United States Patent [19]

Werth

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[54] **MULTI-UNIT CONTAINER PACKAGE**

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[52] **U.S. Cl.** ..... **206/65 C,** 206/56 AB, 229/40, 229/51 DB, 229/51 TS

[51] **Int. Cl.**..... **B65d 5/02,** B65d 5/54, B65d 71/00, B65d 85/62

[58] **Field of Search** ..... 206/65 C, 65 E, 65 R, 206/56 AB; 229/51 DB, 51 TS, 40

[56] **References Cited**

UNITED STATES PATENTS

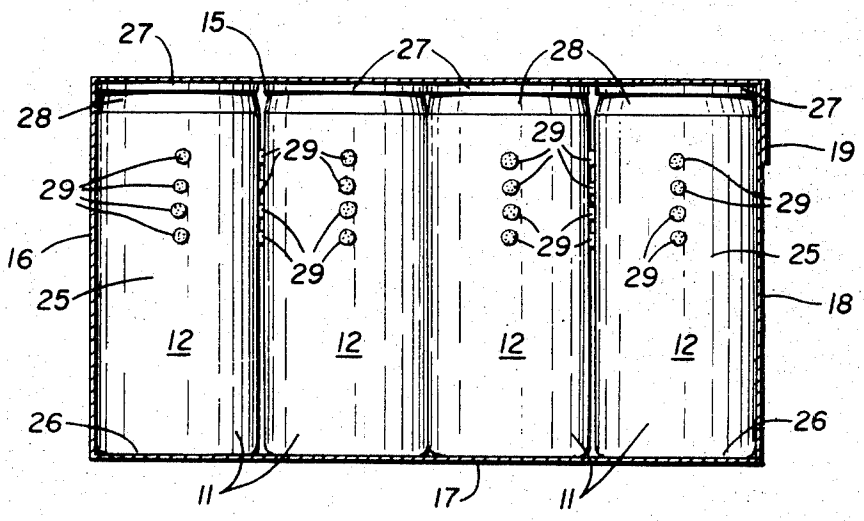
3,540,582	11/1970	Wood	206/65 E
2,677,460	5/1954	Johnson et al.	206/65 C
2,322,323	5/1967	Greene et al.	206/65 R
3,224,633	12/1965	Allen	229/51 DB
3,397,776	8/1968	Weiss	228/40
2,828,009	3/1958	Andre	206/65 C

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[57] **ABSTRACT**

A multi-unit container package comprising in combination an outer one piece sleeve-form open end wrapper and a plurality of container units therein each consisting of a plurality of containers detachably bonded together by adhesive means applied to each container on a side wall contacting a side wall of another container, each unit being free of any holder, strap, tray or space consuming means, said outer wrapper having a flat top overlying in direct contact the tops of the containers, a flat bottom supporting in direct contact the bottoms of the containers, opposite side walls directly contacting the side walls of a plurality of containers in a plurality of units, and a tear strip located midway between and parallel to the open ends of the outer wrapper extending around the outer wrapper said tear strip having a pull tab cut out of the outer wrapper material at one end of the strip, whereby the outer wrapper and contents may be divided into two parts each consisting of an outer wrapper and a plurality of units each consisting of a plurality of adhering containers.

