
(54) DISPLAY CONTAINER WITH FILLER AND

PRODUCT UNITS AND METHOD OF ASSEMBLY
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## ABSTRACT

A display container having a top, a base and two pair of opposed parallel sides between the top and the base; a plurality of product units, each having a rectangular perimeter; and at least one filler unit having a rectangular perimeter, wherein the plurality of product units and the at least one filler unit are positioned side by side and together extend between each of the two pair of opposed parallel sides, and wherein a first side of a first one of the at least one filler unit is adjacent to first sides of a first plurality of the product units, such that the first side of the first one of the at least one filler unit and the first sides of the first plurality of the product units extend between a first of the two pair of opposed parallel sides.




FiG 7


FiG. 6


FiG. 8


FIG BA


Fin. 9



PK. 12


Fr. H


FK. 13


Fin. 15


## F16. 16

# DISPLAY CONTAINER WITH FILLER AND PRODUCT UNITS AND METHOD OF ASSEMBLY 

## FIELD OF THE INVENTION

[0001] The present invention relates generally to a display container with filler and product units and to a method of assembling the display container, filler and product units.

## BACKGROUND OF THE INVENTION

[0002] Manufacturers of consumer and industrial products selling multiple units of the same product, multiple units of similar products, or multiple different products typically use different sized display boxes depending on the quantity of units being sold. For example, it is common for a chocolate manufacturer who sells bite-sized candies to sell the candies in varying quantities, such as $3,6,8,12,15,18,24,36$ and 48 , and to produce a different sized box for each of the quantities of bite-sized candies sold. In this case, nine different sized boxes are required. Alternatively, different sizes and shapes of fillers are needed to fill one size of box. Producing different sized boxes or fillers for each quantity of product sold creates considerable expenses in the individual design, tooling, storage, and handling required for each different sized box.
[0003] In addition, production of the different sized boxes may require separate production machines, which can be highly expensive. Alternatively, production of the different sized boxes may be accomplished by one production machine that may be modified to produce the different sized boxes. However, in such a case, production efficiency is reduced each time the machine is modified to accommodate a different sized box.
[0004] A uniform sized box, able to accommodate varying quantities of multiple units of the same product, multiple units of similar products, or multiple different products with standard sized fillers, reduces some of the costs of production. In addition, a uniform sized box with standard sized filler produces a strong brand development, or a strong source identifier, since consumers or companies purchasing the uniform sized box may quickly associate the size, shape or design of the uniform box with the product being sold or the manufacturer selling the product.

## SUMMARY OF THE INVENTION

[0005] An exemplary embodiment of the present invention includes a display container having a top, a base and two pair of opposed parallel sides between the top and the base. A plurality of product units is included, each having a rectangular perimeter; and at least one filler unit having a rectangular perimeter, wherein the plurality of product units and the at least one filler unit are positioned side by side and together extend between each of the two pair of opposed parallel sides. A first side of a first one of the at least one filler unit is adjacent to first sides of a first plurality of the product units, such that the first side of the first one of the at least one filler unit and the first sides of the first plurality of the product units extend between a first of the two pair of opposed parallel sides.
[0006] Another embodiment of the present invention is a method of assembling a display container. Provided is a container comprising a top, a base and two pair of opposed
parallel sides between the top and the base. At least one filler unit is selected from a supply of filler units, wherein each filler unit has a rectangular perimeter. A plurality of product units is selected from a supply of product units, wherein each product unit has a rectangular perimeter. The selected at least one filler unit and the selected plurality of product units are positioned in the container, such that the at least one filler unit and the plurality of product units are positioned side by side and together extend between each of the two pair of opposed parallel sides, and wherein a first side of a first one of the at least one filler unit is adjacent to first sides of a first plurality of the product units, such that the first side of the first one of the at least one filler unit and the first sides of the first plurality of the product units extend between a first of the two pair of opposed parallel sides.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0007] These and other features and advantages of the present invention will be better understood by reference to the following detailed description when considered in conjunction with the accompanying drawings wherein:
[0008] FIG. 1 shows a perspective view of a display container according to the invention having at least one filler unit and a plurality of product units;
[0009] FIGS. 2-7 show plan views of exemplary display container arrangements;
[0010] FIGS. 8 and 9 show exploded assembly views of exemplary display containers according to the invention;
[0011] FIG. 8A is a cross sectional view taken from line 8 A of the display container of FIG. 1, wherein the container is in a closed position;
[0012] FIGS. 10 and 11 show perspective views of exemplary stacks of product units according to the invention;
[0013] FIG. 12 shows a cross sectional view of an exemplary filler unit according to the invention;
[0014] FIG. 13 shows a cross sectional view of an exemplary second filler unit according to the invention;
[0015] FIG. 14 shows a cross sectional view of an exemplary base filler according to the invention;
[0016] FIG. 15 shows a cross sectional view of an exemplary second base filler according to the invention; and
[0017] FIG. 16 shows a flow chart for a method of assembling a display container according to the invention.

