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(54) **DOCUMENTS ENVELOPE**

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(57) **ABSTRACT**

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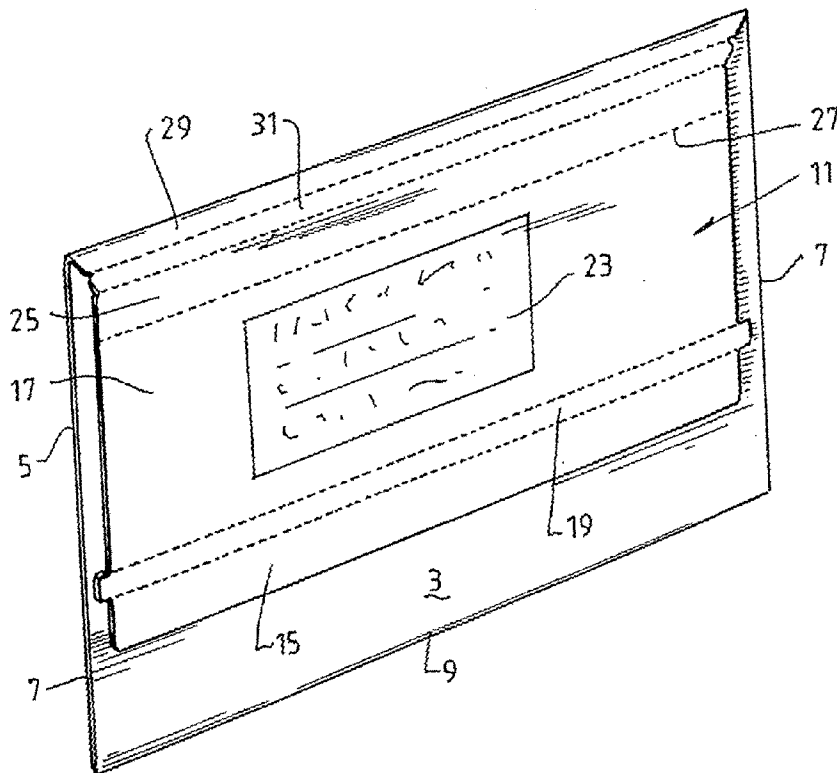
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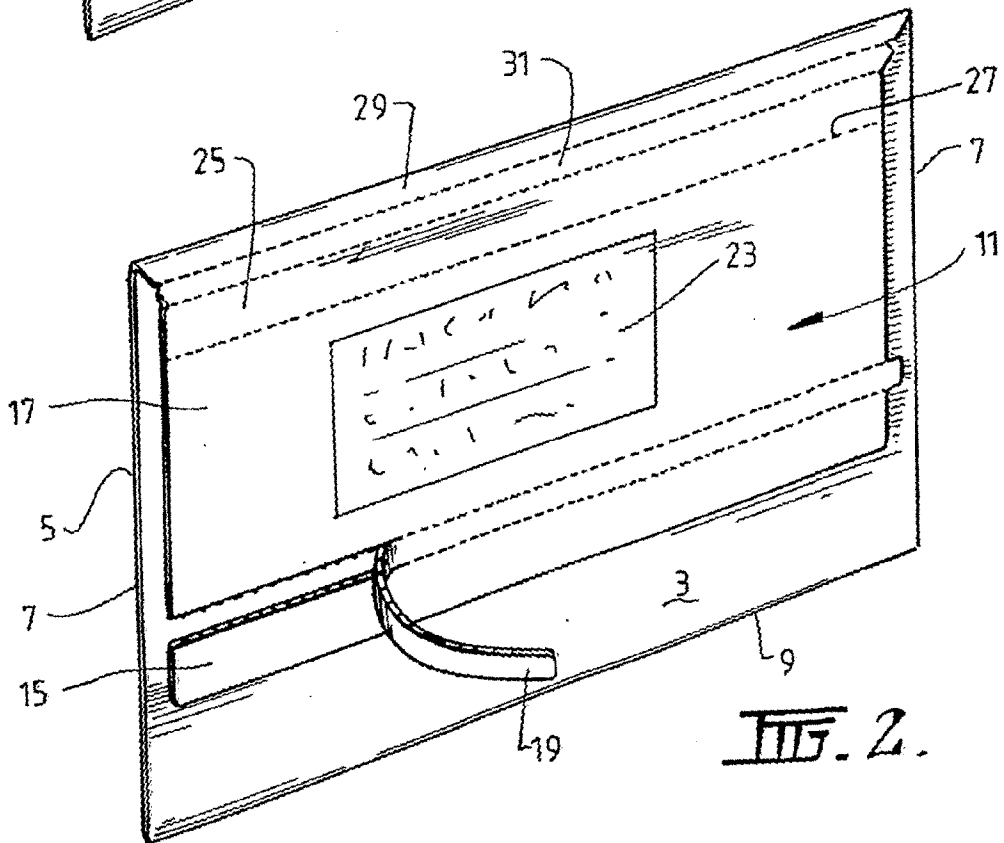