6 Claims, 3 Drawing Figures



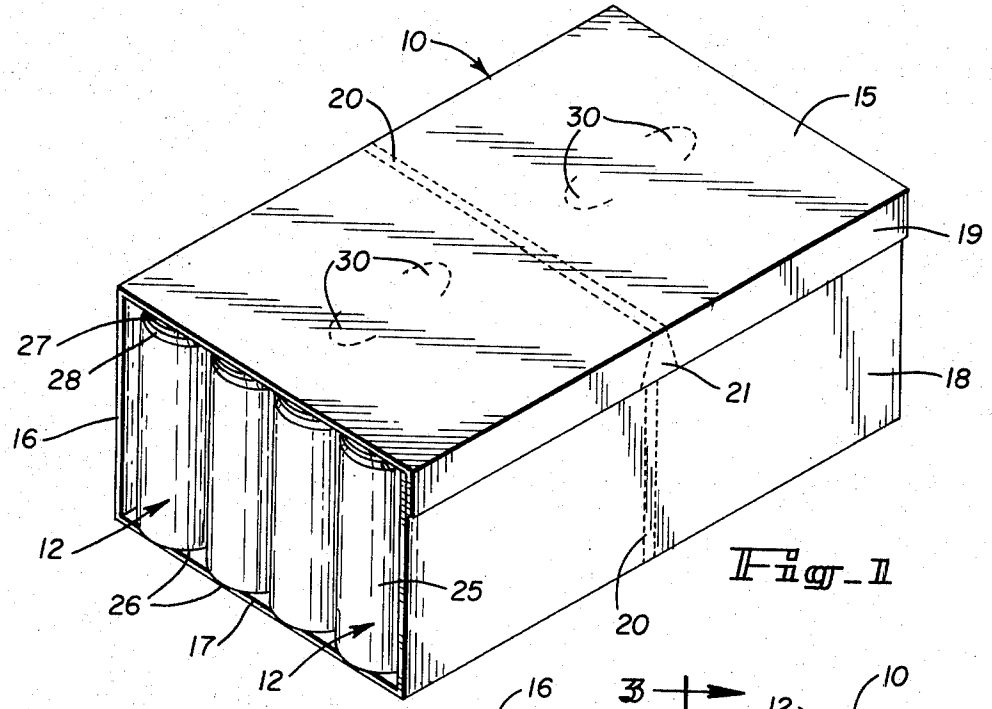


Fig_1

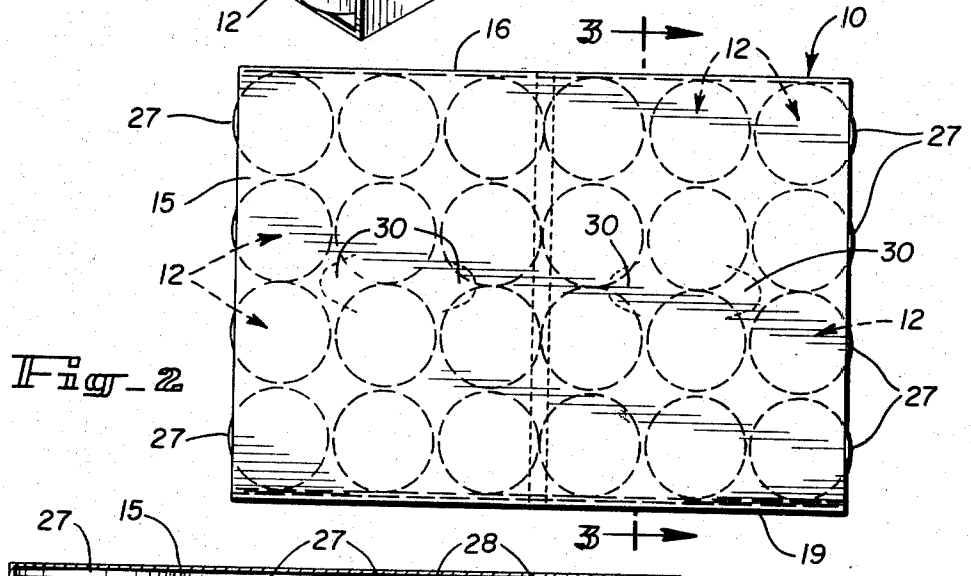


Fig_2

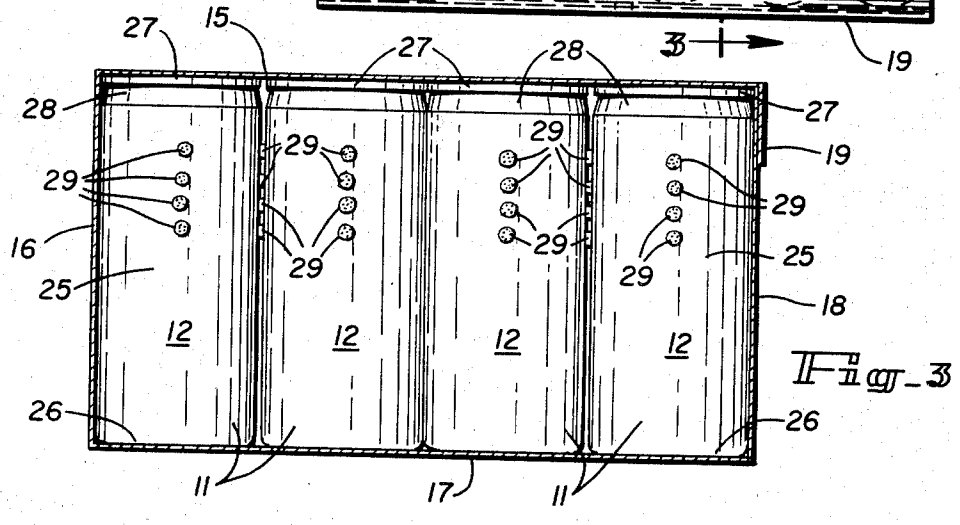


Fig_3

MULTI-UNIT CONTAINER PACKAGE

This invention relates to a container package comprising in combination an outer sleeve-form open end wrapper and a plurality of container units each consisting of a plurality of containers located side by side and detachably bonded together by adhesive means applied to each container on a side wall contacting the side wall of another container. Each of the container units is self-contained and free of any holder, tray or wrapping. The outer wrapper has a flat top overlying in direct contact the tops of the containers, a flat bottom supporting in direct contact the bottoms of the containers, and opposite side walls directly contacting the side walls of a plurality of containers in a plurality of container units.

The outer wrapper is provided with a tear strip extending around the outer wrapper located midway between and parallel to the open ends of the outer wrapper, said tear strip having a pull tab cut out of the outer wrapper material at the end of the strip, whereby the outer wrapper and contents may be divided into two parts each consisting of an outer wrapper and a plurality of units, each of said units consisting of a plurality of glued together containers. The individual containers may be necked cans which have their top ends or lids attached to the necked portions of the cylindrical side walls in such manner that the lids do not protrude beyond the diameter of the can body and thus do not prevent close contact between the glued together side walls of the containers. If the containers are bottles, their bodies have uniform diameter portions and necked smaller diameter portions, the glue being applied to the uniform diameter portions of the bottles.

