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8 Attorneys for Plaintiff,
9 WINTERBORNE, INC.

FILED
12 MAR 22 PM 1:49
CLERY U.S. DISTRICT COURT
CENTRAL DIST. OF CALIF.
LOS ANGELES

10 UNITED STATES DISTRICT COURT
11 CENTRAL DISTRICT OF CALIFORNIA

12 WINTERBORNE, INC., a California
13 corporation,

14 Plaintiff,

15 vs.

16 SEAGATE TECHNOLOGY, LLC, a
17 Delaware corporation; FUJIFILM
18 NORTH AMERICA CORPORATION,
19 a New York corporation, ROKU, INC.,
20 a Delaware corporation, and VIZIO,
21 INC., a California corporation,

22 Defendants.

SACV12 456 AG (RNBx)
Case No.

**COMPLAINT FOR PATENT
INFRINGEMENT; DEMAND
FOR JURY TRIAL**

23 Plaintiff, Winterborne, Inc. ("Winterborne") alleges:

24 1. This is an action for patent infringement, brought under the patent
25 laws of the United States, 35 U.S.C. § 1271 et seq.

26 **I. PARTIES**

27 2. Plaintiff Winterborne is a California corporation, having its principal
28 place of business at 20650 Prairie Street, Chatsworth, CA 91311.

3. Defendant Seagate Technology, LLC ("Seagate"), is a Delaware
corporation having a place of business at 920 Disc Drive, Scotts Valley, CA
95066-4544.

1 4. Fujifilm North America Corporation, is a New York corporation
2 having a place of business at 700 Summit Lake Drive, Valhalla, New York
3 10595-1356.

4 5. Defendant Vizio, Inc. is a California corporation having a place of
5 business at 39 Tesla, Irvine, California, 92518.

6 6. Defendant Roku, Inc. is a Delaware corporation, having a place of
7 business at 12980 Saratoga Avenue, Suite D, Saratoga, California 95070-4659.

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9 **II. JURISDICTION AND VENUE**

10 7. This is an action for patent infringement brought under the patent
11 laws of the United States, 35 U.S.C. § 271, *et seq.* Jurisdiction of the patent
12 infringement claims is conferred on this Court under 28 U.S.C. §§ 1331 and
13 1338(a).

14 8. This Court has personal jurisdiction over the Defendant under Fed.
15 R. Civ. P. 4(k)(1)(A).

16 9. Venue is proper in this district under 28 U.S.C. § 1391 in that the
17 unlawful activities of each defendant as herein alleged were performed in whole
18 or in part in this district and in that each Defendant does business in this district.

19 **COUNT ONE - PATENT INFRINGEMENT**

20 10. Plaintiff Winterborne is a packaging manufacturer in the United
21 States. Plaintiff is the owner of U.S. Patent No. 7,726,480, entitled "Display Pack
22 and Packaging Method and Apparatus" ("the '480) patent). The '480 patent
23 discloses, *inter alia*, packaging products comprising a clear plastic container
24 secured between a pair of overlying corrugated cardboard sheets that are crushed
25 around their periphery to form an aesthetically pleasing and tamper-resistant seal.
26 A true and correct copy of the '480 patent is attached hereto as Exhibit A.

27 11. On information and belief, each defendant sells and offers for sale
28 throughout the United States packaging products comprising a clear plastic

1 container secured between a pair of overlying corrugated cardboard sheets that
2 are crushed around their periphery to form an aesthetically pleasing and tamper-
3 resistant seal ("Accused Packaging Products"). The Accused Packaging Products
4 are being sold and offered for sale in commerce within this district.

5 12. Defendants' sale and offer for sale of the Accused Packaging
6 Products constitute infringement of the '480 patent under 35 U.S. C. § 271.

7 13. Plaintiff has suffered and continues to suffer substantial damages as
8 a direct result of the infringement of each defendant. Under 35 U.S.C. § 284,
9 Plaintiff is entitled to damages adequate to compensate for the infringement,
10 including lost profits, but not less than a reasonable royalty.

11 14. On information and belief, each defendants' infringement of the '480
12 patent is and has been willful and deliberate. Plaintiff is therefore entitled to
13 enhanced damages under 35 U.S.C., § 284. Plaintiff also requests that the Court
14 hold this to be an exceptional case.

15 15. Plaintiff will be irreparably harmed if defendants' patent
16 infringement continues. The balance of equities favors an injunction in favor of
17 Plaintiff. Plaintiff therefore requests preliminary and permanent injunctive relief
18 prohibiting each defendant and its officers, employees, agents, affiliates, and
19 anyone else in active concert with each, from making, using, importing,
20 exporting, selling or offering for sale the Accused Packaging Products, or taking
21 any other actions that would otherwise infringe the '480 patent.

22 WHEREFORE, Plaintiff respectfully requests that this Court enter
23 judgment:

- 24 1. That each defendant has infringed the '480 patent;
- 25 2. That the '480 patent is not invalid and is enforceable;
- 26 3. Entering a preliminary and, ultimately, a permanent injunction
27 restraining defendant and its officers, employees, agents, affiliates, and anyone
28 else in active concert with it, from making, using, importing, exporting, selling,

1 offering for sale or taking any other actions that would directly or indirectly
2 infringe the '480 patent;

3 3. Entering an award of enhanced damages under 35 U.S.C. § 284;

4 4. That this case is exceptional, and that Plaintiff therefore recover
5 reasonable costs, expenses, and attorney's fees, under 35 U.S.C. § 285;

6 5. That Plaintiff recover such other and further relief as this court may
7 deem appropriate.

8

9 DATED: March 21, 2012

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

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By 
David A. Dillard

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Attorneys for Plaintiff,
WINTERBORNE, INC.

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JURY DEMAND

Plaintiff requests a jury trial of all issues in this action so triable.

DATED: March 21, 2012

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By 

David A. Dillard

Attorneys for Plaintiff,
WINTERBORNE, INC.

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EXHIBIT A



US007726480B2

(12) **United States Patent**
Nazari

(10) **Patent No.:** US 7,726,480 B2
(45) **Date of Patent:** Jun. 1, 2010

(54) **DISPLAY PACK AND PACKAGING METHOD AND APPARATUS**

3,695,419 A * 10/1972 Packert et al. 206/470

(75) **Inventor:** Joseph Nazari, Glendale, CA (US)

(Continued)

(73) **Assignee:** Winterborne, Inc., Chatsworth, CA (US)

FOREIGN PATENT DOCUMENTS

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 491 days.

CN 2269414 Y 12/1997

(21) **Appl. No.:** 11/374,769

(Continued)

(22) **Filed:** Mar. 14, 2006

OTHER PUBLICATIONS

(65) **Prior Publication Data**
US 2007/0062836 A1 Mar. 22, 2007

International Search Report and Written Opinion of the ISA, Jul. 10, 2007.

(Continued)

Related U.S. Application Data

(60) Provisional application No. 60/711,024, filed on Aug. 24, 2005.

Primary Examiner—J. Gregory Pickett
Assistant Examiner—Andrew Perreault
(74) *Attorney, Agent, or Firm*—Christie, Parker & Hale, LLP

(51) **Int. Cl.**
B65D 81/24 (2006.01)

(57) **ABSTRACT**

(52) **U.S. Cl.** 206/461; 206/462

(58) **Field of Classification Search** 206/461-471,
206/703, 705, 484, 531; 428/59, 182 184;
108/51.3

See application file for complete search history.

