PACKAGING MATERIALS WITH TEAR TAPES

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ABSTRACT

Packaging materials that are made from paper, film, or a paper/film combination that have tear tapes made from the same or similar material and applied across the web. The tear tapes may be pulled to tear off and open one end of the packing leaving the remaining packaging intact to serve as a storage and dispenser for the package material.
PACKAGING MATERIALS WITH TEAR TAPES

RELATED APPLICATIONS

[0001] This application is a continuation-in-part of application Ser. No. 10/797,312 filed Mar. 10, 2004.

FIELD OF THE INVENTION

[0002] The present invention relates to packaging materials that are made from paper, film, or a paper/film combination that have tear tapes made from the same or similar material and applied across the web. The tear tapes may be pulled to tear off and open one end of the packaging leaving the remaining packaging intact to serve as a storage and dispenser for the package material.

BACKGROUND OF THE INVENTION

[0003] To date tear tapes have only been used with gum and cigarette packaging. Usually, once packages are open they cannot be used to store the remainder of what is in the package. Opening of the package destroys the integrity of the package. One example of traditional packaging is for ream wraps.

[0004] Traditional packaging for wrapped reams (i.e., 500 sheets) of cut paper (8½×11, etc.) for copy machines, computers, printers, and other applications involves folding and overlapping the tops and bottom ends of the packaging and sealing the folded ends using heat or adhesive materials. Reams are most commonly packaged for shipping, storage, and retail sale in ream wrap made of various materials, including the traditional paper (polymer coated or two papers laminated with polymer), plastic film, or a paper/film combination. In addition to encasing the reams of paper, the wrap materials protect the paper from physical damage and moisture pickup during shipping and storing. The wrap materials also protect paper products from physical damage during repeated handling and stocking on retail shelves.

[0005] As small offices and home offices have proliferated, the distribution and sale of reams of paper have changed from boxes for large users to wrapped individual reams for retail stores and the small office and home office users. A major disadvantage of traditional ream wrap packaging for the individual user is that the current method of opening the packaging destroys the integrity of the entire wrapped ream. For instance, when the folded bottom or top end of the wrapped ream is torn open, the entire folded package opens, destroying the integrity of the wrapped structure and exposing and scattering the loose sheets of paper remaining in the ream. For the individual user who uses only a portion of the ream at a time and needs to store the remaining sheets, the unbound papers pose an inconvenience and impediment to storage. Since the structural support of the original packaging is compromised, the result for individual users is often physical damage to the unbound sheets of paper being stored for future use. The current marketplace demands a ream wrapper that may be opened so that a user may remove part of a ream and store the remaining sheets in a structure that prevents physical damage and scattering of loose papers.

SUMMARY OF THE INVENTION

[0006] The present invention relates to a package that is opened so that a user may remove part of the contents of the package and store the remaining contents in a structure that prevents physical damage and scattering of loose parts.

[0007] The present invention relates to a ream wrapper that is opened so that a user removes part of a ream of paper and stores remaining sheets in the ream wrapper. The opened ream wrapper prevents physical damage to the remaining sheets and prevents scattering of loose pieces of paper.

[0008] It is an object of the present invention for the package to be opened by at least one tear tape.

[0009] The present invention relates to a packaging material that has one or more tear tapes inserted in the packaging material across the web so that it surrounds the entire width of the packaging material. It is an object of the present invention for the tear tape to comprise a strip of paper or film that is drawn through or coated with wax. It is an object of the present invention for the tear tape to be ½" to 1½". It is an object of the present invention for the tear tape to be torn lengthwise, not across the width of the tear tape.

[0010] The present invention also relates to packaging materials that are used to wrap products, such as paper towels, napkins, toilet paper, or other consumer products, that have a tear tape applied across the web either on the packaging line or during the manufacturing of the packaging materials.

[0011] It is an object of the present invention that the packaging materials or ream wrap be comprised of a paper, film, or paper/film substrate.

[0012] It is an object of the present invention for the tear tape to comprise a non-coated strip of paper or film that is heat-sealed onto the packaging material. It is an object of the present invention for the tear tape to comprise a strip of high strength poly film, such as polyethylene or polypropylene, with adhesive on one side of the strip. It is an object of the present invention for the tear tape to comprise identical material from which the packaging material itself is made. It is an object of the present invention for the packaging material and the tear tape to both be made of shrink wrap.

[0013] It is an object of the present invention for the tear tape to be printed with a company name, logo, design, or other statement. It is an object of the present invention for the tear tape to be attached by an adhesive. It is an object of the present invention for the packaging material to have a tear tape on top of the packaging material which opens the top of the packaging material but keeps the integrity of the packaging material. It is an object of the present invention for the packaging material to have a tear tape that does not completely remove a section of the packaging material.

