METHOD OF WRAPPING PRODUCTS

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Abstract
Soap bars are packaged in a single sheet of material which can be plastic, paper, paperboard or combinations of these materials in the form of laminates. The soap bars are packaged in high-speed machines at more than about 50/minute. The single sheet of material is die cut to form a main section with the top, bottom and longitudinal side panels and end flaps appended to each panel. In order to promote folding at the desired points the sheet of material is weakened by scoring, perforating or scoring at the fold points. This weakening can be done just prior to feeding to the wrapping machine or at the time of die cutting. The die cutting can be done at the time of feeding in to the wrapping machine. The packaged soap bar will have planar end surfaces so that the package can stand on end and can have corner vents to permit the escape of some moisture and some fragrance at the point of sale.
UNWIND SHEET FROM ROLL

DIE CUT TO FORM FLAPS

REMOVE EDGE RESIDUE SECTION

FOLD CUT SHEET AROUND SOAP BAR

SEAL FLAPS AND LONGITUDINAL OVERLAP

Fig. 3
UNWIND SHEET FROM ROLL

DIE CUT TO FORM FLAPS OPTIONALLY WEAKEN FLAPS AND PANELS AT FOLD LINES

REMOVE EDGE RESIDUE SECTION

FOLD CUT SHEET AROUND SOAP BAR

SEAL FLAPS AND LONGITUDINAL OVERLAP

Fig. 4
SHEET ROLL STOCK

UNWIND AND DIE CUT TO FORM FLAPS

REMOVE EDGE RESIDUE SECTION

REWIND ON ROLL FOR STORAGE

UNWIND AND WEAKEN AT FLAP FOLD LINES

FOLD CUT SHEET AROUND SOAP BAR

SEAL FLAPS AND LONGITUDINAL OVERLAP

Fig. 5
SHEET ROLL STOCK

UNWIND AND DIE CUT TO FORM FLAPS

REMOVE EDGE RESIDUE SECTION

REWIND ON ROLL FOR STORAGE

UNWIND AND WEAKEN AT FLAP AND PANEL FOLD LINES

FOLD CUT SHEET AROUND SOAP BAR

SEAL FLAPS AND LONGITUDINAL OVERLAP

Fig. 6
METHOD OF WRAPPING PRODUCTS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of application PCT/US2004/016234, filed May 21, 2004, which claims the benefit of U.S. Provisional Application 60/473,053 filed May 23, 2003, both of which are incorporated herein by reference in their entirety.

FIELD OF THE INVENTION

This invention relates to the wrapping of a product from a roll of sheet material. More particularly this invention relates to a selectively cut sheet of material from a roll where the sheet of material has a main section and a depending flaps section and this sheet of film is wrapped around a product in an automatic wrapping machine.

BACKGROUND OF THE INVENTION

Consumer products such as personal care products and foods are packaged in various ways. This can be by use of a carton, wrapped in a first wrapping and then inserted into a sleeve or enclosed in a sheet of material crimp sealed at each end by means of flow wrapping. There are yet other techniques such as form/fill packaging. It is desirable to use a single sheet of material to package a product for ease of manipulating materials and to achieve a lower cost. The present invention is directed to the wrapping of substantially rectangular products using a single sheet of material. Although the process can be used to package different products it is described in a preferred embodiment without regard to the packaging of substantially rectangular soap bars.

Soap bars are packaged in many ways. The more common comprise individual soap bars packaged in paperboard or plastic cartons, packaging individual soap bars in a single sheet of material, packaging a plurality of soap bars in a single sheet of material, packaging individual soap bars in a first stiffener sheet of material and a second wrapper sheet of material, and packaging a plurality of soap bars in a first stiffener sheet of material and a second wrapper sheet of material. Of these soap bar packaging techniques the most common are the packaging of individual soap bars in paperboard or plastic cartons, flow wrap packaging in a single sheet of material and the packaging of individual soap bars in a first stiffener sheet of material and second wrapper sheet of material. In the latter technique the stiffener sheet of material functions to form the package into a generally rectangular shape so that it can be more easily be stacked on store shelves for sale.

