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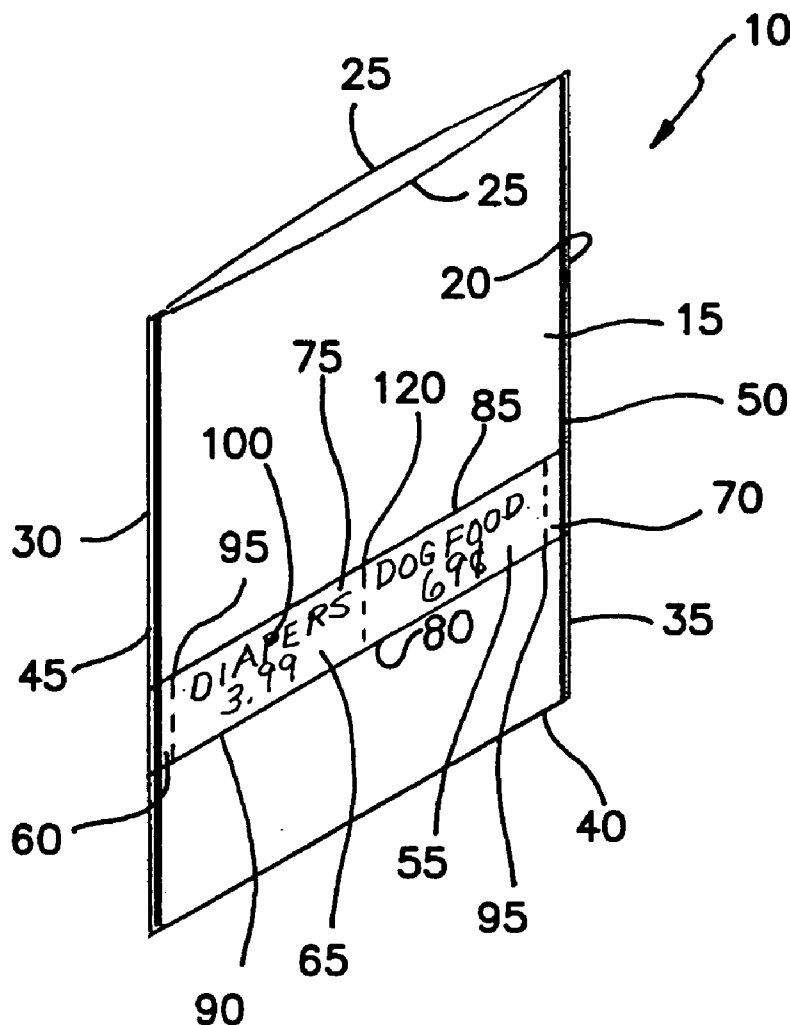
Publication Classification

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(57) **ABSTRACT**

A side seam bag with registered, perforated, promotional strips is formed from a continuous sheet of polyethylene material folded along a longitudinal axis to form a pocket. A continuous strip of polyethylene material is perforated into serial groupings of first and second end sections located on either end of removable center sections. Promotional material is printed on a surface of the center sections. A portion of the strip is located orthogonally to the long axis of the pocket and the first and second end sections are registered and sealed to the upper surface of the pocket as it is divided into side seam bags with first and second side seals. The bags with strips attached are cut and stacked into packs or perforated and wound on rolls. When the pocket is formed, an additional perforation is spaced from the open side of the pocket to form a detachable header strip.

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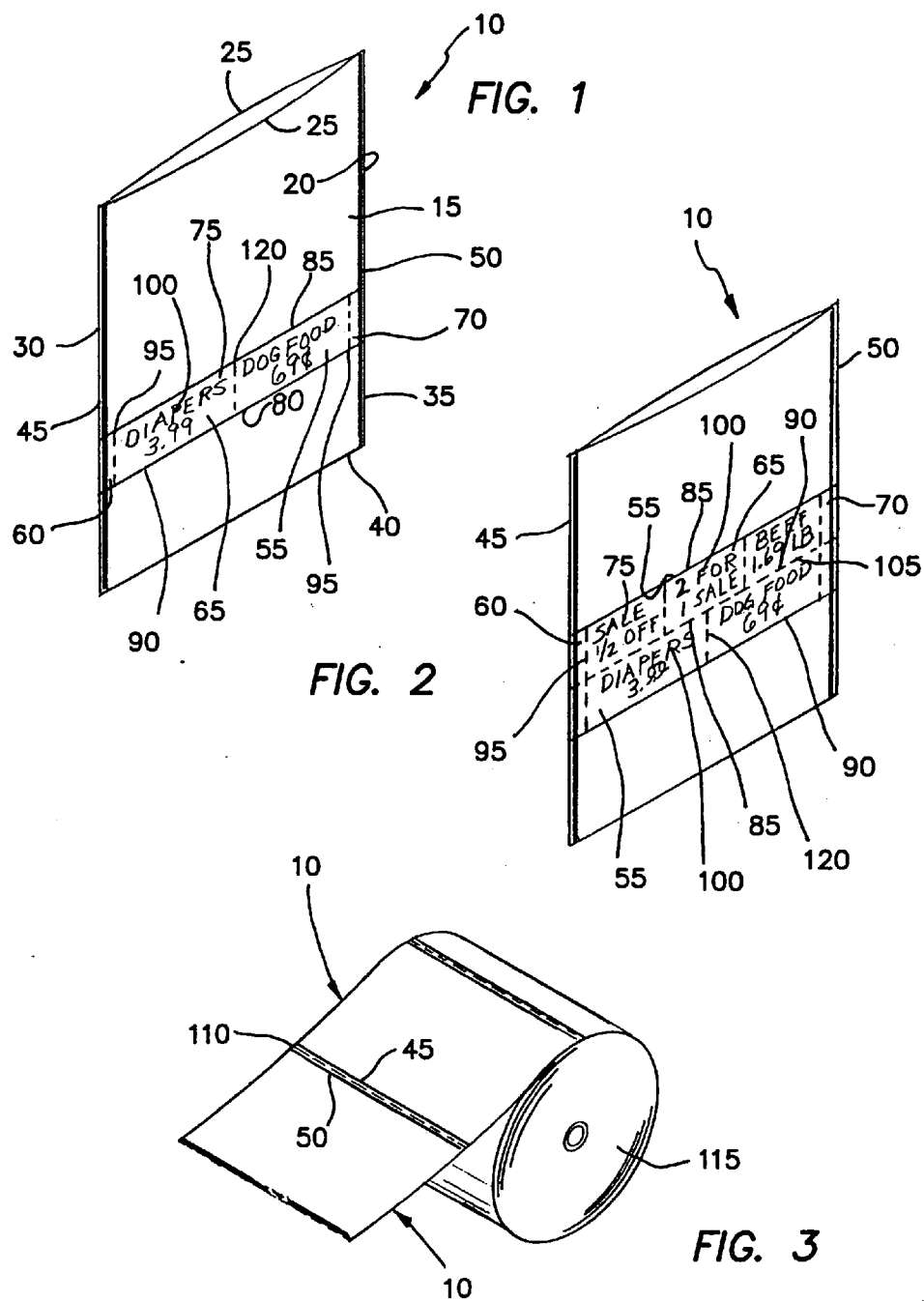