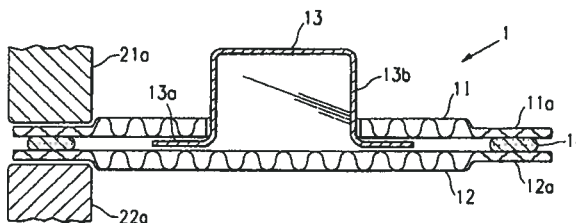
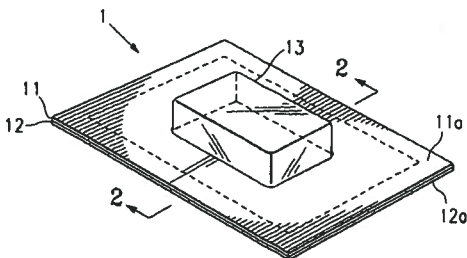
A display pack for a consumer product is made of two sheets of corrugated cardboard and a clear plastic container with a flat insertion portion sandwiched between the cardboard sheets. The two cardboard sheets are adhered together in a peripheral area of the package by a heat-sensitive adhesive, and the corrugations of the cardboard sheets are crushed and flattened in the peripheral area. To seal the package, the peripheral area of the two cardboard sheets is subject to sufficient pressure to crush the corrugations inside the cardboard sheets and flatten them in that area. Heat is applied to the outer side of the cardboard sheets in the peripheral area and conducted to the adhesive material between the two sheets to activate the adhesive material. A sealer machine with a heated sealing press or parallel sets of heated rollers may be used to carry out the sealing process.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 2,323,746 A * 7/1943 Woolf et al. 206/484
- 2,884,127 A 4/1959 Neary
- 2,993,590 A 7/1961 Denton
- 3,054,503 A * 9/1962 Hartman, Jr. et al. 206/531
- 3,062,366 A 11/1962 Palmer
- 3,195,284 A 7/1965 Crane, Jr.
- 3,203,542 A 8/1965 Lightner et al.
- 3,303,930 A 2/1967 Hyland
- 3,327,843 A 6/1967 O'Meara et al.
- 3,561,668 A * 2/1971 Bergstrom 229/123.1
- 3,587,848 A 6/1971 Froehlig

14 Claims, 5 Drawing Sheets



US 7,726,480 B2

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U.S. PATENT DOCUMENTS

3,924,747 A * 12/1975 Gerner 206/531
 3,939,979 A * 2/1976 Neumayer 206/461
 4,261,462 A 4/1981 Wysocki
 4,435,237 A * 3/1984 Hoelzinger 428/59
 4,657,611 A * 4/1987 Guins 428/186
 4,981,213 A 1/1991 Dillon
 5,131,539 A 7/1992 Karita et al.
 5,522,505 A 6/1996 Giovannone
 5,704,481 A * 1/1998 Lutz 206/484
 6,053,321 A * 4/2000 Kayser 206/470
 6,085,904 A * 7/2000 Perdue, Jr. 206/484
 6,308,832 B1 * 10/2001 Pirro et al. 206/469
 6,364,113 B1 * 4/2002 Faasse et al. 206/469
 6,691,870 B1 2/2004 Palm et al.
 6,719,139 B1 * 4/2004 Foos et al. 206/462
 6,736,267 B2 * 5/2004 Schamante 206/705
 6,739,453 B1 * 5/2004 Mazurek 206/461
 7,051,876 B2 * 5/2006 Grosskopf 206/462

7,207,441 B2 4/2007 Ritter
 7,401,702 B2 * 7/2008 Hession 206/531
 2003/0217949 A1 11/2003 Schamante
 2004/0251175 A1 12/2004 Adams et al.
 2006/0201843 A1 9/2006 Kellar et al.
 2006/0207909 A1 * 9/2006 Tada et al. 206/461
 2008/0029417 A1 2/2008 Begim

FOREIGN PATENT DOCUMENTS

EP 0439728 A2 8/1991
 FR 2757489 A1 6/1998
 GB 695708 A 8/1953

OTHER PUBLICATIONS

European Search Report in counterpart application EP 06801817.5, dated Jun. 26, 2008.
 Chinese Office Action in counterpart application CN 2006800003341.8, dated Aug. 7, 2009.

* cited by examiner

EXHIBIT A
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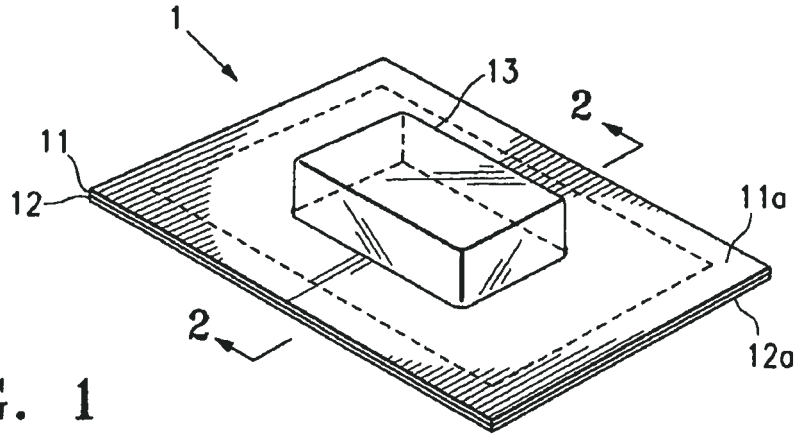


FIG. 1

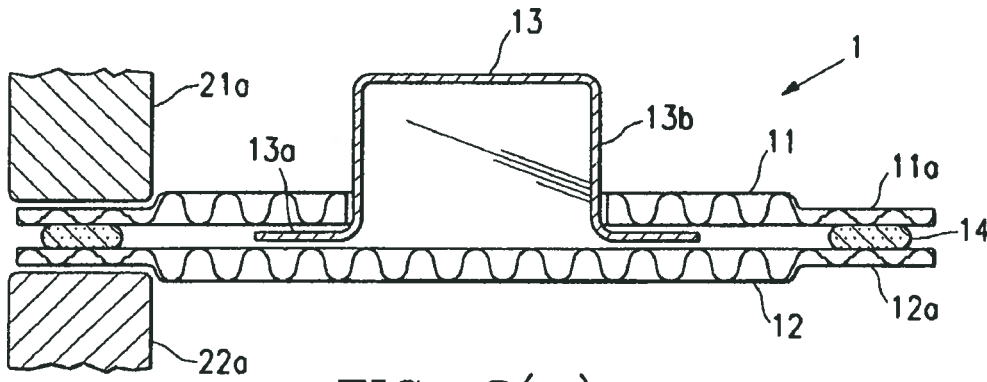


FIG. 2(a)

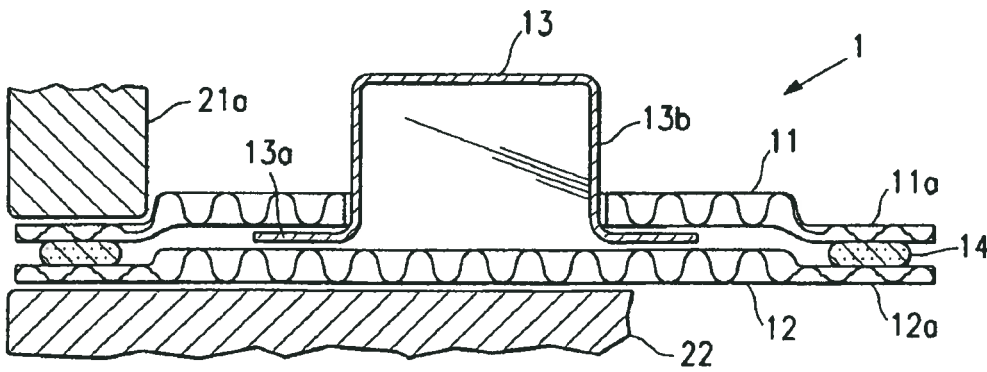


FIG. 2(b)

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PAGE B

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FIG. 3(a)

