Aug. 25, 1970 R. J. CARRIGAN 3,525,470

SEALABLE ENVELOPE FOR PACKING SLIP OR THE LIKE

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Fig. 1

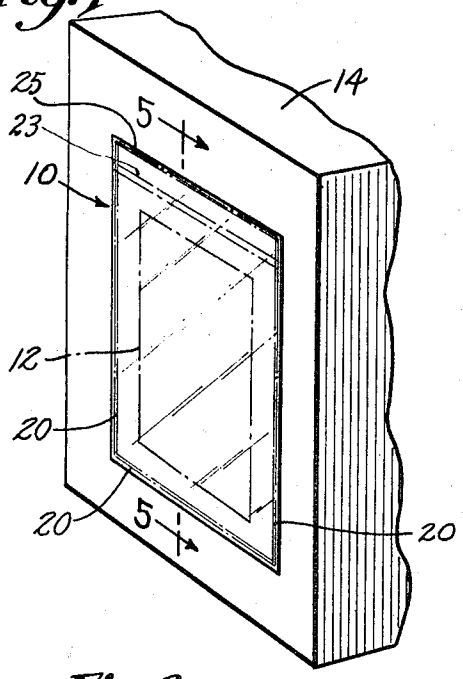


Fig. 2

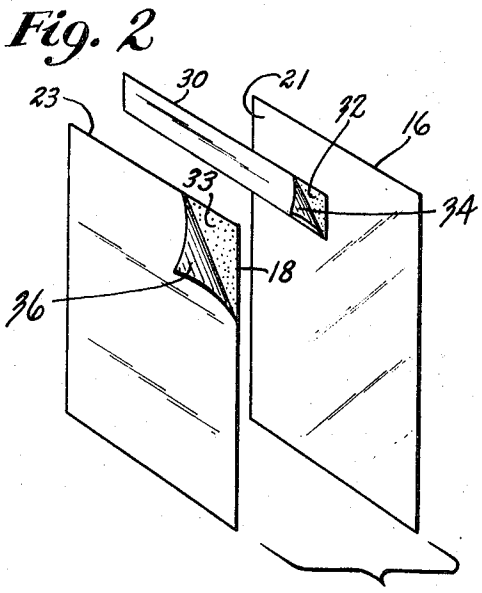


Fig. 3

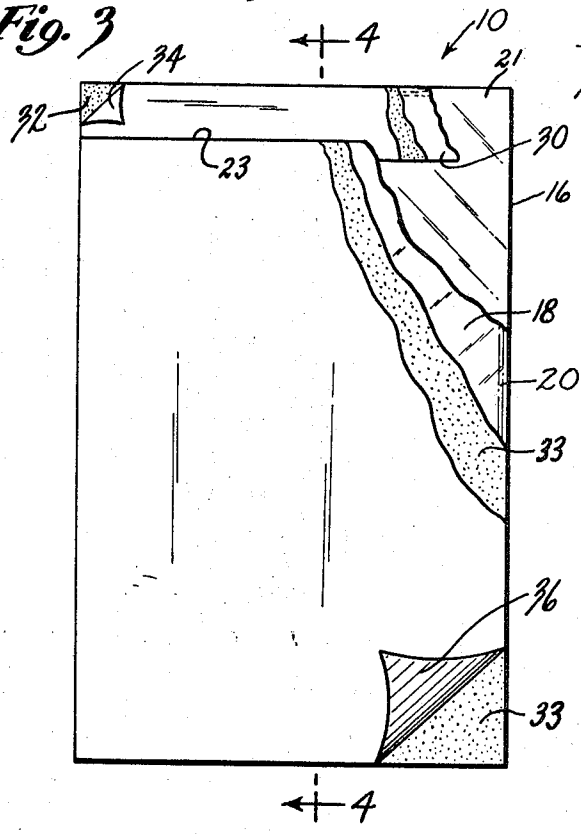


Fig 4

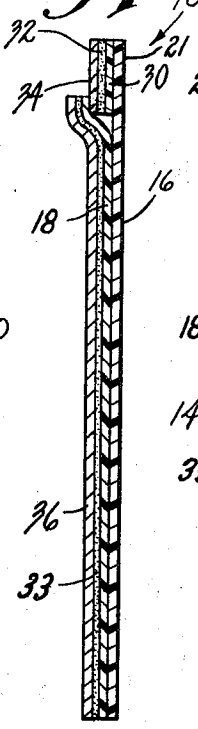
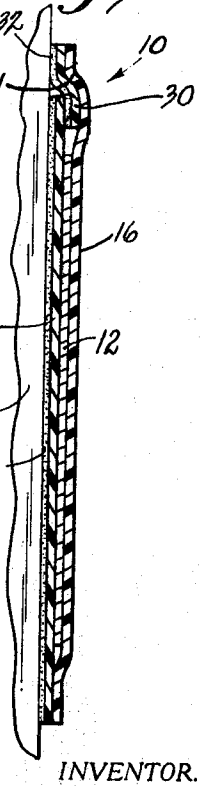


