

Aug. 4, 1964

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3,143,280

QUICK OPENING ENVELOPE

Original Filed Feb. 24, 1959

3 Sheets-Sheet 1

Fig. 1.

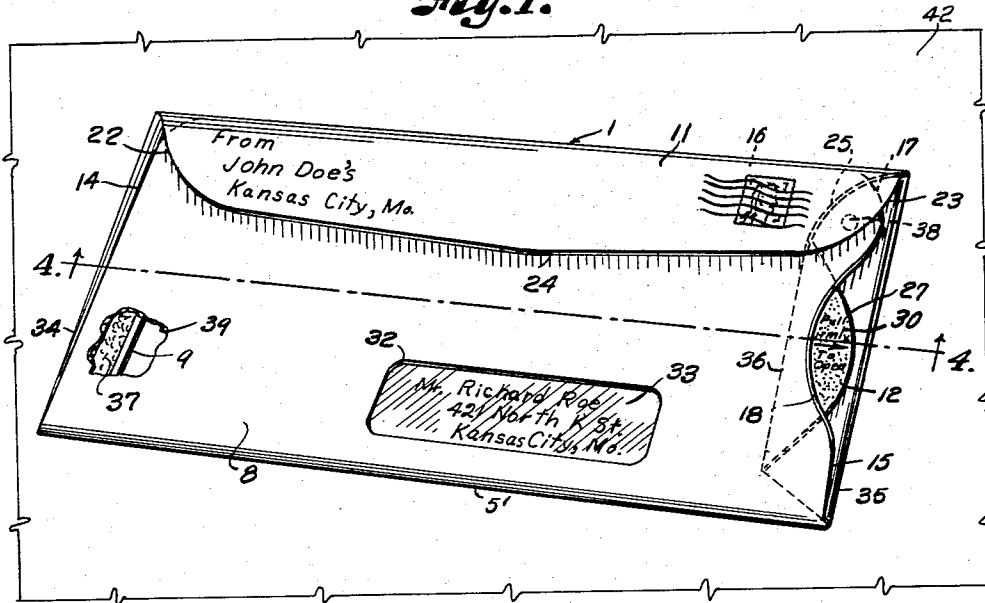


Fig. 2.

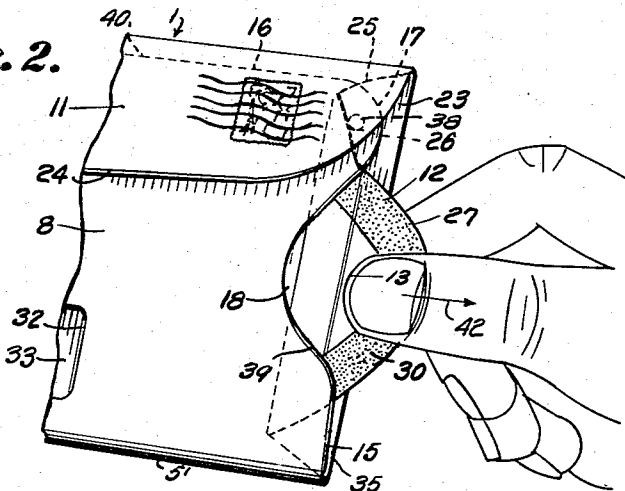
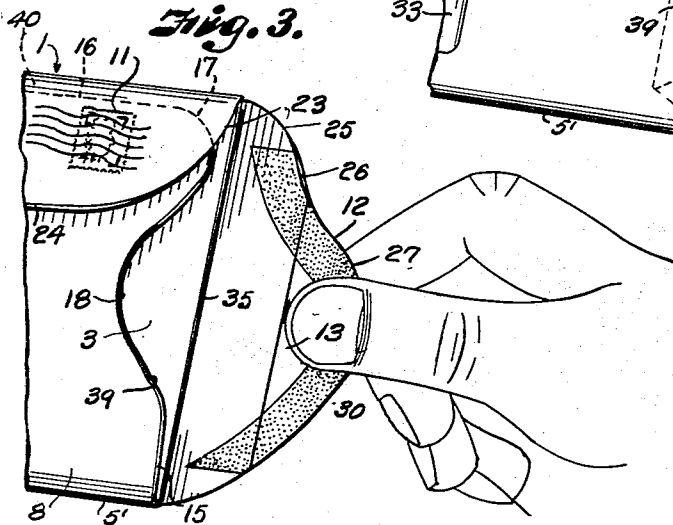


Fig. 3.