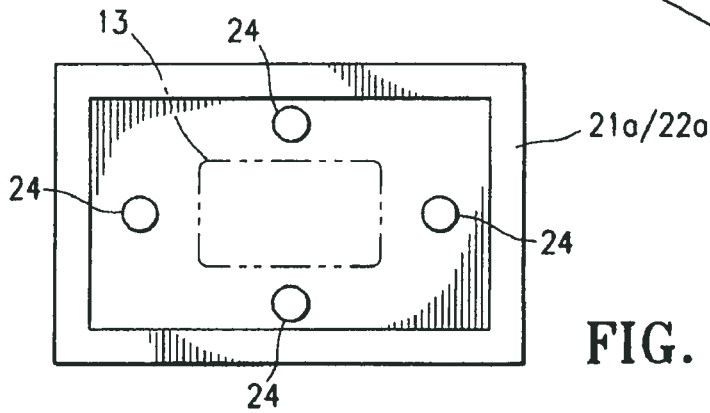
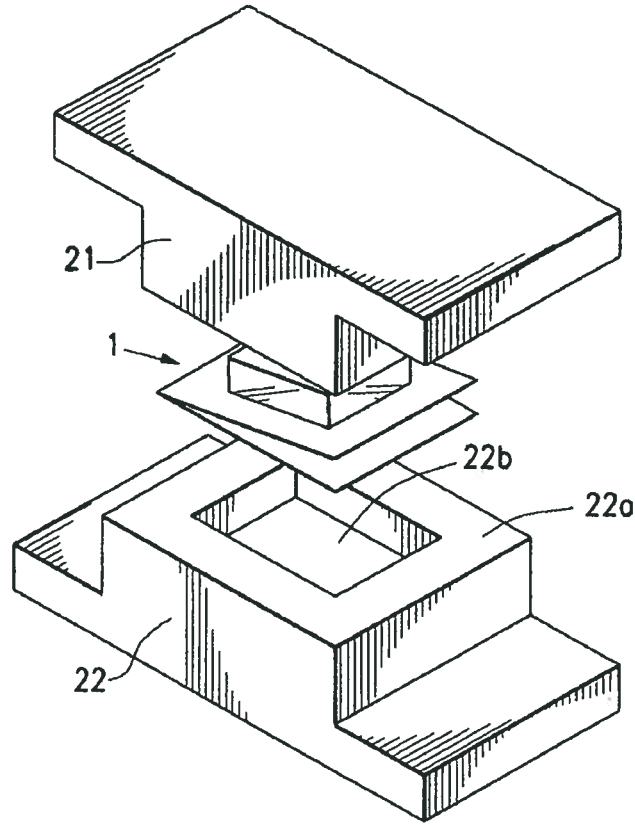
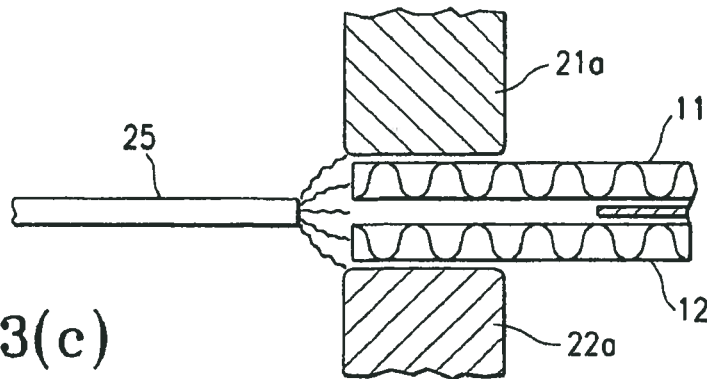


FIG. 3(b)

FIG. 3(c)



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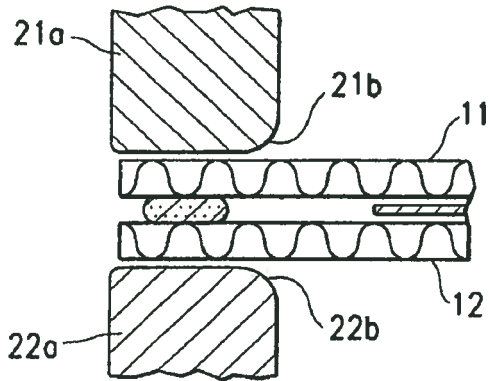


FIG. 4(a)

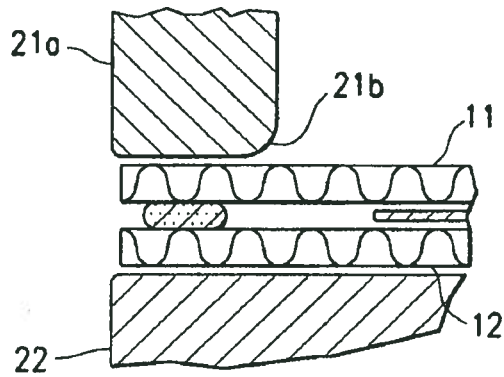


FIG. 4(b)

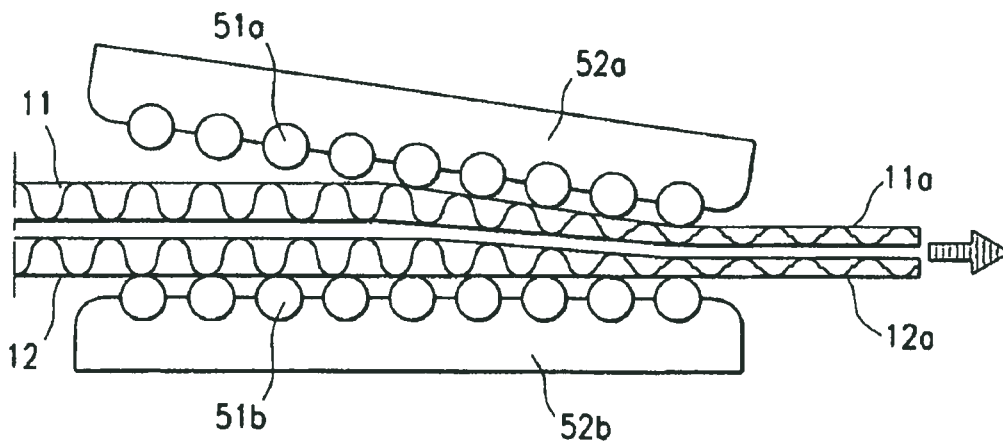


FIG. 5(a)

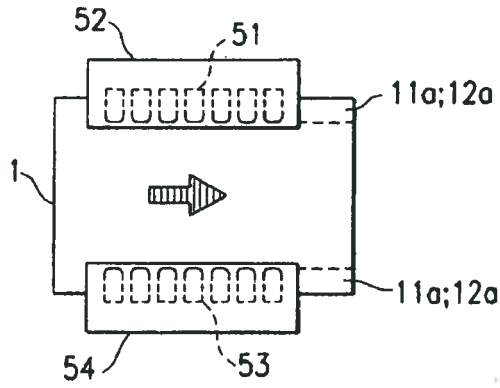


FIG. 5(b)

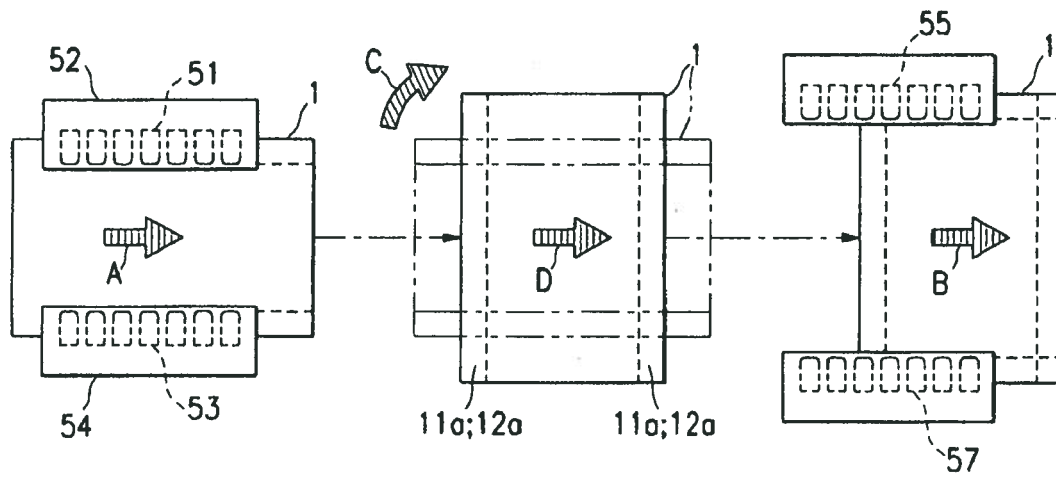


FIG. 5(c)