Fig 5



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FIG. 6

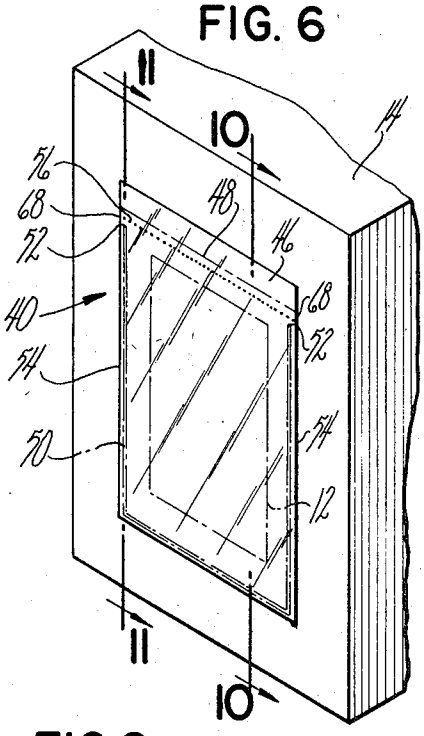


FIG. 7

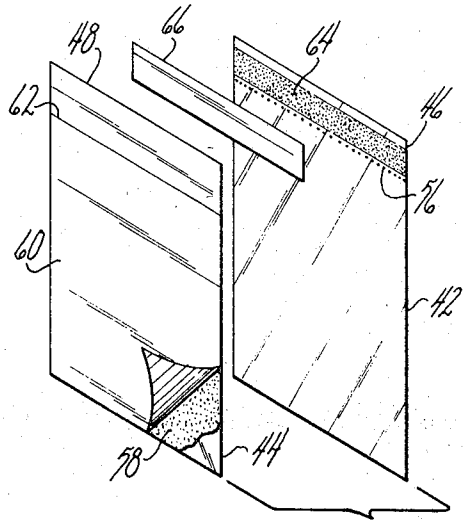


FIG. 8

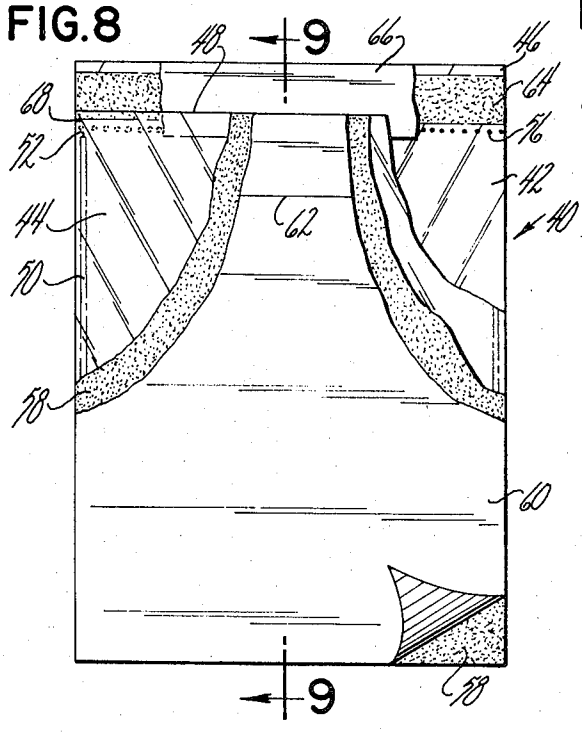


FIG. 9

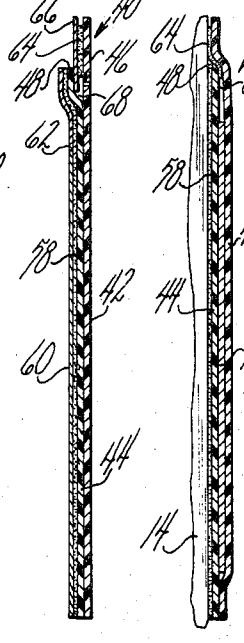


FIG. 10

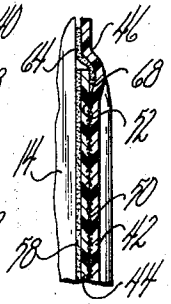


FIG. 11

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United States Patent Office 3,525,470 Patented Aug. 25, 1970

3,525,470

SEALABLE ENVELOPE FOR PACKING SLIP OR THE LIKE

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Continuation-in-part of application Ser. No. 689,370, Dec. 11, 1967. This application Apr. 28, 1969, Ser. No. 825,107

Int. Cl. B65d 27/00

U.S. Cl. 229—74 1 Claim

ABSTRACT OF THE DISCLOSURE

A sealable envelope for receiving a packing slip or the like and adapted for attachment to a packing box or other receiving surface has rectangular rear and front panels made from a flexible plastic material bonded together to form a pocket therebetween. The front panel is longer than the rear panel and includes a seal flap which extends beyond the edge of the rear panel defining the pocket mouth. The outer surface of the rear panel is coated with a pressure sensitive adhesive covered by a piece of release material which is removable therefrom to expose the adhesive for adhering the rear panel to the receiving surface. The seal flap is also coated with a pressure sensitive adhesive covered by a piece of release material which is removable therefrom to expose the adhesive for adhering the flap to the receiving surface. The adhesive on the flap extends inwardly toward the envelope pocket beyond the adjacent mouth defining edge of the rear panel and serves when the envelope is attached to a receiving surface to directly seal the front panel to the rear panel to close the pocket mouth.

RELATED APPLICATION

This application is a continuation-in-part of application Ser. No. 689,370, filed Dec. 11, 1967, now abandoned and entitled Sealable Envelope for Packing Slip or the Like.

BACKGROUND OF THE INVENTION

