Feb. 22, 1966 E. P. JOHNSON ET AL 3,236,439

MULTI-COMPARTMENT EXPANDABLE ENVELOPES

Filed June 22, 1964

3 Sheets-Sheet 1

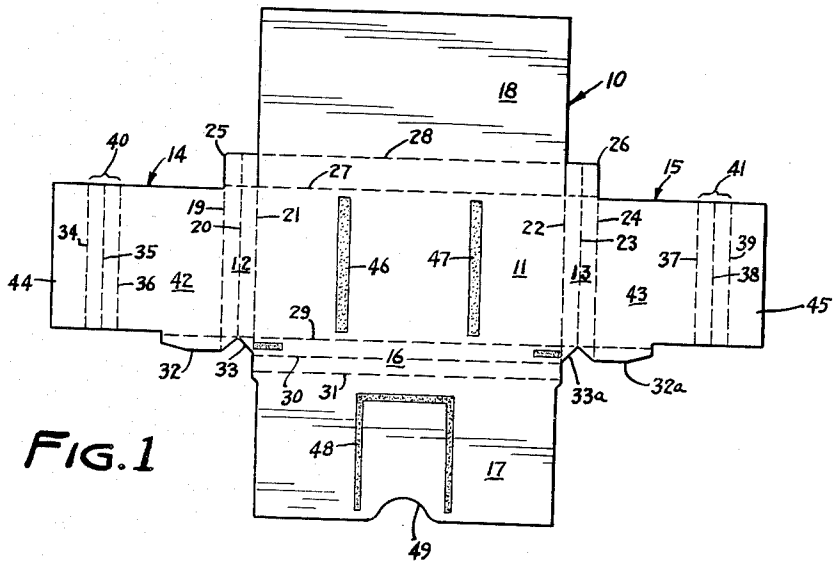


FIG. 1

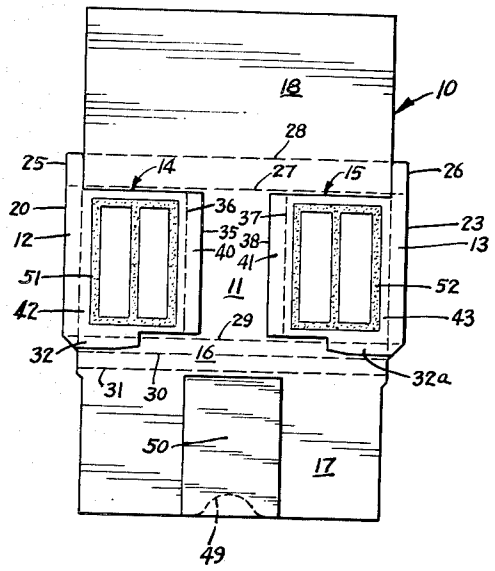


FIG. 2

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Filed June 22, 1964 3 Sheets-Sheet 2

