

Sept. 19, 1972

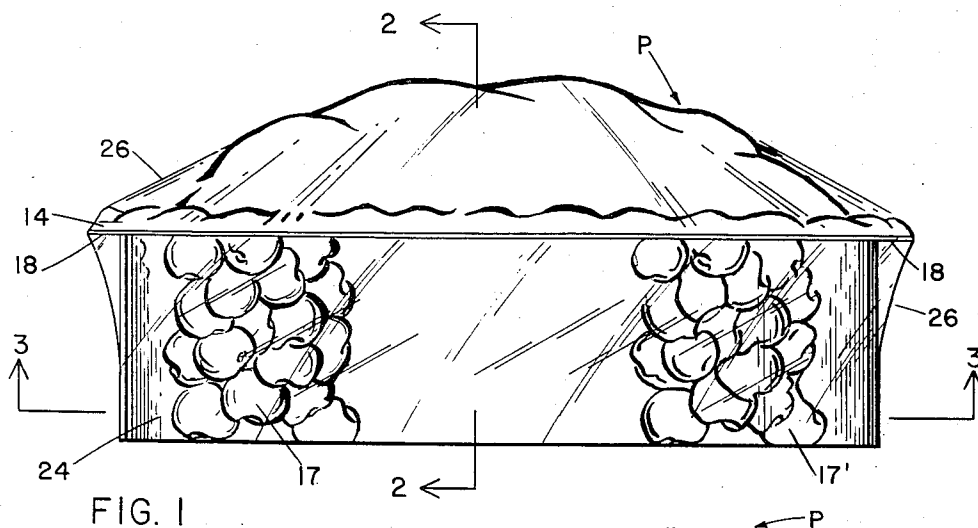
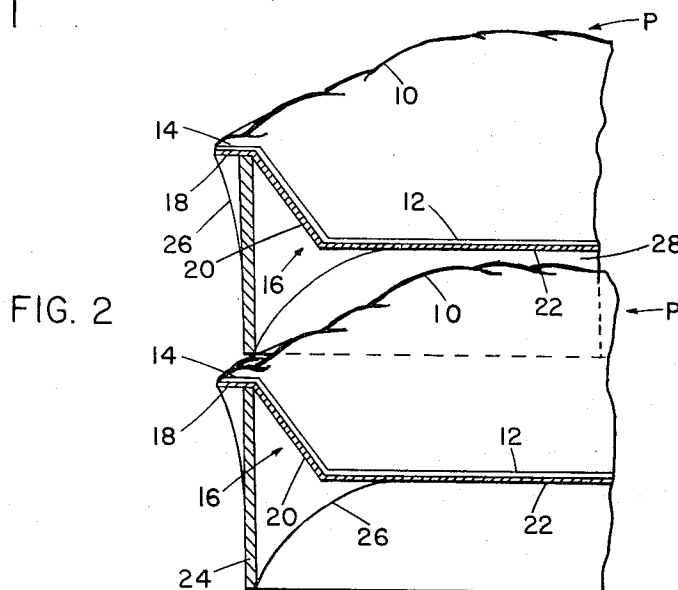
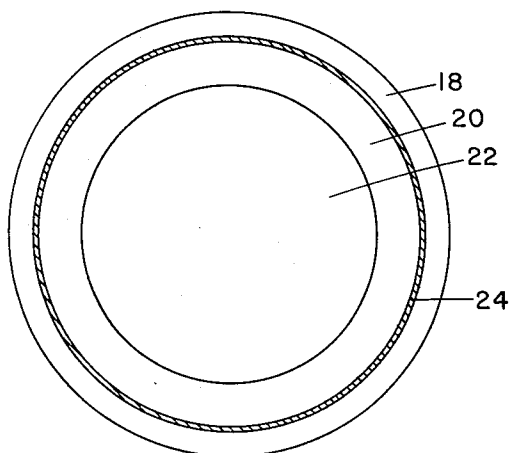
P. C. DENDRINOS

