 3 and 10.

In the bouquet holder configuration, the middle panels comprise continuations of the upper panels, thus elongating the cylinder defined by the upper panel into a bouquet holder. In the transport configuration, both the middle and lower panels comprise continuations of the upper panels, thus further elongating the cylinder defined by the upper panels into a transport package.

While the principles of the invention have been made clear in illustrative embodiments, there will be immediately obvious to those skilled in the art many modifications of structure, arrangement, proportions, the elements, materials, and components used in the practice of the invention, and otherwise, which are particularly adapted for specific environments, and otherwise without departing from those principles. The appended claims are intended to cover and embrace any and all such modifications, within the limits only of the true spirit and scope of the invention. This specification and the appended claims have been prepared in accordance with the applicable patent laws and the rules promulgated under the authority thereof.

Claims

1. Flower package apparatus, comprising, in combination: upper panel means including a plurality of panels secured together to comprise an elongated cylinder;
middle panel means, including a plurality of panels secured to and aligned with the panels of the upper panel means and movable and foldable relative to the upper panel means; and
lower panel means, including a plurality of panels secured to and aligned with the panels of the middle panel means remote from the upper panel means and movable and foldable relative to the upper and middle panel means, the upper, middle, and lower panel means comprising
a transport package when the panel means are aligned with each other,
a bouquet holder when the middle panel means are aligned with the upper panel means and the lower panel means is folded and nested within the middle panel means, and
a stand for the elongated cylinder of the upper panel means when the middle panel means is folded outwardly from the upper panel means and the lower panel means is folded inwardly from the middle panel means.

2. The apparatus of claim 1 in which the lower panel means further includes a cup receptacle for receiving and holding a stem tube for the flower.

3. The apparatus of claim 2 in which the cup receptacle is secured to the lower panel means remote from the middle panel means.

4. The apparatus of claim 3 in which the middle panel means further includes ring means for holding the panels of the middle panel means and the panels of the lower panel means together when the upper panel means and the lower panel means are aligned with the upper panel means to define a transport package and when the panels of the upper panel means and the panels of the middle

panel means are aligned and the panels of the lower panel means are folded within the panels of the middle panel means to define the bouquet holder.

5. The apparatus of claim 1 in which the panels of the upper panel means comprise a plurality of elongated panels connected together.

6. The apparatus of claim 5 in which each panel of the plurality of panels of the middle panel means is connected to a corresponding panel of the plurality of elongated panels of the upper panel means.

7. The apparatus of claim 6 in which each panel of the plurality of panels of the middle panel means includes an upper end and a lower end, and the panels are connected at their upper ends to the elongated panels of the upper panel means.

8. The apparatus of claim 7 in which each panel of the plurality of panels of the lower panel means is connected to a corresponding panel of the middle panel means at the lower ends of the middle panels.

9. The apparatus of claim 8 in which each panel of the plurality of lower panels includes an upper end and a lower end, and the lower panels are connected to the middle panels at the upper ends of the lower panels.

10. The apparatus of claim 9 in which the middle panels are connected together at their lower ends.

11. The apparatus of claim 10 in which the lower ends of the lower panels are connected together to define a receptacle for holding a flower stem.

12. The apparatus of claim 11 in which the respective middle and lower panels are aligned with each other and are foldable at their upper and lower ends for relative movement.

13. Flower package apparatus, comprising, in combination: upper panel means, including a plurality of elongated panels having at least
a first elongated upper panel having side edges and a bottom edge, and
a second elongated upper panel having side edges and a bottom edge, and
a third elongated upper panel having side edges and a bottom edge, and the upper panels are connected together at their side edges to define an elongated cylinder for holding a flower;
middle panel means, including a plurality of middle panels having at least
a first middle panel having side edges and an upper edge and a lower edge and the upper edge is connected to the bottom edge of the first upper panel,
a second middle panel having side edges and an upper edge and a lower edge and the upper edge is connected to the bottom edge of the second upper panel, and
a third middle panel having side edges and an upper edge and a lower edge and the upper edge is connected to the bottom edge of the third upper panel;
lower panel means including a plurality of lower panels having at least
a first lower panel having side edges and an upper edge and a lower edge and the upper edge is connected to the lower edge of the first middle panel,
13. (continued):
a second lower panel having side edges and an upper edge and a lower edge and the upper edge is connected to the lower edge of the second middle panel, and
a third lower panel having side edges and an upper edge and a lower edge and the upper edge is connected to the lower edge of the third middle panel,
the lower panel means are secured together at their lower edges, and the middle and lower panels of the middle and lower panel means are foldable relative to each other and to the upper panel means to define a bouquet holder when the upper and middle panel means are aligned with each other and the lower panel means are folded to a nested position within the middle panel means, and a free-standing vase when the middle panel means is folded outwardly from the upper panel means and the lower panel means is folded inwardly from the middle panel means.