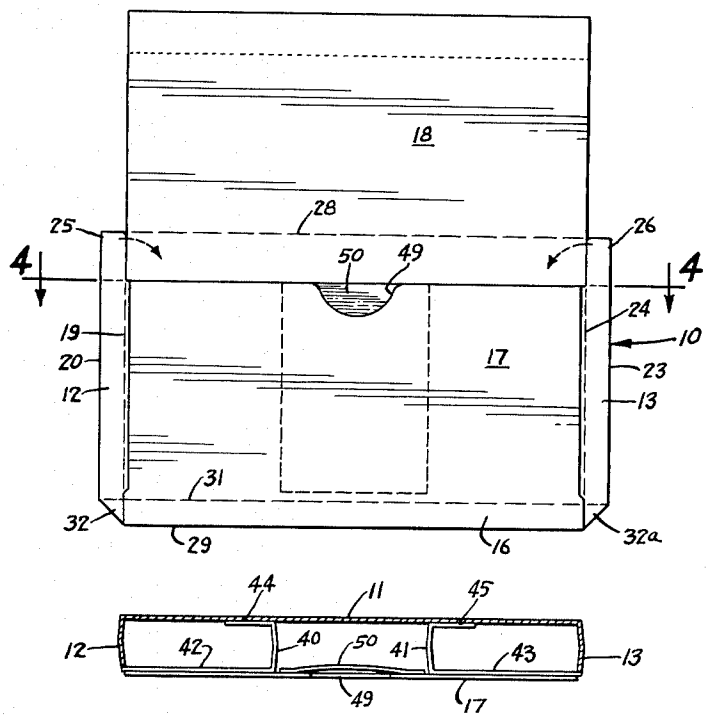


FIG. 3

FIG. 4

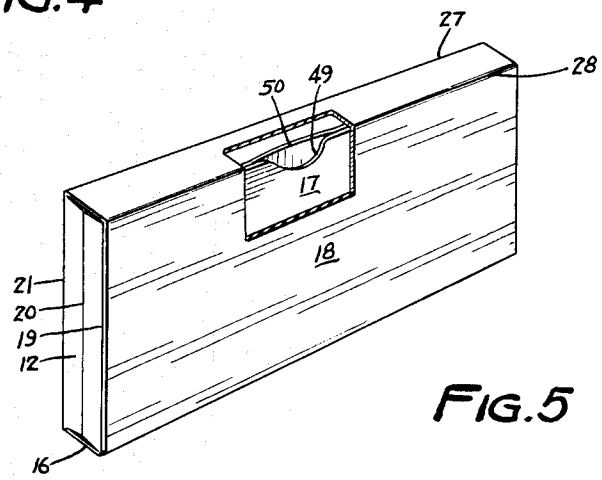


FIG. 5

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3 Sheets-Sheet 3

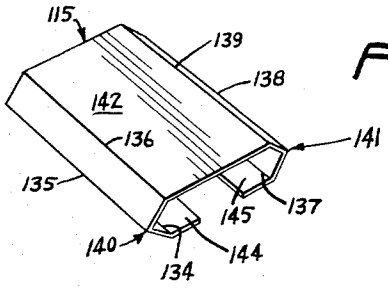


FIG. 6

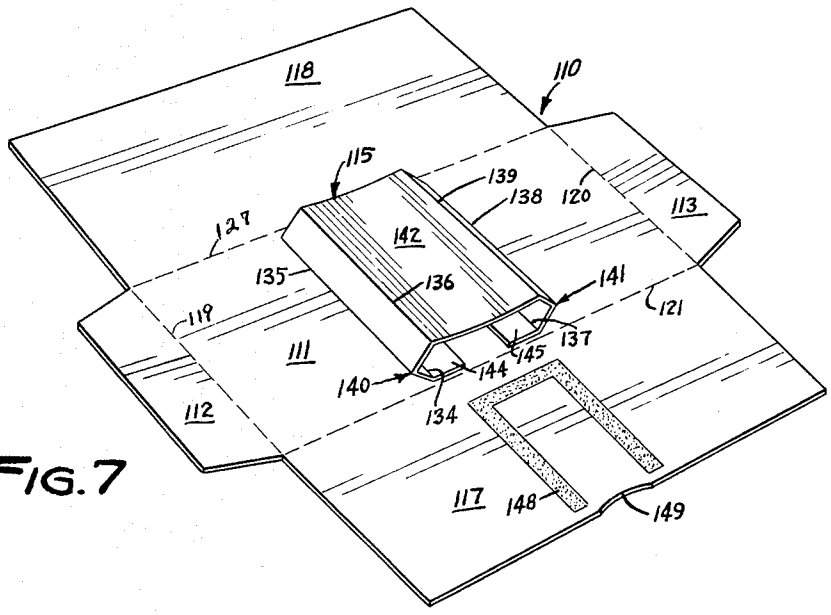


FIG. 7

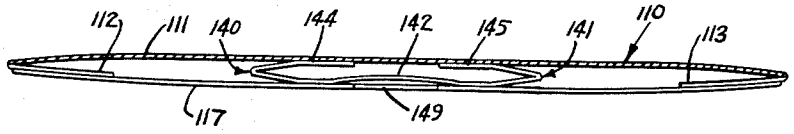


FIG. 8

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United States Patent Office 3,236,439 Patented Feb. 22, 1966

3,236,439

MULTI-COMPARTMENT EXPANDABLE ENVELOPES

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Filed June 22, 1964, Ser. No. 376,933
4 Claims. (Cl. 229—72)

This invention relates to a gusset envelope that is separated by expandable dividers into two or more compartments. The dividers are gusseted so that they expand with the gusseted side and bottom walls of the envelope.