FIG. 4

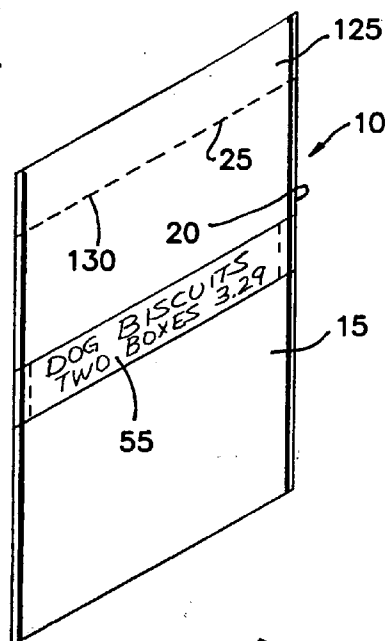
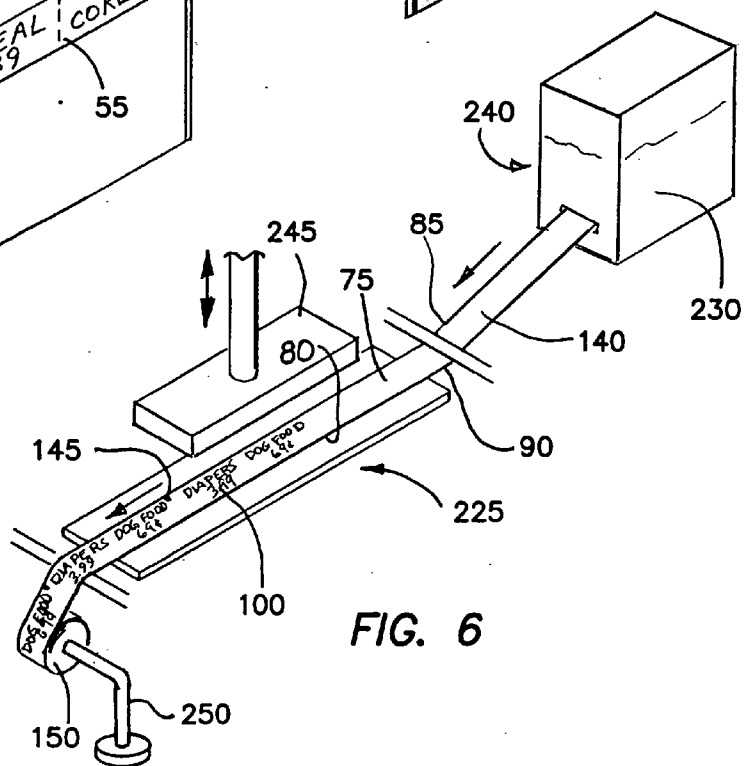
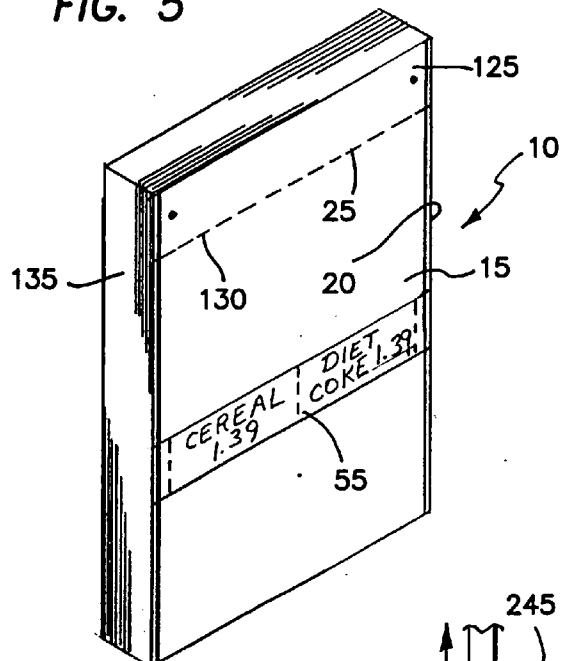
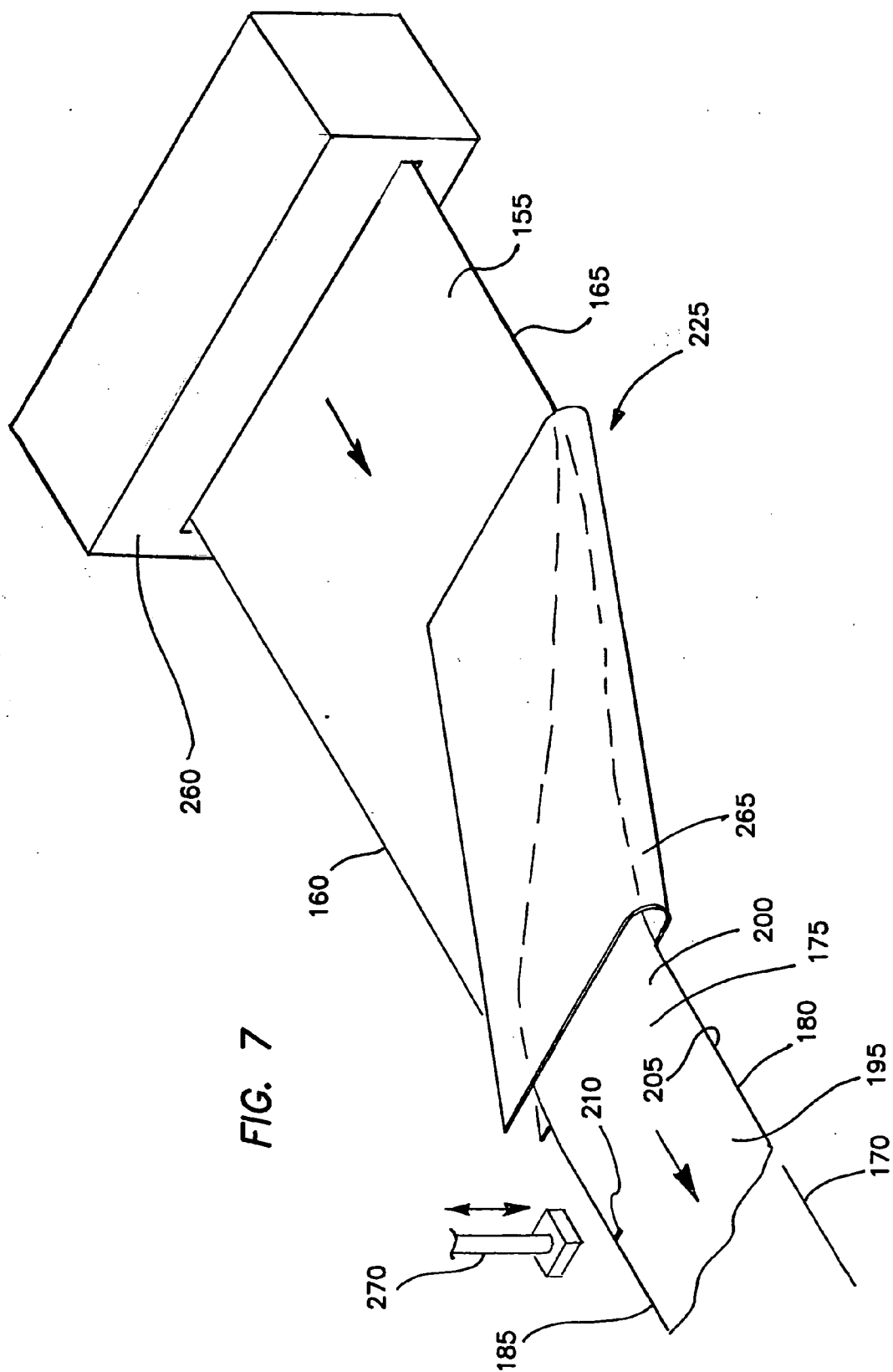
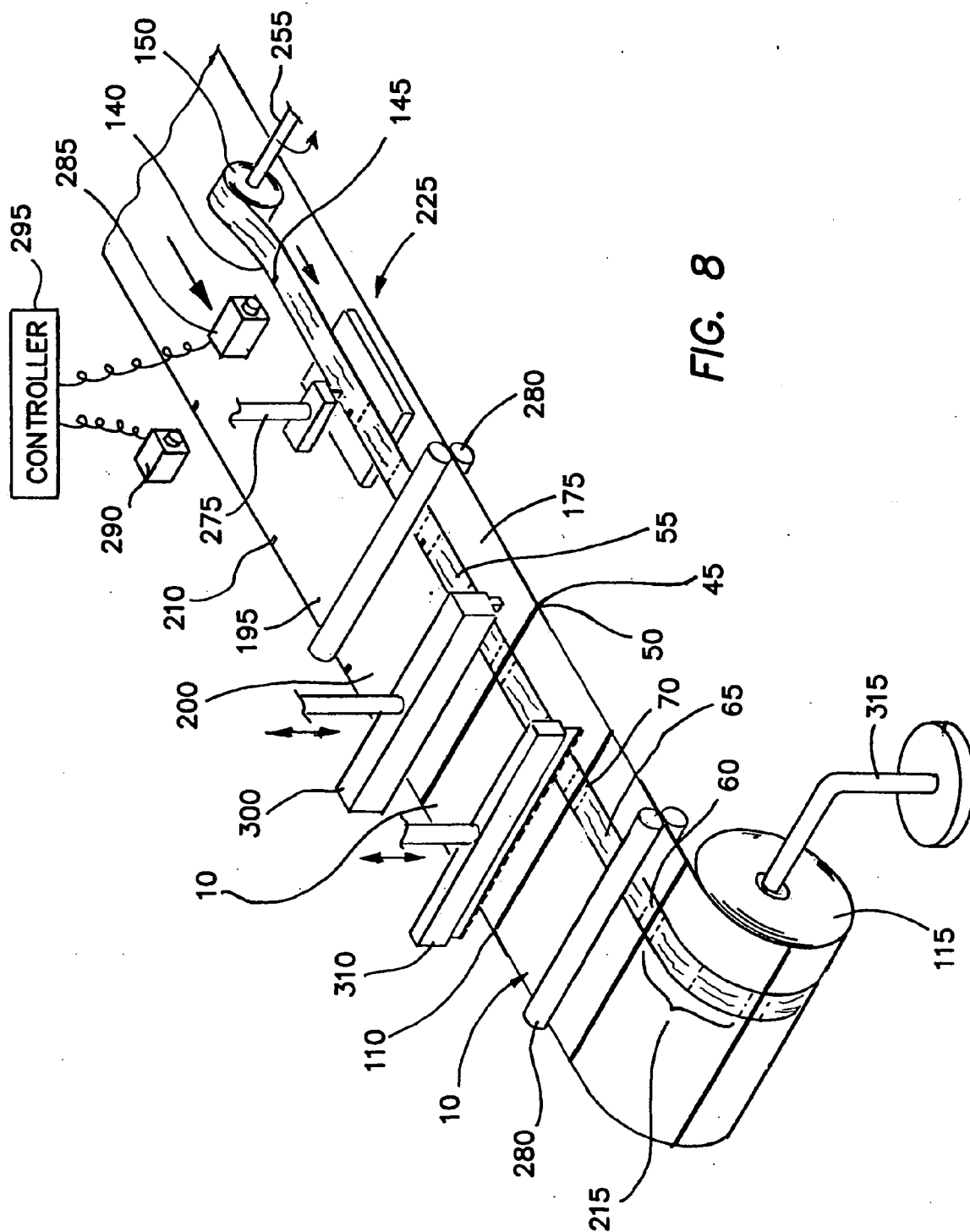
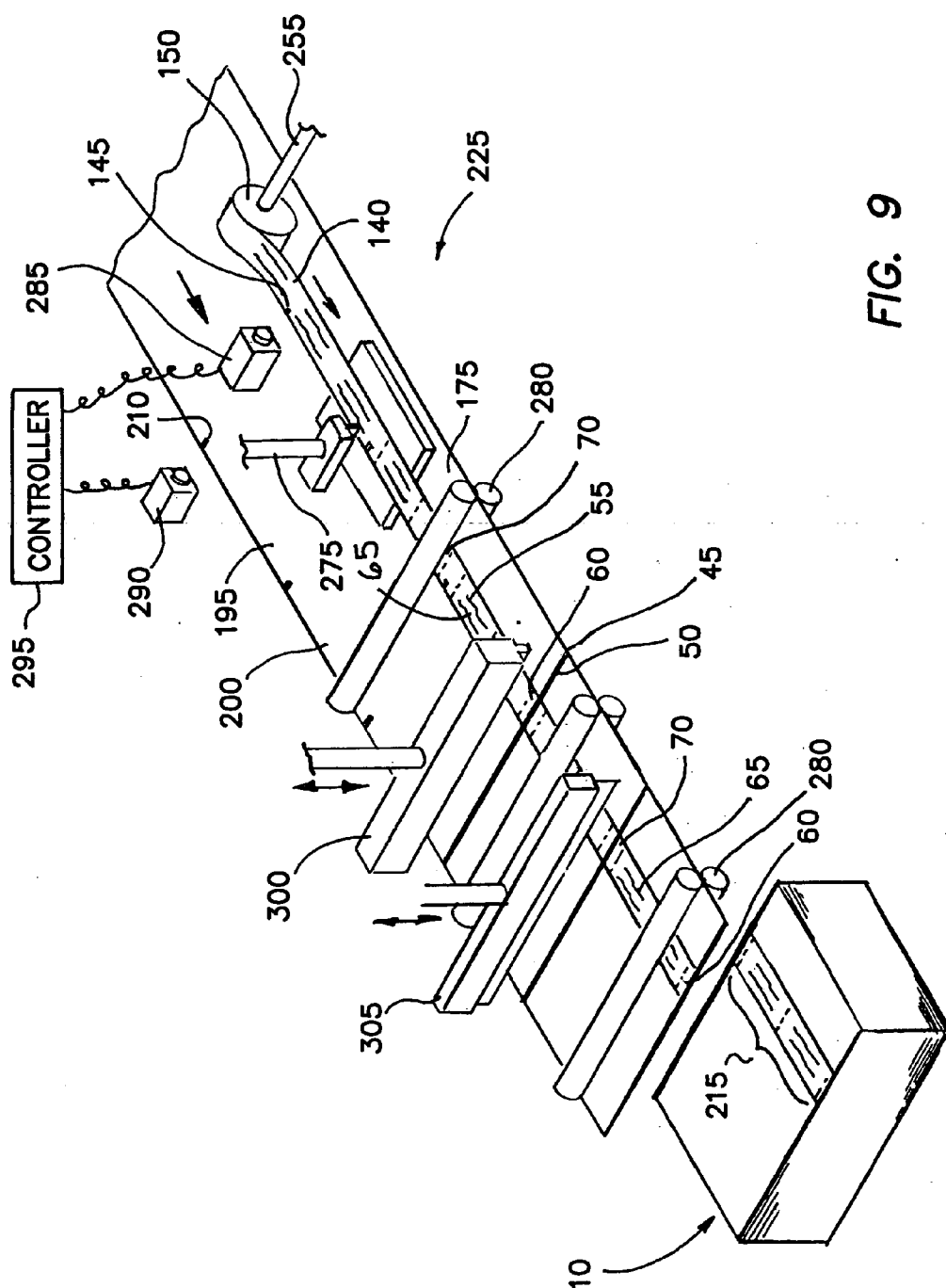