[0014] The present invention relates to a method for opening a package having multiple contents comprising: pulling a tear tape across a packaging material, opening a portion of the packaging material and removing one sealed end of the packaging material while the remaining packaging material is left intact for storage and dispensing of the contents of the package.

[0015] An object of the present invention is to enable large users of reamed papers, such as insurance companies and other large users, to have a quicker way of opening multiple reams. Large users typically open and use several hundred reams of paper each business day. Currently, these users crack open and tear each individual ream by hand. The use
of a tear tape to tear open the end of the ream enables this procedure to be done more quickly and efficiently. The user could tear the tape to remove one end of the packaging and quickly pull off the other end of the wrapper.

[0016] It is an object of the present invention to enable users of paper towels, napkins, toilet paper, tissues, envelopes, cheese slices, or other consumer products, to have a quicker way of opening packaging for these products. Currently, users of these products tear open the packaging. These users currently cannot store the remaining contents of the package, and therefore the contents of the package are exposed to other factors which cause a shorter life for these products due to environmental factors.

[0017] It is a further object of the present invention for the tear tape to be inserted in the ream wrap across the web so that it surrounds the entire width of the wrapped ream. When pulled, the tear tape opens one portion of the top or bottom end of the ream wrap, much like the tear tape on the film package encasing a pack of cigarettes or gum. When pulled, the tear tape opens and enables the removal of one of the sealed ends of the ream wrap while leaving the remaining structure intact for storage and dispensing of the remaining ream of paper.

[0018] The present invention also relates to a method for opening a packaged product comprising: pulling a tear tape across the packaging, opening a portion of the wrapper and removing one sealed end of the wrapper while the remaining ream wrap is left intact for storage, dispensing, or other purposes. It is an object of this invention that the tear tape for such packaging materials be applied across the web.

[0019] The present invention relates to packaging which when directly opens allows a user to use a product contained within the packaging, without having to remove further packaging from the product. For example, if a user were to use the tear tape of the present invention with a wrapper for toilet paper, when the wrapper would be open, the user could directly remove one roll of toilet paper and then store the other rolls in the packaging. Another example is a ream wrap which when open with a tear tape a user can use a sheet of paper. Previously, the tear tape was used in a packaging for cigarettes wherein once the tear tape was removed the cigarettes were still protected by being fully enclosed in a packaging.

**BRIEF DESCRIPTION OF THE DRAWINGS**

[0020] FIG. 1 is a front view showing the ream wrap having a tear tape in the closed position;

[0021] FIG. 2 is a ream wrap having the tear tape in the open position;

[0022] FIG. 3 is a cross sectional view of the tear tape shown in FIG. 1;

[0023] FIG. 4 is a cross sectional view of the tear tape shown in FIG. 2;

[0024] FIG. 5 shows the ream wrap after a tear tape has removed a section of the ream wrap;

[0025] FIG. 6 is a front view showing the ream wrap having a tear tape in the closed position;

[0026] FIG. 7 is a ream wrap having the tear tape in the open position;

[0027] FIG. 8 is a cross sectional view of the tear tape shown in FIG. 6;

[0028] FIG. 9 is a cross sectional view of the tear tape shown in FIG. 7;

[0029] FIG. 10 is a front view showing the ream wrap having a tear tape in the closed position;

[0030] FIG. 11 is a ream wrap having the tear tape in the open position;

[0031] FIG. 12 is a cross sectional view of the tear tape shown in FIG. 10;

[0032] FIG. 13 is a cross sectional view of the tear tape shown in FIG. 11;

[0033] FIG. 14 is a top view showing the ream wrap in the closed position;

[0034] FIG. 15 is a top view showing the ream wrap in the open position;

[0035] FIG. 16 is a top view of the ream wrap in the closed position; and

[0036] FIG. 17 is a top view of the ream wrap in the open position.

**DETAILED DESCRIPTION OF THE INVENTION**

[0037] The present invention relates to a method of wrapping reams of paper or other products involving the insertion of one or more tear tapes into the ream wrap or packaging material. The tear tape, when pulled, enables the opening and removal of a sealed end of the wrapper leaving a portion of the wrapper intact to protect, store, and dispense partial reams of paper or other products. The tear tape is inserted in the ream wrap or packaging materials across the web and can be applied to any type of ream wrap packaging or other packaging materials, including paper, film, paper/film combination, or shrink wrap.

[0038] In one embodiment, the tear tape comprises a strip of paper or film that is drawn through or coated with wax. The wax is used to adhere the tear tape to the ream wrap. The tear tape is 3/32" to 1/2" in width and is torn lengthwise, not across the width of the strip.

[0039] In another embodiment, the tear tape comprises a non-coated strip of paper or film that is heat-sealed onto the ream wrap. The tear tape is 3/32" to 1/2" in width and is torn lengthwise, not across the width of the strip.