Today there are many different uses for multi-compartment envelopes of the gusset or expandable type. For example there is an ever growing trend to issue trading stamps or coupons in conjunction with the sale of merchandise at the retail level. Issuance of stamps and coupons, of course, requires that the saver store them for eventual redemption. Trading stamps can be stored relatively easy by simply moistening their adhesive surface and pasting them into a book. As soon as a sufficient number of books are filled with stamps they are taken to a redemption center to be redeemed for selected merchandise.

Storage in a book is not practical in the case of premium coupons which are issued in a great variety of sizes and shapes and usually do not contain an adhesive surface. As distinguished from trading stamps, which are issued by retailers, premium coupons are issued by manufacturers for the primary purpose of building an association between the manufacturer of the product and the ultimate purchaser. It is, therefore, necessary that premium coupons be issued directly with the manufacturer's products and as such are often packaged with the product in its container or printed directly on the product's label. Thus the individual coupons must be removed from the package or label and then stored in bulk in conventional envelopes, file jackets and the like until a sufficient number have been saved for redemption. This presents the problem of storing and mailing the coupons without mutilating, tearing, crinkling or otherwise damaging them. Careful storage of premium coupons is now of special importance due to the recent and developing practice of the use of electronic scanning devices to scan the coupons after they have been turned in for redemption. Scanning is used to determine the validity of the coupons and to decipher coded market data printed on them. To be scanned electronically coupons must not be exposed to any great degree of tearing, crinkling or other form of mutilation so that they cannot be effectively and efficiently scanned.

The invention disclosed herein is directed in part to an envelope for conveniently and simply storing and mailing premium coupons so that they will not be torn or mutilated. Basically this invention is a multi-compartment expandable envelope divided into two or more compartments by dividers which can expand with the envelope as it is filled. Each compartment can expand to hold a considerable quantity of premium coupons or the like in orderly arrangement. The separate compartments, being only slightly larger in width than the average premium coupon, prevents the coupons from being disposed randomly or haphazardly as they would be in a conventional envelope, thus greatly reducing the chances of tearing, crinkling or other mutilization. Coupons are stored in the envelope by the saver as they are accumulated and after the requisite number have been saved for selected

merchandise the coupons are simply mailed in the envelope for redemption.

In some states a tax must be paid when the coupons are redeemed. The envelope exemplified by this invention provides a coin compartment on the rear panel so that coins for payment of any required taxes can be mailed directly with the envelope when the coupons are mailed in for redemption.

The above explanation is only one example of the use of the invention disclosed by this application. It is to be understood that the envelope described herein may be used whenever a multi-compartment expandable envelope is preferred. Examples are storing or mailing recipes, accounting receipts, small memorandum cards and the like.

Prior art expandable envelopes have proven inefficient in operation or costly and difficult to manufacture because the compartment dividers do not expand properly or the structure of the dividers require several steps in manufacture of the envelope. The instant invention obviates these difficulties by providing dividers that may be formed integrally with the envelope blank or formed separately and secured to the blank in one single operation. The objectives of this invention are therefore:

1st: To provide a gusset envelope with expandable dividers to divide the envelope into two or more compartments.

2nd: Provide a gusset envelope with expandable dividers which divide the envelope into two or more separate compartments, the envelope being easy and economical to manufacture.

3rd: To provide a multi-compartment envelope that conveniently stores a large number of premium coupons without tearing or otherwise damaging them and also has a convenient compartment for depositing coins in payment of any taxes required upon redemption of the coupons.

Other objectives inherent in the structure described, pictured and claimed will become more fully apparent as the disclosure of the invention proceeds.

This invention will be described with reference to the figures of the drawings in which corresponding numerals correspond to the parts described and in which:

FIG. 1 is a top plan view of the envelope blank before folding;

FIG. 2 is a plan view of the envelope with the side panels and division panels folded into assembled position;

FIG. 3 is a plan view of the rear surface of the envelope in assembled unexpanded position with the closure flap open;

FIG. 4 is a sectional view taken along the lines and in the direction of the arrows 4—4 of FIG. 3 with the envelope fully expanded;

FIG. 5 is a perspective view from the rear of the envelope partially cut away and fully loaded and sealed closed;

FIG. 6 is a perspective view of an expandable divider used in a modified form of envelope;

FIG. 7 is a perspective view of the modified envelope blank with the divider section shown in FIG. 6 attached thereto; and

FIG. 8 is a sectional view of the modified envelope in assembled form as seen from the top along a line at the juncture between the body of the envelope and the closure flap.