This invention relates in general to envelopes and deals more particularly with a sealable and self-attaching envelope particularly adapted for attachment to boxes, cartons, and other containers and for receiving packing lists, invoices, and the like.

The general aim of the present invention is to provide an improved moisture impervious envelope of the aforedescribed general type particularly adapted to contain an item such as a packing slip, invoice or the like so that the item may be sealed in the envelope and readily attached to a packing box or other receiving surface.

A further aim of this invention is to provide an envelope of the aforedescribed type suited to economical, automatic machine production.

A still further object of this invention is to provide an envelope of the aforedescribed type which after attachment to a receiving surface may be readily opened for removal of its contents.

SUMMARY OF THE INVENTION

The present invention resides in an envelope formed by two panels of thin flexible material heat sealed or otherwise bonded to one another to form a pocket therebetween with the front panel including a flap extending beyond the edge of the rear panel defining the envelope pocket. A coating of pressure sensitive material on the rear surface of the rear panel and the rear surface of the flap serve to adhere the rear panel and the flap to the receiving surface. The adhesive on the flap also extends inwardly beyond the pocket defining edge of the rear panel and serves to adhere the front panel to the rear panel to seal the pocket mouth. Sheets of removable release material cover the adhesive prior to use. The adhesive on the flap may be provided by means of a separate layer of plastic or the like bonded to the flap and carrying a coating of adhesive and a layer of release material, or may be provided by applying the adhesive directly to the rear surface of the flap and covering it with release material.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of an envelope embodying the present invention, the envelope being shown containing an item in its pocket and attached to a surface of a packing box.

