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MAKING OF A COMBINED PACKAGE OF FILLED TETRAHEDRAL CONTAINERS

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Fig. 1

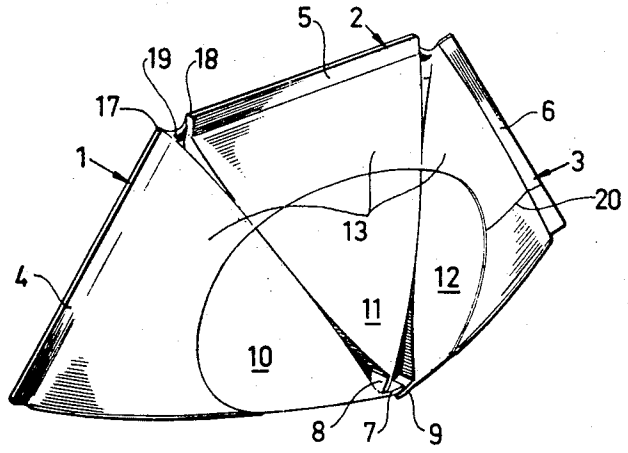
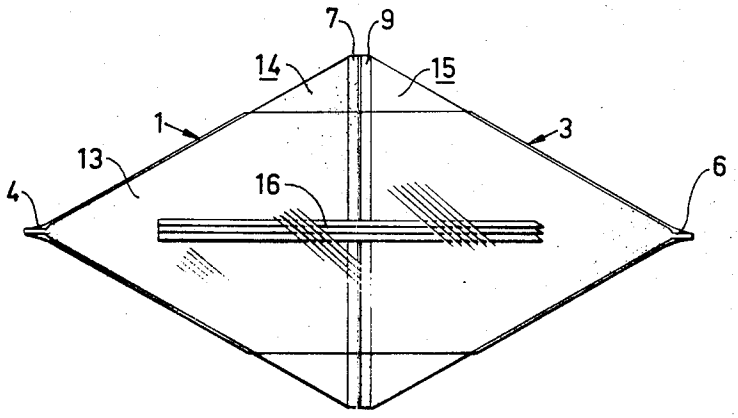


Fig. 2



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MAKING OF A COMBINED PACKAGE OF FILLED TETRAHEDRAL CONTAINERS

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U.S. Cl. 206—47 1 Claim

ABSTRACT OF THE DISCLOSURE

Package of filled tetrahedron shaped containers and drinking straws held together by a film of heat shrinkable material heat shrunk therearound.

The present invention concerns the making of a combined package of filled tetrahedral containers. The purpose of the invention is primarily to facilitate the distribution and sale of small sizes of tetrahedral containers, viz. those with volumes of ½ litre or less. There has long been a great need for combined packages of the smaller sizes of package due to a variety of reasons, of which a few examples will be given.

When selling fruit drinks in self-service shops, containers are placed in the shops in the hexagonal cartons in which they are delivered from the manufacturer. It has in connection with this been found that appreciable quantities of packages disappear in the shops as a result of theft. It seems that the small size of the package is of decisive influence as far as the attractiveness of the object is concerned. An essential advantage of the invention is that theft is made very much harder by displaying the packages in larger units.

When selling fruit drinks or similar articles packed in tetrahedral containers, a straw which is to be inserted through the wall of the package is generally also included. It is usual in self-service shops for the customer to receive the straw when he passes the cash desk, in order that stealing of straws inside the shop should not be possible. The method is time-wasting and on the whole impractical, and thus a further advantage of the invention is that this problem can be solved by the combined package being provided with the number of straws corresponding to the number of tetrahedral units, such straws being protected under the wrapping of the combined package.

A further advantage of the invention is that distribution of goods to the shops is facilitated. Tetrahedral packages have earlier been carried in hexagonal cartons which in their turn were packed in fours in outer square cartons. The number of tetrahedral packages in the hexagon cartons was usually eighteen. For many sales outlets, however, this is too large a number, half this being perhaps more suitable. It is obvious that it is time-wasting and consequently uneconomic to take a number of tetrahedral packages out of the hexagonal cartons at the time of delivery. It is however possible to dispense with the hexagonal cartons as a result of the invention, the combined packages being carried instead in the outer square cartons direct. By this means the merchandise can be delivered quicker in the desired quantity, at the same time as the total packaging cost is substantially reduced as a result of the hexagonal cartons being eliminated.

Under the invention, combined packages are fan shaped. This makes it possible for them to be packed very tight in the outer square container when properly stacked. The individual combined packages will also be very stable and durable as a result of the characteristic configuration according to the invention. Combined packages, in accordance with a preferred form of the invention, are fixed in their fan-shaped configuration by a shrinkable film of plastic. It is best for this to be shaped like a wrapper which will run over those edges of the tetrahedrons which are turned toward the outside of the fan and over the sides of the two outer tetrahedrons in the fan which are situated opposite these edges. The sharp points of the fins on the tetrahedrons, by virtue of the fact that the shrinkable film shrinks over them and that they penetrate deep into the film without being pushed right through this, prevent the wrapper slipping out of position. The grip of the wrapper around the tetrahedral units is thus ensured under even comparatively rough handling. Sliding of the tetrahedron units relative to one another is also prevented by the friction between them being considerably increased as a result of the shrinkage.

The way in which the combined package in accordance with a preferred method can be made up is shown in the figures.

FIGURE 1 showing a side view of the combined package, and

FIGURE 2 is a view of the same package from underneath.

The combined package shown in the figures consists of three containers **1**, **2** and **3** shaped in the main as regular tetrahedrons. The tetrahedral containers have fin-shaped sealing areas **4** and **7**, **5** and **8** and **6** and **9** respectively. The sides to be seen on FIGURE 1 are denoted **10**, **11** and **12** respectively, while the sides of tetrahedrons **1** and **3**, to be seen on FIGURE 2, are denoted **14** and **15** respectively.

A strip **13** of heat-shrinkable plastic, which is jointed **20** to form an endless wrapper, is drawn over the three tetrahedrons. The wrapper **13**, as shown in the figures, runs parallel to the plane defined by fins **4**, **5** and **6** and thus surrounds the group of tetrahedrons in their longitudinal direction. Three straws **16** are placed between film **13** and sides **14** and **15**.

When the film is heated, it shrinks so as to attain the general shape shown in the figures, that is to say, to adhere onto the sides adjacent to fins **4**, **5** and **6**, such as sides **10**, **11** and **12** in FIGURE **1** and onto sides **14** and **15** opposite these fins. The points on fins **4**, **5** and **6** penetrate deep into the film without however making a hole in this, the film being thereby firmly fixed in the position attained as a result of heating. Two of the fin points acting in this way have been denoted **17** and **18** in FIGURE 1 and the portion of film between them **19**. The length of the wrapper is reduced by shrinkage, causing the tetrahedrons to press against one another. Friction between individual tetrahedrons is thus increased and sliding of these relative to one another practically eliminated.

That which is claimed is:

1. A combined package of filled tetrahedron shaped containers comprising at least three tetrahedron shaped packages, said packages each having one end seal overlapping at least one end seal of the other packages, the other end seals of the packages forming a fan shape, a continuous heat shrunk film wrapper running over the edges of said tetrahedrons turned toward the outside of

said fan shape and over those edges of the outer tetrahedrons which are situated opposite those edges to hold said packages in said fan shape, and a number of straws at least equal to the number of tetrahedrons located between said film and said overlapping edges of said tetrahedrons.

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MARTHA L. RICE, Primary Examiner

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