

[54] **CONTAINER PACKAGE**

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[52] **U.S. Cl.**..... **206/427, 206/432, 294/87.2**

[51] **Int. Cl.**..... **B65d 75/00**

[58] **Field of Search** **224/45 P, 45 AA, 45 A; 150/12; 229/52 B; 206/65 S, 65 E; 294/87.2**

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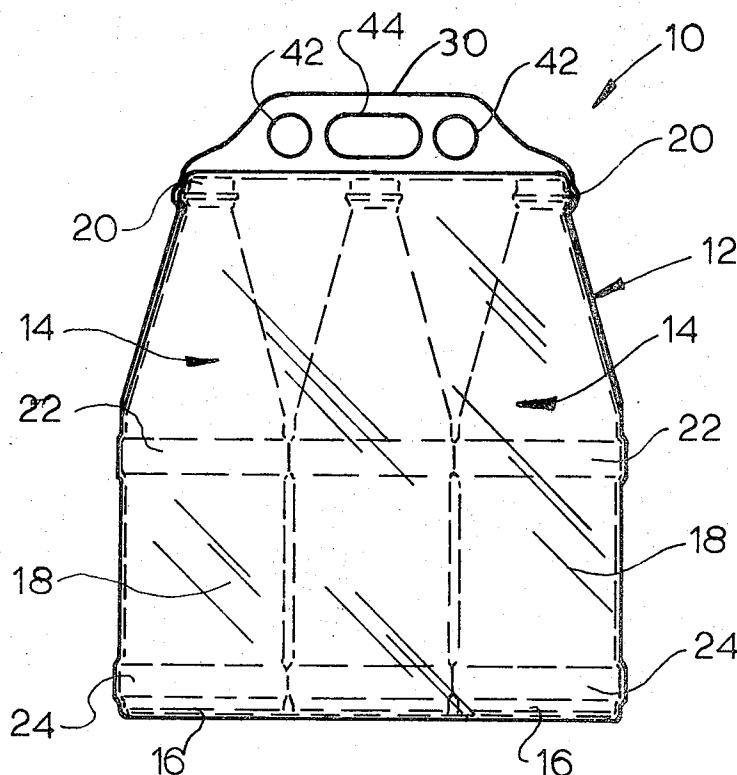