FIG. 2 is an exploded perspective view of the panels from which the envelope of FIG. 1 is formed.

FIG. 3 is a rear view of the envelope of FIG. 1 before attachment to the packing box, portions of the rear panel, adhesive coating and release material being shown broken away to reveal other details of the envelope construction.

FIG. 4 is a sectional view taken along the line 4—4 of FIG. 3.

FIG. 5 is a sectional view taken along the line 5—5 of FIG. 1.

FIG. 6 is a perspective view of an envelope comprising an alternative embodiment of this invention, the envelope being shown containing an item and attached to a surface of a packing box.

FIG. 7 is a exploded perspective view of the panels from which the envelope of FIG. 6 is formed.

FIG. 8 is a rear view of the envelope of FIG. 6 before attachment to the packing box, portions of the rear panel, adhesive coating and release material being shown broken away to reveal other details of the envelope construction.

FIG. 9 is a sectional view taken along the line 9—9 of FIG. 8.

FIG. 10 is a sectional view taken along the line 10—10 of FIG. 6.

FIG. 11 is a fragmentary side view taken along the line 11—11 of FIG. 6.

In FIGS. 4, 5, 9, 10 and 11, the relative thicknesses of the various layers of material have been exaggerated for clarity.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, and first considering FIGS. 1 to 5, these figures show a sealable and self-attaching envelope embodying the present invention and indicated generally at **10**. In FIG. 1, the envelope **10** is shown to contain an item **12**, which may, for example, be a packing slip, and is shown in a sealed condition attached to an end surface of a packing box or carton **14**.

The envelope may take various different forms and shapes and may be made from any suitable stock, but preferably, as shown, it is basically made from two panels of thin flexible, transparent thermoplastic sheet material, such as polyethylene, which is impervious to moisture. These two panels are referred to as front and rear panels, respectively indicated at **16** and **18**, and are of a rectangular shape, the rear panel **18** being the one which in use is designed to lie adjacent the receiving surface and the front panel **16** being the one which in use is exposed to the viewer. The two panels **16** and **18** are connected to one another along their respectively associated peripheral edges, as indicated by the seal line **20**, to form a pocket therebetween. As will be best apparent from FIGS. 2 to 5, the front panel **16** is longer than the rear panel **18** and includes a flap portion **21** which extends beyond the edge **23** of the rear panel **18** which defines the mouth of the envelope pocket.

Attached to the flap portion **21** of the front panel **16** is a strip **30** of flexible thermoplastic material, such as polyethylene, similar to that from which the front panel **16** is made. The strip **30** on its rear surface includes a coating of pressure sensitive adhesive **32** and a layer of release material **34** which entirely covers the adhesive coating. The strip **30** and its associated adhesive and release materials layers **32** and **34** extend inwardly toward the pocket of the envelope, or downwardly in the drawings, beyond the adjacent mouth defining edge **23** of the rear panel. The adhesive coating **32** therefore overlaps the upper end portion of the rear panel **18** and when the release material **34** is removed may be used to seal the front panel to the rear panel to close the mouth of the envelope pocket, it being understood that the release material **34** is readily removable so that it may be stripped from the adhesive coating **34** to expose the adhesive for use.

The rear panel **18** also includes a layer **33** of adhesive covering the entire extent of its rear surface and which is, in turn, entirely covered by a layer of release material **36** which may readily be stripped therefrom to expose the adhesive for use. It should, of course, be understood that in some instances it may not be necessary to completely cover the flap portion **21** of the front panel or the rear surface of the rear panel with adhesive and, if desired, in some instances adhesive may be omitted from selected portions of such surfaces without departing from the invention. Also, one or more slits may be made in the release material if desired in order to facilitate the stripping of such material from the adhesive.