## DETAILED DESCRIPTION OF THE INVENTION

[0018] As shown in FIG. 1, a display container 10, embodying the present invention, has at least one filler unit 12 and a plurality of product units 14 , such as candy units. The at least one filler unit $\mathbf{1 2}$ and the product units $\mathbf{1 4}$ may be arranged in the display container 10 in any one of a variety of arrangements, such that the display container $\mathbf{1 0}$ may accommodate various different display arrangements, for example see FIGS. 2-7 showing various exemplary display arrangements. In addition, the display container 10 may accommodate varying quantities of product units 14 , by
varying the display arrangement and/or by varying the number of the at least one filler units 12 disposed within the display container 10 .
[0019] The display container 10 comprises a parallel top 16 and base 18, and two pair of opposed parallel sides, such as a first pair of opposed parallel sides 20 and a second pair of opposed parallel sides $\mathbf{2 2}$. The two pair of opposed parallel sides $\mathbf{2 0}$ and $\mathbf{2 2}$ are disposed between the container top 16 and the container base 18. In one embodiment, the top 16, the base $\mathbf{1 8}$ and the two pair of opposed parallel sides 20 and 22 are arranged in a generally square configuration.
[0020] The container top 16 may be connected to the display container $\mathbf{1 0}$ such that the display container $\mathbf{1 0}$ has an opened position (as depicted in FIG. 1) and a closed position (not shown). The container top 16 may be integrally formed with the display container 10 or the container top 16 may be a separate component of the display container $\mathbf{1 0}$.
[0021] The container top 16 may be connected to the display container 10 by any one of a variety of methods. For example, the container top $\mathbf{1 6}$ may form a press fit connection with the container sides 20 and 22, the container top 16 may form a snap fit connection with at least one of the container sides $\mathbf{2 0}$ and 22, or the container top 16 may be rotatably, hingedly or pivotably connected to at least one of the container sides 20 and 22, among other attachment methods.
[0022] In one embodiment, such as the embodiment depicted in FIG. 1, the container top 16 is rotatably connected to one side of the second pair of opposed parallel sides 22 along a fold line 24. As is also depicted in FIG. 1, the container top 16 may comprise flaps, such as a first flap 26 disposed between a pair of opposed parallel flaps 28 , which substantially overlap the container sides 20 and 22 when the display container $\mathbf{1 0}$ is in the closed position. For example, the first flap $\mathbf{2 6}$ may substantially overlap one side of the second pair of opposed parallel sides 22 and the pair of opposed parallel flaps $\mathbf{2 8}$ may each substantially overlap one side of the first pair of opposed parallel sides $\mathbf{2 0}$. The display container $\mathbf{1 0}$ container may be comprised of any one of a variety of materials, such as paperboard, wood, metal, or injection molded plastic, among other materials. The disclosed embodiment is paperboard.
[0023] FIGS. 2-5 are plan views of exemplary display container arrangements (for clarity the container top 16 is not shown.) As shown in FIGS. 2-5, the at least one filler unit 12 and the product units 14 are positioned in the display container $\mathbf{1 0}$ between each of the two pair of opposed parallel container sides $\mathbf{2 0}$ and 22. For example, the at least one filler unit $\mathbf{1 2}$ and the product units $\mathbf{1 4}$ may be adjacently positioned, such that together the at least one filler unit 12 and the product units $\mathbf{1 4}$ extend between each of the two pair of opposed parallel container sides 20 and 22, i.e. the at least one filler unit $\mathbf{1 2}$ and the product units $\mathbf{1 4}$ fill the display container $\mathbf{1 0}$ between each of the two pair of opposed parallel container sides 20 and 22.
[0024] In one embodiment, each product unit 14 and each of the at least one filler unit $\mathbf{1 2}$ comprises a rectangular perimeter. For example, in the embodiment depicted in FIG. 2, the display container $\mathbf{1 0}$ comprises the at least one filler unit $\mathbf{1 2}$ positioned such that a first side $\mathbf{3 0}$ of the at least one filler unit $\mathbf{1 2}$ is adjacent to first sides $\mathbf{3 2}$ of a first plurality $\mathbf{3 4}$