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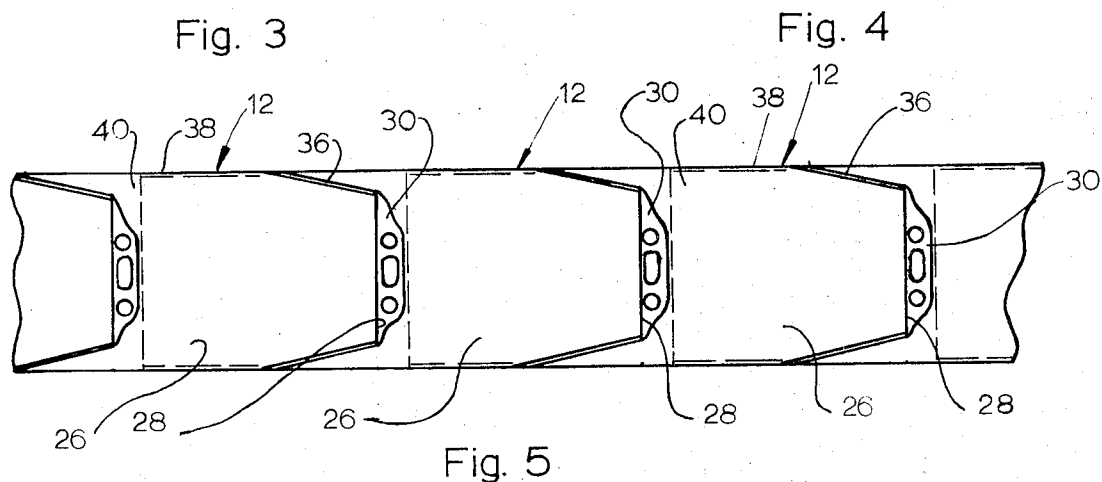
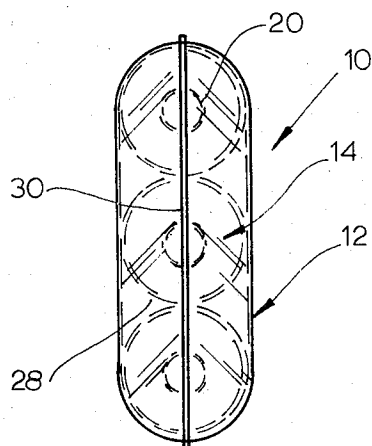
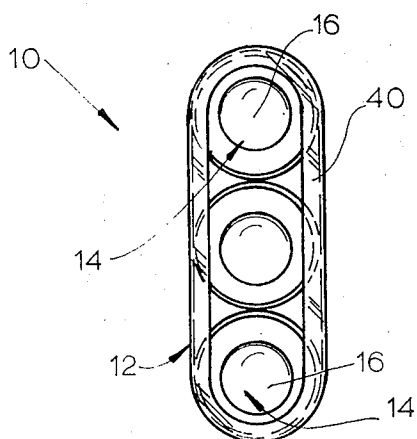
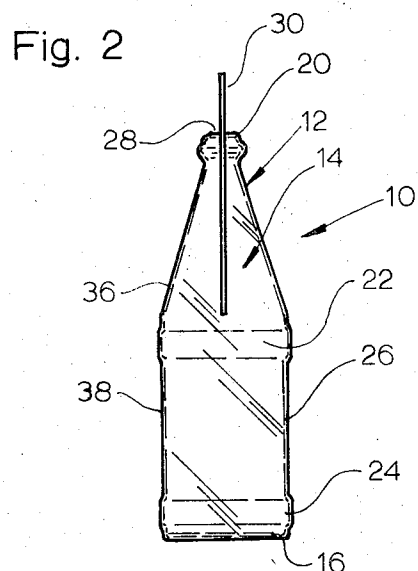
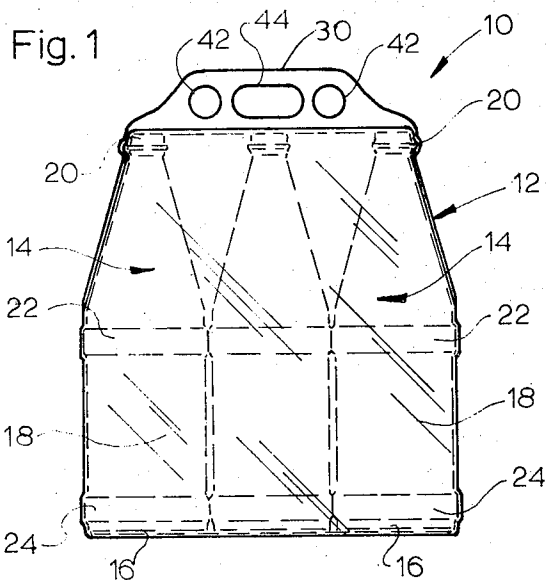
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ABSTRACT