Due to the compact construction of each unit consisting of six or other plurality of containers in close adhering side wall contact with each other, detachably held together by glue applied to said contacting walls, without any wrapper, strap or tray applied to the containers of a unit, together with the placement of a plurality of said units side by side, without any wrapping or binding means, and enclosure of the plurality of said units in an outer sleeve form, open end wrapper in direct contact with the tops, bottoms and sides of containers, I have produced a package which exceeds the dimensions of the plurality of containers only by the thickness of the said outer wrapper.

This is in contrast to prior art packages which employ various means for tying or holding together the individual containers of a unit and for holding together a plurality of such units within an outer tray or box form carton. The provision of necked containers which permit close contact between adjacent side walls to which adhesive is applied, and the absence of any holders, trays or other space-consuming means for holding a plurality of containers together in a unit, has resulted in the production of a package of utmost compactness wherein the contents are in close contact with each other and with the outer wrapper wherein they are retained by close frictional engagement between the wrapper and container surfaces contacted thereby.

In the drawings:

FIG. 1 is a perspective view of a multi-unit container package consisting of four units, each unit including six containers, and an outer open end sleeve-form wrapper preferably made of corrugated or similar paper board. The containers shown are cans, but they may be bottles as heretofore mentioned.

FIG. 2 is a top plan view of the package shown in FIG. 1, showing in broken lines the tops of the containers in the container units in the outer wrapper.

FIG. 3 is a vertical sectional view on an enlarged scale, in the plane of the line 3—3 of FIG. 2.