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Fig. 4.

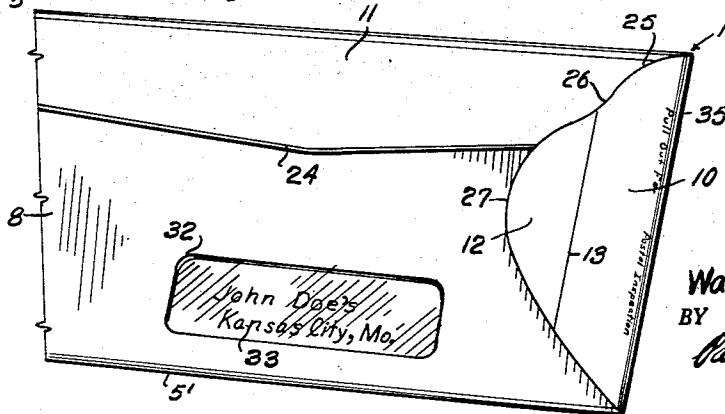
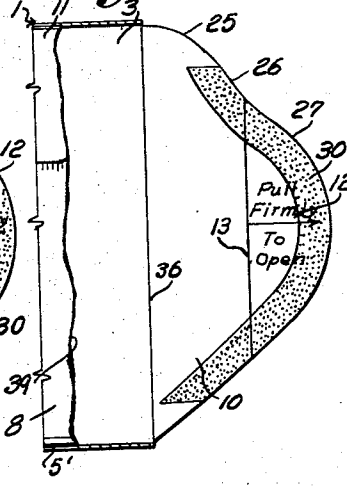
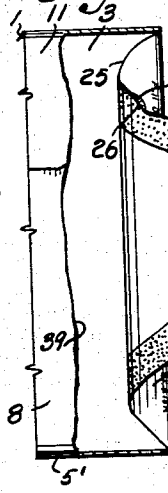
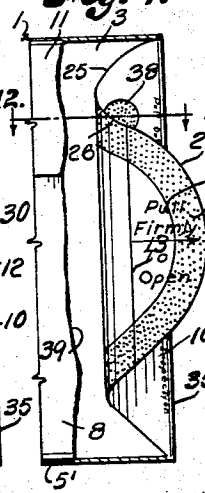


Fig. 10.

