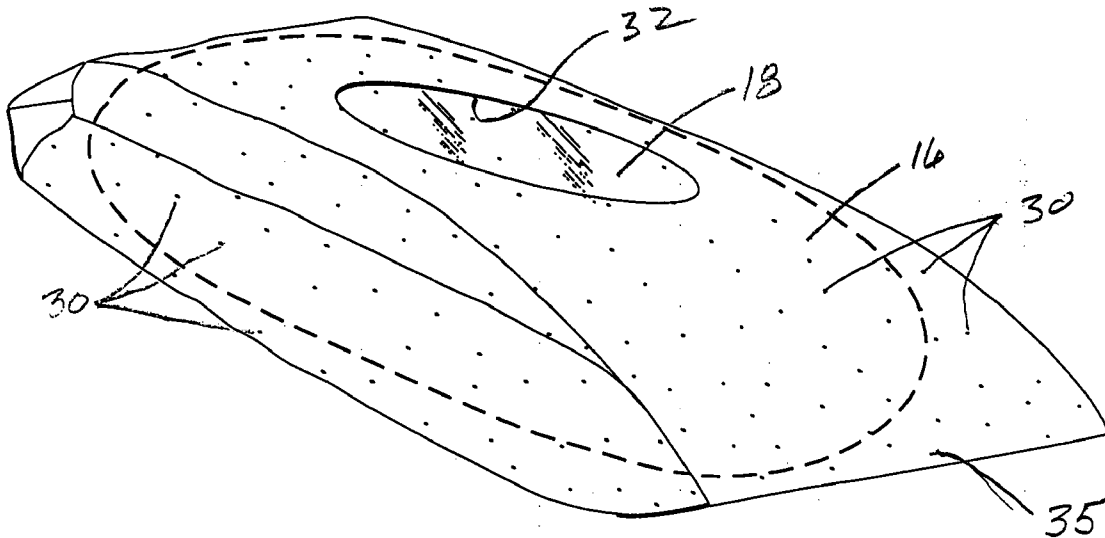


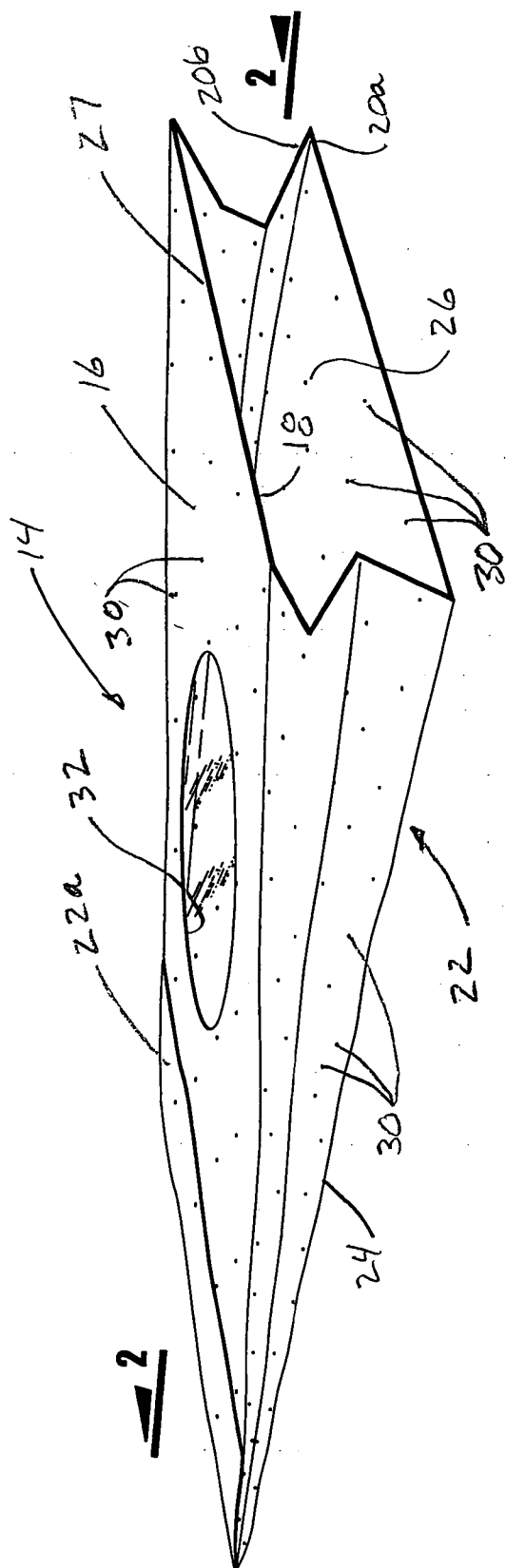


US 20120141640A1

(19) **United States**(12) **Patent Application Publication**
Anderson(10) **Pub. No.: US 2012/0141640 A1**(43) **Pub. Date: Jun. 7, 2012**(54) **COMBINATION BREAD BAKING AND
PACKAGING APPARATUS**(52) **U.S. Cl. 426/113; 426/394; 53/452**(57) **ABSTRACT**(76) **Inventor: Ron Anderson, Upland, CA (US)**(21) **Appl. No.: 12/928,108**(22) **Filed: Dec. 2, 2010****Publication Classification**(51) **Int. Cl.**
B65D 81/34 (2006.01)
B65B 25/16 (2006.01)
B65D 75/38 (2006.01)

A combination bread baking and packaging apparatus that includes an outer sheet of baking paper capable of withstanding a temperature sufficient to bake bread, the outer sheet having an inner surface; an inner oven-able and heat sealable polyester sheet adhesively bonded to and coextensive with the inner surface of the outer sheet to form a composite sheet having opposite edges, the opposite edges being interconnected to form an elongated tubular member having a first end portion that is folded upon itself and sealed to form a precursor apparatus having a bread receiving chamber having an opening end. Following the insertion of a partially baked loaf of bread into the bread receiving chamber, the open end of the bread receiving chamber is folded upon itself and during the heating of the partially baked loaf of bread, is automatically sealed.