In the packaging of individual soap bars in paperboard or plastic cartons the carton material is cut into individual pre-cut sheets formed into cartons and stacked for use in a packaging machine. A separate carton is picked from the stack to package each soap bar. It will have been die cut to form a main central section and a plurality of flaps. The main section will comprise the top, bottom, two longitudinal side panels and a longitudinal glue flap. Usually the carton raw material sheet will be scored at the main section panel and flap fold lines. The plurality of flaps will form the end wall surfaces of the carton while the main section forms the other surfaces of the carton. The flaps are sealed to form the end surfaces. The carton making materials usually will have a thickness of about 200 microns to about 600 microns. This will be sufficient to maintain a rectangular shape to the carton when the cartons are stacked on a shelf. The paperboard will be printed and can be coated with a plastic or laminated with a plastic.

As noted other packaging that is commonly used to package individual soap bars is a first stiffener sheet material and a second wrapper sheet material. The first stiffener sheet usually will be less flexible than the second wrapper sheet. Both of these sheets are in a continuous form on a roll. They usually are fed into a wrapping machine where the sheets are wrapped around the soap bar to produce the final package. The stiffener sheet is the inner sheet which is around the major surfaces of the soap bar and the second wrapper sheet surrounds the stiffener sheet and fully around the soap bar. In the flow wrapping of a soap bar the sheet of film is wrapped laterally to surround the soap bar and crimp or otherwise sealed at each end. There is a longitudinal seal across the bottom surface of the package as well.

All of the techniques for wrapping a soap bar effectively wrap the soap bar. The soap bar is adequately protected until used by the consumer. It can be easily shipped and can be displayed on shelves or in bulk containers. The soap bar will be fresh and will have retained most of its fragrance using any of these wrapping techniques.

It has now been found that a single sheet of material from a roll can be formed to produce a soap bar package that has the attributes of both a carton and a stiffener sheet enclosed in a second wrapper sheet. It is a hybrid package between a carton and a sheet of film package. The ends of the package resemble a carton. But the package is formed and the soap bar packaged using a single sheet of material. These are packaged in high-speed soap bar wrapping machines to give a substantially rectangular package. In addition the longitudinal end surfaces will be substantially planar so that the soap bar can be stacked on end.

The use of a single sheet of material simplifies the packaging of the soap bar over the use of two sheets. There is less material to inventory, and handle, less material to manipulate during the packaging operation, and a lower overall packaging cost. Also this technique can be used on the same high speed wrapping machines that use a stiffener sheet with a wrapper sheet. There is a greater operating efficiency and a lower capital cost.

BRIEF DESCRIPTION OF THE INVENTION

The invention comprises the wrapping of soap bars in automatic wrapping machines using a sheet of material that is formed into a main section and a plurality of flaps section by selectively removing material to form the flaps. The preferred way to remove material is by die cutting. The die cutting of the material to remove film segments will facilitate the folding of the flaps that are formed. The flaps are folded onto each other and sealed to form the end wall panels of the soap bar package. The main section of the film forms the top, bottom and longitudinal sidewall panels of the package. The package will have an overlapping longitudinal seal across the bottom surface. The die cutting can be by roll die cutting or platen die cutting. Other cutting techniques, such as laser techniques, can be used.
In order to facilitate the folding of the die cut material there can be a weakening of the material at the lines where folds are to be made. This can apply to the flaps section and main section panels intersection and/or to between the main section panels. The weakening can be scoring, perforating or forming small slits. In a scoring the thickness of the material will be materially reduced or can be offset. Such a weakening is useful for sheets of material of a greater thickness so that folds are made more effectively at the desired points.

The sheets of material can be die cut and perforated, slit, scored or otherwise weakened in a single step where a single rotary die simultaneously performs both functions, or this can be done using two different dies. Further the sheet of material can be printed and otherwise decorated in this same step. The printing and decorating can be done using the same converting line with the die cutting and weakening of the material. If the roll of material is plastic and is to be stored after die cutting to form the main section and a plurality of flaps section, it is useful to score the material just prior to feeding the film in-line into the automatic soap bar wrapping machine. If scored prior to storage due to the flow of plastics the depth of scoring can decrease over time. When scoring is at a maximum the folds are more apt to be made at the proper place in the packaging machine.