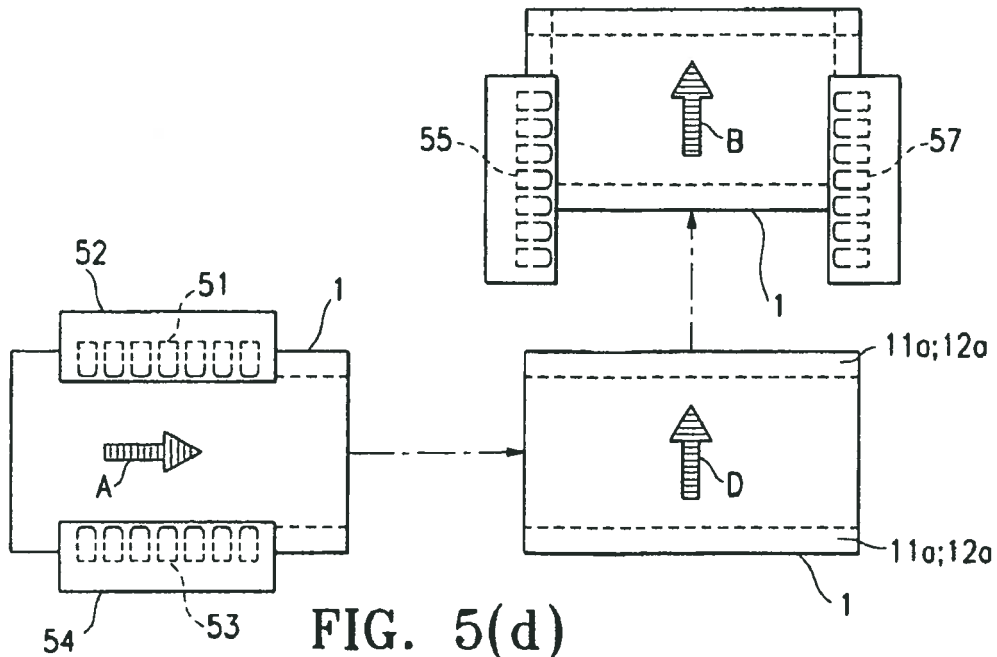


FIG. 5(d)

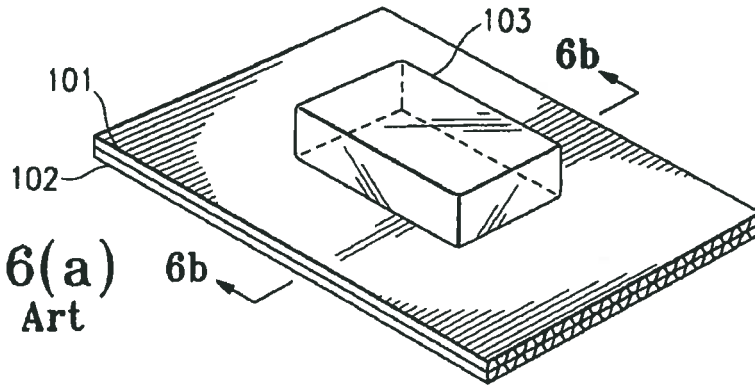


FIG. 6(a)
Prior Art

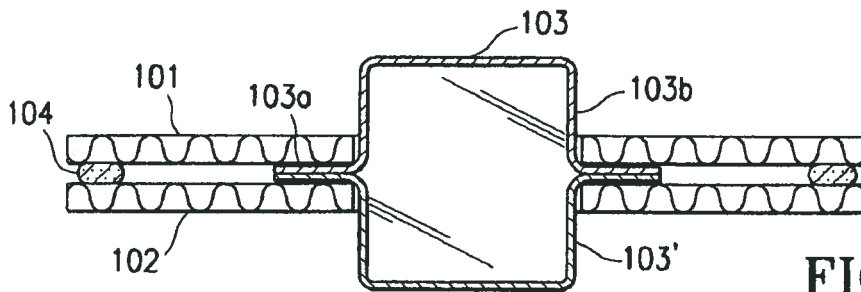


FIG. 6(b)
Prior Art

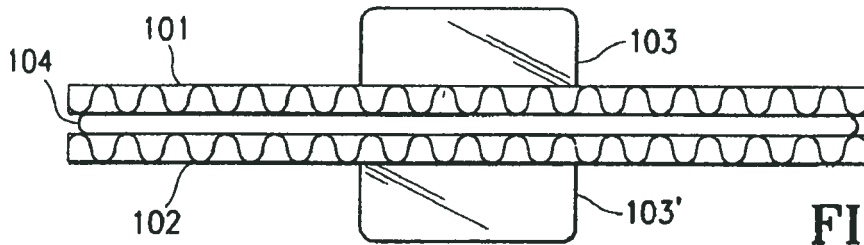


FIG. 6(c)
Prior Art

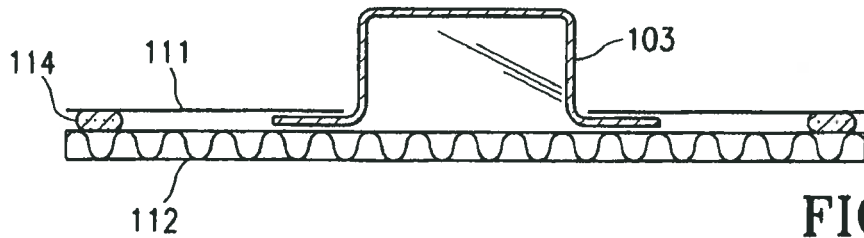


FIG. 7(a)
Prior Art

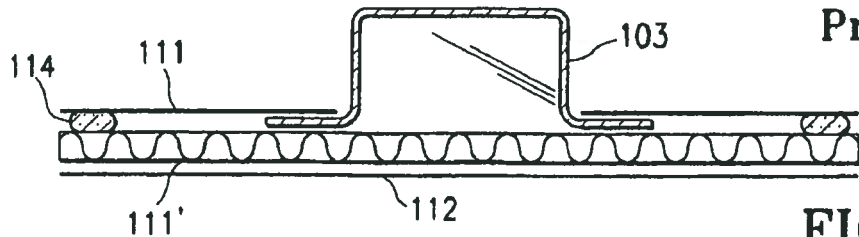


FIG. 7(b)
Prior Art

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DISPLAY PACK AND PACKAGING METHOD AND APPARATUS

The present application is a continuation-in-part of U.S. Provisional Application No. 60/711,024, filed Aug. 24, 2005. 5

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to product packaging, and in particular, it relates to packaging for products suitable for store merchandising.

2. Description of the Related Art

A first type of conventional packaging for consumer products, shown in FIGS. 6(a) and 6(b) (which is a cross-sectional view along the direction of arrows 2-2), is made of two sheets of corrugated cardboard 101 and 102, and a clear plastic container 103 having a flat insertion portion 103a and a chamber portion 103b. The insertion portion is sandwiched between the two cardboard sheets 101 and 102, and the chamber portion 103b protrudes from the plane of the cardboard sheets via a cut (opening) on one cardboard sheet 101 and is used to hold the product inside. A second plastic container 103' may be provided and protrudes from the other cardboard sheet 102 to form a continuous space for hold the product. The two cardboard sheets 101 and 102 are adhered together around the periphery with an adhesive 104. A commonly used adhesive is a hot melt glue. The front and back sides of the package are typically printed with product information and other information. (In these drawings, the spaces between the various layers are exaggerated to illustrate the relationship among the various layers.) One disadvantage of this type of conventional packaging is that the hot melt glue is typically applied by hand, and thus the seal quality is often difficult to control due to, for example, the varying drying speed of the glue, the placement of the glue, etc. Another disadvantage is that the corrugation of the cardboard is visible at some of the side edges of the finished packaging (see FIG. 6(c), a view of the bottom edge of the packaging of FIG. 6(a)), making the packaging aesthetically unappealing.

A second type of conventional packaging, shown in FIG. 7(a), is similar to the first type shown in FIGS. 6(a)-(c), but uses one sheet of corrugated cardboard 112 (typically the back sheet) and one flat sheet of paper 111 (typically the front sheet, i.e., on the side of the product chamber). Sometimes two flat sheets of paper 111 and 111' are used, one on each side of the corrugated cardboard (see FIG. 7(b)). The cardboard sheet 112 and the flat paper sheet 111 are adhered together by a heat-sensitive adhesive 114 to seal the package. The heat sensitive adhesive is pre-applied to the cardboard sheet and/or the flat paper sheet, and heat is applied from the paper side, conducted to the adhesive via the paper to activate the adhesive. Heat sensitive adhesives have not been used in the first type of packaging because corrugated cardboard sheets are poor heat conductors, and heat applied to the outer side of the cardboard cannot easily reach the area between the two cardboard sheets where the heat adhesive material would be applied.