123

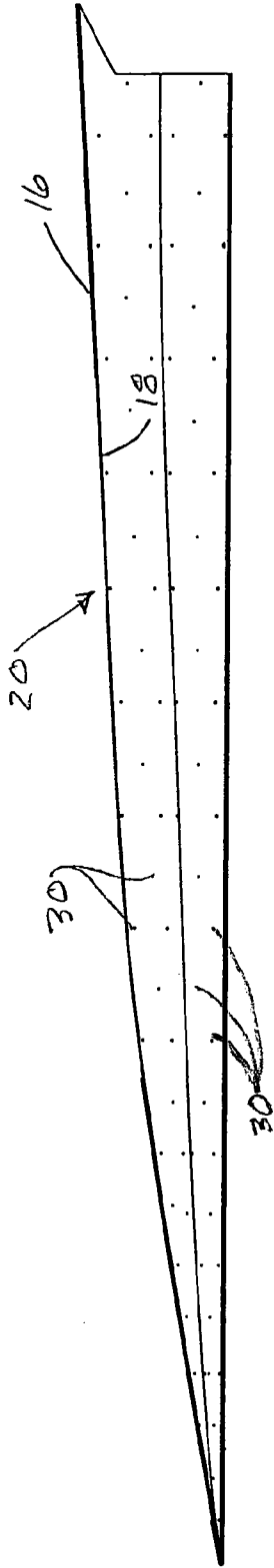


Fig. 2

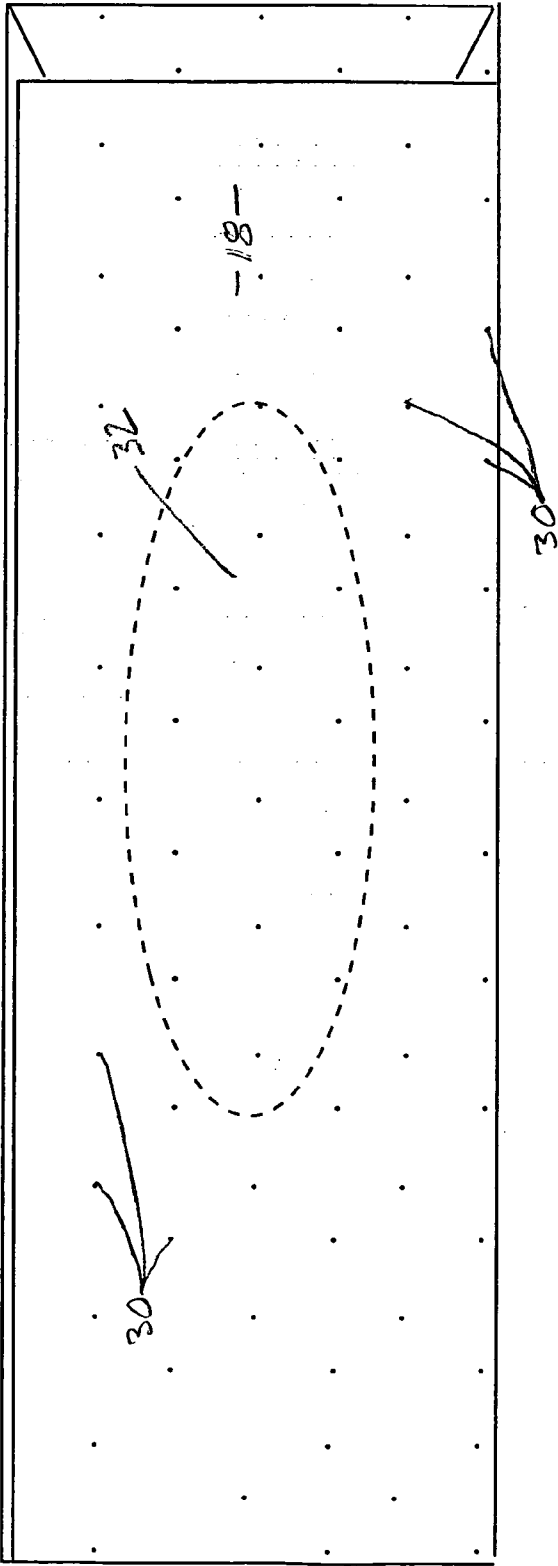


Fig. 3

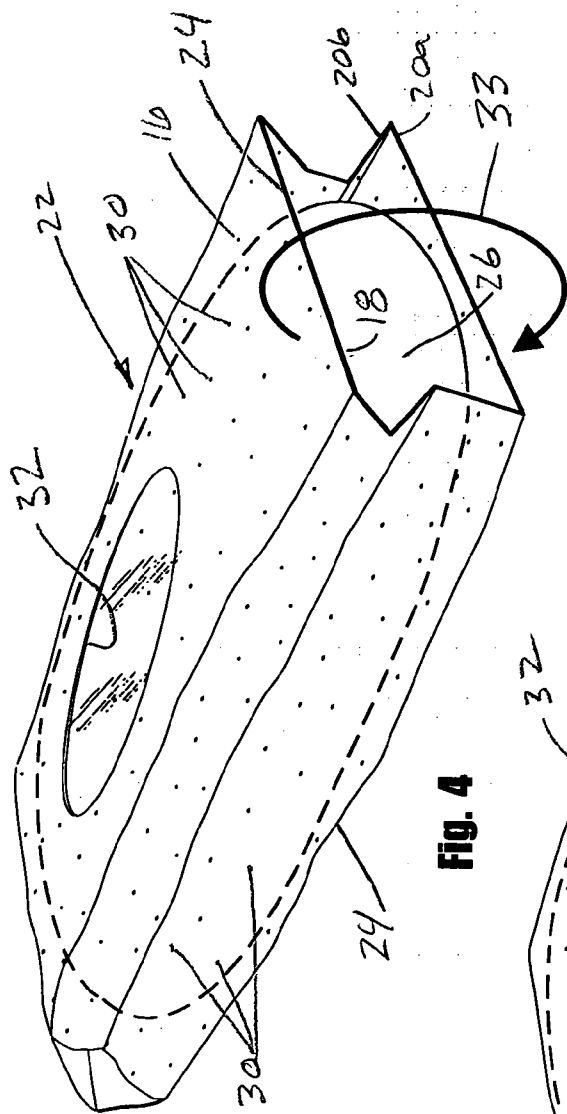


Fig. 4

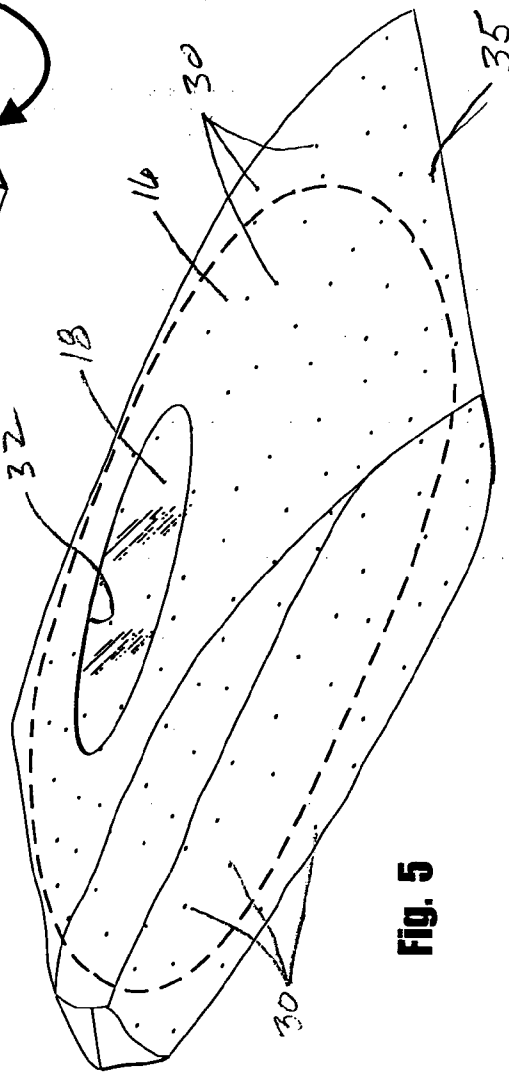