The weakening also can be adapted to provide for the easy opening of the package. The weakening can be designed to assist in making folds and to provide for an easy opening where with an exertion the material can be severed along the weakening area.

The sheet of material will have a thickness of about 50 microns to about 600 microns, and preferably about 75 microns to about 450 microns. The sheet of material can be a plastic, a plastic/plastic laminate, a paperboard, a plastic/paperboard laminate, a plastic/ paper laminate or a plastic/plastic laminate. The plastics can be any of the plastics commonly used in soap bar packaging such as thermoplastics. Useful thermoplastics include ethylene and propylene polymers and copolymers, vinyl polymers and copolymers, acryl polymers and copolymers and polyesters. These can have a coating of an adhesive to facilitate the making of seals.

The soap bar to be packaged can be essentially any shape or size, and can be opaque, translucent or transparent.

FIG. 1 shows a section of the wrapping sheet from a roll of material with segments removed.

FIG. 2 shows the roll of the film of FIG. 1 with weakened fold points.

FIG. 3 is a schematic diagram of the wrapping of a soap bar.

FIG. 4 is a schematic diagram of an embodiment of the wrapping of a soap bar with weakening at flap and panel fold points.

FIGS. 5 and 6 are schematic diagrams of an alternate embodiment where weakening is at a time subsequent to die cutting.

FIGS. 7A and 7B show the initial sequences of the automatic wrapping of a soap bar in an automatic wrapping machine.

FIG. 8-9 show the completion of the wrapping of the soap bar in an automatic wrapping machine.

FIGS. 10-12 show the wrapped soap bar in various orientations.

The invention will be described in more detail in the preferred embodiments of the wrapping of soap bars with specific reference to the drawings.

FIG. 1 shows a running piece of film from a die cutting machine, the film in a form to be fed into an automatic soap bar wrapping machine such as those available from Azonaria Costruzioni Machine Automatiche ACMAS.P.A., Binacchi & Co., or Guerze Srl. In the machine the film is cut into segments and wrapped around individual soap bars. FIG. 1 shows an unrolled sheet of material 18 from die cutter 20 having a main section with panels 22, 24, 26, 28 and 30 with appended flaps 32 and 32' on top wall panel 22, flaps 34 and 34' on longitudinal sidewall panel 24, flaps 36 and 36' on longitudinal sidewall panel 26, flaps 38 and 38' on part 28 of the bottom wall panel and flaps 40 and 40' on part 30 of the bottom wall panel. The bottom wall is comprised of two segments that are bonded together with an overlapping longitudinal seal 35 (FIG. 12). The segments 21 and 23 are the parts of the sheet that are die cut and removed to form the flaps section. These are removed in continuous strips. By being removed in continuous running strips the problem of small debris in the work area is precluded. Shown in this FIG. 1 is one segment of the wrapping sheet sufficient to wrap one soap bar. The sheet of material will have a common width. A roll of the material contains sufficient film to wrap several thousand bars. In platen die cutting the die cut pieces can be removed by vacuum. This die cut material with edge segments 21 and 23 removed can be wound onto a roll for later use or can be fed directly into an in-line automatic soap bar wrapping machine. This will depend on a large degree on who is doing the die cutting. If the film is being printed and die cut during the printing operation the printer will die cut during the film printing operation. It is not likely that the film would be printed in-line with soap wrapping since the printing speeds are higher than the soap bar wrapping speeds. The printing equipment would not be used efficiently. Usually the sheet of material will be printed and die cut and put onto a roll for later use. Optionally it also can be weakened at the fold lines at the printer.