of the product units $\mathbf{1 4}$. The first side $\mathbf{3 0}$ of the at least one filler unit 12 and the first sides 32 of the first plurality 34 of the product units 14 extend between the second pair of opposed parallel container sides 22. The at least one filler unit $\mathbf{1 2}$ may further be positioned such that a second side $\mathbf{3 4}$ of the at least one filler unit $\mathbf{1 2}$ is adjacent to second sides 36 of a second plurality 38 of the product units 14 . The second side $\mathbf{3 4}$ of the at least one filler unit $\mathbf{1 2}$ and the second sides $\mathbf{3 6}$ of the second plurality $\mathbf{3 8}$ of the product units $\mathbf{1 4}$ extend between the second pair of opposed parallel container sides 22. In addition, the at least one filler unit 12 may be disposed between the first and second pluralities 34 and 38 of the product units 14.
[0025] In the embodiment depicted in FIG. 3, the display container $\mathbf{1 0}$ comprises the at least one filler unit $\mathbf{1 2}$ positioned such that the first side $\mathbf{3 0}$ of the at least one filler unit 12 is adjacent to the first sides 32 of the first plurality 34 of the product units 14. The first side $\mathbf{3 0}$ of the at least one filler unit $\mathbf{1 2}$ and the first sides $\mathbf{3 2}$ of the first plurality $\mathbf{3 4}$ of the product units 14 extend between the second pair of opposed parallel container sides $\mathbf{2 2}$. The first plurality $\mathbf{3 4}$ of product units $\mathbf{1 4}$ are further positioned such that second sides $\mathbf{4 4}$ of the first plurality $\mathbf{3 4}$ of product units $\mathbf{1 4}$ are adjacent to second sides 46 of the second plurality 38 of product units 14. The second sides 44 of the first plurality 34 of product units $\mathbf{1 4}$ and the second sides $\mathbf{4 6}$ of the second plurality $\mathbf{3 8}$ of product units 14 extend between the second pair of opposed parallel container sides 22 . In addition, the first plurality $\mathbf{3 4}$ of product units $\mathbf{1 4}$ are disposed between the second plurality 38 of product units $\mathbf{1 4}$ and the at least one filler unit 12
[0026] In the embodiment depicted in FIG. 4, the display container $\mathbf{1 0}$ comprises a first one $\mathbf{1 2 F}$ and a second one $\mathbf{1 2 S}$ of the at least one filler unit 12. A first side 30F of the first one 12 F of the at least one filler unit $\mathbf{1 2}$ is positioned adjacent to the first sides $\mathbf{3 2}$ of the first plurality $\mathbf{3 4}$ of the product units $\mathbf{1 4}$. The first side $\mathbf{3 0 F}$ of the first one $\mathbf{1 2 F}$ of the at least one filler unit 12 and the first sides 32 of the first plurality 34 of the product units 14 extend between the second pair of opposed parallel container sides 22. A second side 48 of the second one 12 S of the at least one filler unit 12 is positioned adjacent to the second sides 44 of the first plurality $\mathbf{3 4}$ of product units 14 . The second side 48 of the second one 12S of the at least one filler unit 12 and the second sides $\mathbf{4 4}$ of the first plurality 34 of product units 14 extend between the second pair of opposed parallel container sides 22. In addition, the first plurality 34 of product units 14 is disposed between the first one 12 F and the second one 12 S of the at least one filler unit 12.
[0027] In the embodiment depicted in FIG. 5, the display container $\mathbf{1 0}$ comprises the first one $\mathbf{1 2 F}$ and the second one $\mathbf{1 2 S}$ of the at least one filler unit $\mathbf{1 2}$. The first side 30F of the first one 12 F of the at least one filler unit $\mathbf{1 2}$ is positioned adjacent to the first sides $\mathbf{3 2}$ of the first plurality $\mathbf{3 4}$ of the product units $\mathbf{1 4}$. The first side 30 F of the first one $\mathbf{1 2 F}$ of the at least one filler unit $\mathbf{1 2}$ and the first sides $\mathbf{3 2}$ of the first plurality 34 of the product units 14 extend between the second pair of opposed parallel container sides 22. A second side $\mathbf{5 0}$ of the first one 12 F of the at least one filler unit $\mathbf{1 2}$ is adjacent to a second side $\mathbf{5 2}$ of the second one $\mathbf{1 2 S}$ of the at least one filler unit 12. The second sides 50 and 52, respectively, of the first one $\mathbf{1 2 F}$ and the second one 12 S of the at least one filler unit $\mathbf{1 2}$ extend between the second pair