Fig. 5

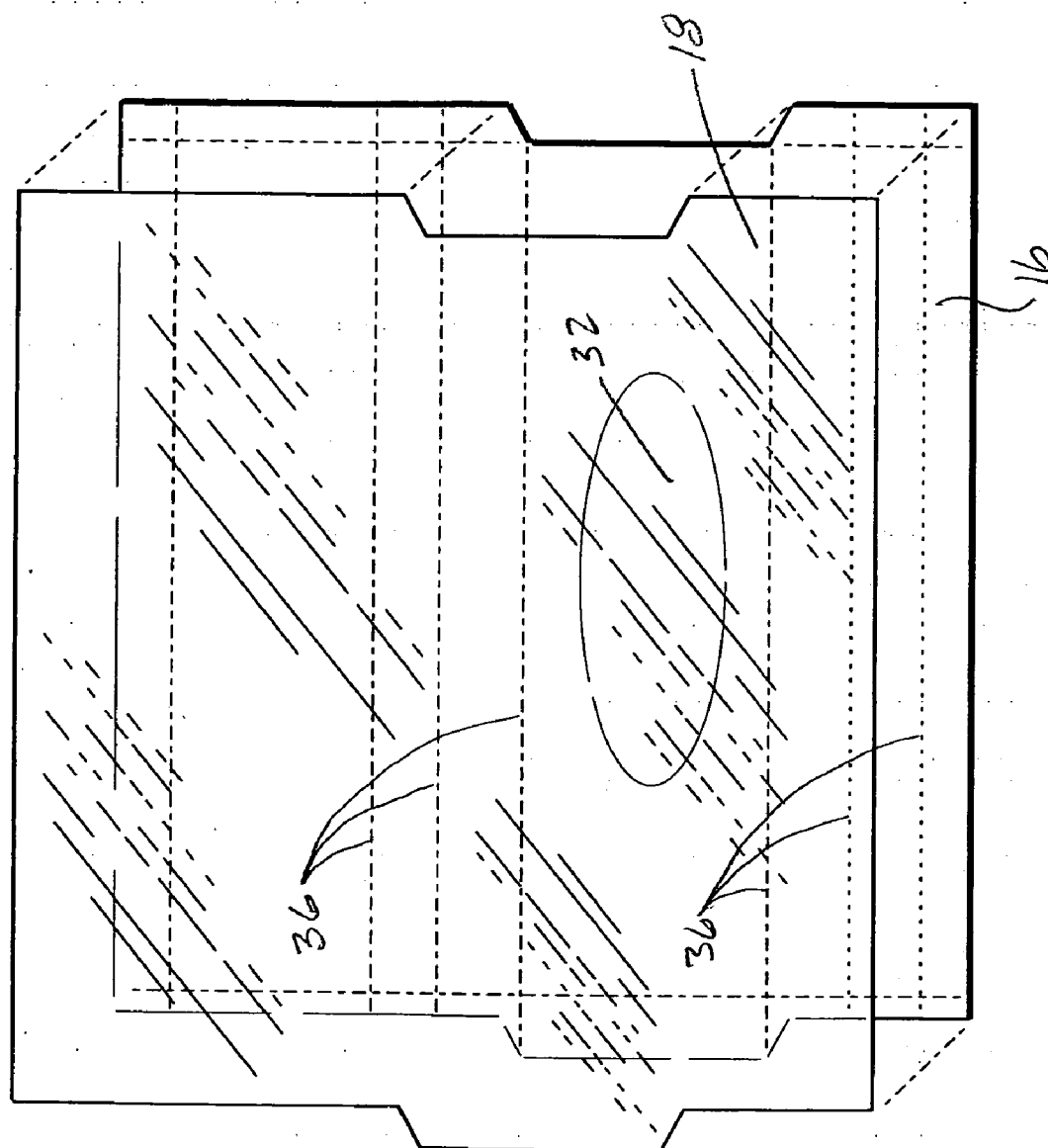


Fig. 6

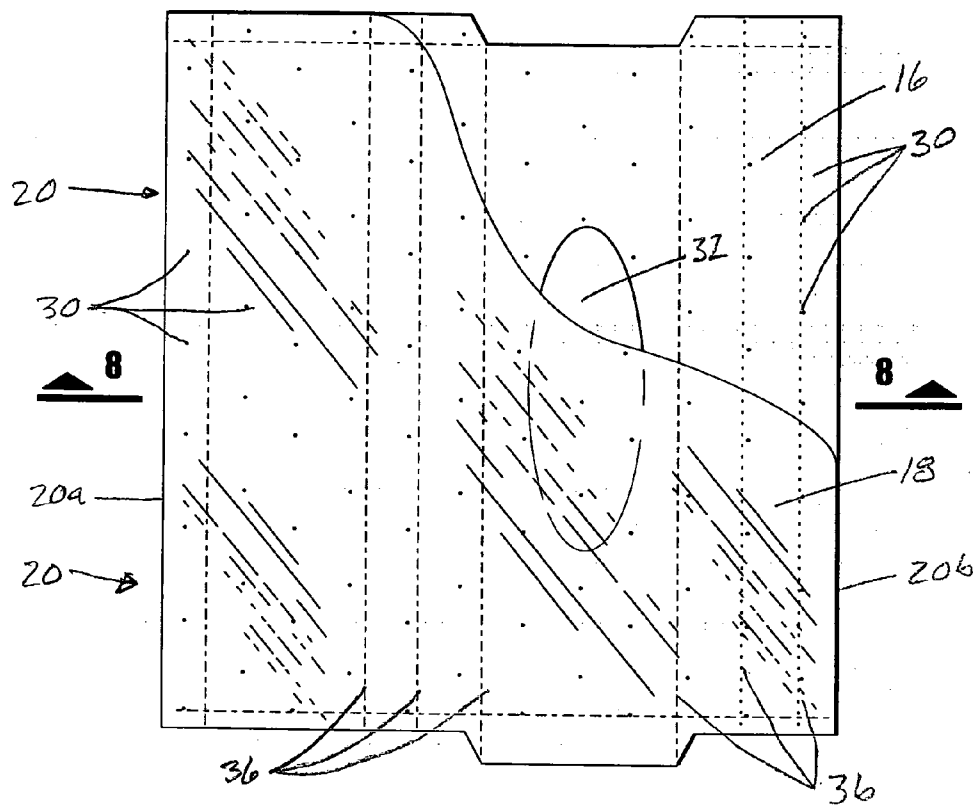


Fig. 7

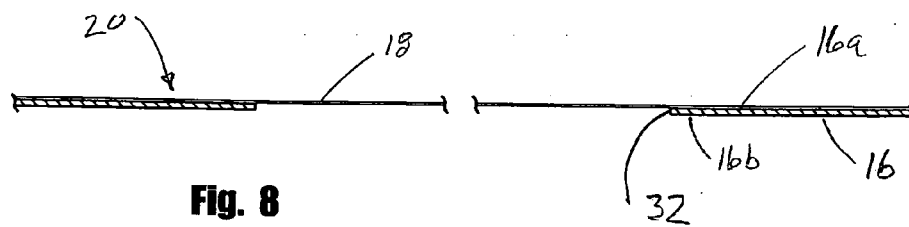


Fig. 8

COMBINATION BREAD BAKING AND PACKAGING APPARATUS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC

[0003] Not Applicable

BACKGROUND OF THE INVENTION

[0004] 1. Field of the Invention

[0005] The present invention relates generally to packaging for baking and displaying baked food products. More particularly, the invention concerns a novel package that can be used to bake and then to display the baked loaves of bread.