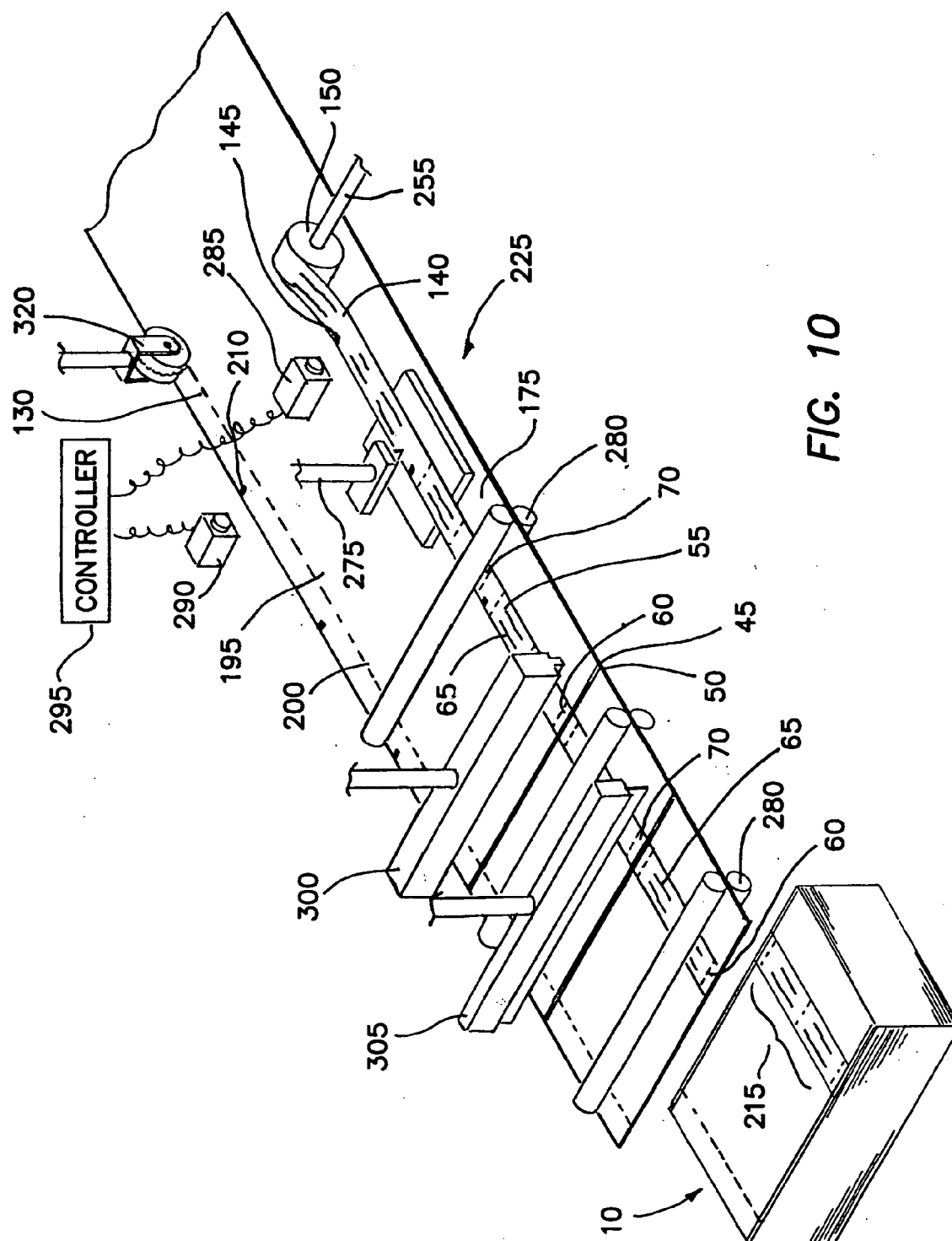
FIG. 5











**SIDE SEAM BAG WITH REGISTERED,
PERFORATED, PROMOTIONAL STRIPS****FIELD OF INVENTION**

[0001] The invention pertains to plastic bags with promotional strips. More particularly, the invention relates to side seam bags with one or more promotional strips registered between the bag side seams.

BACKGROUND OF THE INVENTION

[0002] Plastic bags with promotional or advertising strips attached to the bags permit a different model for the sale and use of plastic bags in grocery and retail establishments. By selling the advertising space on the strips, the revenue generated is often sufficient to more than cover the cost of providing the bags to customers. Previous designs for bags with attached promotional strips have had several problems. A first problem relates to promotional strips used to display coupons. These coupons must be severed from the bags to be redeemed. Early bags required the use of a scissors or knife for this purpose, resulting in low coupon usage and consequently low revenues associated with such bags. A second problem relates to the registration of the coupons to the bags. If the coupons are not registered to the bags, advertisers are not willing to pay for advertising on all of the coupons as a number would be cut off when joined to a bag edge. A third problem relates to the visibility of the coupons. When the coupons are placed in a bag gusset, they are less visible to the customer.