FIG. 2 shows a roll of blank material that is sent through rotary dies which cut segments 21 and 23 from the edges of the film to form a main section 22, 24, 26, 28 and 30 and an appended flaps section. The flaps are formed by passing the film through die cutting roll 20. Optionally at the same time the weakened areas 42, 42', 44, 44', 46, 46', 48, 48', 50, 50', 52, 54, 56 and 58 are formed. The weakened areas can be score lines, perforations or small slits. Also shown are apertures 31 and 33. These apertures will permit some excess moisture and fragrance to be emitted from the corners of the package. The removal of excess moisture will prevent it from condensing on the internal surfaces of the
package. The fragrance that is emitted can be sensed by the consumer at the time of purchase. This is needed when the film has a plastic layer and has a low organic permeability. This modified sheet of material then is sent to an automatic soap bar wrapping machine. This machine receives soap bars and wraps soap bars at from about 50 to 500 bars per minute. The main section of the sheet is draped laterally around the soap bar and folded at the weakened areas, and then the flaps folded into place and sealed. Heat sealing is preferred and further preferred is an adhesive layer at least on the areas to be sealed. On the bottom surface of the soap bar bottom segments 28 and 30 are partially overlapped and sealed. Again similar heat sealing is preferred.

[0027] FIG. 3 is a schematic of making the film of FIG. 1. The roll of material 18 is unwound from a roll and fed to die cutter 20 to form the main panel section 22, 24, 26, 28, 30 and flaps section 32, 32', 34, 34', 36, 36', 38, 38', and 40, 40'. The edge segments 21 and 23 are removed leaving the main section and appended flaps section. The film usually will be printed and decorated in this die cutting operation. This film can be fed directly to an in-line soap bar wrapping machine or rewound and stored for later use.

[0028] FIG. 4 is a schematic of the process to make the film of FIG. 2 with main panel section 22, 24, 26, 28 and 30 and flaps section 32, 32, 34, 34', 36, 36', 38, 38', and 40, 40'. Between the main panel section and the flaps section are weakened areas 52, 54, 56, and 58. In the main panel section there are weakened areas 42, 42', 44, 44', 46, 46', 48, 48', and 50, 50'. Here as in the process of FIG. 3 the film can be fed directly to an in-line soap bar wrapping machine or stored for later use.

[0029] FIG. 5 illustrates a further embodiment in the wrapping of soap bars using the film of FIG. 1. A roll of sheet material is unwound and fed to die cut rolls to remove segments and form the flaps. This sheet of material then is rewound onto a roll for storage. At the time of use it is unwound and can be fed to rolls to form the weakened areas between the flaps and the connected main sections. This film then is sent to an automatic soap bar wrapping machine and the soap bars are wrapped. This process, with a weakening just prior to entering the soap bar wrapping machine, is preferred when the die cut sheet of material is plastic and is to be stored and then scored at fold points. This is the case since due to plastic flow over time in a tight roll some of the effect of a prior scoring can be lost. A scoring just prior to the soap bar wrapping sequence in the automated machine is preferred to better promote folds at preset lines. In addition a scoring weakening is preferred over perforations or slits for aesthetic reasons and to retain more moisture and fragrance within the finished package.

[0030] The process of FIG. 6 is similar to that of FIG. 5 except that in the step of unwinding and weakening there is a weakening between adjacent panels of the main section as well as between the main panels and the appended flaps section. That is, there is a weakening at essentially any point where there is to be a fold.

[0031] FIG. 7A illustrates one folding sequence in an automatic wrapping machine. Shown here is a soap bar 60 under the sheet of material of FIG. 2 at the start of the automatic wrapping process. FIG. 7B illustrates another sequence in an automatic wrapping machine where the soap bar 60 is on the sheet of material segment of FIG. 2 at the start of the automatic wrapping process. The sheet of FIG. 1 could be used in either of these processes. Shown in FIG. 8 is the sheet of material partially folded around the soap bar. Upon the folding of bottom panel segments 28 and 30 and the folding over of flaps 32, 32', 38, 40, and 38 and 40' the package is completed as is shown in FIGS. 9 to 12. The folds are at the previously described weakened lines. The folds are promoted at these weakened lines.