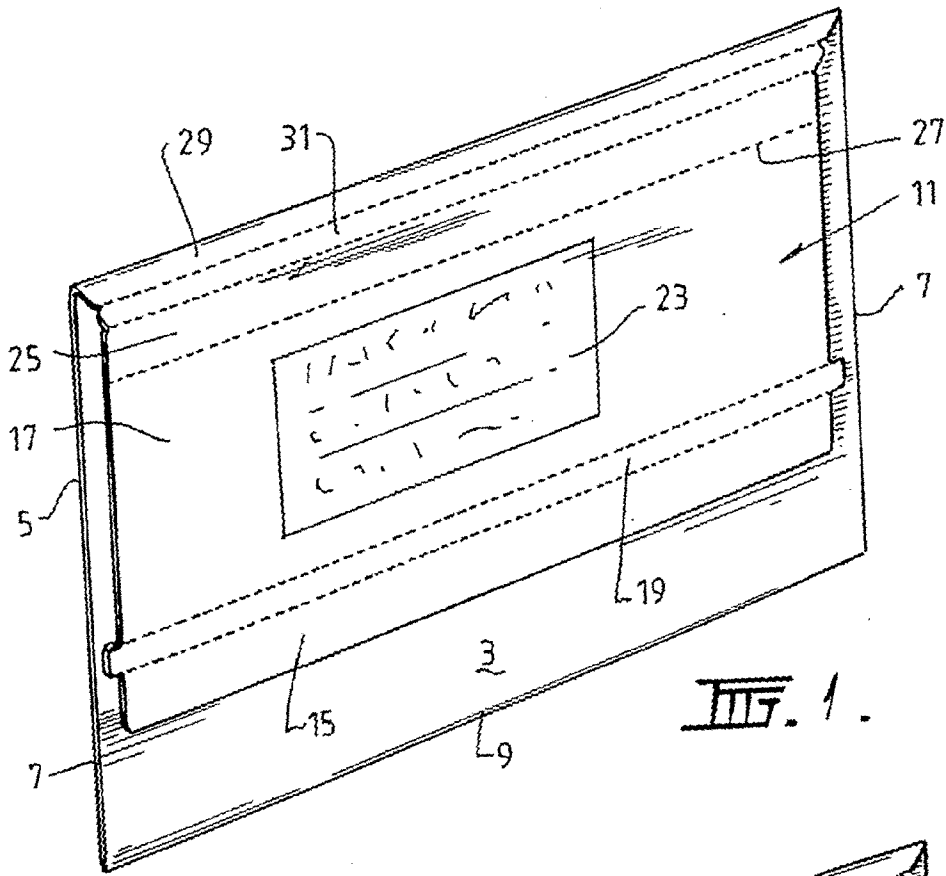
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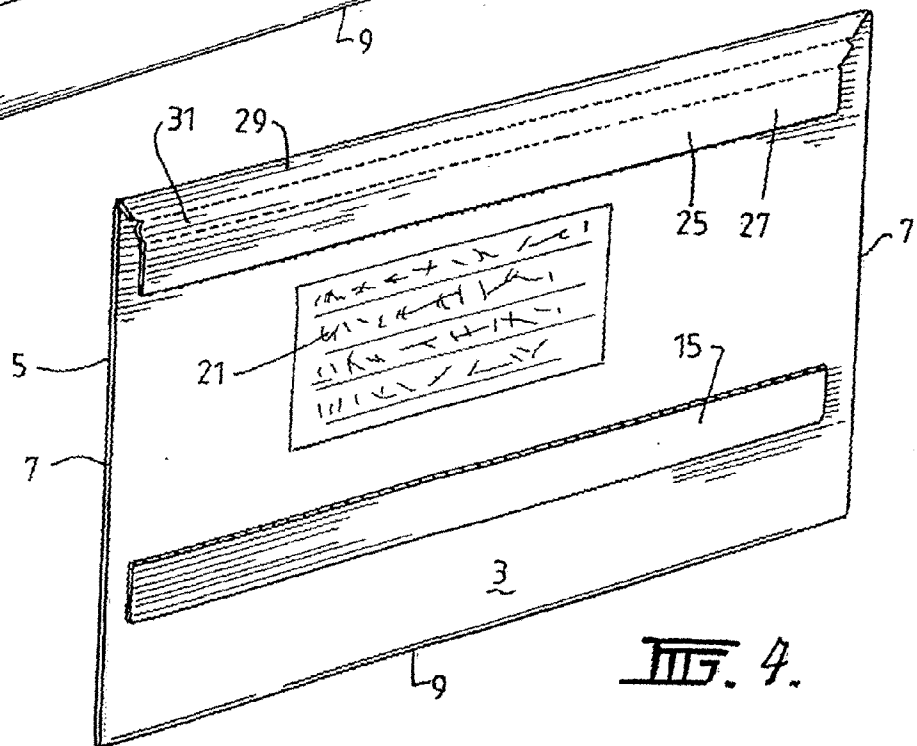
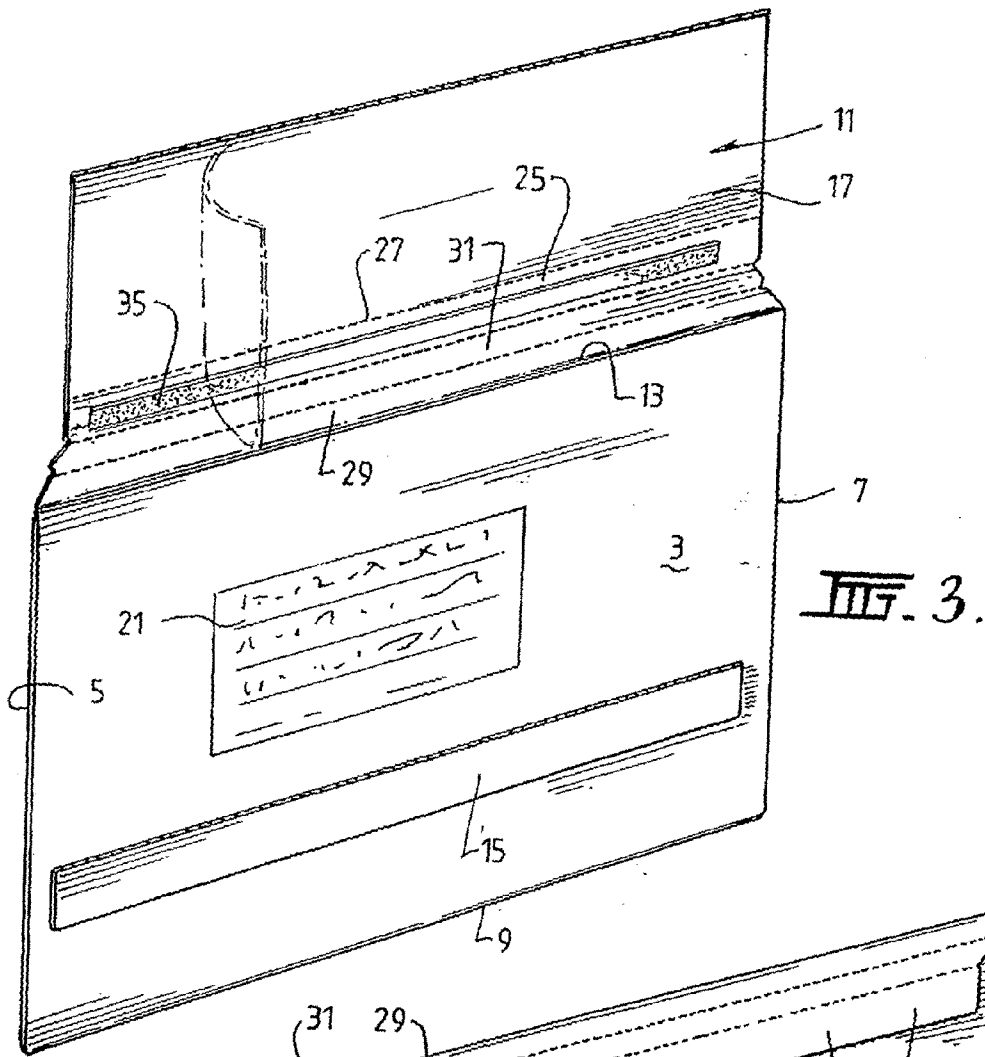
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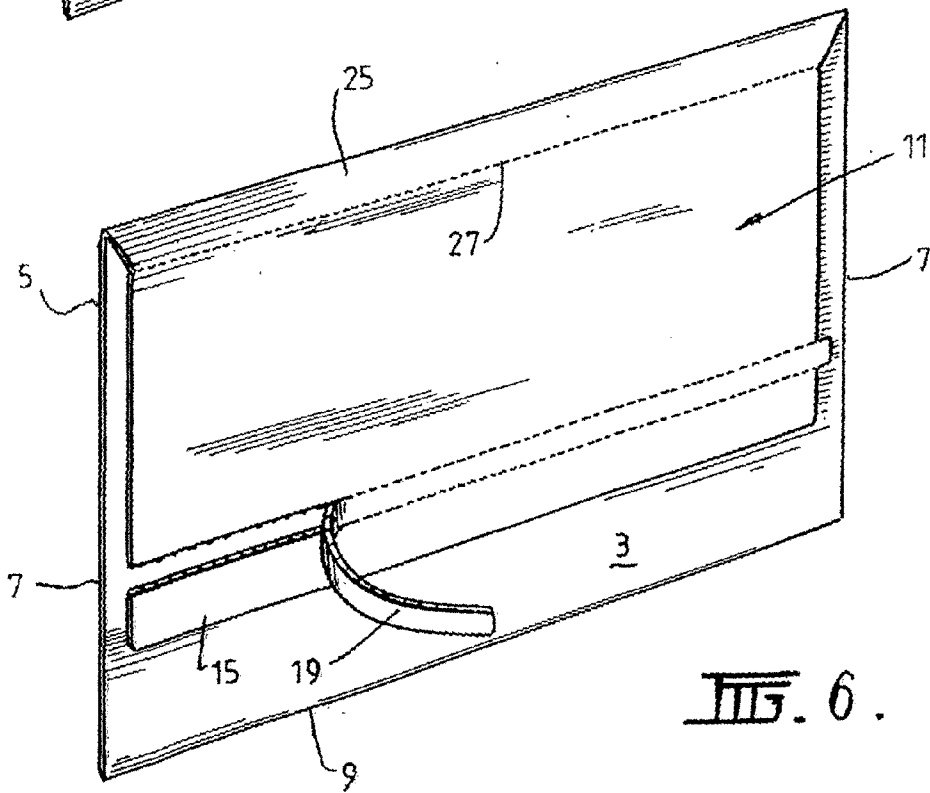
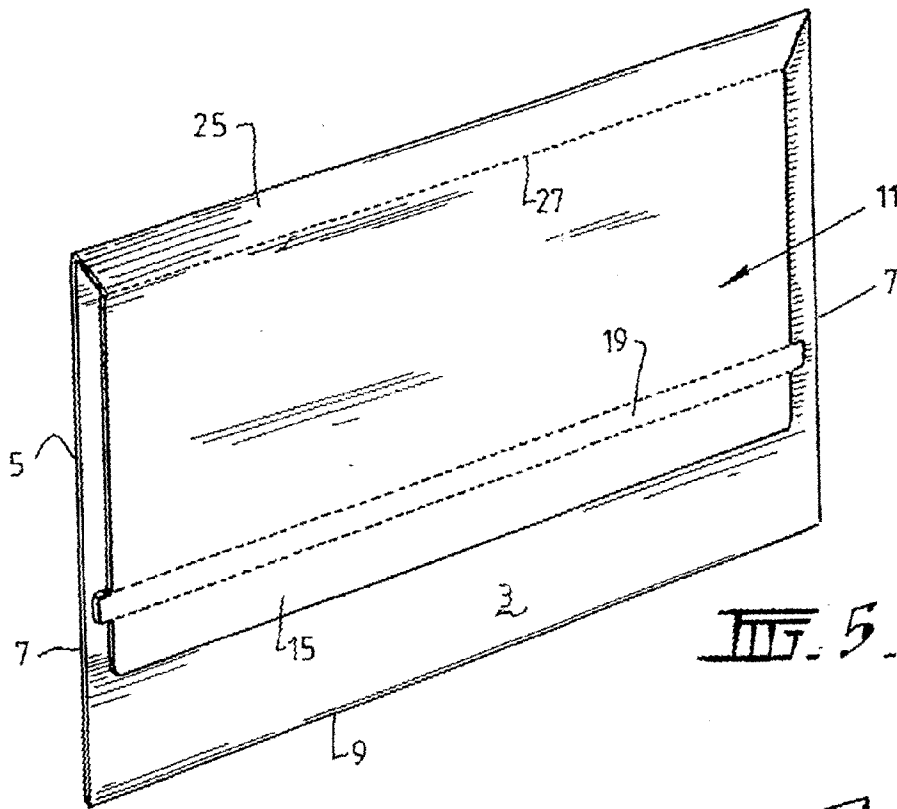