FIG. 4 shows the envelope **10** prior to its attachment to a receiving surface and with the release material layers **36** and **34** in place. FIG. 5, on the other hand, shows the envelope with the release material layers removed and with the envelope adhered to the receiving surface of the box **14** by means of the adhesive coatings **32** and **33**. From inspection of FIG. 5, it will be noted that the adhesive layer **32** serves to adhere the major portion of the envelope to the receiving surface and the adhesive layer **32** serves to adhere the flap portion **21** of the envelope to the same receiving surface. At the same time, the portion of the adhesive coating **32** which overlaps the upper end portion of the rear panel also serves to adhere the front panel **16** to the rear panel **18** and to thereby seal the mouth of the envelope to fully protect the packing slip or other item **12** contained therein.

The strip **30** which is attached to the flap **21** of the front panel may be attached thereto by various means but preferably it is attached by heat sealing along the outer registered peripheral edges of the strip **30** and the flap **21** as indicated by the seal line **25** in FIG. 1. Preferably, the front panel **16** is, in the manufacture of the envelope, cut from a web of polyethylene or similar material and the rear panel **18** and strip **30** are each cut from a web or webs of polyethylene to which the adhesive layer and release material layer have already been applied. The strip **30** is then laid in place over the front panel, the rear panel next laid in place over the front panel and part of the strip **30**, and then all parts are bonded together by heat sealing along the four peripheral edges of the front panel, this method of manufacture lending itself well to high speed production on web-fed envelope making machines.

Normally, the envelope **10** is used by first inserting a packing slip or other item, such as that indicated at **12**, into its pocket and then removing the release material layers **34** and **36** and adhering both the rear panel and the flap to the receiving surface, thereby attaching the envelope to the receiving surface and sealing the item **12** therein. If desired, however, the envelope may also be attached to a receiving surface without sealing the flap to the surface, thereby maintaining the envelope pocket in an opened condition for later sealing. When the envelope is attached in this manner, the release material layer **36** is stripped from the rear panel without removing the release material **34** from the flap **21**, and the rear panel is then attached to the receiving surface by means of its adhesive layer **33**. After this attachment, the envelope pocket remains unsealed due to the presence of the release material **34** on the seal flap. Thereafter, at any time, the release material **34** may be removed from the flap **21** to seal the flap to the receiving surface and to close the envelope mouth.

FIGS. 6 to 11 show an envelope, indicated generally at **40**, which is generally similar to that of the envelope **10** except for including a different construction of the seal flap portion of the front panel. In referring to these figures, the envelope **40** includes a front panel **42** and a rear panel **44** made of polyethylene or similar thin, flexible thermoplastic material, the two panels **42** and **44** being rectangular with the front panel **42** being longer than the rear panel **44** so as to include a seal flap **46** which extends beyond the adjacent or upper edge **48** of the rear panel which defines the mouth of the envelope. The two panels are joined to one another by heat sealing along their three registered peripheral edges as indicated by the seal line **50** of FIG. 1. For a purpose hereinafter described, it should be noted that along the two side edges **54**, **54** of the envelope the seal line **50** terminates, as indicated at **52**, **52** in FIG. 6, a slight distance from the mouth defining edge **48** of the rear panel so that in the area directly adjacent the pocket mouth the front panel is not directly sealed to the rear panel. Also, it should be noted that the front panel **42** includes a weakened line **56** formed by perforations or the like located between the adjacent edge **48** of the rear panel and the end points **52**, **52** of the heat seal.

As shown best in FIGS. 7, 8, and 9 the rear panel **44** includes a layer of pressure sensitive adhesive **58** which is entirely covered by a layer of release material **60**, the layer **60** preferably including a slit, such as shown at **62**, for facilitating its removal from the adhesive.

The seal flap **46** of the front panel **42** also includes a layer of adhesive for adhering the flap to the receiving surface and for sealing the front panel to the rear panel to close the envelope mouth. In this case, the adhesive, indicated at **64**, is applied directly to the flap **46** in the form of a line of such adhesive extending thereacross. This line of adhesive **64** is so located on the flap **46** that it extends in the direction toward the envelope pocket, or downwardly in the figures, beyond the adjacent edge **48** of the rear panel so as to slightly overlap the upper end portion of the rear panel and be capable of directly sealing the front panel to the rear panel to close the envelope mouth. A strip of release material **66** completely covers the strip of adhesive **64** on the seal flap and may be readily removed to expose such adhesive.