A container package for a plurality of containers is disclosed which includes a one-piece multi-packaging device having a stretch mounted wrap-around skirt for engaging the containers, a covering top, and an integral upstanding multiple-thickness handle for transporting the containers.

5 Claims, 5 Drawing Figures





CONTAINER PACKAGE

SUMMARY OF THE INVENTION

In my prior co-pending application Ser. No. 167,385 filed July 29, 1971, I have disclosed a container multi-packaging device made from stretchable and elastic thin film plastic material which includes a wrap-around skirt and an integral top. The wrap-around skirt is adapted to be mounted and stretched in elastic gripping engagement over the containers while the integral top overlies the upper end thereof. Such multi-packaging devices are particularly useful in the multi-packaging of glass or plastic bottles, although other types of containers and other articles may be packaged.

In order to prevent any dust or foreign particles collecting on the containers assembled within multi-packaging devices it is desirable to provide a sealed or dustproof container package for containers.

Where the weight of the package becomes quite heavy, due to the number or size of the containers in the package, it may be necessary to provide a strong handle construction for transporting the package. The stretchable and elastic thin film plastic material from which the multi-packaging device is made does not, by itself, afford the type of handle or carrying means that may be necessary under such circumstances. There are many arrangements that are possible, some of which have been disclosed in my aforementioned patent application; but I have found that an integral upstanding multiple-thickness handle is very desirable for certain multi-packaging applications where weight is a factor because it affords both strength and flexibility. This will become apparent from the discussion that is to follow.

It is an object of the present invention to provide a new and improved multi-packaging device and container package.

More specifically, it is an object of the present invention to provide a stretchable film multi-packaging device which provides a sealed or dustproof package and which incorporates means facilitating the transporting of relatively heavy and/or large containers which are gripped and held by the multi-packaging device.

These and other objects and advantages of the present invention are attained by the provision of a multi-packaging device which is made of stretchable and elastic thin film plastic material including a one-piece wrap-around skirt which embraces and grips containers, a covering top overlying the containers, and an integral upstanding multiple-thickness handle which is attached to the covering top for transporting the containers.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a side elevational view of a container package including a stretchable and elastic thin film multi-packaging device including an integral upstanding multiple-thickness handle which is constructed in accordance with the teachings of the present invention;

FIG. 2 is an end elevational view of the container package shown in FIG. 1;

FIG. 3 is a bottom plan view of the container package shown in FIG. 1;

FIG. 4 is a top plan view of the container package shown in FIG. 1;

FIG. 5 is a top plan view of a plurality of multi-packaging devices interconnected together in strip form.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The stretchable film multi-packaging device illustrated in the drawings is of the type which may be used for packaging quart bottles, such as are commonly used for containing beverages. It will be understood, however, that the multi-packaging device may be used for various types of bottles, containers and other articles where weight and/or size of such products in relation to the film thickness may require a strong and flexible handle construction which facilitates transporting of the containers.

The multi-packaging device as disclosed herein is made from a stretchable and elastic thin film plastic material which provide stretching, with or without deformation, while also permitting the packaging device to tend to return to its former shape by elasticity after being stretched and/or deformed. While the present invention is not restricted to any particular type of material, it has been found that one preferred type of material is low density poly-ethylene.

In the drawings, there is shown a container package 10 including a stretchable and elastic thin film multi-packaging device 12 which is assembled relative to a plurality of bottles 14. Each of the bottles 14 has a bottom or base 16, a body or sidewall portion 18, and a crown or cap 20 which is crimped or placed over the open upper end (not shown) of the bottles 14. The body or sidewall portion 18 of each bottle 14 is provided with upper and lower annular enlargements or shoulders 22, 24 respectively which are thickened or re-enforcing segments formed on each bottle 14 at locations where the bottles 14 would be subject to the most contact between the bottles themselves and other elements. While the annular enlargements or shoulders 22, 24 are not required, it has been found that they are usefully employed where the bottles 14 are made of a breakable material such as glass.

The container package 10 shown in the drawing includes three bottles 14 which are arranged in a single row and are captured by the multi-packaging device 12. As best seen in FIGS. 1-4, the multi-packaging device 12 conformably engages or is mounted in contour fitting engagement relative to the bottles 14. This results from the stretch mounting of the multi-packaging device 12 in elastic and embracing engagement relative to the bottles 14.

The multi-packaging device 12 is preferably initially formed as an interconnected strip of multi-packaging devices 12 as shown in FIG. 5 of the drawings. This is accomplished, as explained in detail in my aforementioned patent application, by forming the multi-packaging devices 12 from an elongated flattened plastic tube. Each of the multi-packaging devices 12 is formed in a manner to provide a wrap-around skirt 26, a covering top 28, and a handle 30. The wrap-around skirt is configured, arranged and dimensioned relative to the bottles 14 in order that it can be stretched and mounted thereover in elastic embracing and gripping engagement relative to the body or sidewall portions 18 of the bottles. In the drawing, it will be seen that the body or sidewall portion 18 of the bottles includes an upper inverted frusto-conical portion and a lower sub-

stantially cylindrical portion. As a result, the wrap-around skirt 26 includes a tapered upper section 36 which is connected to the lower section 38, the latter being arranged substantially normal to the handle 30.