A disadvantage of the second type of conventional packaging is that it sometimes lacks sufficient structural strength. Display packs are often transported in an assembly where a plurality of display packs are stood on their sides in a container with half-height walls (i.e. walls not as high as the packs themselves), and wrapped together to form a box-shaped bundle. When two or more of such bundles are stacked on top of each other, the weight of the top one is supported directly by the packs in the bottom bundle. The packs there-

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fore must have sufficient structural strength and rigidity to prevent them from bending. The lack of physical strength also makes it difficult to make larger packages (e.g. larger than 10 by 15 inches), or to pack heavier items.

SUMMARY OF THE INVENTION

Accordingly, the present invention is directed to a display pack and packaging method that substantially obviates one or more of the problems due to limitations and disadvantages of the related art.

Additional features and advantages of the invention will be set forth in the descriptions that follow and in part will be apparent from the description, or may be learned by practice of the invention. The objectives and other advantages of the invention will be realized and attained by the structure particularly pointed out in the written description and claims thereof as well as the appended drawings.

To achieve these and other advantages and in accordance with the purpose of the present invention, as embodied and broadly described, the present invention provides a display pack for a product including a first and a second corrugated cardboard sheet, at least one cardboard sheet defining at least one opening; at least one container having a flat insertion portion and a chamber portion for holding the product, the insertion portion being sandwiched between the two cardboard sheets and the chamber portion protruding from a plane of the cardboard sheets via the opening; and an adhesive material between the first and the second cardboard sheets in at least a peripheral area of the two cardboard sheets to join the two cardboard sheets together, wherein the first and second cardboard sheets are crushed in the peripheral area with reduced air gaps in the corrugations. The adhesive material may be a heat-sensitive adhesive material.

In another aspect, the present invention provides a method of making a display pack including the steps of providing a first and a second corrugated cardboard sheet, at least one cardboard sheet defining at least one opening; providing at least one container having a flat insertion portion and a chamber portion for holding the product; placing the insertion portion between the two cardboard sheets so that the chamber portion protrudes from a plane of the cardboard sheets via the opening; applying an adhesive material between the first and second cardboard sheets in a peripheral area of the cardboard sheets; and applying a pressure to the peripheral area of the two cardboard sheets to crush the corrugations inside the cardboard sheets in the peripheral area. The adhesive material may be a heat-sensitive adhesive material, in which case the method further includes applying heat to the heat-sensitive adhesive to activate it.

In another aspect, the present invention provides a device for sealing a display pack, which includes an upper and a lower platen, at least one of the platens having a rim and a recessed central area; and a drive mechanism for driving the platens, the drive mechanism capable of applying a force of 25 tons or more at the platens. The platens may be heated.

The present invention provides another device for sealing a display pack, which includes a transport mechanism for transporting a package; one or more sets of rollers disposed along a path of the transport mechanism, each set of rollers including an upper row and an opposing lower row of rollers, the upper and lower rows of rollers disposed at a tapering angle with respect to each other; and a press for applying a force to at least one of the upper and lower rows of each set of rollers. The device may include two or four sets of rollers. The rollers may be heated.

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It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory and are intended to provide further explanation of the invention as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view illustrating a display pack according to an embodiment of the present invention.

FIGS. 2(a) and 2(b) schematically illustrate cross-sectional views of the display pack of FIG. 1 along the line 2-2 with platens of a sealing press.

FIG. 3(a) schematically illustrates parts of a sealing press used to seal a package according to an embodiment of the present invention.

FIG. 3(b) is a schematic plan view of a platen of a sealing press according to another embodiment of the present invention.

FIG. 3(c) is a schematic cross-sectional view of portions of another sealing press according to another embodiment of the present invention.

FIG. 4 is a schematic cross-sectional view showing portions of a sealing press according to another embodiment of the present invention.

FIGS. 5(a) and 5(b) are schematic cross-sectional views showing rollers of a sealer machine according to another embodiment of the present invention.

FIGS. 5(c) and 5(d) schematically illustrate sealer machines employing rollers according to other embodiments of the present invention.

FIGS. 6(a)-(c) illustrate a package made according to a first conventional packaging technique.

FIGS. 7(a) and 7(b) illustrate a package made according to a second conventional packaging technique.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 shows a display pack according to an embodiment of the present invention which has an overall structure similar to that of a conventional packaging shown in FIG. 6(a) but is constructed differently. FIGS. 2(a) and 2(b) are cross-sectional views of the display pack of FIG. 1 along the line 2-2 (the differences between FIGS. 2(a) and 2(b) will be explained later). As shown in FIGS. 1, 2(a) and 2(b), the package 1 is made of two sheets of corrugated cardboard 11 and 12 and a plastic container 13 (preferably made of a clear plastic material such as PET) having a flat insertion portion 13a and a chamber portion 13b. The insertion portion is sandwiched between the two cardboard sheets 11 and 12, and the chamber portion 13b protrudes from the plane of the cardboard sheets via a cut on one cardboard sheet 11 and is used to hold the product inside. Although only one is shown in FIGS. 1, 2(a) and 2(b), a package may contain one or more plastic containers, and they may protrude from either or both of the cardboard sheets and may be located at desired positions depending on the product being held in the package. Further, a plastic container may be a single piece with multiple chambers. The container may be made of a plastic or any other suitable material, and can be of any suitable thickness, color, etc. The front and back sides of the package may be printed with product information and other information. The information may be printed directly on the cardboard, or printed on a litho sheet which is then laminated onto the cardboard. One to six colors can be printed. In FIGS. 2(a) and 2(b), the corrugations are shown as being parallel to the vertical direction in FIG. 1, which is preferably the vertical

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direction when the display pack is stood on its side when being displayed or transported. Of course, the corrugation can be in other directions. The corners of the cardboard sheets may be square, rounded, or a combination of both. The two corrugated cardboard sheets 11 and 12 are adhered together at the periphery of the package by a heat-sensitive adhesive 14 to seal the package. The heat-sensitive adhesive is preferably pre-applied to the inner sides of one or (preferably) both cardboard sheets 11 and 12 prior to the sealing operation, but it may also be applied during the sealing operation. The adhesive may be applied to the entire sheet, or a periphery, or any desired areas of the sheet. In one embodiment, the cardboard sheets 11 and 12 are formed of one cardboard sheet folded over, the cardboard sheet being pre-coated with an adhesive on the entire surface.

To seal the package, the peripheral areas 11a, 12a of the two overlaying cardboard sheets are subject to a sufficient amount of pressure to crush the corrugations inside the cardboard sheets and flatten them in that area. Heat is applied, either simultaneously with or subsequent to the application of pressure, to the outer side of either one or both cardboard sheets in the peripheral area. Because the corrugations inside the cardboard are crushed and the air gaps are substantially eliminated, the crushed cardboard becomes a better heat conductor. Sufficient heat can be conducted from the outer side to the inner side where the heat-sensitive adhesive has been applied to activate the adhesive and seal the package. In one preferred embodiment, the width of the crushed peripheral areas is approximately 0.5 inches. Any suitable sealing width may be used, but it is desirable that the adhesive not be adhered to the insertion portion of the container, so that the container can be easily removed from the packaging for recycling. This is desirable because it facilitates recycling of the container. In addition, the container may be made as a reusable container, and easy removal may facilitate re-use in such a case.

Many types of sealer machines may be used to carry out the sealing process, some of which are described below. The first is a sealer machine with a heated sealing press. As shown in FIG. 3(a) (perspective view), the sealing press has an upper platen 21 and a lower platen 22. The lower platen 22 is shown to have a rim 22a with a heated surface, a recessed central portion 23 that may accommodate the protrusions 13b of the package being sealed. The upper platen 21 similarly has a heated rim 21a and a recessed central portion (not shown). The rims have a width determined by the desired width of the crushed peripheral areas of the finished package. Alternative configurations of the sealing press may be used. For example, one of the platens may have a flat surface without a recess, or have a rim wider than the rim of the other platen. If both the upper and lower platens have rims of similar widths, the crushed peripheral areas of the cardboard sheets may appear depressed on both sides (see FIG. 2(a)). If one platen is flat or has a rim wider than the rim of the other platen, the crushed peripheral areas of the cardboard sheets may appear depressed only on the side of the narrower rim (see FIG. 2(b)). In the platen configuration of FIG. 2(a), one or both rim portions 21a and 22a may be heated. In the configuration of FIG. 2(b), preferably only the narrower rim 21a is heated because it may be undesirable for areas other than the sealed peripheral areas to be heated. Heating from both sides may be more desirable as it reduces the heating time and speeds up the sealing operation.