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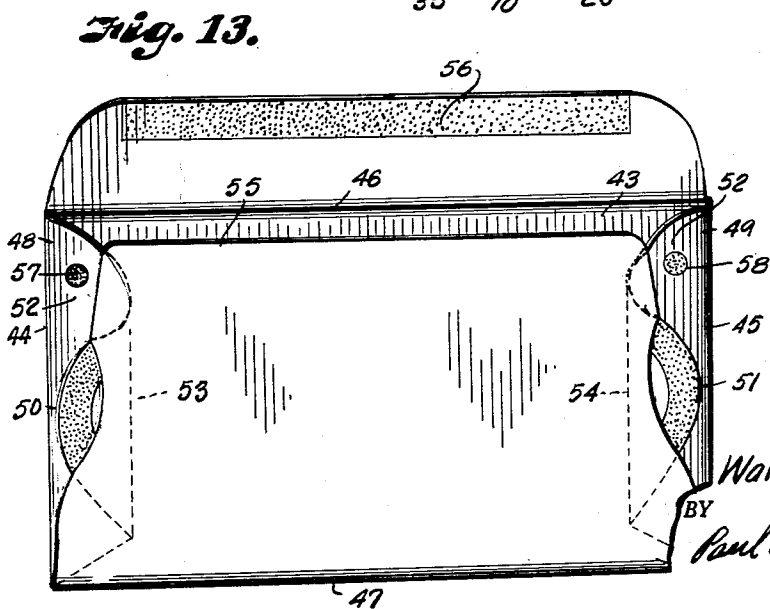
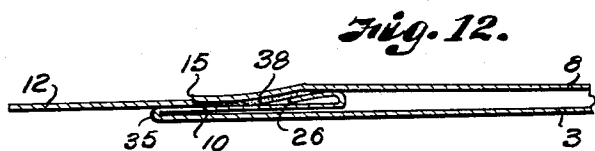
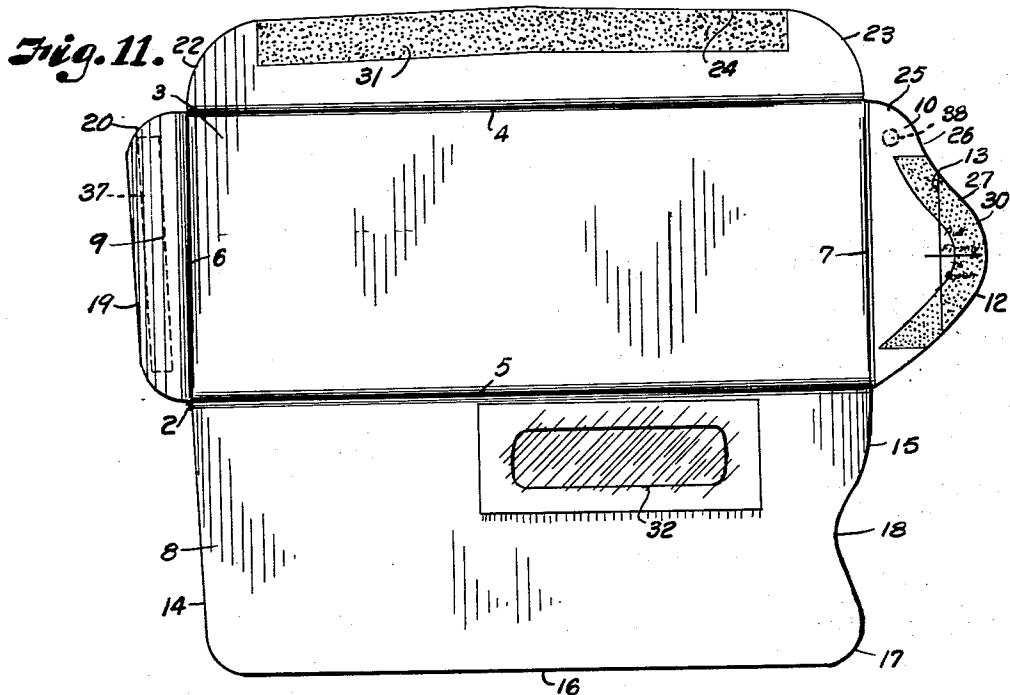
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QUICK OPENING ENVELOPE

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3 Sheets-Sheet 3



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3,143,280

QUICK OPENING ENVELOPE

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Continuation of application Ser. No. 794,897, Feb. 24, 1959. This application Dec. 14, 1961, Ser. No. 159,383
6 Claims. (Cl. 229—85)

This invention relates to envelopes that may be easily opened after they have been sealed, and particularly envelopes of this character for two-way use.

For example, there is a demand for a two-way envelope in which papers are sent to an addressee to which the sender desires a reply which may involve the enclosure of money or the like. It is desirable that such envelopes follow the construction of a standard envelope, in that they have a pocket closed along the bottom and two sides thereof, with the top edge providing an insert opening to be closed and sealed by a gummed closure flap. This general construction is particularly desirable when such envelopes are stuffed and sealed by machines, as in large mailing operations of the first sender. Two-way envelopes are not usually adaptable to modern stuffing and sealing machines, and they are difficult to open without damage to the envelope that renders it unsatisfactory, or at least unsightly, for a second use thereof.

It is, therefore, a principal object of the present invention to provide an envelope for two-way use that follows the standard envelope construction and in which the contents may be placed for the first mailing, sealed by a closure flap, and which has an opening flap separate from the closure flap that may be readily opened without damage to the envelope, leaving the envelope completely intact for reuse as a sealed envelope for the second mailing.

Other objects of the invention are to provide an envelope of this character that is readily opened for inspection of the contents by postal authorities on the first use; to provide an envelope of generally standard construction and having an inwardly turned sealed opening flap provided with a pull tab by which the flap may be readily withdrawn in such manner that an inclined edge thereof cuts cleanly through the seal to produce an opening through which an enclosure may be removed; to provide the opening flap with sealing gum so that it may be folded over the opening and sealed to the body of the envelope to form a sealed envelope for the second mailing; and to provide an opening flap and pull tab therefor that are adapted to be folded and sealed to the overlying panel of the envelope during manufacture of the envelope in modern envelope making machinery, so that the envelope is furnished to the customer of the envelope manufacturer in the manner of a standard envelope.