[0040] In another embodiment, the tear tape comprises a strip of high strength poly film, such as polyethylene or polypropylene, with adhesive on one side of the strip. The adhesive is used to adhere the strip to the ream wrap. The tear tape is 3/32" to 1/2" in width and is torn lengthwise, not across the width of the strip.

[0041] In another embodiment, the tear tape comprises the identical material from which the ream wrap itself is made. For instance, in the case of shrink wrap ream wrap, the tear tape would be made of a similar film material so that it would shrink in proportion to the ream wrap itself. The tear tape is 3/32" to 1/2" in width and is torn lengthwise, not across the width of the tape.
In any of these embodiments, the tear tape may or may not be printed with a company name, logo, design, or other statement.

Although the figures show the tear tape in association with a ream wrap, the tear tape can be used with any other packaging material as described in the specification.

**FIG. 1** shows a ream wrap **10** having a tear tape **20** wherein the ream wrap is closed. **FIG. 2** shows ream wrap **50** having the tear tape **60**, which has been pulled across the ream wrap leaving an opening **70**.

**FIG. 3** shows a cross sectional view of the tear tape attached to the ream wrap shown in **FIG. 1**. **FIG. 4** shows a cross sectional view of the tear tape shown in **FIG. 2**. **FIG. 5** shows the ream wrap **100** after a tear tape has removed a section of the ream wrap **110** allowing the paper **120** to be retrieved and stored in the ream wrap.

**FIG. 6** shows a ream wrap **200** having a tear tape **210** wherein the ream wrap is closed. **FIG. 7** shows a ream wrap **250** having the tear tape **260** which has been pulled across the ream wrap leaving an opening **270**.

**FIG. 8** shows a cross sectional view of the tear tape attached to the ream wrap shown in **FIG. 6**. The tear tape **210** is attached to the ream wrap **200** by a heat seal. **FIG. 9** shows a cross sectional view of the tear tape shown in **FIG. 7**.

**FIG. 10** shows a ream wrap **300** having a tear tape **310** wherein in the ream wrap is closed. **FIG. 11** shows a ream wrap **350** having the tear tape **360** which has been pulled across the ream wrap leaving an opening **370**.

**FIG. 12** shows a cross sectional view of the tear tape attached to the ream wrap shown in **FIG. 10**. The tear tape **310** is attached to the ream wrap **300** by an adhesive. **FIG. 13** is a cross sectional view of the tear tape shown in **FIG. 11**.

**FIG. 14** shows an alternate embodiment wherein the ream wrap **400** has a tear tape **410** on top of the ream wrap which opens the top of the ream wrap but keeps the integrity of the ream wrap. **FIG. 15** shows the ream wrap of **FIG. 14** in the open position.

**FIG. 16** shows an alternate embodiment wherein the ream wrap **500** has a tear tape **510** that does not completely remove a section of the ream wrap. **FIG. 17** shows the ream wrap of **FIG. 16** in the open position.

1. A packaging material that is opened so that a user removes part of a product and stores the remaining product in said package;

   2. The packaging material of claim 1 wherein said packaging is opened by at least one tear tape.

   3. A packaging material comprising:

   a packaging material;

   said packaging material having one or more tear tapes inserted in said packaging material across the web so that it surrounds the entire width of a wrapped product.

   4. The packaging material of claim 3 wherein said tear tape comprises a strip of paper or film that is drawn through or coated with wax.

   5. The packaging material of claim 3 wherein said tear tape is 3/8" to 1 1/2" in width.

   6. The packaging material of claim 3 wherein said tear tape is torn lengthwise, not across the width of said tear tape.

   7. The packaging material of claim 3 wherein said tear tape comprises a non-coated strip of paper or film that is heat-sealed onto said packaging material.

   8. The packaging material of claim 3 wherein said tear tape comprises a strip of high strength poly film, such as polyethylene or polypropylene, with adhesive on one side of the strip.

   9. The packaging material of claim 3 wherein said tear tape comprises identical material from which said packaging material itself is made.

   10. The packaging material of claim 9 wherein said packaging material and said tear tape are both made of shrink wrap.

   11. The packaging material of claim 3 wherein said tear tape is printed with a company name, logo, design, or other statement.

   12. The packaging material of claim 3 wherein said tear tape is attached by an adhesive.

   13. The packaging material of claim 3 wherein said packaging material has a tear tape on top of said wrap which opens said top of said packaging material but keeps the integrity of said packaging material.

   14. The packaging material of claim 3 wherein said packaging material has a tear tape that does not completely remove a section of said packaging.

   15. A method for opening a wrapped product comprising:

   pulling a tear tape across a packaging;

   opening a portion of said packaging,

   removing one sealed end of said packaging while remaining packaging is intact for storage and dispensing other products.

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