Preferably, the force or pressure applied by the platens is such that the cardboard sheets are crushed to up to approximately 50% of their original thickness. Generally speaking, within certain limits, higher pressure results in thinner

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crushed cardboard sheets, which in turn results in increased heat transfer rate and therefore reduced heat application time required to properly activate the adhesive. The optimum pressure may also depend on the type of the cardboard used. The temperature of the heated surface may be approximately from 100 to 500 degrees F., which is a typical temperature used in the second conventional packaging technique. Those of ordinary skill in the art will be able to find acceptable or optimum pressure, temperature and process time conditions for the particular cardboard used without undue experimentation.

In one particular example, the package uses two sheets of 200 lb test E-flute cardboard coated with a heat sensitive blister card coating as an adhesive, has a size of 10 inches by 15 inches and a sealed width of 0.5 inches. The sealing press has a rim on both platens and both surfaces are heated to a temperature of 300 degrees F. The force on the platens is 25 tons. The pressure and heat was applied simultaneously for 3 seconds.

The sealer machine suitable for the above application may be a machined used to seal a conventional package of the second type (as shown in FIG. 7(a)), modified so that the platens can apply sufficient pressures to crush the cardboard. The machine has a pneumatically driven upper and lower toggle mechanism to create the pressure. There are four hydraulic units located under four lower posts which are used as an additional means of raising the press to maximize the pressure. The force on the platens is adjustable. In one example, the force is approximately between 10 and 75 tons. The upper and lower seal heat is generated with the use of multiple cartridge heaters controlled through solid state relays. The temperature of the upper surface is adjustable from 0 to 450 degrees F.; the temperature of the lower surface is fixed at 450 degrees F. Additionally, there are chain driven elevators used to move the fixture that holds the packages during assembly and sealing back to the initial start position.

In addition to the peripheral areas, the corrugated cardboards 11 and 12 may be crushed and sealed in certain interior areas (spot sealed) to provide additional security, especially for larger packages and packages with multiple separate plastic containers. To achieve spot sealing, as shown in FIG. 3(b) (plan view of a platen), a sealer press is provided with a number of posts 24 inside the area surrounded by the rim portion 21a and/or 22a. Opposing posts are provided if both platens have a recessed central portion; alternatively, if one platen is flat, the other platen is provided with the posts 24. The posts are pressured and heated in the same way as the rim portion.

A second type of sealer machine useful for carrying out the sealing process is a sealing press similar to the one described above, but instead of heated platen(s), hot air or a hot steam is applied to the heat-sensitive adhesive to heat it. The hot air or steam is supplied from the side by a tube or pipe 25 as shown in FIG. 3(c) (cross-sectional view). Since a corrugated cardboard typically contains an adhesive to hold its various layers together, it is possible that the hot air or hot steam will melt this adhesive. Thus, after crushing, the layers of the crushed corrugated board will be adhered together by this adhesive, resulting in increased structural integrity of the seal. As an alternative, heated platen(s) and hot air/hot steam may be used in combination.

FIGS. 4(a) and 4(b) illustrate an alternative embodiment of the sealing press (either heated or unheated). In this embodiment, the platens are similar to those shown in FIGS. 2(a), 2(b), 3(a) and 3(c), but the rim portions 21a and 22a have rounded or chamfered edges 21b and 22b on the inside edges, i.e. the edges that correspond to the border between the crushed and uncrushed portions of the package. The rounded

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shape of the edges 21b and 22b avoids forming a sharp line between the crushed and uncrushed portions on the package and avoids potentially tearing or cutting the surface sheet of the cardboard. Desirable radius of the rounded edges 21b and 22b depends on the thickness of the corrugated boards, and is preferable about 1/8 to 1 inch. Note that FIGS. 4(a) and 4(b) illustrate the stage of the platens before crushing occurs.

A third type of sealer machine according to an embodiment of the present invention is shown in FIGS. 5(a)-(d). Instead of a press, parallel sets of rollers are used to seal the package in this type of machine. FIG. 5(a) is a schematic cross sectional view along a side of a package to illustrate the side being sealed by a set of rollers of the sealer machine. The package contains two sheets of corrugated cardboard 11 and 12 with an adhesive (not shown) applied between the two sheets in the peripheral areas. The set of rollers of the sealer machine has opposing upper and lower rows of rollers 51a and 51b mounted on respective roller blocks 52a and 52b. The upper and lower rows of rollers 51a and 51b are disposed at a tapering angle relative to each other such that gap between opposing rollers is slightly greater than the thickness of two sheets of uncrushed corrugated cardboard at the entrance end (the left hand side in FIG. 5(a)), and is reduced to the desired thickness of the two sheets of crushed corrugated cardboard at the exit end. The angle and the gap are preferably adjustable. FIG. 5(a) shows the lower row of rollers 51b as being horizontal, but other designs are possible; for example, the upper row of rollers 51a may be horizontal or neither row may be horizontal. Alternatively, a front segment of the two rows of rollers may be disposed at a tapering angle and a back segment thereof are disposed in parallel with a gap equal to the thickness of the crushed corrugated cardboard sheets. Sufficient pressure is applied to the roller blocks to crush the corrugations in the cardboard sheets and to seal the package. In one embodiment, the upper roller block 52a is fixed and the lower roller block 52b is mounted on a hydraulic press capable of applying a force of about 0 to 75 tons, preferably about 20 to 70 tons. The force is preferably adjustable. One or both rows of rollers may be heated to a controllable temperature in a similar manner as the temperature control mechanism for the sealing press described earlier.

Similar to the platens shown in FIGS. 4(a) and 4(b), the rollers 51a and 51b may have rounded to chamfered inside edges to avoid potentially tearing or cutting the surface sheet of the cardboard.

FIG. 5(b) is a schematic top plan view showing a parallel pair of roller sets 51a,b (collectively 51) and 53 mounted on a pair of roller blocks 52a,b (collectively 52) and 54 as well as a package 1 passing through the pair of roller sets. The structures of the roller set 53 and the roller block 54 are similar to those of the roller set 51 and the roller block 52. The lateral distance between the two roller sets 51 and 53 is adjustable to seal packages of different widths. The two roller sets 51 and 53 may be independent rollers; or alternatively, the lower rows of rollers in the roller sets 51 and 53 may be the same rollers that extend across the width of the package. In the latter case, only the distance between the upper rows of rollers will be adjusted for different package widths.

The pair of roller sets shown in FIG. 5(b) can seal two parallel sides of a package. To seal the other two parallel sides, the package may be passed through another, similar sealer machine, or though the same pair of roller sets one more time (after adjusting the distance if necessary), or through an additional pair of roller sets of the same sealer machine. FIGS. 5(c) and 5(d) show two preferred sealer machines each having two pairs of roller sets. In the machine shown in FIG. 5(c), a second pair of roller sets 55, 57 is

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provided downstream of and at the same orientation as the first pair of roller sets 51, 53. The package 1 is first transported by a transport mechanism in a first direction as indicated by the arrow A and sealed on two sides by the first pair of roller sets 51, 53. Then, the package is rotated 90 degrees (as indicated by the arrow C) by a rotation mechanism and continues to move in the same direction (as indicated by the arrow D). It then passes through the second pair of roller sets 55, 57 (as indicated by the arrow B) and is sealed on the other two sides. In the machine shown in FIG. 5(d), a second pair of roller sets 55, 57 is provided at a right angle with respect to the first pair of roller sets 51, 53. The package 1 is first transported in a first direction (as indicated by the arrow A) and sealed on two sides by the first pair of roller sets 51, 53, and then, without changing its orientation, is transported in a second direction (as indicated by the arrow B) at a right angle to the first direction. It then passes through the second pair of roller sets 55, 57 (as indicated by the arrow B) and is sealed on the other two sides. In the machines shown in FIGS. 5(c) and 5(d), the distances between the roller sets 51 and 53, and 55 and 57 in the first and second pair of roller sets are adjusted for the two widths of the package, respectively. The structures of the transport mechanism, the rotation mechanism and the mechanism for adjusting the distance between roller sets are not described in detail here as they are within the level of skill of artisans in the mechanical art.