The envelope described in this invention is die cut from any suitable paper stock to form an envelope blank gen-

erally designated **10**. The major components of the envelope comprise the blank **10** and a plurality of score lines which divide the blank into a series of panels. The panels comprise a front panel **11**; side panels **12** and **13**; division panels **14** and **15**; bottom panel **16**; rear panel **17** and closure panel **18**. The division panels incorporate a gusseted divider or section. In one form of this invention, the division panels are integrally formed with the side panels. In a modified form of envelope the division panel is formed separately and secured to the envelope before the latter is assembled.

The envelope is assembled by folding the panels into their correct position in the sequence shown in FIGS. **1** through **5**. The structure of the various parts of the envelope and its assembly will now be described.

As best seen in FIG. 1, side panels **12** and **13** are comparatively narrow and are actually gusseted panels, the gussets being formed by score lines **19, 20**, and **21** in panel **12** and scores **22, 23** and **24** in panel **13**. The side panels are integral with front panel **11** and separated therefrom by scores **21, 22**. They are also integral with corresponding division panels **14** and **15**. In assembly each side panel and its corresponding division panel is folded over onto the rear surface of front panel **11** along the score lines **20** and **23**.

A pair of tabs **25** and **26** are formed at the upper end of each side panel so that when the envelope is sealed closed in the fully expandable position of FIG. 5, the tabs **25** and **26** are folded downward under the closure panel **18**. The fold of each tab is in the direction of the arrows of FIG. **3** and they are folded to a horizontal position which is parallel to the upper edge of the envelope compartment. When in folded position the tabs insure a tight fit between the juncture of the closure panel **18** and each side panel by contact with the inner surface of the panel **18**.

The bottom panel **16** is also a gusseted panel formed by score lines **29, 30** and **31** and is integrally joined with the front and rear panels respectively along scores **29** and **31**. The bottom and rear panels are folded to the assembled position along line **30**, the remaining scores **29** and **31** forming an expandable gusset.

At each end of panel **16** are two pairs of projections **32**, **32*a***, **33** and **33*a*** which are formed integrally at the ends of the bottom and side panels and the lower portion of the division panels as best seen in FIG. 1. The function of these projections is to assist in making a complete closure at the juncture of the bottom and side panels when the envelope is assembled and fully loaded. Their function is similar to tabs **25** and **26**. When division panels **14** and **15** and side panels **12** and **13** are folded into position over the front panel, it is seen from FIG. 2 that projections **32** and **32*a*** are superimposed over projections **33** and **33*a*** as well as a portion of the bottom panels between scores **29** and **30**. That portion of projections **32** and **32*a*** that are superimposed over the bottom panel are adhered thereto by an adhesive applied to the bottom panel between scores **29** and **30** at the positions shown in FIG. 1. When the bottom and side panels are fully expanded as shown in FIG. 5, the projections **33** and **33*a*** and the triangular portion of projections **32** and **32*a*** fold inwardly over the bottom panel **16** to form relatively tight juncture between the side and bottom of the envelope.

The division panels **14** and **15** are integrally joined to the side panels along scores **19** and **24** and are simply an extension of the sides. A series of scores **34, 35** and **36** in panel **14** and **37, 38** and **39** in panel **15** form a pair of gusseted divider panels **40** and **41** within each division panel. Each of the divider panels **40** and **41** fit transversely across the envelope compartment when the envelope is assembled to divide the compartment into three smaller compartments as best seen in FIG. 4. Each division panel also comprises an inner adhesive wall indicated by numeral **42** for panel **14** and numeral **43** for panel **15** and an outer adhesive wall **44** as part of panel **14** and outer wall **45** as part of panel **15**. The purpose of the adhesive walls will now be explained.

Before folding the side and division panels onto the inner surface of front panel **11** two vertical adhesive strips are applied thereto at the strip areas designated **46** and **47**. Each of the gusseted divider panels **40** and **41** are folded 180° along their respective scores **35** and **38** so that the two outer walls **44** and **45** are folded back onto walls **42** and **43** respectively. Each side and division panel is then folded onto the inner surface of front panel **11** along score lines **20** and **23** as best seen in FIG. 2. The side and divider panels are secured by pressing the outer adhesive walls **44** and **45** onto its corresponding vertical adhesive strip **46** and **47** which are now in registry with the two walls. The envelope is now in the position of FIG. 2. The outer adhesive walls **44** and **45** are adhered and positioned against the inner surface of front panel **11** by means of strips **46** and **47** as best seen in FIG. 4.