of opposed parallel container sides 22. In addition, the first one 12 F of the at least one filler unit $\mathbf{1 2}$ is disposed between the second one 12 S of the at least one filler unit 12 and the first plurality $\mathbf{3 4}$ of product units $\mathbf{1 4}$ depending on the size of the products units and the size of the display container.
[0028] In the embodiments depicted in FIGS. 2-5, the first and second pluralities $\mathbf{3 4}$ and $\mathbf{3 8}$ of the product units $\mathbf{1 4}$ each comprise two adjacently positioned product units $\mathbf{1 4}$, however, the first and second pluralities 34 and 38 of the product units 14 may each comprise any number of adjacently positioned product units 14.
[0029] FIGS. 6-7 are plan views of other exemplary display container arrangements, wherein three product units 14 are positioned in a second orientation (for clarity the container top 16 is not shown.) Due to the second orientation of the product units 14 being positioned in the same sized display container 10 , at least one second filler unit $\mathbf{5 4} a$ and at least one second filler unit $\mathbf{5 4} b$ are used. The first and second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ are narrower than the at least one filler unit 12. As a result, as shown in FIGS. 6-7, the display container $\mathbf{1 0}$ comprises the at least one first and second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ and the product units $\mathbf{1 4}$, such that the at least one first and second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ and the product units $\mathbf{1 4}$ are positioned in the display container 10 between each of the two pair of opposed parallel container sides 20 and 22. For example, the at least one first and second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ and the product units 14 may be adjacently positioned, such that together the at least one first and second filler units $54 a$ and $54 b$ and the product units 14 extend between each of the two pair of opposed parallel container sides $\mathbf{2 0}$ and 22, i.e. the at least one first and second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ and the product units 14 fill the display container 10 between each of the two pair of opposed parallel container sides 20 and 22.
[0030] In the embodiment depicted in FIG. 6, a plurality 56 of three product units $\mathbf{1 4}$ are arranged adjacent to the at least one first and second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ similar to the description pertaining to FIG. 4. Similarly, in the embodiment depicted in FIG. 7, the first plurality $\mathbf{5 6}$ of three product units $\mathbf{1 4}$ are arranged adjacent to the at least one first and second filler unites $\mathbf{5 4} a$ and $\mathbf{5 4} b$ similar to the description pertaining to FIG. 5.
[0031] Although only the filler unit 12 and the second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ have been described, any one of a variety of different sized filler units are contemplated by the current invention, such that a single display container can accommodate product units that are of a different size and/or shape than the product units $\mathbf{1 4}$ described above, and such that a single display container can accommodate different display arrangements of the product units.
[0032] In addition, although the display container 10 has been described above as containing multiple units of the same product units, the display container $\mathbf{1 0}$ may comprise multiple units of different products having similar sizes and shapes. The display container $\mathbf{1 0}$ may also comprise multiple units of different products having different sizes and shapes, and/or multiple units of the same product having different sizes and shapes.
[0033] In addition, the display container 10 of FIGS. 1-7 may comprise at least one base filler. FIG. 8 shows an exploded assembly view of one embodiment of the display