The package in FIG. 1 is shown to be sealed with the adhesive on all four sides. Alternatively, instead of sealing around the entire periphery with the heat-sensitive adhesive, the package may be sealed in selected peripheral areas only. In particular, the two cardboard sheets 11 and 12 may be made of one board and folded once in the middle, and the side of the package corresponding to the fold line may not need to be sealed with the adhesive (although it is preferable to seal it as well). In such cases, the platens of the sealing press may be constructed so that heat and pressure are only applied to the areas where seals are to be formed.

The packaging technique according to embodiments of the present invention has the following advantages. The packages are more secure and harder to tear from the edge and the center than packages made by the first conventional method described above which uses hot melt glue. The sealing quality is also more consistent than seals using glue because the drying (cooling) speed and the placement of the hot melt glue are hard to control. Packages made with the present technique are also aesthetically more appealing than packages made by the first and second conventional techniques in that the corrugations of the cardboard sheets are less visible when viewed from the side edges (e.g. the bottom side) due to the crushing. Compared to the second conventional packaging technique, packaging made with the present method is stronger because it uses two cardboard sheets. As a result, the packages can be made larger and to pack heavier items, and multiple packages can be stacked in bundles. For example, the packages can be as large as 24x24 inches (whereas the second conventional type of packages are typically up to 14x14 inches) and can be used to pack items as heavy as 10 to 20 lbs. Also, the second type of conventional packages have a tendency to warp because the two sheets are of different materials. Packages according to the present invention are also more environmentally friendly because unlike the cardboard used in the present technique, the flat sheet of paper used in the conventional method uses less post-consumer recycled material. The present sealing technique is also faster than the process used in the second conventional technique.

Although the above-described embodiments are most advantageous when used in combination with a heat-sensitive

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adhesive, the crushing technique described above may also be applied when a regular, non-heat-sensitive adhesive is used. Such a package has the advantages that it is harder to open and tear from the edge than packages made by the first conventional method described above because the corrugations is crushed in the edge areas. It is also aesthetically more appealing than packages made by the first and second conventional techniques in that the corrugations of the cardboard sheets are less visible when viewed from the side edges due to the crushing.

It will be apparent to those skilled in the art that various modification and variations can be made in the display pack and packaging method of the present invention without departing from the spirit or scope of the invention. Thus, it is intended that the present invention cover modifications and variations that come within the scope of the appended claims and their equivalents.

I claim:

1. A display pack for a product, comprising:
 - a first and a second overlaying corrugated cardboard sheets, the first cardboard sheet having a first upper facing, a first lower facing and a first inner corrugated member with first corrugations between the first upper and first lower facings, the second cardboard sheeting having a second upper facing, a second lower facing and a second inner corrugated member with second corrugations between the second upper and second lower facings, the first and second overlaying corrugated cardboard sheets having an outer peripheral edge and an original thickness, at least one of the cardboard sheets defining at least one opening;
 - at least one container having a flat insertion portion and a chamber portion for holding the product, the insertion portion being sandwiched between the two cardboard sheets and the chamber portion protruding from a plane of the cardboard sheets via the opening, the overlaying cardboard sheets having an inner portion extending around the opening and covering the insertion portion, and a peripheral area extending from the inner portion to and including at least a segment of the outer peripheral edge; and
 - an adhesive between the first and the second corrugated cardboard sheets in at least a portion of the peripheral area to adhere the two corrugated cardboard sheets, wherein the inner portion has substantially the original thickness, and the peripheral area of the first and second overlaying corrugated cardboard sheets having a portion of the first upper facing, the first inner corrugated member, the first lower facing, the second upper facing, the second inner corrugated member, and the second lower facing is crushed more than approximately 50% of the original thickness.
2. The display pack of claim 1, wherein the adhesive is a heat-sensitive adhesive material.
3. The display pack of claim 1, wherein the container is made of a clear plastic material.
4. The display pack of claim 1, wherein the first and second corrugated cardboard sheets are 200 lb test E-flute cardboard sheets.
5. The display pack of claim 1, wherein the corrugations in the first and second corrugated cardboard sheets are parallel to a vertical direction when the display pack is stood on its side when being displayed or transported.
6. A display pack for a product, comprising:
 - a container having a chamber portion for holding the product and a flat insertion portion surrounding the chamber portion;

EXHIBIT A
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a first and a second cardboard sheets, the first cardboard sheet having an opening, each cardboard sheet having an upper facing, a lower facing and an inner corrugated member with corrugations between the upper and lower facings, the first and second cardboard sheets being in a stacked configuration forming an outer peripheral edge, with the chamber portion of the container protruding from the opening and the flat insertion portion sandwiched between a surrounding portion of the stacked configuration that surrounds the opening, the flat insertion portion having an outer edge, the surrounding portion having an inner perimeter at the opening and an outer perimeter at or beyond the outer edge of the insertion portion of the container, the stacked configuration also having a generally flat peripheral area that extends from the outer perimeter of the surrounding portion to and including at least a segment of the outer peripheral edge; and

an adhesive between the cardboard sheets in at least the peripheral area,

wherein the corrugations of the cardboard sheets in the surrounding portion define air gaps, and the corrugations of the cardboard sheets in the peripheral area are crushed to substantially eliminate air gaps, wherein the cardboard sheets of the stacked configuration have an original thickness and the crushed peripheral area is crushed to more than approximately 50% of the original thickness.

7. A display pack of claim 6, wherein the surrounding portion is generally flat.

8. A display pack for a product, comprising:
 at least one container having a chamber portion for holding the product, and a flat insertion portion surrounding the chamber portion, the flat insertion portion having an outer edge; and
 a first and a second cardboard sheet, each cardboard sheet having an upper facing, a lower facing and an inner corrugated member with corrugations between the

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upper and lower facings, the cardboard sheets overlaying each other, the overlaying cardboard sheets defining an outer peripheral edge, at least one of the corrugated cardboard sheets having at least one opening; and
 an adhesive,
 wherein the chamber portion of the container protrudes through the opening and the cardboard sheets jointly define an uncrushed area having an inner perimeter at the opening and an outer perimeter at or beyond the outer edge of the insertion portion of the container, and a crushed peripheral area extending from the outer perimeter to and including at least a segment of the outer peripheral edge, the flat insertion portion of the container being sandwiched in the uncrushed area, and the adhesive being between the cardboard sheets in at least the crushed peripheral area, wherein the crushed peripheral area has a thickness less than about 50% of the uncrushed area.

9. A display pack of claim 8, wherein the crushed peripheral area is generally free of air gaps in the corrugated cardboard sheets.

10. A display pack of claim 1 wherein the crushed peripheral area extends from the outer peripheral edge of the overlaying cardboard sheets inwardly approximately one-half inch.

11. A display pack of claim 6 wherein the outer perimeter of the surrounding portion extends outwardly to the outer peripheral edge of the stacked first and second cardboard sheets approximately one-half inch.

12. A display pack of claim 8 wherein the crushed peripheral area extends from the outer peripheral edge of the overlaying cardboard sheets inwardly a distance of approximately one-half inch.

13. The display pack of claim 6, wherein the adhesive is a heat-sensitive adhesive material.

14. The display pack of claim 8, wherein the adhesive is a heat-sensitive adhesive material.

* * * * *

**UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA**

NOTICE OF ASSIGNMENT TO UNITED STATES MAGISTRATE JUDGE FOR DISCOVERY

This case has been assigned to District Judge Andrew Guilford and the assigned discovery Magistrate Judge is Robert N. Block.

The case number on all documents filed with the Court should read as follows:

SACV12- 456 AG (RNBx)

Pursuant to General Order 05-07 of the United States District Court for the Central District of California, the Magistrate Judge has been designated to hear discovery related motions.

All discovery related motions should be noticed on the calendar of the Magistrate Judge

=====

NOTICE TO COUNSEL

A copy of this notice must be served with the summons and complaint on all defendants (if a removal action is filed, a copy of this notice must be served on all plaintiffs).