It is a further object of the invention to provide an envelope with an opening flap at either side thereof.

It is also an object of the invention to provide an envelope with an opening flap at each end thereof and which are sealed in closed position by spot seals with the closure flap of the envelope, so that when the opening flaps are withdrawn to cut through the spot seals, all of the flaps of the envelope are freed, to leave the interior of the envelope completely exposed for explanatory matter, advertising, order forms, and the like.

It is a further object of the invention to provide an envelope constructed in accordance with the present invention and which may be secured to the face of a larger envelope, package, or the like.

The present application is a continuation of my co-pending application Serial No. 794,897, filed February 24, 1959, now abandoned.

In accomplishing the above and other objects of the invention hereinafter pointed out, I have provided improved structure, the preferred forms of which are illustrated in the accompanying drawings, wherein:

FIG. 1 is a perspective view of an envelope constructed in accordance with the present invention and showing a use thereof whereby it is attached to the wall of a larger envelope or package bearing enclosures taking a different mailing rate than the contents of the attached envelope.

FIG. 2 is a fragmentary perspective view of the envelope, showing a step in withdrawal of the opening flap thereof.

FIG. 3 is a similar view, but showing the opening flap completely withdrawn.

FIG. 4 is a longitudinal sectional view through the envelope on the line 4—4 of FIG. 1, showing the closure flap of the envelope partially lifted to better illustrate the construction.

FIG. 5 is a sectional view similar to FIG. 4, but showing the opening flap completely withdrawn.

FIG. 6 is an enlarged, fragmentary view of the end of the envelope which has the opening flap, with the covering portion of the front wall and part of the closure flap broken away, to illustrate the inwardly folded opening flap and the spot seal that connects the opening flap with the front wall.

FIG. 7 is a similar view showing partial withdrawal of the pull tab that starts the reversal of the opening flap, so that a slanting edge thereof starts a cut through the sealed spot.

FIG. 8 is a similar view illustrating further withdrawal of the opening flap and substantially complete cut-through of the seal spot.

FIG. 9 is a similar view, with the opening flap completely withdrawn to remove the contents of the envelope pocket after the first use.

FIG. 10 is a perspective view of the envelope after the opening flap has been folded over and sealed to cover the removal opening for the second use thereof.

FIG. 11 is a plan view of the blank from which the envelope is formed, and showing the gummed and adhesive areas and score lines thereon.

FIG. 12 is an enlarged section taken on the line 12—12 of FIG. 7, to better illustrate cutting through of the adhesive spot by the sloping edge portion of the opening flap.

FIG. 13 is a perspective view of a modified form of envelope, wherein both sides or ends of the envelope are equipped with opening flaps of the present invention, and showing the closure flap open.

Referring more in detail to the drawings, and first to the form of invention illustrated in FIGS. 1 to 12, inclusive:

1 designates a preferred form of envelope constructed in accordance with the present invention. The envelope 1 is produced from a blank 2, as shown in FIG. 11. The blank 2 is cut from sheet material to provide a substantially rectangular back panel 3 defined by score or fold lines 4—5 and 6—7, a front panel 8 that is integrally connected with the back panel along the score 5, a side flap 9 and an opening flap 10 that are integrally connected with sides of the back panel 3 along the score lines 6 and 7, and a closure or seal flap 11 integral with the back panel 3 along the score line 4.

In accordance with the present invention, the opening flap 10 is provided with a pull tab 12, the connection between the opening flap 10 and the pull tab 12 being defined by a score line 13 that is spaced from the score 5. The end edges 14 and 15 of the front panel 8 preferably converge from the ends of the score line 5 and join with the outer edge 16 of the front panel in curves

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17. The front panel is also provided with a substantially arcuate recess 18 along the midportion of the edge 15, for a purpose later to be described.