In the embodiment of the invention shown in the drawings, the package as a whole consists of an outer open end sleeve-form wrapper **10** containing four units **11** each consisting of six containers **12.**

The wrapper **10** is made of one rectangular piece of cardboard folded to provide a top **15,** side **16,** bottom **17,** side **18** and a flap **19** on the edge of the top **15.** The flap **19** overlies the upper portion of the side **18.** A tear strip **20** extends around the wrapper midway between the open ends of the wrapper and parallel to the ends of the wrapper. The tear strip **20** has a pull tab **21** which is cut out of the material of the flap **19** adjacent the end of the strip. The flap **19** is glued or otherwise fastened to the side **18** in the overlapping area.

Each container **12** is a can having a cylindrical body **25** constituting the side wall of the container, a bottom **26** which may be integral with the body **25,** and a cover or lid **27** attached to the upper edge of the cylindrical body. The upper portion of the body **25** is necked as indicated at **28** to reduce the diameter of said upper portion and permit attachment of a cover or lid **27** that does not project radially beyond the outer surfaces of the cylindrical body **25.** Thus the containers **12** can be positioned adjacent each other side by side, with their cylindrical side walls in close tangential contact. If the containers are non-cylindrical, or rectangular in cross section, their side walls are located in close surface contact with each other. In cylindrical bodies such as shown herein, dots or lines of adhesive material **29** are placed on the tangential contacting areas to bond the containers of a unit together.

Depressible tabs **30** in the top **15** of the outer wrapper provide finger openings for carrying the package as a whole or half of the package if the tear strip **20** has separated one half from the other half.

In the embodiment of the invention shown in the drawings, six containers **12** comprise each of the four units **11,** with the two-container ends of the units **11** facing the open ends of the sleeve-form wrapper **10** as a whole and also when divided into two parts. The closed sides **16** and **18** of the outer wrapper **10** contact the three-container sides of two units **11.** The adhesive **29** thus bonds the containers **12** of each unit together, and the wrapper **10** retains the plurality of units together without any intermediate wrapper, strap or tray. The compact arrangement, made possible by necking the containers and bonding them together by adhesive means applied to the side walls of the containers, produces a package of minimum size as related to the contents.

I claim:

1. A compact multi-unit container package consisting only of an outer one piece sleeve-form open end wrapper and a plurality of container units therein each consisting only of a plurality of cylindrical containers, said container units being characterized by the absence of any holder, tray, strap or wrapping, the containers in each unit being detachably bonded together by adhesive means applied in a narrow area or row parallel to the axis of the cylindrical container to each container on a cylindrical side wall closely contacting a cylindrical side wall of another container, said outer wrapper

having a flat top overlying in direct contact the tops of the containers, a flat bottom supporting in direct contact the bottoms of the containers, and opposite side walls directly contacting side walls of a plurality of containers in a plurality of units.

2. The package defined by claim **1**, which includes a tear strip extending around the outer wrapper midway between and parallel to the open ends of the said wrapper, said tear strip having a pull tab cut out of the outer wrapper material at the end of the strip, whereby the outer wrapper and contents may be divided into two parts each consisting of an outer wrapper and a plurality of units each consisting of a plurality of adhering containers.

3. The package defined by claim **2**, in which the one piece wrapper includes a flap integral with the top of the wrapper overlying one of its sides, and the pull tab is cut out of the flap portion of the wrapper.

4. The package defined by claim **1**, in which the individual containers have uniform diameter side walls necked at their upper edges and ends which do not protrude outwardly beyond said uniform diameter side walls, whereby the containers in each unit are located side by side in close side wall contact with each other, and the plurality of units are retained in the outer wrapper by close frictional engagement between the wrapper and container surfaces contacted thereby.

5. The package defined by claim **1**, in which four **6**-container units are located in the outer wrapper, with two containers in each of two units facing the open ends of the wrapper, and three containers in each of two units facing a side wall of the outer wrapper.

6. The package defined by claim **2**, in which four 6-container units are located in the outer wrapper, two of said units being located between one open end of the wrapper and the tear strip, and the other two of said units being located between the opposite open end of the wrapper and the tear strip, whereby when the tear strip has been removed, each of the separated parts of the package contains two **6**-container units and each unit has two containers exposed at opposite ends of the separated outer wrapper.

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