[0032] The soap bars are fed into the automatic wrapping machine with either a leading longitudinal side surface or a leading end surface. When the soap bar is fed in with a leading end side surface it can be rotated turned to a leading longitudinal side surface. The die cut film is fed into the wrapping machine and moves in the same direction as the soap bar feed when placed over the soap bar 60 as in 7A or placed under the soap bar as in 7B. In the 7A orientation the bottom panel segments 28 and 30 are folded under the soap bar 60, the trailing bottom panel segment being folded under first and the leading panel segment second. It is possible to reverse the sequence of the folding of the leading and trailing edges. The side flaps 34, 34', 36, 36' are folded inward. The bottom panel flaps 38, 38', and 40, 40' then are folded upward. This is followed by top panel flaps 32, 32' being folded downward. When all of the flaps are fully folded the soap bar passes by hot platens that press against the folded flaps to heat seal the flaps. In addition the wrapped soap bar will pass over a heated platen to seal the overlapping edges of panels 28 and 30 to form the longitudinal bottom seal 35 (FIG. 12). The soap bar then is fully wrapped.

[0033] In the 7B embodiment the soap bar 60 is placed on to the die cut sheet segment top panel 22. The longitudinal side panels 24 and 26 are folded upward and then bottom panel segments 28 and 30 are folded to form a package open at the ends. The flaps 34, 34' and 36, 36' then are folded inward followed by bottom flaps 38, 38' and 40, 40' being folded downward. The top flaps 32, 32' then are folded upward. Then as in the embodiment of FIG. 7A the overlapping flaps are heat sealed to form the side surfaces of the wrapped soap bar and the longitudinal bottom seal 35 (FIG. 12) is formed. Soap bar wrapping machines usually will use either the sequence of FIG. 7A or of 7B.

[0034] The sequence of either FIG. 7A or 7B involves a continuous flow of the soap bars through the wrapping machines. The soap bars and sheet of material are in continuous motion. This is possible since the film material moves in the same direction as the soap bars in the machine as the sheet of material segments are being shaped over the soap bar. If the feed of the sheet material was at a right angle to the movement of the soap bars, soap bar movement would have to be intermittent to permit the proper placement of the sheet segment onto or under the soap bar. Intermittent flow through a machine is not desired. The sheet of material can be fed 180 degrees to the direction of the soap bar flow when draped over or placed under the soap. However this will require more precision in the placement of the film segment onto the soap bar.

[0035] As noted the weakening to promote folds can by scoring, perforating or slitting. Scoring is preferred and depending on the material can extend up to half or more of the thickness of the material. However any of these techniques will enhance the packaged soap bar to have flat end
surfaces so that the packaged soap bar can stand on end as is shown in FIG. 12. This is the case even though the soap bar has compound curved end surfaces. Another advantage to this package is that the top panel flaps 32 and 33 (prime) have a greater surface area thus providing more space for decoration and text information.

[0036] The optional apertures 31, 31’, 33 and 33’ that are created at the time of die cutting provide corner points in the package for the escape of some moisture to prevent condensation of the moisture in the interior package surfaces and to allow some of the fragrance to escape at the point of purchase the packaged soap bar can have one to eight of these apertures. That is, there can be one at each corner. However it is preferred that they only be at the upper corners. By allowing some of the fragrance to escape at the point of purchase, the purchaser can detect the fragrance and use this as a part of the purchase decision.

[0037] In addition by the control of the depth of the weakening in a material the package can be converted to an easy opening package. This can be accomplished with reference to FIG. 9 where shown weakened areas 48, 50, 42 and unshown weakened areas 44 and 46 can be additionally weakened so that when panels 32, 38 are pulled most of this side of the package can be removed. The soap bar then can easily be removed from the package. Likewise the weakened areas on the other end can be additionally weakened to make that end also easy opening.

[0038] The sheet materials that can be used comprise most of the materials currently being used to package soap bars. These include paperboard, plastic/paperboard/laminates, plastic/paper/laminates, plastic/paper/plastic laminates, plastics, and plastic/plastic laminates. The preferred plastics are thermoplastics. The thermoplastics include the polymers and copolymers of ethylene, propylene, butadiene, vinyl compounds, acryl compounds and polyesters. Specific embodiments of plastics include polylethylene, polypropylene, polypevindichloride, polypvlniacetates, polypvinyl alcohols and polyesters such as polyethylene teraphthalate. These plastics can contain various additives such as colorants, fillers, thickeners, catalysts and ultraviolet and other light absorbing compounds. The additives would be added to give the plastic particular properties that are desired to have in the plastic.