The seal or closure flap 11 and side flap 9 are of conventional shape. For example, the end edge 19 of the side flap 9 angles relatively to the score 6 and terminates in curves 20 and 21 in registry with the scores 4 and 5. The end edges 22 and 23 of the sealing or closure flap 11 also converge in rounding curves from the ends of the score line 4 and join with the outer edge 24. The front panel 8 has a depth between the edge 16 thereof and score line 5 slightly less than the depth of the back panel 3 between the longitudinal score lines 4 and 5.

The upper edge 25 of the opening flap 10 is curved from the score line 4 and terminates with a sloping edge portion 26 joining with the rounding edge 27 of the pull tab near the score line 13. The edge 27 curves outwardly in circular formation and joins with the score line 5. The outer marginal portion of the pull tab 12 and adjoining upper and lower marginal portions of the opening flap 10 have a dried gum strip 30. The closure or seal flap 11 also has a strip of dried gum 31. The front panel 8 may have a window opening 32 suitably located therein, and the opening may be covered with a transparent patch 33 to utilize addresses on the enclosures for the mailing addresses.

The blank thus described may be folded and gummed in a conventional envelope making machine, substantially in accordance with a conventional envelope. The side flap 9 and opening flap 10 are turned inwardly along the scores 6 and 7 to provide the folds 34 and 35 of the finished envelope that is illustrated in FIGS. 1 to 10 of the drawings, so that the flaps 9 and 10 overlie the sides or ends of the back panel 3. The pull tab 12 is also folded on the score line 13 in a reverse fold 36 (FIGS. 1, 4 and 6), so that the pull tab 12 overlies the opening flap 10. When thus folded, the reverse fold 36 (FIG. 6) is positioned within the envelope and the pull tab is directed outwardly substantially symmetrically with the end of the envelope, but terminates short of the fold 35. Moist adhesive is applied as a stripe 37 to the folded-over side flap 9. A spot of adhesive 38 is applied to the upper portion of the opening flap 10 in lateral registry with the inclined edge 26.

The front panel 8 is folded over the inner face of the back panel 3 to bring the front panel into sealing contact with the adhesive strip 37 and the adhesive spot 38 and to form a bottom fold 5'. When the envelope is thus folded, a pocket 39 (FIGS. 4 and 5) is formed between the front and back panels 3 and 8, with the bottom and sides thereof closed by the folds 5', 34 and 35, and which pocket 39 has an insert opening 40 formed between the edge 16 and the score line 4 on which the sealing or closure flap 11 is ultimately folded. It is obvious that after folding and sealing of the front panel 8 to the adhesive spot 38 and gum stripe 37, the notch or recessed portion 18 of the front panel 8 overlies the pull tab 12, with the outer rounding edge 27 of the pull tab exposed in the notch to facilitate gripping thereof. The projecting portion of the pull tab 12 may be suitably marked to indicate that the tab 12 is to be withdrawn from the envelope to open up the end thereof. The opening flap may be marked to indicate that it may be pulled out for postal inspection of the contents to be placed within the envelope.

The envelope just described may be used the first time in the manner of a conventional envelope, in that an enclosure 41 (FIGS. 4 and 5) is inserted into the pocket 39 through the insert opening 40 so that the sides of the enclosure enter the space in the pocket between the back panel 3 and the flaps 9 and 10, as shown in FIG. 4. The gum 31 on the closure flap 11 is moistened and the closure flap 11 is folded on the score 4 to make sealing contact with the upper marginal portion of the front

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panel 8. It is obvious that the enclosure is securely retained in the envelope as long as the seals are intact.

When the envelope is to be opened to remove the enclosure 41, the tab 12 is grasped between the thumb and finger, as shown in FIG. 2, and pulled outwardly through the end of the pocket 39 in the direction of the arrow 42. Since the pulling force on the opening flap is against the side fold 45, the force on the pull tab causes the fold 13 to straighten out its position in such manner as to transpose the sloping edge 26 so that it makes cutting contact with the adhesive spot 38, as shown in FIG. 7. The sloping edge 26, being reinforced by the gum 30, constitutes a relatively sharp cutting edge, so that further pull on the tab causes the edge 26 to cut through the spot seal as shown in FIGS. 8 and 12. Continued pull on the tab 12 then effects a complete withdrawal of the opening flap 10 to the position shown in FIGS. 3, 5 and 9.