A coin pocket is formed by placing a series of adhesive strips **48** in the form of an inverted U along the inner surface of rear panel **17**. A finger gripping area is provided by die cutting a semi-circular recess **49** in panel **17** when the blank **10** is cut so that coins may be easily inserted into the pocket. A rectangular sheet **50** of suitable paper is placed over and adhered to the U-shaped strip **48** to form the coin pocket. The inner surfaces of rear panel **17** and rectangular sheet **50** constitute the coin pocket as best seen in FIGS. 2 and 4 and the cut away area of FIG. 5.

Rear panel **17** is secured in place by placing a series of rectangular adhesive strips **51** and **52** on the outer facing surface respectively of inner adhesive walls **42** and **43** as shown in FIG. 2. To complete assembly, panel **16** is simply folded along score line **30** over the division panels **14** and **15** and secured by the rectangular strips **51** and **52**. The envelope is now assembled to the position of FIG. 3. The guesseted divider panels **40** and **41** divide the envelope into three separate compartments best seen in FIG. 4.

The envelope in the position of FIG. 3 is now ready to be filled with premium coupons or other similar articles. The coupons are simply placed in one of the three compartments in sequential or random order, whichever is preferred. As the envelope is filled, the gusseted side and bottom panels and the gusseted divider panels **40** and **41** will expand by reason of their respective scores in the well understood manner of gusseted envelopes and jackets. Printed data of any kind may be printed on the inner surface of the closure panel **18**. For example such data can be used to explain and facilitate the sequence of storing coupons and the like or record supplementary market data when premium coupons designed for electronic scanning are stored in the envelope.

When the envelope is fully expanded it will be in the position of FIG. 4 and the closure panel **18** is then folded over the expanded envelope along the score line **27** which separates the closure panel from front panel **11**, best seen in FIG. 1. A score line **28** is disposed in spaced relation above score **27** a distance equivalent to the expanded width of the side and bottom gussets. Thus as the closure panel is folded over the envelope the rectangular area formed between scores **27** and **28** folds transversely over the top of the envelope. The balance of the closure panel from score **28** to its free edge folds down upon the outer surface of rear panel **17** to form a complete closure as shown in FIG. **5**. A conventional adhesive may be used to secure the closure panel to panel **17**.

A modified form of envelope is seen in FIGS. 6 through 8. The modified envelope is made from a die cut blank **110** which is similar to blank **10** except that the gusseted side and bottom panels are eliminated and the division panel is separately formed and adhered to the blank **110** upon assembly of the envelope as hereinafter explained.

Blank **110** comprises a rectangular front panel **111** with side panels **112** and **113**, a rear panel **117** and a closure panel **118** disposed adjacent the edges of panel **111**. All panels are integrally joined by score lines, score **119** joining panels **111** and **112**, score **120** joining panels **111** and **113**, score **121** joining panels **111** and **117** and score **127** joining panels **111** and **118**.

A separate division panel **115** is formed from a rectangular sheet of suitable paper and comprises a pair of gusseted divider panels **140** and **141**. The gussets are formed by longitudinal score lines **134**, **135** and **136** in panel **140** and lines **137**, **138** and **139** in panel **141**. Panel **115** also has a central adhesive wall **142** between scores **136** and **139** and two outer adhesive walls **144** and **145** at its free ends. A pair of vertical adhesive strips (not shown in the drawings) similar to strips **46** and **47** of FIG. 1 are applied to the inner surface of front panel **111** in the same position as the strips disposed on panel **111**. Panel **115** is then folded along mid-scores **135** and **138** to the position of FIG. 6. The panel is then secured along its walls **144** and **145** to the inner surface of panel **111** by means of the vertical adhesive strips so that it is fastened as shown in FIG. 7.

The envelope is assembled following a sequence similar to that shown in FIGS. 1–3. The side panels **112** and **113** are folded onto the front panel along scores **119** and **120** and a suitable adhesive is applied to the outer surface of each side panel. In addition, an inverted U-shaped adhesive strip **148** is centrally applied to the inner surface of the rear panel **117**. Panel **117** is then folded along score **121** onto front panel **111** and division panel **115**. Upon being folded into position, it will adhere to the adhesive applied to the side panels. Also the U-shaped adhesive strip **148** will adhere to the central wall **142** of the division panel. The envelope will now be assembly as shown in FIG. 8. It is to be noted that the adhesive strip **148** adheres to central wall **142** in U shaped contour to form a coin pocket between the wall **142** and rear panel **117**. This pocket is similar to the pocket previously described except that a separate rectangular sheet **50** is not necessary in this modification as wall **142** acts as the inner lining of the pocket. A finger recess **149** may be die cut along the free edge of panel **117** to facilitate insertion of coins into the pocket.