[0003] Various designs for bag and advertising or promotional systems have been developed to address these problems. U.S. Pat. No. 6,536,951, issued to Sill, discloses a plastic bag that includes first and second opposing body panels fixedly connected to each other along a pair of sides and a bottom bridging the pair of sides to form a receptacle space having a mouth formed opposite the bottom. The plastic bag also includes a reclosable fastener extending along said mouth and an overlay strip fixedly connected to the body panels at the sides of the body panel. The overlay strip overlays at least a portion of the body panels and extends beyond the body panels. The overlay strip preferably includes a header portion having at least one opening for mounting the plastic bag to a dispensing post, and a perforation line such that the header is removable from the remainder of the overlay strip. The overlay strip can also have at least one advertisement and/or at least one coupon with perforation lines such that the coupon is removable from the remainder of the overlay strip.

[0004] U.S. Pat. No. 5,035,515, issued to Crossman et al. describes a packaging comprising a pocket made of sheet material, the pocket defining an enclosure for holding merchandise and having at least one sealed edge. One or more detachable compartments are formed by extensions of the sheet material beyond the at least one sealed edge. A seal along at least one edge of the extensions closes the compartment. A promotional message is carried by the detachable compartment, and a perforation line extends parallel to the at least one sealed edge of the pocket on each compartment side thereof to make the compartment detachable from the pocket by a consumer. The extensions are folded back towards the sealed edge to form at least one sheet of the sheet material enclosed by the compartment. The pocket remains functional when the compartment is detached.

[0005] U.S. Pat. No. 4,909,636, issued to DeMatteis et al. discloses a plastic grocery bag is provided with a tear-off coupon. The coupon is configured with the rest of the bag for rapid production and easy detachment from the bag. The plastic bag is fabricated from tubes of blown plastic. The tube is first collapsed and printed and thereafter folded at the side edges to form two "W" shaped folds along the bag sides. These folds permit the bag, when expanded, to accommodate the required containment volume. As a next step, the folded tube is both heat-sealed and cut to form sealed incremental folded tubes. These tubes are in turn cut at the bottom to form the bottom of the bag and at the top to form the paired handles on either side of an opening, which handles are characteristic of the T-shirt bag. Centrally of the top of the two handles, and for the purpose of holding a group of such bags together, there is configured on the forward wall and rearward wall of each bag a tab. When numerous bags overlie one another, the tabs of all the overlying bags may be joined together into a wicket. This wicket holds the overlying bags stacked as a group together. This wicket also allows the bags to be serially opened and filled with merchandise, typically at a check stand. The improved coupon of this bag is configured from material that would otherwise be cut from the vicinity of the bag opening when it is formed. Specifically, the coupon is printed and cut for placement between the folded "W" folds at the sides. The coupon is configured so as not to interfere with the tab. With these positioning constraints, the coupon is placed for each detachment by either a packing clerk or the toting shopper without otherwise damaging or interfering with overall functionality of the bag.

[0006] U.S. Pat. No. 5,011,466, issued to DeMatteis et al. describes a T-shirt type grocery bag having a tear-off coupon provided during manufacture. An endless tube of blown thermoplastic is collapsed and printed, including printing for the coupon indicia. The bag is "W" folded forming side for the to-be-formed bag. The folded tube is heat sealed and cut, forming sealed incremental folded tubes. Cutting operations form a bag bottom and produce paired handles on opposing sides of an opening. The definition of this opening also provides a coupon proximate the bag opening. Preferably, the coupon formed lies between the W-folds and its orientation does not permit interference with a bag dispensing structure, such as tabs and wickets. Other embodiments include coupons for thermoplastic bags lacking paired handles and coupons for bags lacking some of the dispensing structures.

[0007] It is an objective of the present invention to provide a side seam bag with at least one promotional strip attached to the side seams of the bag. It is a further objective to provide a bag with promotional strips that are perforated for easy removal from the bag. It is a still further objective of the invention to provide a side seam bag with promotional strips containing coupons registered to the side seams of the bag. Finally, it is an objective of the invention to provide such bags that are simple and economical to produce and are strong enough for use with heavy loads of groceries or other retail purchases.

[0008] While some of the objectives of the present invention are disclosed in the prior art, none of the inventions found include all of the requirements identified.

SUMMARY OF THE INVENTION

[0009] The present invention addresses all of the deficiencies of prior art bag with advertising strip inventions and satisfies all of the objectives described above.

[0010] (1) A side seam polyethylene bag with registered, perforated, promotional strips having all of the desired features includes front and rear bag walls. Each of the walls has a top edge, first and second side edges and a bottom edge. The bottom edge of the front wall is joined to the bottom edge of the rear wall. The first side edges of the front and rear bag walls are joined at a first side seam and the second side edges of the front and rear bag walls are joined at a second side seam. At least one promotional strip is provided. The promotional strip has a first end section, at least one detachable center section, a second end section, an upper surface, a lower surface, an upper edge and a lower edge.

[0011] The first and second end sections are removably attached to the at least one center section with perforations. The promotional strip is attached at the first and second end sections to the first and second side seams, respectively. The at least one detachable center section has at least one promotional message printed on at least one of the upper surface and the lower surface of the strip. The promotional message is registered to the strip so that all of the message is located between the perforations. When the detachable center section is removed from the first and second end sections, it will comprise at least one complete promotional message.

[0012] (2) In a variant of the invention, the promotional strip has horizontal perforations along at least one of the upper edge and the lower edge. The horizontal perforations removably attach at least one additional promotional strip to the at least one promotional strip. The at least one additional promotional strip has a first end section, at least one detachable center section, a second end section, an upper surface, a lower surface, an upper edge and a lower edge. The first and second end sections are removably attached to the at least one center section with perforations. The additional promotional strip is attached at the first and second end sections to the first and second side seams, respectively.

[0013] The at least one detachable center section has at least one promotional message printed on at least one of the upper surface and the lower surface of the strip. The promotional message is registered to the additional promotional strip so that all of the message is located between the perforations. When the detachable center section of the additional promotional strip is removed from the first and second end sections, it will have at least one complete promotional message.

[0014] (3) In another variant, a side seam perforation is provided. The side seam perforation removably attaches the second side seam of the bag to the first side seam of a subsequent bag. When the bags include the side seam perforation they are windable into a compact bag roll.

[0015] (4) In still another variant, at least one additional perforation is provided. The at least one additional perforation extends from the upper edge to the lower edge of the promotional strip. The center section has at least one promotional message printed on at least one of the upper surface and the lower surface of the strip. The promotional message

is registered to the strip so that all of the message is located between the perforation and the additional perforation. When the detachable center section is removed from the first and second end sections, it will have at least one complete promotional message.

[0016] (5) In yet another variant, the top edge of at least one of the front and rear bag walls is attached to a header strip.

[0017] (6) In still another variant, the top edge of at least one of the front and rear bag walls is attached to said header strip with a perforation.

[0018] (7) In a further variant, a plurality of the header strips are attached together to form a bag pack.

[0019] (8) A method of making a side seam polyethylene bag with registered, perforated, promotional strips includes the following steps. Extruding a continuous strip of polyethylene material. The polyethylene strip has an upper edge, a lower edge, an upper surface and a lower surface. Printing a plurality of promotional messages and a plurality of first alignment indicators upon the upper surface of the polyethylene strip. Winding the continuous strip into a first roll. Extruding a continuous sheet of polyethylene material. The sheet has a first edge and a second edge. Folding the sheet along a longitudinal axis to form a continuous pocket. The pocket has a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer. Printing a plurality of second alignment indicators on the outer surface. Unwinding the strip from the roll.

[0020] Perforating the strip into serial groupings of first end sections, detachable center sections and second end sections. Locating a portion of the strip orthogonally over the pocket. Aligning one of the first alignment indicators with one of the second alignment indicators. Sealing the first end section of the portion of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, thereby forming a first side seam. Sealing the second end section of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, thereby forming a second side seam. Cutting a finished bag from the continuous pocket.

[0021] (9) In a variant of the invention, a method of making a side seam polyethylene bag with registered, perforated, promotional strips includes the following steps. Extruding a continuous strip of polyethylene material. The polyethylene strip has an upper edge, a lower edge, an upper surface and a lower surface. Printing a plurality of promotional messages and a plurality of first alignment indicators upon the upper surface of the polyethylene strip. Perforating the strip into serial groupings of first end sections, detachable center sections and second end sections. Winding the continuous strip into a first roll.

[0022] Extruding a continuous sheet of polyethylene material. The sheet has a first edge and a second edge. Folding the sheet along a longitudinal axis to form a continuous pocket that has a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer. Printing a plurality of second alignment indicators on the outer surface. Unwinding the strip from the roll. Locating a portion of the strip orthogonally over the pocket. Aligning one of the first alignment indicators with one of the second alignment indicators. Sealing the first end section of

the portion of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, forming a first side seam. Sealing the second end section of the portion of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, forming a second side seam and thereby forming a finished bag. Forming a perforation between the second side seam of a first bag and the first side seam of a subsequent bag. Rolling the bags into a compact roll.