14. The apparatus of claim 13 in which the lower panel means further includes a cup for receiving the stem of a flower, and the lower edges of the lower panels are secured to the cup.

15. The apparatus of claim 14 in which the middle panel means further includes a ring disposed about the middle panels and defining a tension element for securing the middle and lower panels together.

16. The apparatus of claim 15 in which the respective upper panels, middle panels, and lower panels are aligned with each other to define a transport package prior to the folding of the middle and lower panels.

17. Flower package apparatus, comprising, in combination:
cylinder means comprising a plurality of elongated panels for holding a flower; and
panel means connected to the cylinder means, including
first panel means connected to the cylinder means and movable relative to the cylinder means, and
second panel means connected to the first panel means remote from the cylinder means, the first and second panel means aligned with the cylinder means and defining with the cylinder means a

container, and the second panel means is movable relative to the first panel means whereby the first and second panel means may be folded relative to each other and to the cylinder means to comprise in one position a bouquet holder when the first panel means is aligned with the cylinder means and the second panel means is nested within the first panel means, and the first and second panel means may be folded relative to each other and to the cylinder means to comprise in another position a stand for the cylinder means for displaying the flower in the cylinder means.

18. The apparatus of claim 17 in which the panel means further includes a cup receptacle secured to the second panel means remote from the first panel means for receiving and holding a stem tube for the flower.

19. The apparatus of claim 18 in which the panel means further includes ring means for holding the first panel means and the second panel means together when the first and second panel means comprise a continuation of the cylinder means and when the first and second panel means are folded relative to each other and to the cylinder means to define a bouquet holder.