3,692,544

PIE PACKAGE

Filed Dec. 4, 1970

2 Sheets-Sheet 1



INVENTOR
PETER C. DENDRINOS

BY *Price, Heneveld,
Huizinga + Cooper*

ATTORNEYS

Sept. 19, 1972

P. C. DENDRINOS

3,692,544

PIE PACKAGE

Filed Dec. 4, 1970

2 Sheets-Sheet 2

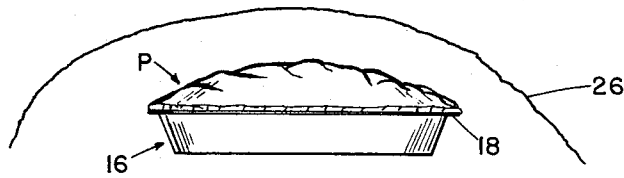
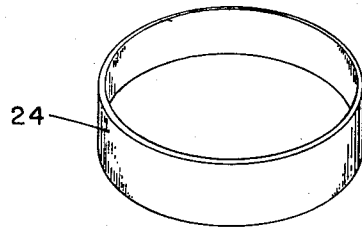


FIG. 4

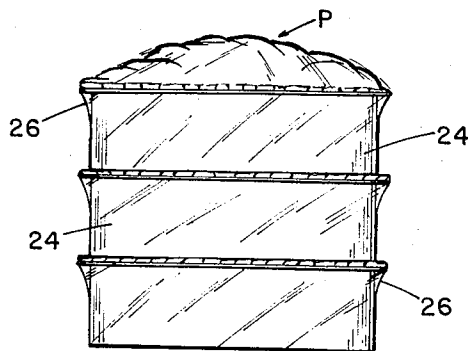


FIG. 5

INVENTOR
PETER C. DENDRINOS

BY *Price, Heneveld,
Huzenga + Cooper*

ATTORNEYS

1

3,692,544

PIE PACKAGE

Peter C. Dendrinis, Traverse City, Mich., assignor to
Chef Pierre, Inc., Traverse City, Mich.
Filed Dec. 4, 1970, Ser. No. 95,014

Int. Cl. B65b 25/16

U.S. Cl. 99—172

8 Claims

ABSTRACT OF THE DISCLOSURE

A packaging arrangement for frozen pies providing an extremely attractive package while incorporating a unique stacking feature for display purposes and to facilitate shipping and handling. A ring-like member is fixed under the lip of the formed aluminum pie pan and a shrinkable plastic film is fitted over the ring, the pan, and the product to seal the package. The ring diameter and the pie pan diameter are such that a plurality of sealed packages may be stacked for shipping and display purposes.

BACKGROUND OF THE INVENTION

In the distribution and merchandising of frozen pies, cakes and like comestible products, it is desirable to provide an attractive package while at the same time providing for convenient shipping and display. Such products are generally packaged and displayed in cardboard containers. Frozen pies, particularly those of the high quality "home made" type generally contain greater quantities of the fruit filling resulting in a top surface which is rounded and which protrudes above the rim of the tin in which it is contained. This type of product, if packaged in the conventional cardboard container, would, because of its rounded top surface, require a much thicker container. This, of course, creates excessive space requirements both in shipping and in the retail display. There is also an increased packaging cost when a larger package is utilized.

When placed for retail sale, the cardboard containers are often crushed, bent and otherwise damaged, particularly when the product is heaped to protrude above the rim of the tin. Consequently, there is a certain propensity on the part of the purchasing public to open and inspect the product contained within the package. This handling often results in damage and contamination of the product.

SUMMARY OF THE INVENTION

I have now discovered a means of attractively packaging such products, rendering them visible to the purchaser, while at the same time providing an arrangement wherein the packages may be conveniently stacked for shipping and which also provides an attractive stacked display when placed for retail sale.

By various aspects of my invention one or more of the following or other objects may be obtained.