[0023] (10) A method of making a side seam polyethylene bag with registered, perforated, promotional strips includes the following steps. Extruding a continuous strip of polyethylene material. The polyethylene strip has an upper edge, a lower edge, an upper surface and a lower surface. Printing a plurality of promotional messages and a plurality of first alignment indicators upon the upper surface of the polyethylene strip. Winding the continuous strip into a first roll. Extruding a continuous sheet of polyethylene material. The sheet has a first edge and a second edge. Folding the sheet along a longitudinal axis to form a continuous pocket that has a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer. Perforating at least one of the top layer and the bottom layer parallel and adjacent to the open top to form an attached header strip.

[0024] Printing a plurality of second alignment indicators on the outer surface. Unwinding the strip from the roll. Perforating the strip into serial groupings of first end sections, detachable center sections and second end sections. Locating a portion of the strip orthogonally over the pocket. Aligning one of the first alignment indicators with one of the second alignment indicators. Sealing the first end section of the portion of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, thereby forming a first side seam. Sealing the second end section of the portion of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, thereby forming a second side seam. Cutting a finished bag from the continuous pocket.

[0025] (11) An apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips includes a supply of polyethylene material. A first extruder is provided. The first extruder forms a continuous polyethylene strip. The strip has an upper edge, a lower edge, an upper surface and a lower surface. A first printer is provided. The first printer marks a plurality of promotional messages and a plurality of first alignment indicators upon the upper surface of the polyethylene strip. A winder is provided. The winder forms the polyethylene strip into a first roll. An unwind stand is provided. The unwind stand controllably dispenses the polyethylene strip from the first roll.

[0026] A second extruder is provided. The second extruder forms a continuous sheet of polyethylene material. The sheet has a first edge and a second edge. A sheet folder is provided. The sheet folder forms the sheet along a longitudinal axis to form a continuous pocket. The pocket has a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer. A second printer is provided. The second printer marks a plurality of second alignment indicators on the outer surface. A first perforator is provided. The first perforator perforates the strip into serial groupings of first end sections, detachable center sections and second end sections. A tractor is provided. The tractor pulls the strip

from the first roll located upon the unwind stand and locates a portion of the strip orthogonally over the pocket.

[0027] A first sensor is provided. The first sensor detects the first alignment indicator on the strip. A second sensor is provided. The second sensor detects the second alignment indicator on the outer surface of the pocket. A controller is provided. The controller is connected to the first and second sensors and aligns one of the first alignment indicators with one of the second alignment indicators. A sealer is provided. The sealer seals the first end section of the portion of the strip to the outer surface on the top layer and seals the top layer to the bottom layer, forming a first side seam, seals the second end section of the portion of the strip to the outer surface on the top layer and seals the top layer to the bottom layer, thereby forming a second side seam. A cutter is provided. The cutter cuts a finished bag from the continuous pocket.

[0028] (12) In a variant of the invention, the controller adjusts the speed of the unwind stand to align the first alignment indicator with the second alignment indicator.

[0029] (13) An apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips includes a supply of polyethylene material. A first extruder is provided. The first extruder forms a continuous polyethylene strip. The strip has an upper edge, a lower edge, an upper surface and a lower surface. A first printer is provided. The first printer marks a plurality of promotional messages and a plurality of first alignment indicators upon the upper surface of the polyethylene strip. A first perforator is provided. The first perforator perforates the strip into serial groupings of first end sections, detachable center sections and second end sections.

[0030] A winder is provided. The winder forms the polyethylene strip into a first roll. An unwind stand is provided. The unwind stand controllably dispenses the polyethylene strip from the first roll. A second extruder is provided. The second extruder forms a continuous sheet of polyethylene material. The sheet has a first edge and a second edge. A sheet folder is provided. The sheet folder forms the sheet along a longitudinal axis to form a continuous pocket that has a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer. A second printer is provided. The second printer marks a plurality of second alignment indicators on the outer surface. A tractor is provided. The tractor pulls the strip from the first roll located upon the unwind stand and locates a portion of the strip orthogonally over the pocket. A first sensor is provided. The first sensor detects the first alignment indicator on the strip.

[0031] A second sensor is provided. The second sensor detects the second alignment indicator on the outer surface of the pocket. A controller is provided. The controller is connected to the first and second sensors and aligns one of the first alignment indicators with one of the second alignment indicators. A sealer is provided. The sealer seals the first end section of the portion of the strip to the outer surface on the top layer and seals the top layer to the bottom layer, forming a first side seam, seals the second end section of the portion of the strip to the outer surface on the top layer and seals the top layer to the bottom layer, thereby forming a second side seam. A second perforator is provided. The second perforator forms a side seam perforation between the

second side seam of a first bag and the first side seam of a subsequent bag. A roller is provided. The roller rolls the bags into a compact roll.

[0032] (14) In a variant of the invention, the controller adjusts the speed of the unwind stand to align the first alignment indicator with the second alignment indicator.

[0033] (15) In a final variant of the invention an apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips includes the following components. A supply of polyethylene material is provided. A first extruder is provided. The first extruder forms a continuous polyethylene strip. The strip has an upper edge, a lower edge, an upper surface and a lower surface. A first printer is provided. The first printer marks a plurality of promotional messages and a plurality of first alignment indicators upon the upper surface of the polyethylene strip. A winder is provided. The winder forms the polyethylene strip into a first compact roll. An unwind stand is provided. The unwind stand controllably dispenses the polyethylene strip from the first compact roll.

[0034] A second extruder is provided. The second extruder forms a continuous sheet of polyethylene material. The sheet has a first edge and a second edge. A sheet folder is provided. The sheet folder forms the sheet along a longitudinal axis to form a continuous pocket that has a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer. A first perforator is provided. The first perforator perforates at least one of the top layer and the bottom layer parallel and adjacent to the open top to form an attached header strip. A second printer is provided. The second printer marks a plurality of second alignment indicators on the outer surface. A second perforator is provided. The second perforator perforates the strip into serial groupings of first end sections, detachable center sections and second end sections. A tractor is provided. The tractor pulls the strip from the first roll located upon the unwind stand and locates a portion of the strip orthogonally over the pocket. A first sensor is provided. The first sensor detects the first alignment indicator on the strip. A second sensor is provided. The second sensor detects the second alignment indicator on the outer surface of the pocket.

[0035] A controller is provided. The controller is connected to the first and second sensors and aligns one of the first alignment indicators with one of the second alignment indicators. A sealer is provided. The sealer seals the first end section of the portion of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, forming a first side seam, sealing the second end section of the portion of the strip to the outer surface on the top layer and sealing the top layer to the bottom layer, thereby forming a second side seam. A cutter is provided. The cutter cuts a finished bag from the continuous pocket.

[0036] An appreciation of the other aims and objectives of the present invention and an understanding of it may be achieved by referring to the accompanying drawings and the detailed description of a preferred embodiment.

DESCRIPTION OF THE DRAWINGS

[0037] **FIG. 1** is a perspective view of the preferred embodiment of the invention illustrating a single promotional strip;

[0038] **FIG. 2** is a perspective view of the **FIG. 1** embodiment illustrating a pair of promotional strips joined by a perforation;

[0039] **FIG. 3** is a perspective view of a series of the **FIG. 1** bags joined on the edges and formed into a bag roll;

[0040] **FIG. 4** is a perspective view of an alternative bag with a header at the upper end;

[0041] **FIG. 5** is a perspective view of a registered stack of bags of the **FIG. 4** embodiment;

[0042] **FIG. 6** is a perspective view of an apparatus for printing promotional messages and alignment indicators on a plastic strip;

[0043] **FIG. 7** is a perspective view of an apparatus for folding an extruded plastic sheet into a pocket and printing alignment indicators on it;

[0044] **FIG. 8** is a perspective view of an apparatus for forming side seam bags from the folded pocket, registering and attaching the promotional strip and forming a bag roll;

[0045] **FIG. 9** is a perspective view of an apparatus for forming side seam bags from the folded pocket, registering and attaching the promotional strip and forming a registered bag pack; and

[0046] **FIG. 10** is a perspective view of an apparatus for forming side seam bags with an attached header strip from the folded pocket, registering and attaching the promotional strip and forming a registered bag pack.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0047] (1) **FIGS. 1-5** illustrate a side seam polyethylene bag with registered, perforated, promotional strips **10** having all of the desired features that may be constructed from the following components. Front **15** and rear **20** bag walls are provided. Each of the walls **15, 20** has a top edge **25**, first **30** and second **35** side edges and a bottom edge **40**. The bottom edge **40** of the front wall **15** is joined to the bottom edge **40** of the rear wall **20**. The first side edges **30** of the front **15** and rear **20** bag walls are joined at a first side seam **45** and the second side **35** edges of the front **15** and rear **20** bag walls are joined at a second side seam **50**. At least one promotional strip **55** is provided. The promotional strip **55** has a first end section **60**, at least one detachable center section **65**, a second end section **70**, an upper surface **75**, a lower surface **80**, an upper edge **85** and a lower edge **90**.

[0048] The first **60** and second **70** end sections are removably attached to the at least one center section **65** with perforations **95**. The promotional strip **55** is attached at the first **60** and second **70** end sections to the first **45** and second **50** side seams, respectively. The at least one detachable center section **65** has at least one promotional message **100** printed on at least one of the upper surface **75** and the lower surface **80** of the strip **55**. The promotional message **100** is registered to the strip **55** so that all of the message **100** is located between the perforations **95**. When the detachable center section **65** is removed from the first **60** and second **70** end sections, it will comprise at least one complete promotional message **100**.