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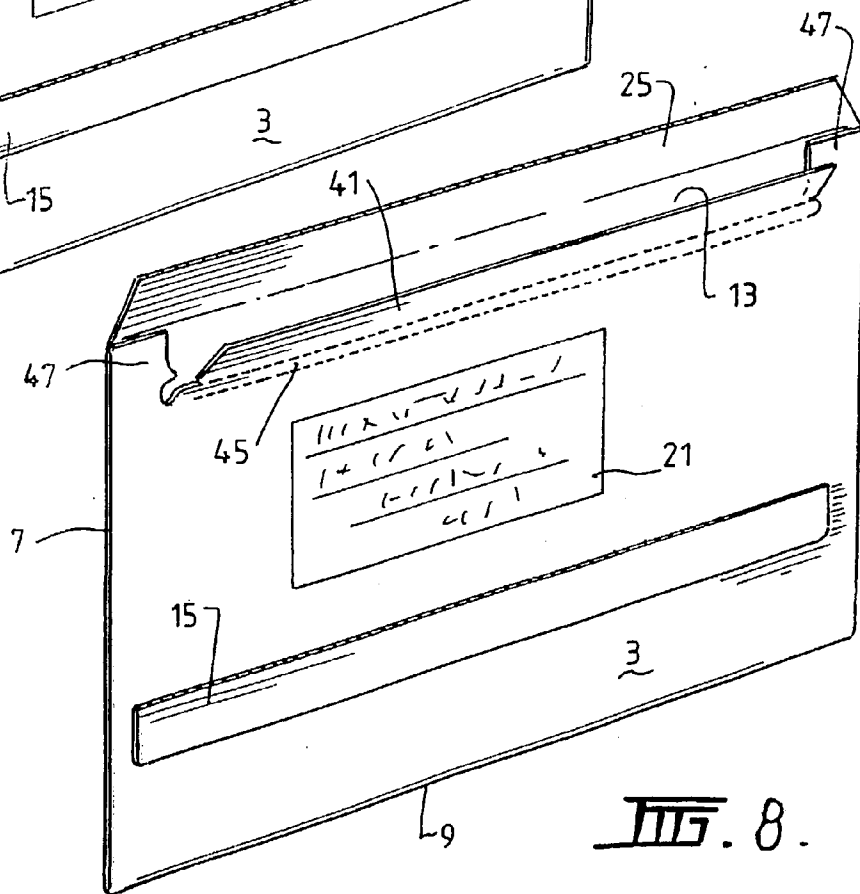
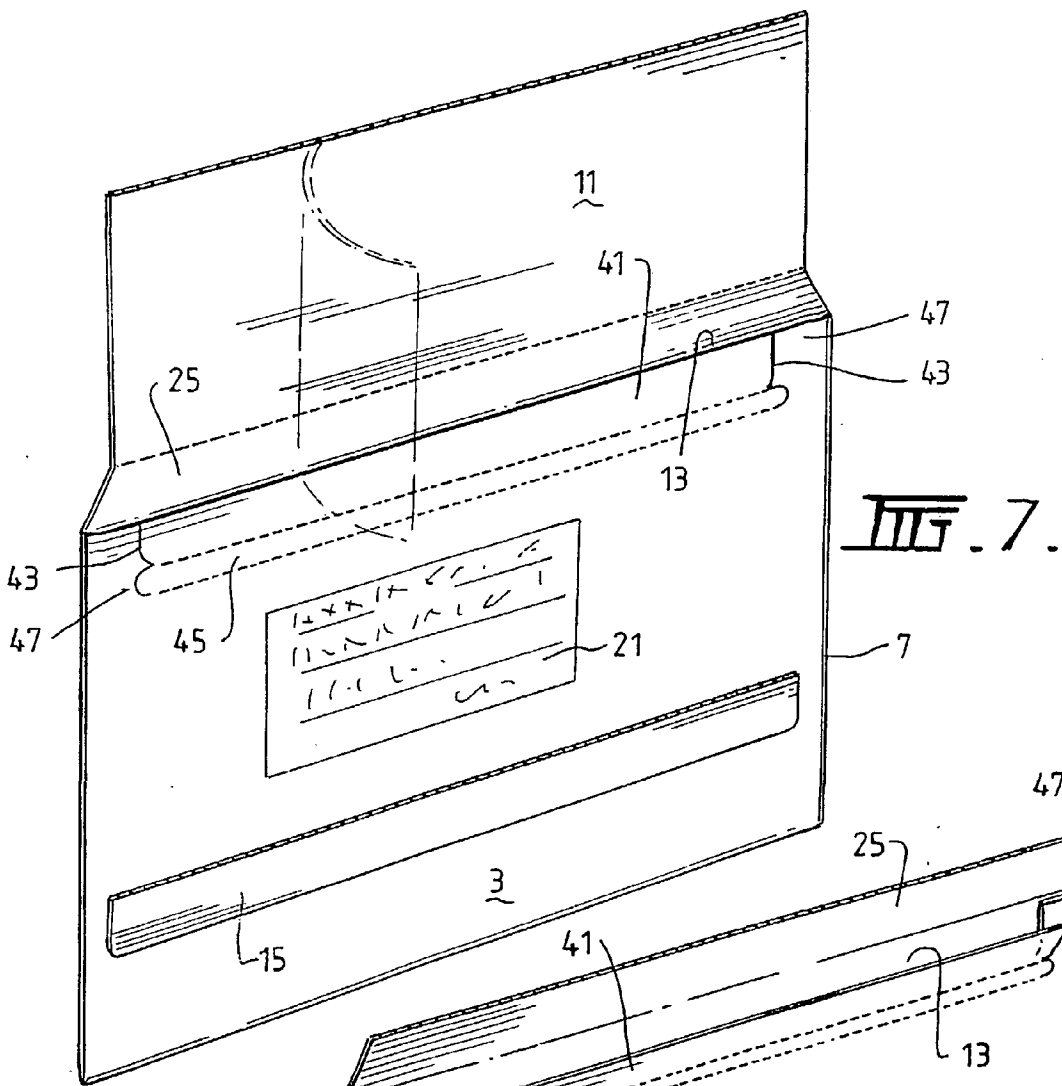
A documents envelope that has one opening (13) only for inserting documents into and removing documents from the envelope and a flap (11) for closing the opening, which flap (11) includes a series of sections, the sections including: (a) a first section (15) that is at or towards an end of the flap and can be secured to a front face or panel (3) (hereinafter referred to as "panel") of the envelope when the flap (11) is in an initial closed position and thereby close the opening (13); (b) a second section (17) that is adjacent to the first section (15) and covers a section of the envelope front panel (3) that can carry or does carry on-forwarding or return delivery information when the flap (11) is in the initial closed position; and (c) a third section (25) that is adjacent to the second section (17) and can be secured to the envelope front panel when the flap (11) is in a subsequent closed position and thereby reclose the opening (13).