[0006] 2. Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 1.98

[0007] It is a common practice for large food markets to buy partially baked loaves of bread from commercial bakeries and then, using suitable ovens or microwaves, fully bake the bread at the store. After the bread has been baked it is suitably packaged and then displayed for sale on the store shelves as "freshly baked bread". The process of removing the partially baked loaves of bread from their shipping container, placing the loaves into and removing them from the oven and then placing the hot loaves of bread into a package, is both cumbersome and time consuming. Further, the handling of the very hot loaves of bread after they are removed from the oven can be quite hazardous. Additionally, the packaging into which the baked loaves of bread are placed, which typically comprises tube-like containers formed from parchment paper, fails to adequately preserve the freshness of the bread. It is these drawbacks that the novel packaging apparatus of the present invention and the method of its use, seek to overcome.

[0008] One prior art oven-able bag of simple construction and the method of making the bag is described in U.S. Pat. No. 4,866,786 issued to Nagler. The Nagler patent discloses a method of forming an oven-able bag, comprising the steps of providing an inner layer of parchment-like paper having a plurality of small holes therein; providing an outer layer of parchment-like paper material having no holes therein; forming a substantially rectangular sheet of paper-like material made from the inner and outer layers superposed on each other so as to permit escape of heated gases during a baking operation through the small holes and from between said inner and outer layers; securing opposite lengthwise edges of said substantially rectangular sheet together to form a tubular member open at opposite ends thereof; folding the tubular member over itself at one end thereof along a transverse fold line; adhering a portion of the wall section that has been folded along said transverse fold line to itself to provide a liquid seal at the folded end of the tubular member.

SUMMARY OF THE INVENTION

[0009] By way of brief summary, one form of the combination bread baking and packaging apparatus of the present

invention comprises an outer sheet of baking paper capable of withstanding a temperature sufficient to bake bread, the outer sheet having an inner surface; an inner oven-able and heat sealable polyester sheet adhesively bonded to and coextensive with the inner surface of the outer sheet to form a composite sheet having opposite edges, the opposite edges being interconnected to form an elongated tubular member having a first end portion that is folded upon itself and sealed to form a precursor apparatus having a bread receiving chamber having an open end. Following the insertion of a partially baked loaf of bread into the bread receiving chamber, the open end of the bread receiving chamber is folded upon itself and during the baking of the partially baked loaf of bread, is automatically sealed.

[0010] With the foregoing in mind, it is an object of the present invention to provide an automatically sealable food package that can be used to bake partially baked loaves of bread at the point of sale and then to attractively display the baked bread on the store shelves.

[0011] Another object of the invention is to provide an automatically sealable food package of the aforementioned character in which the composite sheet is provided with a multiplicity of perforations.

[0012] Another object of the invention is provide an automatically sealable food package of the character described that maintains the freshness of the baked bread for a substantial length of time

[0013] Another object of the invention is provide an automatically sealable food package of the character described in the preceding paragraphs in which the outer sheet of baking paper is provided with a viewing opening.

[0014] Another object of the invention is provide an automatically sealable food package of the character described that is attractive in appearance, is inexpensive to manufacture and is easy to use.

[0015] The foregoing objectives as well as other features and advantages of the present invention will become readily apparent from the following detailed description and the accompanying drawings.

BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWINGS

[0016] FIG. 1 is a generally perspective view of one form of the combination bread baking and packaging apparatus of the invention.

[0017] FIG. 2 is a view taken along lines 2-2 of FIG. 1.

[0018] FIG. 3 is a bottom view of the combination bread baking and packaging apparatus of the invention shown in FIG. 1

[0019] FIGS. 4 and 5 are generally perspective views of the combination bread baking and packaging apparatus of the invention, which when considered together illustrate the step of folding the open end of the apparatus upon itself to close the bread receiving chamber of the apparatus.

[0020] FIG. 6 is an exploded view of the combination bread baking and packaging apparatus of the invention as it appears in a planar, unfolded configuration.

[0021] FIG. 7 is a partly broken away plan view similar to FIG. 6, but showing the inner and outer sheets of the apparatus as they appear when bonded together and disposed in a planar, unfolded configuration.