[0049] (2) In a variant of the invention, as illustrated in **FIG. 2**, the promotional strip **55** has horizontal perforations

105 along at least one of the upper edge **85** and the lower edge **90**. The horizontal perforations **105** removably attach at least one additional promotional strip **55** to the at least one promotional strip **55**. The at least one additional promotional strip **55** has a first end section **60**, at least one detachable center section **65**, a second end section **70**, an upper surface **75**, a lower surface **80**, an upper edge **85** and a lower edge **90**. The first **60** and second **70** end sections are removably attached to the at least one center section **65** with perforations **95**. The additional promotional strip **55** is attached at the first **60** and second **70** end sections to the first **45** and second **50** side seams, respectively.

[0050] The at least one detachable center section **65** has at least one promotional message **100** printed on at least one of the upper surface **75** and the lower surface **80** of the strip **55**. The promotional message **100** is registered to the additional promotional strip **55** so that all of the message **100** is located between the perforations **95**. When the detachable center section **65** of the additional promotional strip **55** is removed from the first **60** and second **70** end sections, it will have at least one complete promotional message **100**.

[0051] (3) In another variant, as illustrated in FIG. 3, a side seam perforation **110** is provided. The side seam perforation **110** removably attaches the second side seam **50** of the bag **10** to the first side seam **45** of a subsequent bag **10**. When the bags **10** include the side seam perforation **110** they are windable into a compact bag roll **115**.

[0052] (4) In still another variant, as illustrated in FIG. 2, at least one additional perforation **120** provided. The at least one additional perforation **120** extends from the upper edge **85** to the lower edge **90** of the promotional strip **55**. The center section **65** has at least one promotional message **100** printed on at least one of the upper surface **75** and the lower surface **80** of the strip **55**. The promotional message **100** is registered to the strip **55** so that all of the message **100** is located between the perforation **55** and the additional perforation **120**. When the detachable center section **65** is removed from the first **60** and second **70** end sections, it will have at least one complete promotional message **100**.

[0053] (5) In yet another variant, as illustrated in FIGS. 4 and 5, the top edge **25** of at least one of the front **15** and rear **20** bag walls is attached to a header strip **125**.

[0054] (6) In still another variant, as illustrated in FIGS. 4 and 5, the top edge **25** of at least one of the front **15** and rear **20** bag walls is attached to said header strip **125** with a perforation **130**.

[0055] (7) In a further variant, as illustrated in FIG. 5, a plurality of the header strips **125** are attached together to form a bag pack **135**.

[0056] (8) A method of making a side seam polyethylene bag with registered, perforated, promotional strips **10** includes the following steps, as illustrated in FIG. 6. Extruding a continuous strip **140** of polyethylene material. The polyethylene strip **140** has an upper edge **85**, a lower edge **90**, an upper surface **75** and a lower surface **80**. Printing a plurality of promotional messages **100** and a plurality of first alignment indicators **145** upon the upper surface **75** of the polyethylene strip **140**. Winding the continuous strip **140** into a first roll **150**. Extruding a continuous sheet of polyethylene material **155**. As illustrated in FIG. 7, the sheet **155** has a first edge **160** and a second edge **165**. Folding the sheet

155 along a longitudinal axis **170** to form a continuous pocket **175**. The pocket **175** has a closed bottom **180**, an open top **185**, an inner surface **190** (not shown), an outer surface **195**, a top layer **200** and a bottom layer **205**. Printing a plurality of second alignment indicators **210** on the outer surface **195**.

[0057] As illustrated in FIG. 9, unwinding the strip **140** from the roll **150**. Perforating the strip **140** into serial groupings **215** of first end sections **60**, detachable center sections **65** and second end sections **70**. Locating a portion **55** of the strip **140** orthogonally over the pocket **175**. Aligning one of the first alignment indicators **145** with one of the second alignment indicators **210**. Sealing the first end section **60** of the portion **55** of the strip **140** to the outer surface **195** on the top layer **200** and sealing the top layer **200** to the bottom layer **205**, thereby forming a first side seam **45**. Sealing the second end section **70** of the portion **55** of the strip **140** to the outer surface **195** on the top layer **200** and sealing the top layer **200** to the bottom layer **205**, thereby forming a second side seam **50**. Cutting a finished bag **10** from the continuous pocket **175**.

[0058] (9) In a variant of the invention, as illustrated in FIG. 6, a method of making a side seam polyethylene bag with registered, perforated, promotional strips **10**, includes the following steps. Extruding a continuous strip of polyethylene material **140**. The polyethylene strip **140** has an upper edge **85**, a lower edge **90**, an upper surface **75** and a lower surface **80**. Printing a plurality of promotional messages **100** and a plurality of first alignment indicators **145** upon the upper surface **75** of the polyethylene strip **140**. Perforating the strip **140** into serial groupings **215** of first end sections **60**, detachable center sections **65** and second end sections **70**. Winding the continuous strip **140** into a first roll **150**.

[0059] As illustrated in FIG. 7, extruding a continuous sheet of polyethylene material **155**. The sheet **155** has a first edge **160** and a second edge **165**. Folding the sheet **155** along a longitudinal axis **170** to form a continuous pocket **175** that has a closed bottom **180**, an open top **185**, an inner surface **190** (not shown), an outer surface **195**, a top layer **200** and a bottom layer **205**. Printing a plurality of second alignment indicators **210** on the outer surface **195**.

[0060] As illustrated in FIG. 8, unwinding the strip **140** from the roll **150**. Locating a portion **55** of the strip **140** orthogonally over the pocket **175**. Aligning one of the first alignment indicators **145** with one of the second alignment indicators **210**. Sealing the first end section **60** of the portion **55** of the strip **140** to the outer surface **195** on the top layer **200** and sealing the top layer **200** to the bottom layer **205**, forming a first side seam **45**. Sealing the second end section **70** of the portion **55** of the strip **140** to the outer surface **195** on the top layer **200** and sealing the top layer **200** to the bottom layer **205**, forming a second side seam **50** and thereby forming a finished bag **10**. Forming a perforation **110** between the second side seam **50** of a first bag **10** and the first side seam **45** of a subsequent bag **10**. Rolling the bags **10** into a compact roll **115**.

[0061] (10) A method of making a side seam polyethylene bag with registered, perforated, promotional strips **10** includes the following steps. As illustrated in FIG. 6, extruding a continuous strip of polyethylene material **140**. The polyethylene strip **140** has an upper edge **85**, a lower

edge 90, an upper surface 75 and a lower surface 80. Printing a plurality of promotional messages 100 and a plurality of first alignment indicators 145 upon the upper surface 75 of the polyethylene strip 140. Winding the continuous strip 140 into a first roll 150.

[0062] As illustrated in FIG. 7, extruding a continuous sheet of polyethylene material 155. The sheet 155 has a first edge 160 and a second edge 165. Folding the sheet 155 along a longitudinal axis 170 to form a continuous pocket 175 that has a closed bottom 180, an open top 185, an inner surface 190, an outer surface 195, a top layer 200 and a bottom layer 205. Printing a plurality of second alignment indicators 210 on the outer surface 195.

[0063] As illustrated in FIG. 10 perforating at least one of the top layer 200 and the bottom layer 205 parallel and adjacent to the open top 185 to form an attached header strip 125. Unwinding the strip 140 from the roll 150. Perforating the strip 140 into serial groupings 215 of first end sections 60, detachable center sections 65 and second end sections 70. Locating a portion 55 of the strip 140 orthogonally over the pocket 175. Aligning one of the first alignment indicators 145 with one of the second alignment indicators 210. Sealing the first end section 60 of the portion 55 of the strip 140 to the outer surface 195 on the top layer 200 and sealing the top layer 200 to the bottom layer 205, thereby forming a first side seam 45. Sealing the second end section 70 of the portion 55 of the strip 140 to the outer surface 195 on the top layer 200 and sealing the top layer 200 to the bottom layer 205, thereby forming a second side seam 50. Cutting a finished bag 10 from the continuous pocket 175.

[0064] (11) As illustrated in FIG. 6, an apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips 225, includes a supply of polyethylene material 230. A first extruder 240 is provided. The first extruder 240 forms a continuous polyethylene strip 140. The strip has an upper edge 85, a lower edge 90, an upper surface 75 and a lower surface 80. A first printer 245 is provided. The first printer 245 marks a plurality of promotional messages 100 and a plurality of first alignment indicators 145 upon the upper surface 75 of the polyethylene strip 140. A winder 250 is provided. The winder 250 forms the polyethylene strip 140 into a first roll 150.