container 10 (for clarity the container top 16 is not shown). In the embodiment depicted in FIG. 8, the display container 10 comprises a display arrangement as described above with respect to FIG. 2. At least one base filler 40 is disposed between the container base $\mathbf{1 8}$ and the plurality of product units 14. For example, one of the at least one base fillers 40 may be disposed between the container base $\mathbf{1 8}$ and the first plurality 34 of product units 14 . In one embodiment, the one of the at least one base fillers 40 , which is disposed between the container base $\mathbf{1 8}$ and the first plurality $\mathbf{3 4}$ of product units $\mathbf{1 4}$, has a size and shape substantially similar to the size and shape of the combined size and shape of a bottom side of the first plurality 34 of product units $\mathbf{1 4}$. In addition, another one of the at least one base fillers $\mathbf{4 0}$ may be disposed between the container base $\mathbf{1 8}$ and the second plurality $\mathbf{3 8}$ of product units 14 . In one embodiment, the another one of the at least one base fillers $\mathbf{4 0}$, which is disposed between the container base 18 and the second plurality 38 of product units 14 , has a size and shape substantially similar to the size and shape of the combined size and shape of a bottom side of the second plurality 38 of product units 14.
[0034] FIG. 9 shows of an exploded assembly view of another embodiment of the display container $\mathbf{1 0}$ (for clarity the container top 16 is not shown.) In the embodiment depicted in FIG. 9, the display container 10 is arranged as described above with respect to FIG. 6. In addition, the display container $\mathbf{1 0}$ may comprise at least one second base filler 57. The at least one second base filler 57 may be disposed between the container base $\mathbf{1 8}$ and the plurality of product units 14. For example, one of the at least one second base fillers $\mathbf{5 7}$ may be disposed between the container base 18 and the first plurality 56 of product units 14 . In one embodiment, the one of the at least one second base fillers 40 , which that is disposed between the container base 18 and the first plurality $\mathbf{5 6}$ of product units $\mathbf{1 4}$, has a size and shape substantially similar to the size and shape of the combined size and shape of a bottom side of the first plurality $\mathbf{5 6}$ of product units 14.
[0035] FIGS. 8 and 9 each show a protective pad 58. In the embodiments depicted in FIGS. 8 and 9, the protective pad 58 is disposed between the container top 16 and both the at least one filler unit (filler unit $\mathbf{1 2}$ or second filler units $\mathbf{5 4} a$ and $\mathbf{5 4 b}$ ) and the product units $\mathbf{1 4}$, such that the protective pad 58 fills the display container $\mathbf{1 0}$ between each of the two pair of opposed parallel container sides 20 and 22. However, in another embodiment, the protective pad $\mathbf{5 8}$ may be disposed only between the plurality of product units 14 and the container top 16.
[0036] FIG. 8A shows one embodiment of the display container 10, wherein the at least one filler unit $\mathbf{1 2}$ and the product units $\mathbf{1 4}$ are substantially flush at a position in proximity to the container top 16. Having the at least one filler unit $\mathbf{1 2}$ and the product units $\mathbf{1 4}$ substantially flush at a position in proximity to the container allows the protective pad 58 to be positioned between the container top 16 and a top side of both the at least one filler unit 12 and the product units 14. Similarly, in another embodiment (not shown), the at least one second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ and the product units $\mathbf{1 4}$ are substantially flush at a position in proximity to the container top $\mathbf{1 6}$ so as to allow the protective pad 58 to
be placed between the container top 16 and a top surface of both the at least one filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$ and the product units 14.
[0037] FIGS. 8 and 9 show dimensions, denoted W, L and H , for the display container $\mathbf{1 0}$, the filler unit $\mathbf{1 2}$, the product unit 14, the base filler 40, the second filler units $54 a$ and $54 b$, the second base filler $\mathbf{5 7}$, and the protective pad $\mathbf{5 8}$. Although other dimensions may be used within the scope of the invention, exemplary dimensions (in inches) are shown in the table below:

TABLE 1

| Component | W (in.) | L (in.) | H (in.) |
| :--- | :---: | :---: | :---: |
| Display container 10 | 5.6 | 5.6 | 1.94 |
| Filler unit 12 | 1.75 | 5.5 | 1.88 |
| Product unit 14 | 1.86 | 2.73 | 0.25 |
| Base filler 40 | 1.86 | 5.5 | 0.25 |
| Second filler units 54a and 54b | 1.31 | 5.5 | 1.88 |
| Second base filler 57 | 2.73 | 5.5 | 0.25 |
| Protective pad 58 | 5.47 | 5.47 | 0.06 |

[0038] The display container 10 may comprise at least one stack $\mathbf{4 2}$ of product units $\mathbf{1 4}$ whose upper side is disposed in proximity to the container top 16 and extending towards the container base 18 . The stack 42 may comprise only product units 14, as is shown in the embodiment shown in FIG. 10. Alternatively, in order to vary the quantity of product units 14 that can be accommodated by the same display container, at least one base filler $\mathbf{4 0}$ may be disposed between the stack 42 and the container base $\mathbf{1 8}$ so as to make the top side of the stack proximate to the container top 16. The top side of the stack is proximate to the container top $\mathbf{1 6}$ for aesthetic reasons such as to position the top side of the stack substantially flush with the at least one filler unit $\mathbf{1 2}$ and also to make the display container $\mathbf{1 0}$ appear full. Although the preceding discussed described only the at least one base filler 40, the preceding discussion also applies to the at least one second base filler 57 as well.
[0039] In the embodiment depicted in FIG. 11, the stack 42 comprises one product unit 14 and a plurality of the at least one base filler $\mathbf{4 0}$. Each stack $\mathbf{4 2}$ may comprise any one of a variety of combinations of the at least one base filler $\mathbf{4 0}$ and product units 14. Although the embodiment depicted in FIG. 11 shows a plurality of the at least one base fillers 40, wherein each of the at least one base fillers 40 is substantially equal in shape and size, a single base filler having a size and shape equal to the combined size and shape of the plurality of the at least one base fillers 40 could be used as an alternative to the plurality of the at least one base fillers 40 of FIG. 11. Again, although the preceding discussed described only the at least one base filler $\mathbf{4 0}$, the preceding discussion also applies to the at least one second base filler 57 as well.
[0040] In an exemplary embodiment, FIG. 2 shows a display arrangement having four stacks 42 of product units 14. The following table shows examples of combinations of filler unit 12 and product units 14 in each stack 42 that can be accommodated in the display container $\mathbf{1 0}$.

TABLE 2

| Number of <br> stacks | Product units <br> per stack | Base fillers <br> beneath each <br> stack | Total product <br> units |
| :---: | :---: | :---: | :---: |
| 4 | 4 | 4 | 16 |
| 4 | 5 | 3 | 20 |
| 4 | 6 | 2 | 24 |
| 4 | 7 | 1 | 28 |
| 4 | 8 | 0 | 32 |