[0039] The thickness of the film material will depend to a degree on the composition of the material. However, the thickness can be about 50 microns, to about 600 microns, and preferably about 75 microns to about 450 microns. The sheet material can be transparent, translucent or opaque in whole or in part. Also it may be of any color or tint. The sheet to be used and the thickness of the film to be used will be dictated by the soap bar to be packaged and the exact functional characteristics needed. Once a package material is chosen, the thickness to be used can be determined.

[0040] In addition the film material can have a continuous or discontinuous layer of an adhesive on its surface. This can be a heat activated adhesive and can be any of the commonly used acrylic adhesives, polyolefin coatings or hot melt adhesives. Alternatively, cold seal contact adhesives can be used when heat usage is not desirable.

What is claimed is:

1. A method of wrapping products having a major dimension and a minor dimension comprising:

   (a) providing a roll of sheet material for wrapping products;

   (b) cutting edge portions from said roll of sheet material to form a modified sheet material having a main section and a plurality of depending flaps section, said plurality of depending flaps section depending from each side of said main section and being of a shape to facilitate the formation of a wrapped product with said flaps forming end surfaces of the wrapped product;

   (c) feeding the modified sheet material and a plurality of products into an automatic product wrapping machine wherein segments of said modified sheet material are formed in the machine by cutting at designated points and said segments of said modified sheet material are wrapped laterally around each of said plurality of products and said plurality of flaps in said plurality of depending flaps section are folded to overlap and form end surfaces of a wrapped product; and

   (d) sealing the overlapping flaps to form the wrapped product.

2. The method as in claim 1 wherein said automatic wrapping machine receives said product from a first direction and said modified sheet material from second direction, as said product moves through said automatic wrapping machine disposing said modified sheet material over said product and cutting said modified sheet material into a segment to be wrapped around said product, folding a trailing edge of said segment under said product, folding a leading edge of said segment under said product to at least partially overlap said trailing edge, folding the flaps of said flap sections into an overlapping relationship, and sealing the overlapping flaps of said flap section and said overlapping leading edge and trailing edge.

3. A method as in claim 2 wherein said product is received by said wrapping machine with a leading first dimension and said product is rotated to a leading second dimension prior to said sheet of material being disposed over said product.

4. A method as in claim 2 wherein said main section of said sheet material from said roll of sheet material is weakened by one of scoring, perforating or slitting along selected lines to form top, bottom and longitudinal side panels.

5. A method as in claim 2 wherein said modified sheet material is weakened by one of scoring, perforating or slitting at the time of feeding said sheet modified material into said automatic product wrapping machine.

6. A method as in claim 2 wherein said sheet of film is printed in the step (b) of cutting edge portions of said roll of sheet material.

7. A method as in claim 2 wherein said product is a soap bar.

8. The method as in claim 1 wherein said automatic wrapping machine receives said product from a first direction and said modified sheet material from said first direction, as said product moves through said automatic wrapping machine disposing said modified sheet material under said product and cutting said modified sheet material into a segment to be wrapped around said product, folding a trailing edge of said segment under said product, folding a
leading edge of said segment under said product to at least partially overlap said trailing edge, folding the flaps of said flap sections into an overlapping relationship, and sealing the overlapping flaps of said flap section and said overlapping leading edge and trailing edge.

9. A method as in claim 8 wherein said product is received by said wrapping machine with a leading first dimension and said product is rotated to a leading second dimension prior to said sheet of material being disposed over said product.

10. A method as in claim 8 wherein said main section of said sheet material from said roll of sheet material is weakened by one of scoring, perforating or slitting along selected lines to form top, bottom and longitudinal side panels.

11. A method as in claim 8 wherein said modified sheet material is weakened by one of scoring, perforating or slitting at the time of feeding said sheet modified material into said automatic product wrapping machine.

12. A method as in claim 8 wherein said sheet of film is printed in the step (b) of cutting edge portions of said roll of sheet material.