[0065] As illustrated in FIG. 7, a second extruder 260 is provided. The second extruder 260 forms a continuous sheet of polyethylene material 155. The sheet 155 has a first edge 160 and a second edge 165. A sheet folder 265 is provided. The sheet folder 265 forms the sheet 155 along a longitudinal axis 170 to form a continuous pocket 175. The pocket 175 has a closed bottom 180, an open top 185, an inner surface 190, an outer surface 195, a top layer 200 and a bottom layer 205. A second printer 270 is provided. The second printer 270 marks a plurality of second alignment indicators 210 on the outer surface. As illustrated in FIG. 9, an unwind stand 255 is provided. The unwind stand 255 controllably dispenses the polyethylene strip 140 from the first roll 150. A first perforator 275 is provided. The first perforator 275 perforates the strip 140 into serial groupings 215 of first end sections 60, detachable center sections 65 and second end sections 70. A tractor 280 is provided. The tractor 280 pulls the strip 140 from the first roll 150 located upon the unwind stand 255 and locates a portion 55 of the strip 140 orthogonally over the pocket 175.

[0066] A first sensor 285 is provided. The first sensor 285 detects the first alignment indicator 145 on the strip 140. A second sensor 290 is provided. The second sensor 290 detects the second alignment indicator 210 on the outer surface 195 of the pocket 175. A controller 295 is provided. The controller 295 is connected to the first 285 and second 290 sensors and aligns one of the first alignment indicators 145 with one of the second alignment indicators 210. A sealer 300 is provided. The sealer 300 seals the first end section 60 of the portion 55 of the strip 140 to the outer surface 195 on the top layer 200 and seals the top layer 200 to the bottom layer 205, forming a first side seam 45, seals the second end section 70 of the portion 55 of the strip 140 to the outer surface 195 on the top layer 200 and seals the top layer 200 to the bottom layer 205, thereby forming a second side seam 50. A cutter 305 is provided. The cutter 305 cuts a finished bag 10 from the continuous pocket 175.

[0067] (12) In a variant of the invention, as illustrated in FIGS. 8, 9 and 10, the controller 295 adjusts the speed of the unwind stand 255 to align the first alignment indicator 145 with the second alignment indicator 210.

[0068] (13) An apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips 225 includes a supply of polyethylene material 230, as illustrated in FIG. 6. A first extruder 240 is provided. The first extruder 240 forms a continuous polyethylene strip 140. The strip 140 has an upper edge 85, a lower edge 90, an upper surface 75 and a lower surface 80. A first printer 245 is provided. The first printer 245 marks a plurality of promotional messages 100 and a plurality of first alignment indicators 145 upon the upper surface 75 of the polyethylene strip 140. A winder 250 is provided. The winder 250 forms the polyethylene strip 140 into a first roll 150. As illustrated in FIG. 7, a second extruder 260 is provided. The second extruder 260 forms a continuous sheet of polyethylene material 155. The sheet 155 has a first edge 160 and a second edge 165. A sheet folder 265 is provided. The sheet folder 265 forms the sheet 155 along a longitudinal axis 170 to form a continuous pocket 175 that has a closed bottom 180, an open top 185, an inner surface 190 (not shown), an outer surface 195, a top layer 200 and a bottom layer 205. A second printer 270 is provided. The second printer 270 marks a plurality of second alignment indicators 210 on the outer surface 195.

[0069] As illustrated in FIG. 8, an unwind stand 255 is provided. The unwind stand 255 controllably dispenses the polyethylene strip 140 from the first roll 150. A tractor 280 is provided. The tractor 280 pulls the strip 140 from the first roll 150 located upon the unwind stand 255 and locates a portion 55 of the strip 140 orthogonally over the pocket 175. A first perforator 275 is provided. The first perforator 275 perforates the strip 140 into serial groupings 215 of first end sections 60, detachable center sections 65 and second end sections 70. A first sensor 285 is provided. The first sensor 285 detects the first alignment indicator 145 on the strip 140. A second sensor 290 is provided. The second sensor 290 detects the second alignment indicator 210 on the outer surface 195 of the pocket 175. A controller 295 is provided. The controller 295 is connected to the first 285 and second 290 sensors and aligns one of the first alignment indicators 145 with one of the second alignment indicators 210. A sealer 300 is provided. The sealer 300 seals the first end section 60 of the portion 55 of the strip 140 to the outer surface 195 on the top layer 200 and seals the top layer 200

to the bottom layer 205, forming a first side seam 45, seals the second end section 70 of the portion 55 of the strip 140 to the outer surface 195 on the top layer 200 and seals the top layer 200 to the bottom layer 205, thereby forming a second side seam 50. A second perforator 310 is provided. The second perforator 310 forms a side seam perforation 110 between the second side seam 50 of a first bag 10 and the first side seam 45 of a subsequent bag 10. A roller 315 is provided. The roller 315 rolls the bags 10 into a compact roll 115.

[0070] (14) In a variant of the invention, as illustrated in FIGS. 8, 9, and 10, the controller 295 adjusts the speed of the unwind stand 255 to align the first alignment indicator 145 with the second alignment indicator 210.

[0071] (15) In a final variant of the invention, as illustrated in FIG. 6, an apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips 225 includes the following components. A supply of polyethylene material 230 is provided. A first extruder 240 is provided. The first extruder 240 forms a continuous polyethylene strip 140. The strip 140 has an upper edge 85, a lower edge 90, an upper surface 75 and a lower surface 80. A first printer 245 is provided. The first printer 245 marks a plurality of promotional messages 100 and a plurality of first alignment indicators 145 upon the upper surface 75 of the polyethylene strip 140. A winder 250 is provided. The winder 250 forms the polyethylene strip 140 into a first roll 150.

[0072] As illustrated in FIG. 7, a second extruder 260 is provided. The second extruder 260 forms a continuous sheet of polyethylene material 155. The sheet 155 has a first edge 160 and a second edge 165. A sheet folder 265 is provided. The sheet folder 265 forms the sheet 155 along a longitudinal axis 170 to form a continuous pocket 175 that has a closed bottom 180, an open top 185, an inner surface 190 (not shown), an outer surface 195, a top layer 200 and a bottom layer 205.

[0073] As illustrated in FIG. 10, a first perforator 320 is provided. The first perforator 320 perforates at least one of the top layer 200 and the bottom layer 205 parallel and adjacent to the open top 185 to form an attached header strip 125. A second printer 270 is provided. The second printer 270 marks a plurality of second alignment indicators 210 on the outer surface 195. An unwind stand 255 is provided. The unwind stand 255 controllably dispenses the polyethylene strip 140 from the first roll 150. A second perforator 325 is provided. The second perforator 325 perforates the strip 140 into serial groupings 215 of first end sections 60, detachable center sections 65 and second end sections 70. A tractor 280 is provided. The tractor 280 pulls the strip 140 from the first roll 150 located upon the unwind stand 255 and locates a portion 55 of the strip 140 orthogonally over the pocket 175. A first sensor 285 is provided. The first sensor 285 detects the first alignment indicator 145 on the strip 140. A second sensor 290 is provided. The second sensor 290 detects the second alignment indicator 210 on the outer surface 195 of the pocket 175. A controller 295 is provided. The controller 295 is connected to the first 285 and second 290 sensors and aligns one of the first alignment indicators 145 with one of the second alignment indicators 210. A sealer 300 is provided. The sealer 300 seals the first end section 60 of the portion 55 of the strip 140 to the outer surface 195 on the top

layer 200 and sealing the top layer 200 to the bottom layer 205, forming a first side seam 45, sealing the second end section 70 of the portion 55 of the strip 140 to the outer surface 195 on the top layer 200 and sealing the top layer 200 to the bottom layer 205, thereby forming a second side seam 50. A cutter 305 is provided. The cutter 305 cuts a finished bag 10 from the continuous pocket 175.

[0074] The side seam polyethylene bag with registered, perforated, promotional strips 10 and apparatus for making same 225 has been described with reference to particular embodiments. Other modifications and enhancements can be made without departing from the spirit and scope of the claims that follow.

1. A side seam polyethylene bag with registered, perforated, promotional strips comprising:

front and rear bag walls, each of said walls having a top edge, first and second side edges and a bottom edge;

said bottom edge of said front wall being joined to said bottom edge of said rear wall;

said first side edges of said front and rear bag walls being joined at a first side seam and said second side edges of said front and rear bag walls being joined at a second side seam;

at least one promotional strip, said promotional strip having a first end section, at least one detachable center section, a second end section, an upper surface, a lower surface, an upper edge and a lower edge;

said first and second end sections being removably attached to said at least one center section with perforations;

said promotional strip being attached at said first and second end sections to said first and second side seams, respectively;

said at least one detachable center section having at least one promotional message printed on at least one of said upper surface and said lower surface of said strip;

said promotional message being registered to said strip so that all of said message is disposed between said perforations; and

whereby, when said detachable center section is removed from said first and second end sections, it will comprise at least one complete promotional message.

2. The side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 1, wherein:

said promotional strip has horizontal perforations along at least one of said upper edge and said lower edge;

said horizontal perforations removably attaching at least one additional promotional strip to said at least one promotional strip;

said at least one additional promotional strip having a first end section, at least one detachable center section, a second end section, an upper surface, a lower surface, an upper edge and a lower edge;

said first and second end sections being removably attached to said at least one center section with perforations;

said additional promotional strip being attached at said first and second end sections to said first and second side seams, respectively;

said at least one detachable center section having at least one promotional message printed on at least one of said upper surface and said lower surface of said strip;

said promotional message being registered to said additional promotional strip so that all of said message is disposed between said perforations; and

whereby, when said detachable center section of said additional promotional strip is removed from said first and second end sections, it will comprise at least one complete promotional message.