As best seen in FIG. 3 of the drawing, the wrap-around skirt 26 may further be provided with a skirt extension 40 which conformably engages the lower annular enlargements 24 and/or bottoms or bases 16 of the containers 14. In addition to the bottles 14 being engaged along the lower portions or bottoms thereof, the bottles 14 are engaged at their crowns or caps 20 by the upper section 36 of the wrap-around skirt 26 and the covering top 28 of the multi-packaging device 12.

As a result, the multi-packaging device 12, when assembled to the bottles 14, prevents any lateral or vertical movement of the bottles 14 relative to one another due to the manner in which the body or sidewall portions 18, bottoms or bases 16 and the crowns or caps 20 of each bottle 14 are engaged by the contour fitting stretch mounted multi-packaging device 12.

Where the size and/or weight of the containers 14 relative to the film thickness of the multi-packaging device 12 necessitates an effective carrying means or handle, the present invention contemplates that the handle 30 will be used. Handle 30 comprises an integral multiple-thickness handle construction which is attached to the flexible covering top 28 so as to provide a strong, yet flexible handle which facilitates the transporting of the containers 14. The method of manufacturing multiple-thickness handle constructions for multi-packaging devices is disclosed in my co-pending U.S. Pat. application Ser. No. 240,040 filed on an even date herewith.

The manner in which the handle 30 extends or projects upwardly from the multi-packaging device 12 is best illustrated in FIGS. 1-2 and 4 of the drawing. It will there be seen that the multiple-thickness handle 30 has sufficient strength, due to its thickness and construction, to stand upright by itself. Preferably, the handle 30 extends directly over the containers 14 as illustrated in FIGS. 1-2 and 4 of the drawing.

In addition to its strength, the handle 30, because it is integrally attached to the thin and flexible covering top 28 of the multi-packaging device 12, is also flexible. The strength of the handle 30, coupled with its ability to flex or give, will facilitate the lifting and/or transporting of the container package 10. This results from the ability of the handle 30 to flex or give as the weight of the container package is shifted during lifting and transporting thereof.

The gripping of the handle 30 is enhanced by the provision of a fingerhole 42 on each side of a fingerhole

slot 44. Each of the fingerholes 42 will receive a single finger while the fingerhole slot 44 may receive several fingers. Thus, the index and the fifth finger may be inserted in the spaced fingerholes 42 while the third and fourth fingers of the user are inserted within the fingerhole slot 44. While this type of fingerhole and finger slot carrying openings are quite effective, other types of openings may be used, if desired.

It will be appreciated that the number and size of the containers 14 will vary depending upon the kind of container package that is desired. Thus, while the three quart bottle package illustrated in the drawing is most effective, other container shapes with more or less containers may be used, if desired.

The foregoing description has made it apparent that the present invention contemplates a new and improved multi-packaging device and resulting container package which has an effective carrying means or handle which has not been heretofore obtainable by other prior art devices.

I claim:

1. A dustproof package for containers comprising a plurality of adjacently positioned containers each having a body and reduced neck portion, and a carrier made of stretchable and elastic thin film plastic material including a substantially circumferentially continuous wrap-around skirt and an integral covering top, said wrap-around skirt including an upper section which tapers downwardly and outwardly from said covering top for a distance corresponding to the height of the reduced neck portion of said containers and a lower section which extends downwardly in substantially parallel relationship to the body portion of said containers at least for substantially the entire height thereof, said wrap-around skirt being dimensioned in its upper and lower sections relative to said containers to be substantially contour fitted in elastic gripping engagement relative to the reduced neck and body portions of said containers while the covering top is positioned in overlying relationship to said containers, and handle means associated with the covering top for transporting the container package.

2. The package as defined in claim 1 wherein the plurality of containers are arranged in a single row.

3. The package as defined in claim 2 wherein there are three containers arranged in a single row.

4. The package as defined in claim 1 including an integral upstanding multiple-thickness handle attached to the covering top.

5. The package as defined in claim 4 wherein the handle includes a fingerhole opening on each side of a fingerhole slot.

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