[0022] FIG. 8 is a greatly enlarged, foreshortened cross-sectional view taken along lines 8-8 of FIG. 7.

DETAILED DESCRIPTION OF THE INVENTION

[0023] Referring to the drawings and particularly to FIGS. 1 through 5, one form of the combination bread baking and packaging apparatus of the invention is there shown and generally designated by the numeral 14. The apparatus here comprises a first, or outer, sheet of baking paper 16 that is capable of withstanding a temperature of about 350° F. to 400° F. that is sufficient to bake bread. Sheet 16 can be constructed from various materials, but a 30 to 45 pound grease resistant paper that is commercially available from various sources including the Wausau Paper Mill of Brokaw, Wis. has proven satisfactory for the purpose. As best seen in FIG. 8 of the drawings, sheet 16 has an inner surface 16a and an outer surface 16b.

[0024] The apparatus of the invention also here comprises an inner oven-able and heat sealable polyester sheet 18 that is adhesively bonded to and coextensive with the inner surface 16a of outer sheet 16 (FIGS. 6 and 7) to form a composite sheet 20 having lengthwise opposite edges 20a and 20b (see FIG. 7). Polyester sheet 18 is preferably formed from a 0.48 gauge oven-able and heat sealable polyester film that is readily commercially available from several sources including Terphane, Inc. of Bloomfield, N.Y.

[0025] As illustrated in FIGS. 1, 4 and 5, the lengthwise opposite edges of the composite sheet 20 are interconnected by any suitable bonding method to form an elongated tubular member 22 having a first end portion 22a that is folded upon itself in the manner illustrated in FIG. 1 and sealed by any appropriate bonding method to form a precursor apparatus 24 having a bread receiving chamber 26 (FIG. 4). As indicated in FIGS. 1 and 4 of the drawings, bread receiving chamber 26 has an open end 27. A suitable adhesive that can be used in carrying out the aforementioned bonding methods is available from various sources including the Warren Adhesives Company of Mobile, Ala.

[0026] An important aspect of the apparatus of the invention resides in the fact that the composite sheet 20 is provided with a multiplicity of spaced apart through perforations 30 that allow the bread receiving chamber 26 to breathe. Another important aspect of the apparatus concerns the provision in the outer sheet 16 of a generally oval-shaped viewing opening, or window 32 that allows the customer to view the bread that is disposed within the sealed package. The novel manner in which the package of the invention is sealed will presently be described. Still another important feature of the apparatus of the invention resides in the provision of a plurality of transversely spaced apart, lengthwise fold lines 36, the purpose of which will presently be described (see FIG. 7).

[0027] One form of the method of making the novel combination bread baking and packaging apparatus of the invention will now be described. This novel method comprises the steps of providing an inner layer of oven-able and heat sealable polyester sheet 18, providing an outer layer of paper-like material 16 having a viewing opening, and then bonding together the inner and outer layers to form a substantially rectangular composite sheet 20 having opposing lengthwise edges 20a and 20b and a plurality of transversely spaced apart lengthwise fold lines 36. Following the construction of the composite sheet 20, a multiplicity of perforations are formed through the composite sheet. This done, the opposing length-

wise edges of the composite sheet are suitably bonded together to form a tubular member 22 having first and second open ends.

[0028] The next step in the construction of the packaging apparatus is to fold the tubular member inwardly along the lengthwise fold lines 36 to form a generally flattened tubular member having first and second open ends. This done, the flattened tubular member is folded over on itself proximate its first open end to form a flattened tubular member having a folded end portion 22a, the general configuration of which is shown in FIG. 1 of the drawings. Finally, to render the apparatus ready for use, the folded end portion is appropriately sealed by any suitable bonding method such as a method using an adhesive such as that obtainable from various sources including the Warren Adhesives Company.