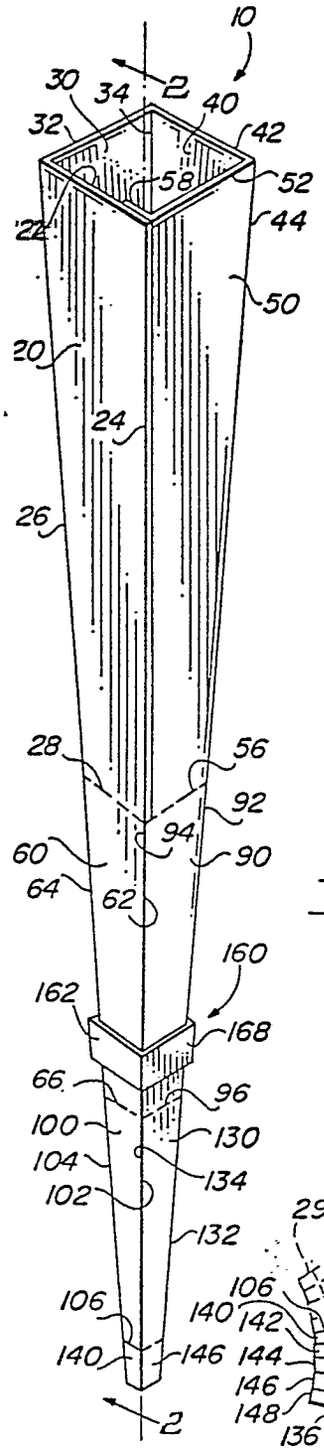

FIG-1

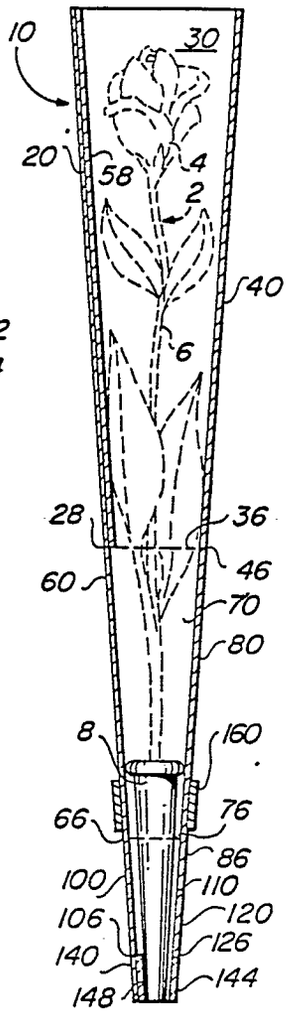

FIG-2

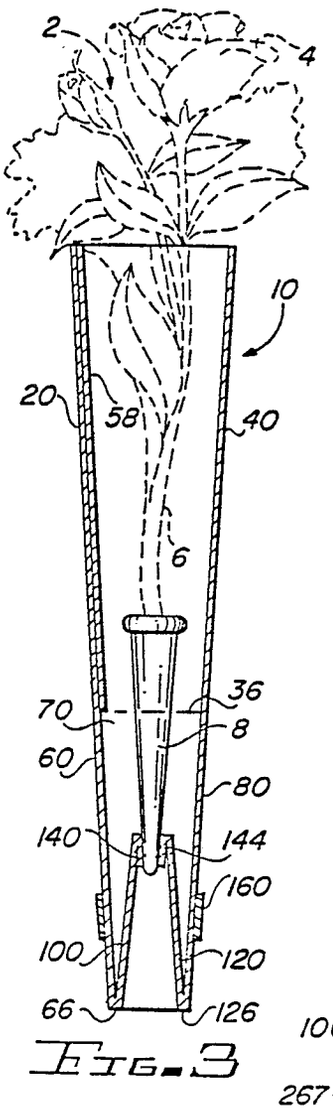

FIG-3

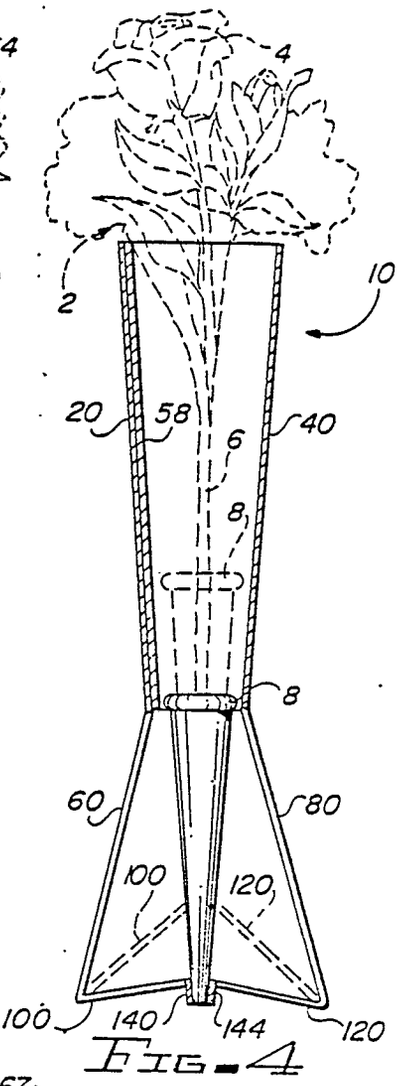

FIG-4

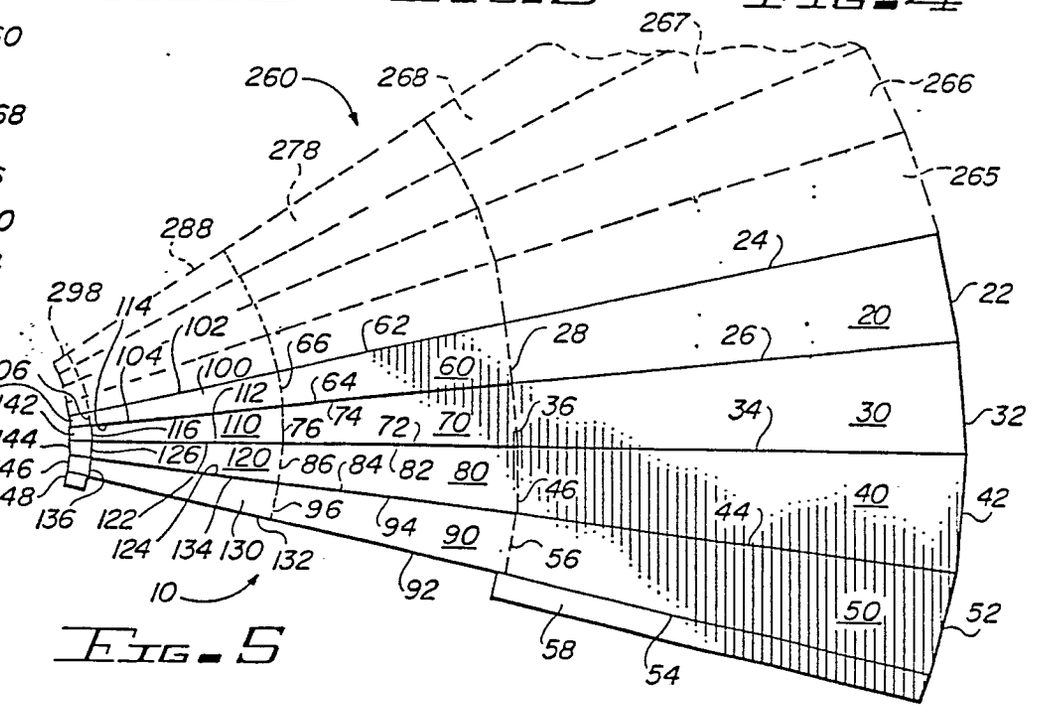

FIG-5

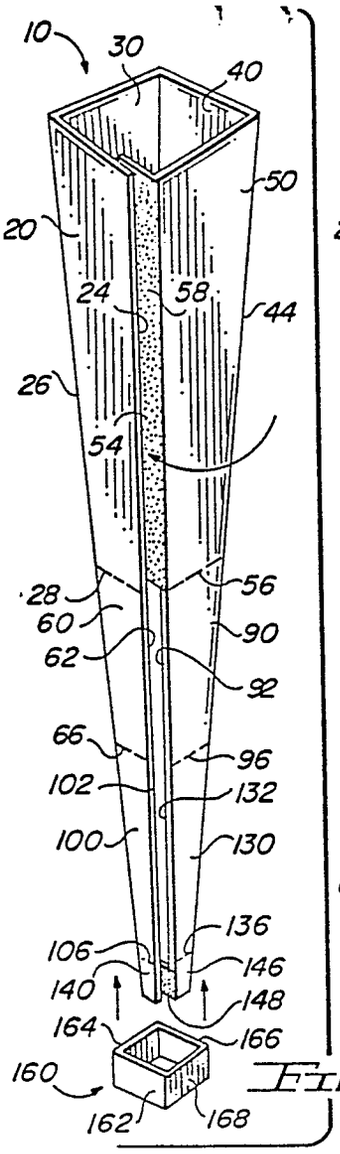

Fig-6

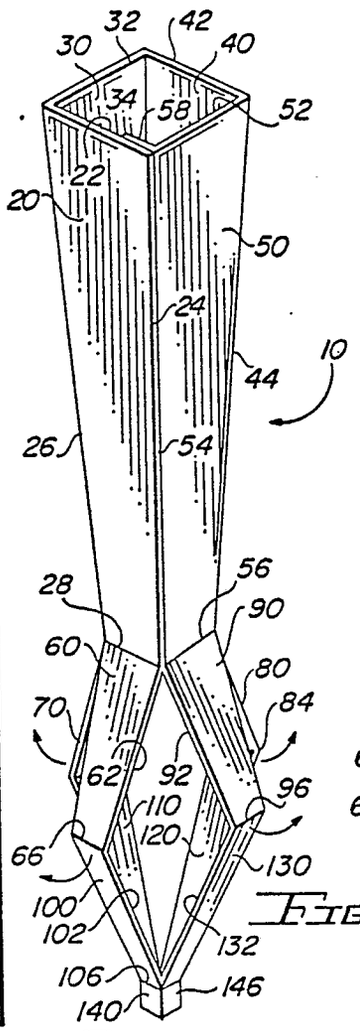

Fig-7

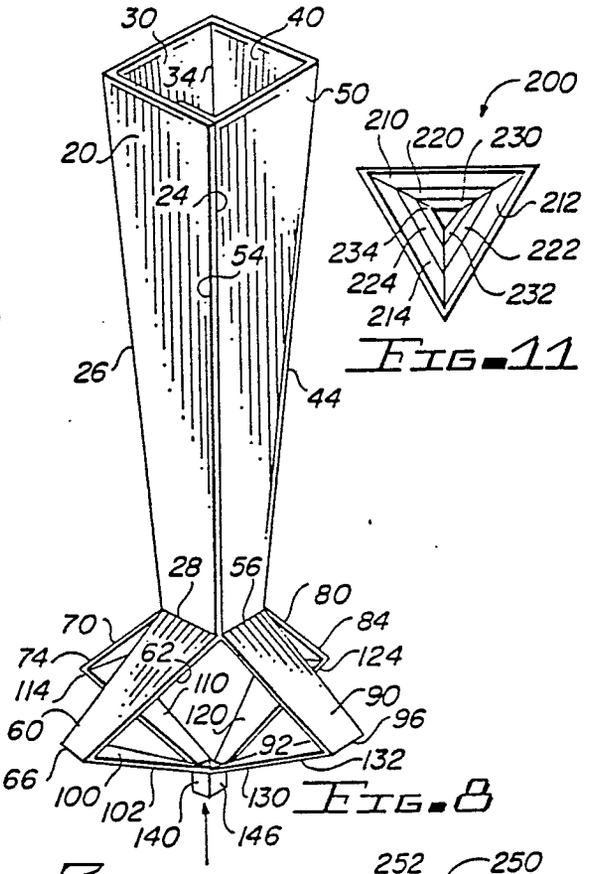

Fig-8

Fig-11

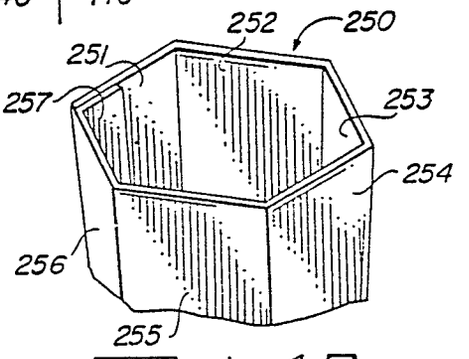

Fig-12

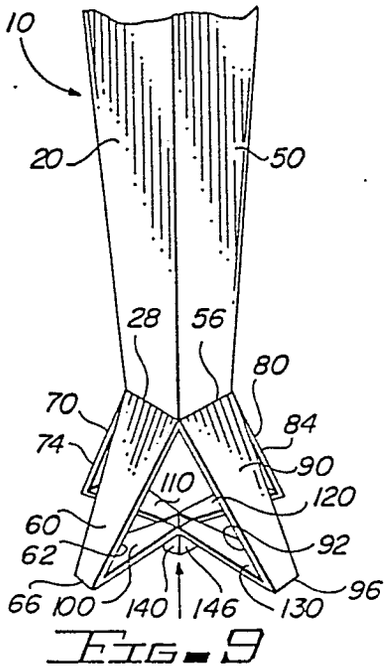

Fig-9

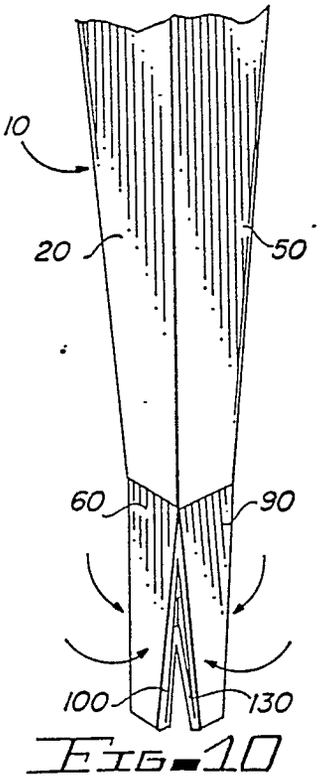

Fig-10

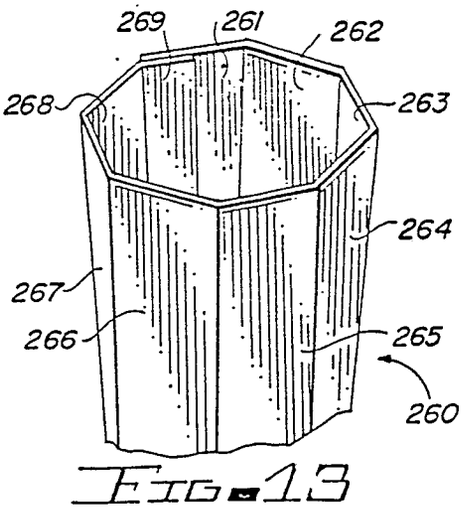

Fig-13

European Patent Office

EUROPEAN SEARCH REPORT

Application number

EP 86 30 2615

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	FR-A-2 256 663 (DUBOURDIEU) * page 3, lines 3-30; figures 3,4 *	1,13, 17	B 65 D 85/50
A	FR-A-2 176 640 (PALMERO) * figures 1-4 *	1,13, 17	
A	DE-U-7 618 754 (ZIEMANN) * figures 1,2 *	1,13, 17	
A	US-A-3 973 356 (SCHACHT) * column 1, line 63 - column 2, line 8 *	1,13, 17	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
D,A	DE-C- 631 054 (HANSEN) * page 1, lines 1-57; figures 1-5 *	1,4-9, 12,13, 15,17, 19	B 65 D 5/00 B 65 D 85/00
A	FR-A-1 433 138 (RIEGEL PAPER CORP.) * page 1, left column, line 19 - right column, line 5; figures 1-9 *	1,13, 17	

-/-

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	27-11-1986	SIMON J J P

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Application number

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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
D,A	US-A-4 113 094 (COLLIN) * claim 1 *	1,13, 17	
D,A	US-A-1 811 574 (BARRETT) * figures 1-3 *	1	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

The present search report has been drawn up for all claims

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