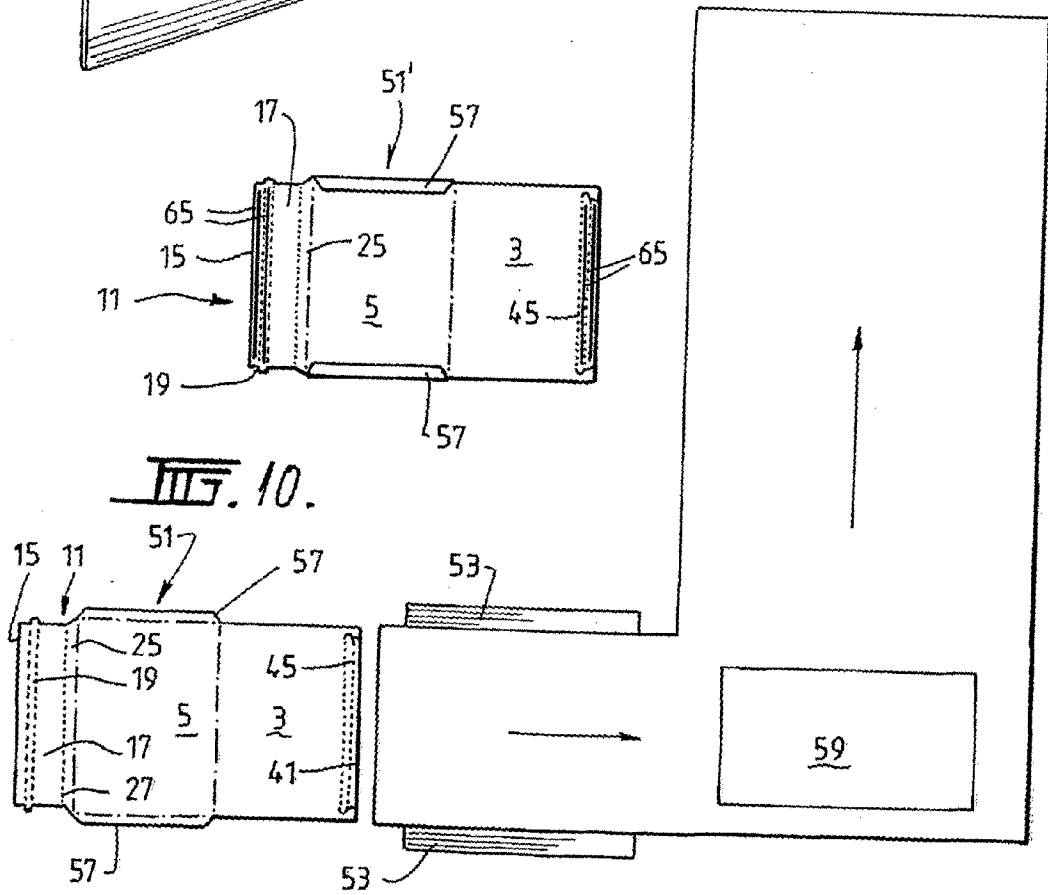
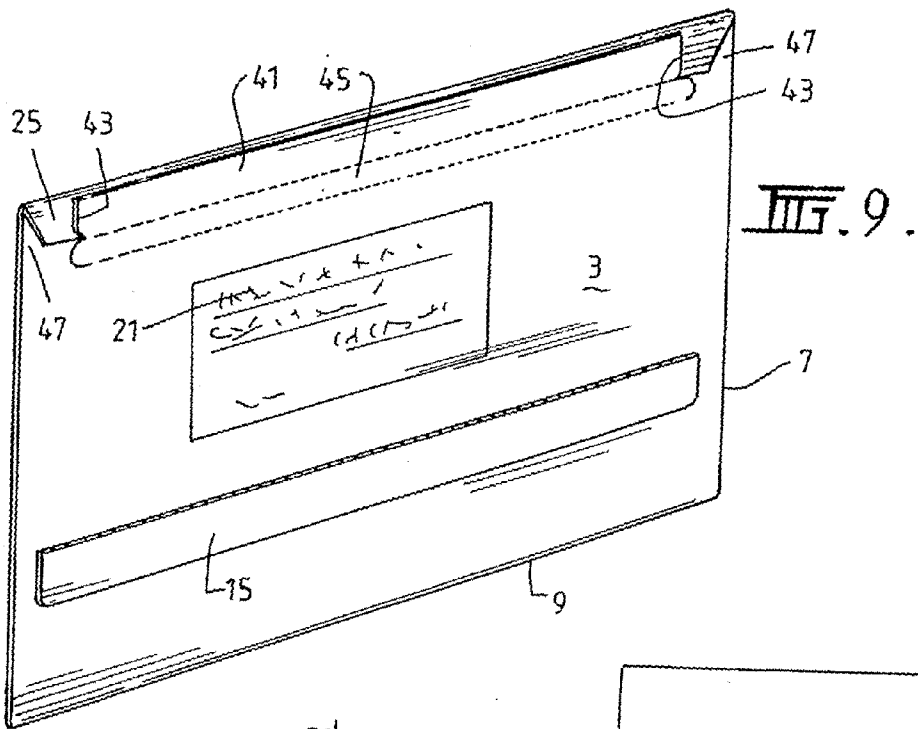