[0029] One form of the method of the invention for using the ready for use apparatus shown in FIG. 1 of the drawings, for baking and packaging a loaf of bread, comprises the steps of first providing a combination bread baking and packaging apparatus comprising an outer sheet of baking paper 16 having an inner surface 16a and an inner oven-able and heat sealable polyester sheet 18 adhesively bonded to and coextensive with said inner surface of said outer sheet to form a composite sheet 20 having opposite edges 20a and 20b. The opposite edges of the composite sheet are interconnected to form an elongated tubular member that includes a first end portion 22a that is folded upon itself and sealed to form a precursor apparatus of the character shown in FIG. 1 of the drawings. The next step in this form of the method of the invention is to insert a partially baked loaf of bread into the bread receiving chamber 26 of the precursor apparatus. This done, the open end of the bread receiving chamber is folded upon itself in the manner indicated by the arrow 33 shown in FIG. 4 of the drawings to enclose the partially baked loaf of bread within the bread receiving chamber. The ready-to-heat package that is thusly formed is then placed in a suitable oven and heated to an elevated temperature to finish baking the partially baked loaf of bread and to simultaneously seal the folded end 35 (FIG. 5) of said ready-to-heat package. Following this step, the sealed package can be placed on the store shelves with the viewing window 32 in a position such that the potential customer can view the baked loaf of bread that is now completely sealed within the novel packaging apparatus. Due to the novel composition of the packaging apparatus and the provision of the venting perforations, the freshly baked loaf of bread will remain fresh for a substantial length of time.

[0030] Having now described the invention in detail in accordance with the requirements of the patent statutes, those skilled in this art will have no difficulty in making changes and modifications in the individual parts or their relative assembly in order to meet specific requirements or conditions. Such changes and modifications may be made without departing from the scope and spirit of the invention, as set forth in the following claims.

1. A combination bread baking and packaging apparatus comprising:

- (a) an outer sheet of baking paper capable of withstanding a temperature sufficient to bake bread said outer sheet having an inner surface;
- (b) an inner polyester sheet adhesively bonded to and coextensive with said inner surface of said outer sheet to form a composite sheet having opposite edges, said opposite edges being interconnected to form an elongated tubular member having a first end portion, said first end portion

being folded upon itself and sealed to form a precursor apparatus having a bread receiving chamber having an open end.

2. The combination as defined in claim 1 in which following the insertion into said bread receiving chamber of said precursor apparatus of a partially baked loaf of bread, said open end of said bread receiving chamber of said precursor apparatus is folded upon itself and sealed by heating said precursor apparatus to an elevated temperature.

3. The combination as defined in claim 1 in which said composite sheet is provided with a multiplicity of perforations.

4. The combination as defined in claim 1 in which said outer sheet of baking paper is provided with a viewing opening.

5. The combination as defined in claim 1 in which said outer sheet of baking paper is capable of withstanding a temperature of at least 350° Fahrenheit.

6. A method of forming a combination bread baking and packaging apparatus, comprising the steps of:

- (a) providing an inner layer of oven-able and heat sealable polyester sheet;
- (b) providing an outer layer of paper-like material;
- (c) bonding together said inner and outer layers to form a substantially rectangular composite sheet having opposing lengthwise edges and transversely spaced apart lengthwise fold lines;
- (d) forming a multiplicity of perforations through said substantially rectangular composite sheet;
- (e) securing together said opposing lengthwise edges of said composite sheet to form a tubular member having first and second open ends;
- (f) folding said tubular member inwardly along said lengthwise fold lines to form a flattened tubular member having first and second open ends;

(g) folding said flattened tubular member over itself proximate said first open end to form a flattened tubular member having a folded end portion; and

(h) sealably closing said folded end portion.

7. The method as defined in claim 6 including the further step of forming a viewing opening in said outer layer of paper-like material.

8. A method of heating and packaging a loaf of bread comprising the steps of:

(a) providing a combination bread baking and packaging apparatus comprising an outer sheet of baking paper having an inner surface and an inner oven-able and heat sealable polyester sheet adhesively bonded to and coextensive with said inner surface of said outer sheet to form a composite sheet having opposite edges, said opposite edges being interconnected to form an elongated tubular member having a first end portion, said first end portion being folded upon itself and sealed to form a precursor apparatus having a bread receiving chamber having an open end;

(b) inserting a partially baked loaf of bread into said bread receiving chamber of said precursor apparatus;

(c) folding said open end of said bread receiving chamber upon itself to enclose said partially baked loaf of bread within said bread receiving chamber to form a ready to heat package having a folded end; and

(d) heating said ready to heat package to an elevated temperature to finish baking said partially baked loaf of bread and to simultaneously seal said folded end of said ready to heat package.

9. The method as defined in claim 8 in which said outer sheet of baking paper of said combination bread baking and packaging apparatus is provided with a viewing opening.

10. The method as defined in claim 8 in which said composite sheet of said combination bread baking and packaging apparatus is provided with a multiplicity of perforations.

* * * * *