It is obvious that with withdrawal of the opening flap 10, that side or end of the envelope is completely open to expose the enclosure 41. The exposed edge of the enclosure 41 may then be gripped between the thumb and finger and the enclosure withdrawn from the pocket. Thus, the envelope may be quickly and easily opened without tearing or leaving broken patches of paper attached to the exterior faces thereof.

The envelope is now made ready for reuse by placing money or enclosures into the pocket 39 through the side opening, after which the gum 30 is moistened and the opening flap 10, together with the pull tab 12, is folded over the outer face of the front panel and sealed thereto, as shown in FIG. 10.

While the envelope may be used as described, it is also desirable when an envelope is to be attached to a package or larger envelope or the like 42, as shown in FIG. 1. It is well known that when an envelope is attached to a package it is difficult to open because of the close contact and rigidity of the package, however, the present envelope, when attached to a package, may be readily opened to remove the enclosure by pulling out the opening flap upon grasping the pull tab and exerting an outward pull thereon.

In the form of invention shown in FIG. 13, a quick opening seal is provided at each side of the envelope. In this form of the invention, the envelope includes a back panel 43 defined by folds 44-45 and 46-47. Connected with the sides of the back panel 43 by the folds 46 and 47 are side flaps 48 and 49, each of which is provided with a pull tab 50 and 51, the pull tabs being of less depth than the depth of the side flaps 48 and 49 to provide sealing areas 52 at the upper ends of the side flaps when the side flaps are turned inwardly over the sides of the back panel 43 and the pull tabs 50 and 51 are turned outwardly on folds 53 and 54. The envelope also has a front panel 55 connected to the back panel by the fold 47 to overlie the side flaps. A closure flap 56 also extends from the fold 46 to overlie the upper marginal edge of the front panel. Dried gum spots 57 and 58 are applied to the areas 52 of the side flaps to seal the closure flap 56.

This form of the invention is especially adapted for order forms, statements, letters of solicitation, and similar envelopes that may be folded and sealed. When the envelope is to be opened, both pull tabs 50 and 51 are pulled outwardly to start withdrawal of the side flaps 48 and 49 and to slice through the spot seals 57 and 58, after which the side flaps 48 and 49 are completely withdrawn on continued pull on the tabs 50 and 51. After the spot seals 57 and 58 have been broken with respect to the closure flap 56, the flap 56 and the panel 55 may be folded outwardly, to expose all of the inner faces of the envelope. For the second use, the envelope may be refolded by first folding the front panel 55 over the back panel 43, after which the side flaps 48 and 49, together with their pull tabs 50 and 51, are folded over the front

panel and secured to the outer face thereof in the same manner as the opening flap in FIG. 10.

From the foregoing, it is obvious that I have provided envelope structures with a quick opening flap separate from the closure flap, and which opening flap constitutes one of the inwardly turned side flaps of the envelope. It is also obvious that the intumed side flaps are both sealed to the back panel to provide a pocket having an insert opening extending along the length of the closure flap. Therefore, enclosures may be inserted and securely retained therein by automatic stuffing and sealing machines, yet the envelopes may be easily and quickly opened without the necessity of tearing or cutting the seal flaps, the opening being effected merely by pulling upon the pull tab to reverse the opening flap and causing the sloping cutting edge thereof to cut through the sealed spot progressively with withdrawal of the flap from the end of the envelope. This leaves the opening flap, as well as the envelope pocket, completely intact for reuse, simply by inserting an enclosure through the opened side, moistening the adhesive 30, and folding the opening flap over the opening and sealing it to the outer face of the front panel of the envelope.

What I claim and desire to secure by Letters Patent is:

1. An envelope including generally rectangular panels of substantially the same size and having registering inner faces providing a pocket therebetween,
 - said panels being connected together along two of their edges for closing permanently two adjacent sides of the pocket,
 - one of the other edges of the panels providing therebetween an insert opening for inserting an enclosure into said pocket,
 - a closure flap on one edge of the insert opening, gum extending along substantially the full length of the closure flap to permanently seal the insert opening closed when the envelope is used,
 - the remaining other edges of the envelope providing a removal opening for removal of the enclosure from said pocket after the closure flap is sealed,
 - an opening flap for closing the removal opening and having connection with one of the remaining edges that provide said removal opening and having a fold at said connection for bringing said opening flap into the pocket and between said panels,
 - a pull tab connected with the opening flap by a fold reverse to the fold of said opening flap for extending the pull tab outwardly in the direction of the fold at said connection and between the opening flap and the inner face of the panel that overlies said opening flap with said pull tab terminating near the edge of said overlying panel,
 - said pull tab being of a size relatively to the opening flap to leave an area of the opening flap in contact with the overlying panel and on the side of the insert opening,
 - and a spot of adhesive connecting said area of the opening flap to the inner face of said overlying panel for sealing the removal opening and closing the end of the insert opening prior to sealing of the closure flap,
 - said opening flap having a cutting edge movable in the plane of said area and in a path across the adhesive spot for cutting through the seal provided by the adhesive spot upon pullout of the pull tab and to withdraw the opening flap after cutting through said seal.
2. An envelope including generally rectangular front and rear panels connected together along three of their edges for providing a pocket between the panels,
 - one of said connected edges adjacent said remaining edges being provided by a closure flap closing an insert opening between said panels,
 - an opening flap connected with one of the remaining

edges of one of the panels and having a fold at said connection for bringing said opening flap between said panels,

- a pull tab connected with the inner edge of the opening flap by a fold reverse to the fold of said opening flap for extending the pull tab outwardly in the direction of the fold of the opening flap and between the opening flap and the inner face of the panel that overlies said opening flap,
 - said pull tab being of a size relatively to the opening flap to leave an area of the opening flap nearest the insert opening for face to face contact with said overlying panel,
 - and a spot of adhesive connecting said area of the opening flap to the inner face of said overlying panel to seal the opening flap and to close the end of the insert opening prior to seal of the closure flap,
 - said opening flap having the end edge curving around the adhesive spot and joining with a reversely directed curved edge of the pull tab to provide a sloping cutting portion movable in the plane of said area to cut through the seal made by the adhesive spot upon pulling the pull tab outwardly in the plane between said panels to withdraw the opening flap for opening the side of the envelope.
3. An envelope for two-way use including generally rectangular front and rear panels connected together along three of their edges for providing a pocket between the panels,
 - an opening flap connected with one of the remaining edges of one of the panels and having a fold at said connection for bringing said opening flap between said panels,
 - a pull tab connected with the inner edge of the opening flap by a fold reverse to the fold of said opening flap for extending the pull tab outwardly in the direction of the fold of the opening flap and between the opening flap and the inner face of the panel that overlies said opening flap,
 - said pull tab being of a size relatively to the opening flap to leave an area of the opening flap nearest the insert opening for face to face contact with said overlying panel,
 - a spot of adhesive for connecting said area of the opening flap to the inner face of said overlying panel to close the end of the insert opening at the opening flap prior to seal of the closure flap and to seal the opening flap during the first use,
 - said opening flap having the end edge curving around the adhesive spot and joining with a reversely directed curved edge of the pull tab to provide a sloping cutting portion to cut through the seal made by the adhesive spot upon reversal of the opening flap upon pulling the pull tab outwardly in the plane of said panels for opening the side of the envelope after the first use,
 - and gum on said opening flap coextensive with the cutting edge to strengthen the cutting edge and to seal the opening flap upon the outer face of said overlying panel.
 4. An envelop for two-way use including generally rectangular front and rear panels of substantially the same size having registering inner faces providing a pocket therebetween,
 - said panels being connected together along one of their edges by a fold to provide a bottom for the pocket,
 - said edges of the panels directly opposite said bottom fold being unconnected to provide an insert opening to said pocket,
 - a closure flap on one of the panels and coextensive with the insert opening for folding over the unconnected edge of the other panel to overlie the outer face of said other panel,
 - a sealing gum on the closure flap for sealing the closure flap in closed position,