It is an object of this invention to provide a novel display package for frozen comestible products.

It is another object of this invention to provide an attractive package for the display of such products wherein the product is visible through the package.

Another object of this invention is to provide a tamper-proof package for frozen comestible products while at the same time displaying the product.

It is still another object of this invention to provide a package for comestible products wherein the packages may be stacked for ease in shipping and display.

It is yet another object of this invention to provide a package for comestible products wherein the packages may be stacked and displayed in a convenient and attractive manner.

2

Other aspects, objects and the many advantages of this invention are apparent to one skilled in the art from a study of this disclosure, the drawings, and the appended claims.

According to the invention, there is provided an improvement in packaging for comestible products such as frozen pies and the like in which the products are carried in a container having a rim around its periphery comprising a rigid member supported against the rim of said container and a heat shrinkable protective wrapper enclosing said rigid member and said container to form a unitary package.

The invention will now be described with reference to the accompanying drawings in which:

FIG. 1 is a front elevational view of a comestible product incorporating my invention;

FIG. 2 is a sectional view taken along lines 2—2 of FIG. 1 and showing the products in a stacked relationship;

FIG. 3 is a sectional view taken along lines 3—3 of FIG. 1;

FIG. 4 is an exploded view showing the component arrangement of my invention; and

FIG. 5 shows my invention in a stacked arrangement for display purposes.

Referring now to the drawings, particularly FIGS. 1, 2 and 3, a frozen comestible product, such as for example a pie, is shown at P. As is well known in the art, the pie has an upper crust 10 and a lower crust 12 which may be filled therebetween with any conventional pie filling. As is also conventional, the pie is formed in a pie tin or pan 16 having a rim or lip 18 about its outer diameter, sloping side walls 20 and a flat bottom 22. The upper and lower crust are sealed together at their edges 14 on the rim 18. The pie thus formed is then frozen in a manner well known to those skilled in the art.

As shown in FIG. 4, to prepare the frozen pie for shipment and eventual retail distribution, a ring-like member 24, which may be formed from paperboard, molded plastic or other inexpensive reasonably rigid material, is placed under the rim 18 of the pie tin 16. The ring-like member 24 may be of any convenient shape depending on the shape of the container to be supported. When used, for example, to package a square or rectangular shaped cake, the ring member 24 must correspond to that shape. Pies are conventionally round in shape, consequently the ring must be round. The ring-like member 24 is of lesser diameter than the outer diameter of the rim 18 so that it abuts against the lower surface of the rim near the intersection of the rim with the side wall 20.

The height of the ring is also critical as when the products are stacked for shipment or display the heaped upper portion of the pie must not contact the lower portion of the package stacked above it. I therefore provide that the ring is high enough so that the sides and bottom of the tin 16 extend into the ring somewhat less than one-half the height of the ring.

The ring 24 with the pie and pan mounted therein is then covered with a thin transparent cellulosic wrapper 26 which is sealed along its edges thereby completely encapsulating the pie, tin and ring. The encapsulated pie, tin and ring are then briefly subjected to an elevated temperature which causes the cellulosic wrapper to shrink and draw up tightly to completely and effectively seal the product.

As shown in FIG. 2, a plurality of products wrapped as described above may be stacked one on top of another. The ring 24 rests on the sealed edge 14 of the upper and lower crusts on the rim 18. The upper rounded top crust 10 extends upwardly into the center of the ring 24. As mentioned above, the bottom 22 of the tin 16 extends into the ring somewhat less than half its height. As is apparent,

this is so that the top crust 10 of the pie will not contact the bottom 22 of the tin stacked above it. A small clearance 28 is thus provided between each package and the one stacked above.