13. A method as in claim 8 wherein said product is a soap bar.

14. The method as in claim 1 wherein said automatic wrapping machine receives said product from a first direction and said modified sheet material from a second direction, as said product moves through said automatic wrapping machine disposing said modified sheet material over said product and cutting said modified sheet material into a segment to be wrapped around said product, folding a trailing edge of said segment under said product, folding a leading edge of said segment under said product to at least partially overlap said trailing edge, folding the flaps of said flap sections into an overlapping relationship, and sealing the overlapping flaps of said flap section and said overlapping leading edge and trailing edge.

15. A method as in claim 14 wherein said product is received by said wrapping machine with a leading minor dimension and said product is rotated to a leading major dimension prior to said sheet of material being disposed over said product.

16. A method as in claim 14 wherein said main section of said sheet material from said roll of sheet material is weakened by one of scoring, perforating or slitting along selected lines to form top, bottom and longitudinal side panels.

17. A method as in claim 14 wherein said modified sheet material is weakened by one of scoring, perforating or slitting at the time of feeding said sheet modified material into said automatic product wrapping machine.

18. A method as in claim 14 wherein said sheet of film is printed in the step (b) of cutting edge portions of said roll of sheet material.

19. A method as in claim 14 wherein said product is a soap bar.

20. A method as in claim 14 wherein said second direction is perpendicular to said first direction.

21. A method as in claim 14 wherein said second direction is opposite to said first direction.

22. The method as in claim 1 wherein said automatic wrapping machine receives said product from a first direction and said modified sheet material from said first direction, as said product moves through said automatic wrapping machine disposing said modified sheet material under said product and cutting said modified sheet material into a segment to be wrapped around said product, folding a trailing edge of said segment under said product, folding a leading edge of said segment under said product to at least partially overlap said trailing edge, folding the flaps of said flap sections into an overlapping relationship, and sealing the overlapping flaps of said flap section and said overlapping leading edge and trailing edge.

23. A method as in claim 22 wherein said product is received by said wrapping machine with a leading first dimension and said product is rotated to a leading second dimension prior to said sheet of material being disposed over said product.

24. A method as in claim 22 wherein said sheet material from said roll of sheet material is weakened by one of scoring, perforating or slitting at the time of feeding said sheet modified material into said automatic product wrapping machine.

25. A method as in claim 22 wherein said modified sheet material is weakened by one of scoring, perforating or slitting at the time of feeding said sheet modified material into said automatic product wrapping machine.

26. A method as in claim 22 wherein said sheet of film is printed in the step (b) of cutting edge portions of said roll of sheet material.

27. A method as in claim 22 wherein said product is a soap bar.

28. A method as in claim 22 wherein said second direction is perpendicular to said first direction.

29. A method as in claim 22 wherein said second direction is opposite to said first direction.

30. A method as in claim 1 wherein said sheet of material is selected from the group consisting of plastics, paper, cardboard, plastic laminates, plastic/paperboard laminates, plastic/paperboard/plastic laminates, plastic/paper laminates and plastic/paper/plastic laminates.

31. A method as in claim 30 wherein the plastic and the plastic of said plastic laminates, plastic paper laminates, plastic/paperboard laminates, and plastic/paperboard/plastic laminates is a thermoplastic.

32. A method as in claim 31 wherein said thermoplastic is selected from the group consisting of ethylene polymers and copolymers, polypropylene polymers and copolymers, acrylic polymers and copolymers, vinyl polymers and copolymers and polyethylene terephthalate.

33. A method as in claim 1 wherein said sheet material has a thickness of about 50 micron to about 600 micron.

34. A method as in claim 42 wherein a paperboard, a plastic/paperboard laminate and plastic/paperboard/plastic laminate will have a thickness of about 200 micron to about 500 micron.

35. A method as in claim 1 wherein in step (b) of cutting edge portions an increased portion is cut from said main section to form at least one aperture of a predetermined size in a corner of said wrapped soap bar to allow some of the fragrance from the soap bar to leave the wrapped soap bar.

36. A method as in claim 35 wherein there are at least two apertures in an upper part of the wrapped soap bar.

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