a side flap connected with one of the remaining edges
 of one of the panels and having a fold at said connection
 for bringing the side flap into contact with the
 other panel,
 an adhesive for securing said side flap to said other 5
 panel,
 an opening flap connected with one of the unconnected
 edges at the opposite side of the envelope and having
 a fold at said connection to position the opening
 flap between the panels, 10
 a pull tab connected with the opening flap by a fold
 reverse to the fold of said opening flap for extending
 the pull tab outwardly,
 said pull tab being of a size relatively to the opening
 flap to leave an area of the opening flap for contact 15
 with an overlying part of the envelope near the insert
 opening,
 a spot of adhesive connecting said area of the opening
 flap to the inner face of said overlying part of the
 envelope to close that end of the insert opening, 20
 said opening flap having a sloping cutting edge adjacent
 the spot of adhesive and movable across said area
 for cutting through the adhesive spot upon outward
 pulling of the pull tab in the plane of said panels
 to provide an opening for removal of the enclosure
 after a first use and for inserting enclosures during
 a second use,
 and gum on the pull tab and coextensive with the sloping
 edge to strengthen the cutting edge in cutting 30
 through the adhesive spot and to seal the opening
 flap in covering relation with said last named opening
 during the second use of the envelope.

5. An envelope for two-way use including generally
 rectangular panels interconnected together along one of
 their edges by a fold for closing permanently the bottom 35
 of a pocket between the panels,
 the edges of the panels directly opposite said fold providing
 therebetween an insert opening for inserting
 an enclosure into said pocket for the first use,
 a closure flap in connection with one of said edges and 40
 extending the full width of the envelope,
 gum along substantially the full length of the closure
 flap to permanently seal the closure flap over the
 insert opening during said first use,
 a side flap connected with one of the remaining edges 45
 of one of the panels and having a fold at said connection
 for bringing the side flap into contact with
 the other of said panels,
 an adhesive sealing said side flap to the said other panel 50
 for closing permanently that side of the pocket,
 an opening flap connected with one of the panels at
 the opposite side of the envelope and having a fold
 at said connection for bringing said opening flap between
 said panels to close that side of the envelope for 55
 the first use,
 a pull tab connected with the inner edge of the opening
 flap by a fold reverse to the fold of said opening flap
 for extending the pull tab outwardly in the direction
 of the fold of the opening flap and between the opening
 flap and the inner face of the panel that overlies 60
 said opening flap,
 said pull tab being of a size relatively to the opening
 flap to leave an area of the opening flap nearest the
 insert opening for face to face contact with said over-
 lying panel, 65

a spot of adhesive for connecting said area of the opening
 flap to the inner face of said overlying panel to
 close that end of the insert opening prior to seal of
 the closure flap and to seal the opening flap during
 said first use,
 said opening flap having the end edge nearest the insert
 opening curving around the adhesive spot and
 joining with a reversely directed curved edge of the
 pull tab to provide a sloping cutting edge to cut
 through the seal made by the adhesive spot upon
 reversal of the opening flap by pulling the pull tab
 in the plane of said panels for providing a removal
 opening at that side of the envelope after said first
 use without interfering with the seal of the closure
 flap,
 and gum on said opening flap coextensive with said
 cutting edge for strengthening said cutting edge and
 to seal the opening flap over said removal opening
 for the second use of the envelope.

6. An envelope including generally rectangular panels
 connected together along one of their edges by a fold
 for closing permanently the bottom of a pocket between
 the panels,
 the edges of the panels directly opposite said fold providing
 therebetween an insert opening for inserting
 an enclosure into said pocket,
 a closure flap in connection with one of said edges and
 extending the full width of the envelope,
 opening flaps connected with opposite sides of one of
 the panels and having folds at said connections for
 bringing said opening flaps between said panels,
 pull tabs connected with the inner edges of the opening
 flaps by folds reverse to the folds of said opening
 flaps for extending the pull tabs outwardly in the
 direction of the folds of the opening flaps and between
 the opening flaps and the inner face of the panel
 that overlies said opening flaps,
 said pull tabs being of a size relatively to the opening
 flaps to leave areas of the opening flaps nearest the
 closure flap and said overlying panel having edge
 portions exposing portions of said areas for face to
 face contact with the closure flap,
 a spot of adhesive on each of said exposed portions of
 said areas for connecting said areas of the opening
 flaps to said closure flap,
 said opening flaps having the end edges nearest the closure
 flap curving around the adhesive spots and joining
 with reversely directed curved edges of the pull
 tabs to cut through the seals made by the adhesive
 spots upon reversal of the opening flaps by pulling
 the pull tabs outwardly in the plane of said panels
 for opening the envelope, and adhesive coextensive
 with marginal portions of the curved edges for
 strengthening said edges in cutting through the adhesive
 spots.

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