[0041] Although table 2 makes reference only to FIG. 2, a similar table of varying product unit quantities per display container can be created for each display arrangement shown in FIGS. 3-7 as well.
[0042] FIG. 12 shows a section of one embodiment of the at least one filler unit 12. As shown, the at least one filler unit $\mathbf{1 2}$ comprises a top surface $\mathbf{6 0}$ and two opposed parallel sides 62 attached to the top surface 60.
[0043] FIG. 13 shows a section of one embodiment of the at least one second filler units $\mathbf{5 4} a$ and $\mathbf{5 4} b$. As shown, each of the at least one second filler unit $\mathbf{5 4} a$ and $\mathbf{5 4} b$ comprises a top surface 64 and two opposed parallel sides 66 attached to the top surface 64.
[0044] FIG. 14 shows a section of one embodiment of the at least one base filler $\mathbf{4 0}$. As shown, the at least one base filler $\mathbf{4 0}$ comprises a top surface $\mathbf{6 8}$ and two opposed parallel sides 70 attached to the top surface 68. In one embodiment, the rectangular outer perimeter of the at least one base filler 40 is the same size and shape as the rectangular outer perimeter of the product units 14 .
[0045] FIG. 15 shows a section of one embodiment of the at least one second base filler $\mathbf{5 7}$. As shown, the at least one second base filler $\mathbf{5 7}$ comprises a top surface $\mathbf{7 2}$ and two opposed parallel sides 74 attached to the top surface $\mathbf{7 2}$. In one embodiment, the rectangular outer perimeter of the at least one second base filler $\mathbf{5 7}$ is the same size and shape as the rectangular outer perimeter of the product units $\mathbf{1 4}$.
[0046] Although each of the at least one filler units 12, each of the at least one second filler units 54, each of the at least one base filler 40 and each of the at least one second base filler $\mathbf{5 7}$ have been described as having three sides, any or all of the preceding components may comprise four sides having two pair of opposed parallel sides, five sides having two pair of opposed parallel sides and a top between the sides, or six sides having two pair of opposed parallel sides, and a top and base between the sides. In addition, each of these components may be comprised of any one of a variety of materials, such as paperboard, plastic, foam or styrofoam, among other materials. Any or all of these components may also comprise a decorative coating. In the embodiments shown, the material is paperboard.
[0047] As depicted in the flow chart of FIG. 16, another embodiment of the present invention is a method of assembling the display container. As shown, provided is a supply 200 of display containers, a supply $\mathbf{3 0 0}$ of filler units, a supply $\mathbf{4 0 0}$ of base fillers and a supply $\mathbf{5 0 0}$ of product units. Steps 600 to $\mathbf{9 0 0}$ show one embodiment of a method of assembling the display container, comprising selecting a display container from the supply $\mathbf{2 0 0}$ of display containers
at step 600. At step 700 at least one base filler is selected from the supply 400 of base fillers and positioned in the display container. At step $\mathbf{8 0 0}$ a plurality of product units is selected from the supply $\mathbf{5 0 0}$ of product units and positioned on the at least one base filler. At step 900, at least one filler unit is selected from the supply of filler units $\mathbf{3 0 0}$ and positioned in the display container.
[0048] Steps $\mathbf{1 0 0 0}$ to $\mathbf{1 3 0 0}$ show another embodiment of a method for assembling the display container, comprising selecting a display container from the supply 200 of display containers at step 1000. At step 1100, at least one filler unit is selected from the supply of filler units $\mathbf{3 0 0}$ and positioned in the display container. At step $\mathbf{1 2 0 0}$ at least one base filler is selected from the supply $\mathbf{4 0 0}$ of base fillers and positioned in the display container. At step $\mathbf{1 3 0 0}$ a plurality of product units is selected from the supply $\mathbf{5 0 0}$ of product units and positioned on the at least one base filler.
[0049] In either of steps $\mathbf{6 0 0}$ to $\mathbf{9 0 0}$ or step 1000-1300, a container having filler units, product units, and base fillers is formed as discussed with respect to FIGS. 1-15. In another embodiment of a method for assembling the display container, provided is the container $\mathbf{1 0}$ comprising the parallel top 16 and base 18 and two pair of opposed parallel sides 20 and $\mathbf{2 2}$ between the top $\mathbf{1 6}$ and the base 18 . At least one filler unit 12 is selected from a supply of filler units $\mathbf{1 2}$, wherein each filler unit $\mathbf{1 2}$ has a rectangular perimeter. A plurality of product units 14 is selected from a supply of product units 14, wherein each product unit 14 has a rectangular perimeter. The selected at least one filler unit 12 and the selected plurality of product units 14 are positioned in the container, such that the at least one filler unit $\mathbf{1 2}$ and the plurality of product units $\mathbf{1 4}$ are positioned side by side and together extend between each of the two pair of opposed parallel sides 20 and 22, and wherein the first side 30F of the first one $\mathbf{1 2 F}$ of the at least one filler unit 12 is adjacent to first sides 32 of the first plurality 34 of the product units 12 , such that the first side 30 F of the first one $\mathbf{1 2 F}$ of the at least one filler unit 12 and the first sides 32 of the first plurality 34 of the product units 12 extend between a second of the two pair of opposed parallel sides 22.
[0050] The preceding description has been presented with references to presently preferred embodiments of the invention. Persons skilled in the art and technology to which this invention pertains will appreciate that alterations and changes in the described structures and methods of operation can be practiced without meaningfully departing from the principle, spirit and scope of this invention. Accordingly, the foregoing description should not be read as pertaining only to the precise structures described and shown in the accompanying drawings, but rather should be read as consistent with and as support for the following claims, which are to have their fullest and fairest scope.