DOCUMENTS ENVELOPE

[0001] The present invention relates to a documents envelope.

[0002] The present invention relates particularly, although by no means exclusively, to a returnable, pre-paid documents envelope.

[0003] In general terms, a returnable documents envelope is an envelope that can be sealed (ie closed) by a sender, delivered as a sealed envelope to another party who can remove the documents in the envelope and can place the same documents or other documents in the envelope and reseal and return the envelope to the sender or forward the envelope to another party.

[0004] There is a wide range of returnable envelopes in the patent literature. For example, in an International-type search carried out prior to lodging the subject patent specification, the Australian Patent Office located the following patent documents as returnable envelopes:

[0005] WO 00/10885 (Emmott)

[0006] U.S. Pat. No. 6,039,242 (Tee)

[0007] Derwent Abstract Accession No. 2000-376940/33 (CH)

[0008] 690169 A (Seetal Schaller A G))

[0009] U.S. Pat. No. 5,513,795 (Sauerwine)

[0010] GB 2117319 A (Westvaco Corporation)

[0011] U.S. Pat. No. 4,775,095 A (Emmott)

[0012] WO 98/28198 A (Spaulding)

[0013] U.S. Pat. No. 4,308,987 A (Solomon)

[0014] In addition, U.S. Pat. No. 2,686,005 has been disclosed to the applicant as another type of returnable envelope.

[0015] The reference to the above patent documents in the subject patent specification is not to be taken as an admission by the applicant that the information in the documents was part of the common general knowledge in Australia before the priority date of the subject application.

[0016] An object of the present invention is to provide a returnable documents envelope that is an improvement over the returnable envelopes known to the applicant.

[0017] According to the present invention there is provided a documents envelope that has one opening only for inserting documents into and removing documents from the envelope and a flap for closing the opening, which flap includes a series of sections, the sections including:

[0018] (a) a first section that is at or towards an end of the flap and can be secured to a front face or panel (hereinafter referred to as "panel") of the envelope when the flap is in an initial closed position and thereby close the opening;

[0019] (b) a second section that is adjacent to the first section and covers a section of the envelope front panel that can carry or does carry on-forwarding or return delivery information when the flap is in the initial closed position; and

[0020] (c) a third section that is adjacent to the second section and can be secured to the envelope front panel when the flap is in a subsequent closed position and thereby reclose the opening.

[0021] In use, a sender can initially close the opening of the above-described envelope by folding the flap into the initial closed position and securing together the first section of the flap and the envelope front panel. A third party who receives the envelope can gain access to the envelope via the opening by separating the flap from the envelope front panel. The third party can reuse the envelope by (i) separating the second section from the third section to reveal the section of the envelope front panel that can carry or does carry on-forwarding or return delivery information, (ii) inserting documents into the envelope via the opening, and (iii) securing the third section to the envelope front panel and thereby re-close the opening. The envelope can then be addressed (if necessary) and forwarded to the nominated delivery destination.

[0022] The term "on-forwarding or return delivery information" is understood herein to mean information in any form concerning the subsequent delivery point for the envelope.

[0023] By way of example, the information may be in the form of a pre-paid consignment note that is adhered (or other otherwise secured) to or directly printed onto the envelope.

[0024] The flap may include a tear strip that separates the first and the second sections of the flap and facilitates separating the flap from the envelope when the flap is in the initial closed position.

[0025] The flap may include a line of weakness that separates the second and the third sections of the flap and facilitates separating the second section from the third section.

[0026] The first section may include an adhesive for securing the first section to the envelope front panel.

[0027] The third section may include an adhesive for securing the third section to the envelope front panel.

[0028] With this arrangement, the flap may include a tear strip that separates the third section and a fourth section of the flap and facilitates opening the re-closed opening.

[0029] In another, although not the only other possible, embodiment of the invention the envelope front panel may include a flap that has an adhesive for securing the third section to the envelope front panel.