Upon loading the envelope with premium coupons or the like the gusseted divider panels **140** and **141** are expanded in the manner described above. To seal the envelope closed after loading, closure panel **118** is folded downward onto the envelope along score **127**. It may be adhered to the surface of rear panel **117** in the conventional manner by applying a suitable adhesive along the free end of panel **118**.

The envelopes described herein are die cut and scored so that they are suited for assembly by automatic envelope machinery. In the modified envelope the separate division panel **115** may be mechanically formed first and then automatically assembled along with the envelope blank by folding it along scores **135** and **138** and attaching it to blank **110**.

It is apparent that many modifications and variations of this invention may be made without departing from the spirit and scope thereof. The specific embodiments described are given by way of example only and the invention is limited only by the terms of the following claims.

We claim:

1. An expandable envelope blank adapted to be assembled in an automatic envelope machine comprising; a plurality of score lines defining a rectangular front panel centrally disposed on said blank; side, bottom, rear and closure panels joined to said front panel along its respective edges by said score lines; division panels integrally formed with and extending from said side panels for terminating in adhesive walls coextensive with the free ends, thereof, said division panels foldable with said side panels onto said front panel when the envelope is assembled, said division panels having gusseted divider panels adjacent the adhesive walls; adhesive means disposed on said front panel for securing the adhesive walls to said front panel when said side and division panels are folded onto said front panel, said gusseted dividers being of the same width as said front panel and secured by said adhesive walls to said front panel substantially normal thereto for dividing the envelope when assembled into a plurality of expandable compartments.

2. An expandable envelope comprising; a rectangular front panel joined along its respective sides by a closure panel for folding over the envelope and sealing same closed and expandable side and bottom panels; a rear panel joined to said bottom panel, said front, side, bottom and rear panels forming an envelope compartment; division panels integrally joined to said side panels for extending into the envelope compartment, said division panels having expandable gusseted divider panels transversely disposed in the envelope compartment for dividing same into a plurality of expandable compartments, and having further, a first adhesive wall secured to said rear panel and second adhesive walls secured to said front panel, said walls securing said gusseted divider panels in position within said compartment; means secured to the upper edge of said side panels foldable under said closure panel for sealing the juncture between said side and closure panels when the envelope is closed; and projection means integral with said side and bottom panels for folding over said bottom panel to seal the juncture of said side and bottom panels when said envelope is fully expanded.

3. An expandable envelope comprising; a rectangular front panel; a pair of side panels, a rear panel and a closure panel joined to said front panel and foldable along the edges thereof to form an envelope compartment therewith; a division panel of rectangular configuration centrally disposed in said compartment, said division panel having gusseted panels and first adhesive walls adjacent opposite edges thereof and a second adhesive wall disposed between said gusseted panels, said first adhesive wall secured to said front panel and said second adhesive wall secured to said rear panel for securing said gusseted panels in transverse position within said compartment and dividing same into a plurality of expandable compartments; and pocket means formed by said rear panel and second adhesive wall adjacent said compartment.

4. An expandable envelope blank adapted to be assembled in an automatic envelope machine comprising; a plurality of score lines defining a rectangular front panel centrally disposed on said blank; a pair of side panels, a rear and a closure panel joined to said front panel along its respective edges by said score lines; a U-shaped adhesive area centrally disposed on the inner surface of said rear panel; and a division panel of substantially rectangular configuration having first adhesive means co-extensive with opposing sides of said division panel, said first adhesive means being folded toward the vertical axis of said division panel and secured to said front panel, said division panel having further, gusseted means contiguous with said first adhesive means and second adhesive means disposed between said gusseted means for securing said division panel to said rear panel along said U-shaped area and forming a pocket between the second adhesive means and said rear panel when secured to said rear panel by said U-shaped adhesive area, said first and second adhesive means securing said gusseted means between said front and rear panels when said envelope blank is folded to assembled position for dividing said envelope into a plurality of expandable compartments when said envelope is assembled.

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