## 1. A display container comprising:

a top, a base and two pair of opposed parallel sides between the top and the base;
a plurality of product units, each having a rectangular perimeter; and
at least one filler unit having a rectangular perimeter, wherein the plurality of product units and the at least one filler unit are positioned side by side and together extend between each of the two pair of opposed parallel
sides, and wherein a first side of the perimeter of a first one of the at least one filler unit is adjacent to first sides of the perimeter of a first plurality of the product units, such that the first side of the first one of the at least one filler unit and the first sides of the first plurality of the product units extend between a first of the two pair of opposed parallel sides.
2. The display container of claim 1 , wherein the first plurality of the product units comprises at least one stack of product units disposed in proximity to the container top and extending towards the container base.
3. The display container of claim 1 , further comprising at least one base filler unit disposed between the container base and the first plurality of the product units.
4. The display container of claim 1 , wherein a second side of the perimeter of the first one of the at least one filler unit is adjacent to second sides of the perimeter of a second plurality of the product units, such that the second side of the first one of the at least one filler unit and the second sides of the second plurality of the product units extend between the first of the two pair of opposed parallel sides, and wherein the at least one filler unit is disposed between the first and second plurality of the product units.
5. The display container of claim 4 , wherein the first and second plurality of the product units each comprise at least one stack of product units disposed in proximity to the container top and extending towards the container base.
6. The display container of claim 4 , further comprising at least one base filler unit disposed between the container base and the first plurality of the product units and at least one other base filler unit disposed between the container base and the second plurality of the product units.
7. The display container of claim 1 , wherein second sides of the perimeter of the first plurality of the product units are adjacent to second sides of the perimeter of a second plurality of the product units, such that the second sides of the first and second plurality of the product units extend between the first of the two pair of opposed parallel sides.
8. The display container of claim 7 , wherein the first and second plurality of the product units each comprise at least one stack of product units disposed in proximity to the container top and extending towards the container base.
9. The display container of claim 7, further comprising at least one base filler unit disposed between the container base and the first plurality of the product units and at least one other base filler unit disposed between the container base and the second plurality of the product units.
10. The display container of claim 1 , wherein a second side of the perimeter of a second one of the at least one filler unit is adjacent to second sides of the perimeter of the first plurality of the product units, such that the second side of the second one of the at least one filler unit and the second sides of the first plurality of the product units extend between the first of the two pair of opposed parallel sides and wherein the first plurality of the product units is disposed between the first and second ones of the at least one filler unit.
11. The display container of claim 10 , wherein the first plurality of the product units comprises at least one stack of product units disposed in proximity to the container top and extending towards the container base.
12. The display container of claim 10 , further comprising at least one base filler unit disposed between the container base and the first plurality of the product units.
13. The display container of claim 1 , wherein a second side of the perimeter of the first one of the at least one filler unit is adjacent to a second side of the perimeter of a second one of the at least one filler unit, such that the second sides of the first one and the second one of the at least one filler unit extend between the first of the two pair of opposed parallel sides.
14. The display container of claim 13 , wherein the first plurality of the product units comprises at least one stack of product units disposed in proximity to the container top and extending towards the container base.
15. The display container of claim 13, further comprising at least one base filler unit disposed between the container base and the first plurality of the product units.
16. The display container of claim 1 , further comprising a protective pad disposed between the container top and the plurality of product units.
17. The display container of claim 1 , wherein the plurality of product units and the at least one filler unit are substantially flush at a position in proximity to the container top.
18. The display container of claim 1 , wherein the container top comprises a lid, rotatably connected to one of the container sides, such that the container has an open position and a closed position.
19. The display container of claim 1 , wherein the at least one filler unit comprises a top surface and two opposed parallel sides attached to the top surface.
20. The display container of claim 19, wherein the top surface of the at least one filler unit is disposed in proximity to the container top and the two opposed parallel sides of the at least one filler unit extend towards the container base.
21. The display container of claim 19, wherein the top surface of the at least one filler unit is disposed in proximity to the container top and the two opposed parallel sides of the at least one filler unit extend to the container base.
22. The display container of claim 3, wherein the at least one base filler unit comprises a top surface and two opposed parallel sides attached to the top surface.
23. A method of assembling a display container comprising:
providing a container comprising a top, a base and two pair of opposed parallel sides between the top and the base;
selecting at least one filler unit from a supply of filler units, wherein each filler unit of the supply of filler units has a rectangular perimeter;
selecting a plurality of product units from a supply of product units, wherein each product unit of the supply of product units has a rectangular perimeter; and
positioning the selected at least one filler unit and the selected plurality of product units in the container, such that the at least one filler unit and the plurality of product units are positioned side by side and together extend between each of the two pair of opposed parallel sides, and wherein a first side of the at least one filler unit is adjacent to first sides of a first plurality of the product units, such that the first side of the at least one filler unit and the first sides of the first plurality of the product units extend between a first of the two pair of opposed parallel sides.
24. The method of claim 23, wherein the at least one filler unit is positioned in the container before the product units are positioned in the container.
25. The method of claim 23 , wherein the product units are positioned in the container before the at least one filler unit is positioned in the container.
26. The method of claim 23 , further comprising selecting at least one base filler unit from a supply of base filler units;
positioning the selected at least one base filler unit in the container before the plurality of product units; and positioning the selected plurality product units on the at least one base filler unit.