3. The side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 1, further comprising:

a side seam perforation, said side seam perforation removably attaching said second side seam of said bag to said first side seam of a subsequent bag; and

whereby, when said bags comprise said side seam perforation they are windable into a compact bag roll.

4. The side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 1, wherein said center section of said promotional strip further comprises:

at least one additional perforation, said at least one additional perforation extending from said upper edge to said lower edge of said promotional strip;

said center section having at least one promotional message printed on at least one of said upper surface and said lower surface of said strip;

said promotional message being registered to said strip so that all of said message is disposed between said perforation and said additional perforation; and

whereby, when said detachable center section is removed from said first and second end sections, it will comprise at least one complete promotional message.

5. The side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 1, wherein the top edge of at least one of the front and rear bag walls is attached to a header strip.

6. The side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 5, wherein the top edge of at least one of the front and rear bag walls is attached to said header strip with a perforation.

7. The side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 5, wherein a plurality of said header strips are attached together to form a bag pack.

8. A method of making a side seam polyethylene bag with registered, perforated, promotional strips, comprising the steps of:

extruding a continuous strip of polyethylene material, said polyethylene strip having an upper edge, a lower edge, an upper surface and a lower surface;

printing a plurality of promotional messages and a plurality of first alignment indicators upon said upper surface of said polyethylene strip;

winding said continuous strip into a first roll;

extruding a continuous sheet of polyethylene material, said sheet having a first edge and a second edge;

folding said sheet along a longitudinal axis to form a continuous pocket having a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer;

printing a plurality of second alignment indicators on said outer surface;

unwinding said strip from said roll;

perforating said strip into serial groupings of first end sections, detachable center sections and second end sections;

disposing a portion of said strip orthogonally over said pocket;

aligning one of said first alignment indicators with one of said second alignment indicators;

sealing said first end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, thereby forming a first side seam;

sealing said second end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, thereby forming a second side seam; and

cutting a finished bag from said continuous pocket.

9. A method of making a side seam polyethylene bag with registered, perforated, promotional strips, comprising the steps of:

extruding a continuous strip of polyethylene material, said polyethylene strip having an upper edge, a lower edge, an upper surface and a lower surface;

printing a plurality of promotional messages and a plurality of first alignment indicators upon said upper surface of said polyethylene strip;

perforating said strip into serial groupings of first end sections, detachable center sections and second end sections;

winding said continuous strip into a first roll;

extruding a continuous sheet of polyethylene material, said sheet having a first edge and a second edge;

folding said sheet along a longitudinal axis to form a continuous pocket having a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer;

printing a plurality of second alignment indicators on said outer surface;

unwinding said strip from said roll;

disposing a portion of said strip orthogonally over said pocket;

aligning one of said first alignment indicators with one of said second alignment indicators;

sealing said first end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, forming a first side seam;

sealing said second end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, forming a second side seam and thereby forming a finished bag;

forming a perforation between said second side seam of a first bag and said first side seam of a subsequent bag; and

rolling said bags into a compact roll.

10. A method of making a side seam polyethylene bag with registered, perforated, promotional strips, comprising the steps of:

extruding a continuous strip of polyethylene material, said polyethylene strip having an upper edge, a lower edge, an upper surface and a lower surface;

printing a plurality of promotional messages and a plurality of first alignment indicators upon said upper surface of said polyethylene strip;

winding said continuous strip into a first roll;

extruding a continuous sheet of polyethylene material, said sheet having a first edge and a second edge;

folding said sheet along a longitudinal axis to form a continuous pocket having a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer;

perforating at least one of said top layer and said bottom layer parallel and adjacent to said open top to form an attached header strip;

printing a plurality of second alignment indicators on said outer surface;

unwinding said strip from said roll;

perforating said strip into serial groupings of first end sections, detachable center sections and second end sections;

disposing a portion of said strip orthogonally over said pocket;

aligning one of said first alignment indicators with one of said second alignment indicators;

sealing said first end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, thereby forming a first side seam;

sealing said second end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, thereby forming a second side seam; and

cutting a finished bag from said continuous pocket.

11. An apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips, comprising:

a supply of polyethylene material;

a first extruder, said first extruder forming a continuous polyethylene strip, said strip having an upper edge, a lower edge, an upper surface and a lower surface;

a first printer, said first printer marking a plurality of promotional messages and a plurality of first alignment indicators upon said upper surface of said polyethylene strip;

a winder, said winder forming said polyethylene strip into a first roll;

an unwind stand, said unwind stand controllably dispensing said polyethylene strip from said first roll;

a second extruder, said second extruder forming a continuous sheet of polyethylene material, said sheet having a first edge and a second edge;

a sheet folder, said sheet folder forming said sheet along a longitudinal axis to form a continuous pocket having a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer;

a second printer, said second printer marking a plurality of second alignment indicators on said outer surface;

a first perforator, said first perforator perforating said strip into serial groupings of first end sections, detachable center sections and second end sections;

a tractor, said tractor pulling said strip from said first roll disposed upon said unwind stand and disposing a portion of said strip orthogonally over said pocket;

a first sensor, said first sensor detecting said first alignment indicator on said strip;

a second sensor, said second sensor detecting said second alignment indicator on said outer surface of said pocket;

a controller, said controller being connected to said first and second sensors and aligning one of said first alignment indicators with one of said second alignment indicators;

a sealer, said sealer sealing said first end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, forming a first side seam, sealing said second end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, thereby forming a second side seam; and

a cutter, said cutter cutting a finished bag from said continuous pocket.

12. The apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 11, wherein said controller adjusts the speed of said unwind stand to align said first alignment indicator with said second alignment indicator.

13. An apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips, comprising:

a supply of polyethylene material;

a first extruder, said first extruder forming a continuous polyethylene strip, said strip having an upper edge, a lower edge, an upper surface and a lower surface;

a first printer, said first printer marking a plurality of promotional messages and a plurality of first alignment indicators upon said upper surface of said polyethylene strip;

a first perforator, said first perforator perforating said strip into serial groupings of first end sections, detachable center sections and second end sections;

a winder, said winder forming said polyethylene strip into a first roll;

an unwind stand, said unwind stand controllably dispensing said polyethylene strip from said first roll;

a second extruder, said second extruder forming a continuous sheet of polyethylene material, said sheet having a first edge and a second edge;

a sheet folder, said sheet folder forming said sheet along a longitudinal axis to form a continuous pocket having a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer;

a second printer, said second printer marking a plurality of second alignment indicators on said outer surface;

a tractor, said tractor pulling said strip from said first roll disposed upon said unwind stand and disposing a portion of said strip orthogonally over said pocket;

a first sensor, said first sensor detecting said first alignment indicator on said strip;

a second sensor, said second sensor detecting said second alignment indicator on said outer surface of said pocket;

a controller, said controller being connected to said first and second sensors and aligning one of said first alignment indicators with one of said second alignment indicators;

a sealer, said sealer sealing said first end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, forming a first side seam, sealing said second end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, thereby forming a second side seam; and

a second perforator, said second perforator forming a side seam perforation between said second side seam of a first bag and said first side seam of a subsequent bag;

a roller, said roller rolling said bags into a compact roll.

14. The apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips, as described in claim 13, wherein said controller adjusts the speed of said unwind stand to align said first alignment indicator with said second alignment indicator.

15. An apparatus for making a side seam polyethylene bag with registered, perforated, promotional strips, comprising:

a supply of polyethylene material;

a first extruder, said first extruder forming a continuous polyethylene strip, said strip having an upper edge, a lower edge, an upper surface and a lower surface;

a first printer, said first printer marking a plurality of promotional messages and a plurality of first alignment indicators upon said upper surface of said polyethylene strip;

a winder, said winder forming said polyethylene strip into a first roll;

an unwind stand, said unwind stand controllably dispensing said polyethylene strip from said first roll;

a second extruder, said second extruder forming a continuous sheet of polyethylene material, said sheet having a first edge and a second edge;

a sheet folder, said sheet folder forming said sheet along a longitudinal axis to form a continuous pocket having a closed bottom, an open top, an inner surface, an outer surface, a top layer and a bottom layer;

a first perforator, said first perforator perforating at least one of said top layer and said bottom layer parallel and adjacent to said open top to form an attached header strip;

a second printer, said second printer marking a plurality of second alignment indicators on said outer surface;

a second perforator, said second perforator perforating said strip into serial groupings of first end sections, detachable center sections and second end sections;

a tractor, said tractor pulling said strip from said first roll disposed upon said unwind stand and disposing a portion of said strip orthogonally over said pocket;

a first sensor, said first sensor detecting said first alignment indicator on said strip;

a second sensor, said second sensor detecting said second alignment indicator on said outer surface of said pocket;

a controller, said controller being connected to said first and second sensors and aligning one of said first alignment indicators with one of said second alignment indicators;

a sealer, said sealer sealing said first end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, forming a first side seam, sealing said second end section of said portion of said strip to said outer surface on said top layer and sealing said top layer to said bottom layer, thereby forming a second side seam; and

a cutter, said cutter cutting a finished bag from said continuous pocket.

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