In the use of the envelope **40**, the release material layers **60** and **66** are normally removed, after a packing slip or other item such as that shown at **12** has been placed therein, and the envelope pressed to the receiving surface so that the adhesive **58** of the rear panel and the adhesive **64** of the seal flap will adhere the rear panel and the seal flap to the receiving surface. The portion of the flap adhesive **64** which overlaps the upper edge portion of the rear panel also seals the flap to the rear panel to close the mouth of the envelope thereby protecting the envelope contents. As mentioned previously, however, the heat seal line **50** along which the rear panel is joined to the front panel terminates short of the mouth defining edge **48** of the rear panel, and after the envelope has been sealed and adhered to a receiving surface, as shown in FIGS. 6, 10 and 11, a pencil or other sharp pointed tool may be inserted between the rear panel and the front panel along either side edge **54**, **54** of the envelope in the unsealed area **68** between the end **52** of the heat seal and the edge **48**. After the tool is so inserted, it may be moved across the envelope to tear the front panel along the weakened line **56**, thereby quickly and easily opening the envelope for removal of its contents **12**. It should be understood, however, that this easy opening feature is not necessary to the broader aspects of the invention and, if desired,

the envelope may be constructed so as to eliminate the weakened line **56** and to move the end points **52**, **52** of the heat seal closer to the edge **48**, thereby virtually eliminating any gap in the side edges of the envelope.

In the use of the envelope **40**, it may also be attached to a receiving surface without initially adhering the seal flap to such receiving surface as explained in connection with the envelope **10** of FIGS. 1 to 5. That is, the envelope may initially be adhered to the receiving surface solely through the use of the adhesive **58** on the rear panel without removing the release material **66** from the adhesive on the seal flap, the release material **66** thereafter being removed at a later time for sealing the flap to the receiving surface.

In the manufacture of the envelope **40**, the front panel **42** is preferably cut from a web of polyethylene or similar material, and the line of adhesive **64** and line **56** of perforations are added before the cutting of the panel from the web. Similarly, the release paper strip **66** is also preferably added prior to the cutting of the panel from the web. This allows the adhesive, the line of perforations and the release paper to be applied as a continuous process. The rear panel may also be cut from a web of polyethylene or similar material to which the adhesive and release material layers have previously been applied. The front and rear panels are then placed on top of one another and heat sealed together to form the finished envelope, this process lending itself well to high speed economical production on web-fed envelope making machines.

I claim:

1. A sealable envelope for a packing slip or the like, said envelope comprising front and rear panels of thin, flexible material connected to one another to form a pocket therebetween, said rear panel having an edge defining a mouth for said pocket and said front panel including a flap extending beyond said mouth defining edge of said rear panel, a layer of pressure sensitive adhesive on the rear surface of said rear panel, a layer of release material adhered to and completely covering said adhesive layer of said rear panel, a layer of pressure sensitive adhesive on the rear side of said flap, a layer of release material adhered to and completely covering said adhesive layer of said flap, said adhesive on said flap extending inwardly toward said pocket beyond said mouth defining edge of said rear panel so as to overlap a portion of said rear panel and be capable of adhering said front panel to said rear panel when its associated layer of release material is removed, said front and rear panels being connected to one another along a seal line which at at least one of the opposite ends of said mouth defining edge of said rear panel terminates short of said edge so as to provide an area adjacent said mouth defining edge along which said front and rear panels are unjoined to one another so as to permit the insertion of a tool therebetween for opening said envelope after it is adhered to a receiving surface, and a weakened line extending across said front panel and communicating with said area at which said front and rear panels are unjoined.

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DAVID M. BOCKENEK, Primary Examiner

U.S. Cl. X.R.

229—68, 71