The products may be displayed as shown in FIG. 5. A plurality of wrapped products are shown in a stacked relationship with the rings 24 visible through the sealed transparent wrapper 26. Advertising matter, product information, baking instructions and other indicia may be printed on the ring 24 and will remain visible to the purchaser through the transparent wrapper 26. Alternately, the wrapper 26 may have such matter printed thereon. I have found that a most attractive display is presented when a reproduction of the type of filling, as shown at 17 in FIG. 1, contained within the product is displayed on the ring 24. Alternately, the reproduction of the type of filling may be printed on the wrapper 26 as shown at 17' in FIG. 1.

Of particular appeal to the purchaser is the sight of the heaped top surface of the pie protruding and rounded above the rim of the container. Its eye catching appeal is emphasized by my novel packaging arrangement.

When the frozen pie is to be prepared it is simply removed from the package by cutting the cellulosic wrapper 26. The pie is then placed in a heated oven at a predetermined temperature for a specified period of time. After baking, the pie may again be placed in the ring 24 which also serves as a handy and convenient cooling rack.

While the invention has been described with reference to a frozen pie, it is apparent that the invention is equally useful for the packaging and display of other products so long as there is a supporting surface provided to hold the ring.

As can be seen from the foregoing disclosure I have provided a new and novel packaging arrangement for products which not only provides an aesthetically pleasing package and stackable display but which also provides a more sanitary product and one which may easily be inspected by the consumer.

Reasonable modifications and variations are possible within the scope of the foregoing disclosure and drawings without departing from the spirit and scope of the invention.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. In a package of comestible products such as pies in which the products are in a rigid circular container being a pan with a bottom, sides and a rim extending radially from said sides and around the periphery of said pan and said product having an upwardly heaped portion extending above said rim, the improvement comprising: a rigid ring-like member of lesser diameter than the outer diameter of said rim and located under and having its top edge bearing against said rim of said container to support the same; said ring-like member receiving the sides and bottom of said container and extending downwardly from said rim below the lowermost portion of said bottom, and

having a height sufficient to also receive below said container an upwardly heaped portion of a product in a similar package located therebelow; and a heat shrunk protective wrapper enclosing said product, container and ring-like member to hold the same together in a unitary package.

2. The improved package as claimed in claim 1 wherein said wrapper has indicia printed thereon representative of the contents of said container.

3. The improved package as claimed in claim 1 wherein said wrapper is a transparent cellulosic material.

4. The improved package as claimed in claim 3, wherein said rigid member has indicia printed thereon representative of the contents of said container.

5. In a package of comestible products in which the products are in a rigid container having a bottom, sides and a rim extending outwardly from said sides around the periphery of said container and said products having an upwardly heaped portion extending above said rim, the improvement comprising: a rigid ring-like member located under and having its top edge bearing against said rim of said container adjacent said sides to support the same; said ring-like member receiving the sides and bottom of said container and extending downwardly from said rim below the lowermost portion of said bottom, and having a height sufficiently greater than the combined distance of said container extending downwardly from said rim and the height of said upwardly heaped portion of said product to receive below said container an upwardly heaped portion of a product in a similar package located therebelow; and a heat shrunk protective wrapper enclosing said product, container and ring-like member to hold the same together in a unitary package.

6. The improved package as claimed in claim 5 wherein said wrapper has indicia printed thereon representative of the contents of said container.

7. The improved package as claimed in claim 5 wherein said wrapper is a transparent cellulosic material.

8. The improved package as claimed in claim 7 wherein said rigid member has indicia printed thereon representative of the contents of said container.

References Cited

UNITED STATES PATENTS

2,430,566	11/1947	Harriss	99—172
1,978,296	10/1934	Donovan et al.	206—DIG. 2
1,647,289	11/1927	Gwinn	206—45.32
212,673	2/1879	Ferry	206—9
2,156,583	5/1939	Chaplin	220—97 B
3,202,274	8/1965	Klasmire	206—65 S
3,397,773	8/1968	Harrison et al.	206—45.33

JOSEPH R. LECLAIR, Primary Examiner

J. M. CASKIE, Assistant Examiner

U.S. Cl. X.R.

99—171 TC; 206—45.32, 45.33, DIG. 2, DIG. 29