Subsequent documents must be filed at the following location:

Western Division
312 N. Spring St., Rm. G-8
Los Angeles, CA 90012

Southern Division
411 West Fourth St., Rm. 1-053
Santa Ana, CA 92701-4516

Eastern Division
3470 Twelfth St., Rm. 134
Riverside, CA 92501

Failure to file at the proper location will result in your documents being returned to you.

AO 440 (Rev. 12/09) Summons in a Civil Action

UNITED STATES DISTRICT COURT

for the
CENTRAL District of CALIFORNIA

WINTERBORNE, INC.

Plaintiff

v.

SEAGATE TECHNOLOGY, LLC; FUJIFILM NORTH AMERICA CORPORATION; VIZIO, INC.; and ROKU, INC.,

Defendant SEE ATTACH

Civil Action No.

SACV12

456 AG (RNBX)

SUMMONS IN A CIVIL ACTION

To: (Defendant's name and address)

SEAGATE TECHNOLOGY, LLC
920 Disc Drive
Scotts Valley, CA 95066-4544

A lawsuit has been filed against you.

Within 21 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are: David A. Dillard

CHRISTIE, PARKER & HALE, LLP
655 N. Central Avenue, Suite 2300
Glendale, CA 91203
(626) 795-9900 (T) / (626) 577-8800 (F)

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

MAR 22 2012

CLERK OF COURT

JULIE PRADO



Date: _____

Signature of Clerk or Deputy Clerk

AO 440 (Rev. 12/09) Summons in a Civil Action (Page 2)

Civil Action No. _____

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 4(l))

This summons for *(name of individual and title, if any)* _____
was received by me on *(date)* _____.

I personally served the summons on the individual at *(place)* _____
_____ on *(date)* _____; or

I left the summons at the individual's residence or usual place of abode with *(name)* _____
_____, a person of suitable age and discretion who resides there,
on *(date)* _____, and mailed a copy to the individual's last known address; or

I served the summons on *(name of individual)* _____, who is
designated by law to accept service of process on behalf of *(name of organization)* _____
_____ on *(date)* _____; or

I returned the summons unexecuted because _____; or

Other *(specify)*: _____

My fees are \$ _____ 0.00 for travel and \$ _____ 0.00 for services, for a total of \$ _____ 0.00.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc:

UNITED STATES STRICT COURT CENTRAL DISTRICT CALIFORNIA

COPY

I (a) PLAINTIFFS (Check box if you are representing yourself) WINTERBORNE, INC. DEFENDANTS SEAGATE TECHNOLOGIES, LLC, FUJIFILM NORTH AMERICA CORPORATION, VIZIO, INC., and ROKU, INC.

(b) Attorneys (Firm Name, Address and Telephone Number. If you are representing yourself, provide same.) David A. Dillard, CA Bar # 97,515 CHRISTIE, PARKER & HALE, LLP 655 N. Central Avenue, Suite 2300 Glendale California 91203 626/795-9900 (T) / 626/577-8800 (F) Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an X in one box only.) I U.S. Government Plaintiff X 3 Federal Question (U.S. Government Not a Party) 2 U.S. Government Defendant 4 Diversity (Indicate Citizenship of Parties in Item III) III. CITIZENSHIP OF PRINCIPAL PARTIES - For Diversity Cases Only (Place an X in one box for plaintiff and one for defendant.) Citizen of This State PTF DEF 1 1 Incorporated or Principal Place of Business in this State PTF DEF X 4 X 4 Citizen of Another State 2 2 Incorporated and Principal Place of Business in Another State 5 5 Citizen or Subject of a Foreign Country 3 3 Foreign Nation 6 6

IV. ORIGIN (Place an X in one box only.) X 1 Original Proceeding 2 Removed from State Court 3 Remanded from Appellate Court 4 Reinstated or Reopened 5 Transferred from another district (specify): 6 Multi-District Litigation 7 Appeal to District Judge from Magistrate Judge

V. REQUESTED IN COMPLAINT: JURY DEMAND: X Yes No (Check 'Yes' only if demanded in complaint.) CLASS ACTION under F.R.C.P. 23: Yes No MONEY DEMANDED IN COMPLAINT: \$ 0.00

VI. CAUSE OF ACTION (Cite the U.S. Civil Statute under which you are filing and write a brief statement of cause. Do not cite jurisdictional statutes unless diversity.) Patent Infringement

VII. NATURE OF SUIT (Place an X in one box only.) Table with columns: OTHER STATUTES, CONTRACT, REAL PROPERTY, TORTS (PERSONAL INJURY, IMMIGRATION), TORTS (PERSONAL PROPERTY, CIVIL RIGHTS), PRISONER PETITIONS, LABOR, PROPERTY RIGHTS, SOCIAL SECURITY, FEDERAL TAX SUITS.

SACV12 456

OR OFFICE USE ONLY: Case Number: AFTER COMPLETING THE FRONT SIDE OF FORM CV-71, COMPLETE THE INFORMATION REQUESTED BELOW.

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT OF CALIFORNIA
CIVIL COVER SHEET

VIII(a). IDENTICAL CASES: Has this action been previously filed in this court and dismissed, remanded or closed? No Yes

If yes, list case number(s): _____

VIII(b). RELATED CASES: Have any cases been previously filed in this court that are related to the present case? No Yes

If yes, list case number(s): _____

Civil cases are deemed related if a previously filed case and the present case:

- (Check all boxes that apply)
- A. Arise from the same or closely related transactions, happenings, or events; or
 - B. Call for determination of the same or substantially related or similar questions of law and fact; or
 - C. For other reasons would entail substantial duplication of labor if heard by different judges; or
 - D. Involve the same patent, trademark or copyright, and one of the factors identified above in a, b or c also is present.

IX. VENUE: (When completing the following information, use an additional sheet if necessary.)

(a) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which EACH named plaintiff resides.
 Check here if the government, its agencies or employees is a named plaintiff. If this box is checked, go to item (b).

County in this District:*	California County outside of this District; State, if other than California; or Foreign Country
Los Angeles	

(b) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which EACH named defendant resides.
 Check here if the government, its agencies or employees is a named defendant. If this box is checked, go to item (c).

County in this District:*	California County outside of this District; State, if other than California; or Foreign Country
(1) Santa Cruz County; (2) Santa Clara County; (3) Orange County	(4) New York

(c) List the County in this District; California County outside of this District; State if other than California; or Foreign Country, in which EACH claim arose.

Note: In land condemnation cases, use the location of the tract of land involved.

County in this District:*	California County outside of this District; State, if other than California; or Foreign Country
Los Angeles	

* Los Angeles, Orange, San Bernardino, Riverside, Ventura, Santa Barbara, or San Luis Obispo Counties

Note: In land condemnation cases, use the location of the tract of land involved

X. SIGNATURE OF ATTORNEY (OR PRO PER): David A. Dillard Date 3-22-12

Notice to Counsel/Parties: The CV-71 (JS-44) Civil Cover Sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law. This form, approved by the Judicial Conference of the United States in September 1974, is required pursuant to Local Rule 3-1 is not filed but is used by the Clerk of the Court for the purpose of statistics, venue and initiating the civil docket sheet. (For more detailed instructions, see separate instructions sheet.)

Key to Statistical codes relating to Social Security Cases:

Nature of Suit Code	Abbreviation	Substantive Statement of Cause of Action
861	HIA	All claims for health insurance benefits (Medicare) under Title 18, Part A, of the Social Security Act, as amended. Also, include claims by hospitals, skilled nursing facilities, etc., for certification as providers of services under the program. (42 U.S.C. 1935FF(b))
862	BL	All claims for "Black Lung" benefits under Title 4, Part B, of the Federal Coal Mine Health and Safety Act of 1969. (30 U.S.C. 923)
863	DIWC	All claims filed by insured workers for disability insurance benefits under Title 2 of the Social Security Act, as amended; plus all claims filed for child's insurance benefits based on disability. (42 U.S.C. 405(g))
863	DIWW	All claims filed for widows or widowers insurance benefits based on disability under Title 2 of the Social Security Act, as amended. (42 U.S.C. 405(g))
864	SSID	All claims for supplemental security income payments based upon disability filed under Title 16 of the Social Security Act, as amended.
865	RSI	All claims for retirement (old age) and survivors benefits under Title 2 of the Social Security Act, as amended. (42 U.S.C. (g))