[0030] With this arrangement, preferably the flap is formed so that the flap can be folded out of the plane of the envelope front panel to allow the third section to be folded so that it extends across the location occupied previously by the flap and the flap can then be folded back to contact the third section and secure the third section to the envelope front panel via the adhesive strip and thereby re-close the opening.

[0031] The envelope front panel flap may include a tear strip that separates the flap and the envelope front panel and facilitates opening the re-closed opening.

[0032] The envelope may be formed by folding and gluing a blank of a suitable material, such as paperboard or paper.

[0033] In addition to the front panel and the flap, the envelope may include a rear panel, parallel side edges that interconnect the front and the rear panels, and a bottom edge that interconnects the front and the rear panels, with the flap being an extension of the rear panel.

[0034] The present invention is described further by way of example with reference to the accompanying drawings, of which:

[0035] FIGS. 1 to 4 illustrate a preferred embodiment of the envelope and a preferred sequence of steps to open a sealed (ie closed) envelope and to re-seal the envelope for delivery to another location;

[0036] FIGS. 5 to 9 illustrates another preferred embodiment of the envelope and a preferred sequence of steps to open and then re-close a sealed envelope; and

[0037] FIG. 10 is a schematic diagram of a right hand gluing machine for forming the envelopes shown in FIGS. 1 to 9.

[0038] The envelopes shown in the figures include a front panel 3, a rear panel 5, parallel side edges 7, a bottom edge 9, a top opening 13 (which is the only opening of the envelope), and a flap generally identified by the numeral 11 that extends from the rear panel 5.

[0039] It can readily be appreciated from the figures that movement of the flap 11 between the positions shown in FIGS. 1 and 3 and between the positions shown in FIGS. 5 and 7 opens and closes the opening.

[0040] The envelopes as described above are of a generally conventional configuration.

[0041] The envelopes are characterised by the construction of the flaps 11 so as to enable each envelope to be sealed with the flap 11 in an initial closed position (as-shown in FIGS. 1 and 5), delivered to a third party, opened by the third party to gain access to the documents in the envelope, re-sealed (ie re-closed) by the third party with the same or different documents with the flap 11 in a subsequent closed position (as shown in FIGS. 4 and 9), and forwarded to another party, and opened by the other party to gain access to the documents in the envelope.

[0042] With reference initially to the FIGS. 1 to 4 embodiment, the flap 11 includes a first section 15 located at the free end of the flap 11.

[0043] The first section 15 carries an adhesive strip (not shown) on an inner surface and the adhesive strip enables the flap 11 to be secured to the front panel 3 of the envelope in the initial closed position and thereby close the opening 13 of the envelope.

[0044] The envelope shown in FIGS. 1 to 4 also includes a second section 17 that is connected to the first section 15 via a tear strip 19 and is provided:

[0045] (a) to cover a delivery consignment note 21 (FIG. 3) that is attached to the front panel 3 of the envelope when the flap 11 is in the-initial closed position shown in FIGS. 1 and 2; and

[0046] (b) to carry on its outer surface a further delivery consignment note 23 (FIGS. 1 and 2).

[0047] The envelope also includes a third section 25 that is connected to the second section 17 via a score line 27.

[0048] The third section 25 carries an adhesive strip 35 (FIG. 3) on an inner surface and the adhesive strip enables the flap 11 to be secured to the front panel 3 of the envelope in the subsequent closed position and thereby re-close the opening 13 of the envelope.

[0049] The envelope also includes a fourth (and final) section 29 that is connected to the third section 25 via a tear strip 31.

[0050] In use of the envelope shown in FIGS. 1 to 4 as a pre-paid return envelope, a sender locates documents in the envelope via the opening 13 and initially closes the opening 13 by folding the flap 11 onto the envelope front panel 3 into the initial closed position shown in FIG. 1 and seals the flap 11 in that position via the adhesive-carrying first section 15.

[0051] In this initially closed and sealed position, the second section 17 of the flap 11 covers the pre-paid delivery consignment note 21.

[0052] The closed and sealed envelope is then delivered to a third party as required.

[0053] The third party opens the envelope by detaching the tear strip 19 from the flap 11 as illustrated in FIG. 2.

[0054] When the tear strip 19 is detached, the first section 15 of the flap 11 is retained via the adhesive strip (not shown) to the front panel 3 of the envelope, and the third party folds upwardly the remainder of the flap 11, including the second and third sections 17, 25, to the position shown in FIG. 3 and thereby gains access to the envelope via the opening 13.

[0055] The third party re-seals and forwards the envelope to another party by a sequence of steps that includes a first step of detaching the second section 17 of the flap 11 from the remainder of the flap 11 by tearing along the score line 27 and thereby revealing the return delivery consignment note 21.

[0056] As can be seen in FIG. 4, at this stage, the flap 11 includes the third section 25, the tear strip 31, and the fourth section 29.

[0057] The third party then inserts documents as required into the envelope via the opening 13 and re-closes the envelope by folding the flap 11 onto the envelope front panel 3 into the subsequent closed position shown in FIG. 4 and seals the flap 11 in that position via the adhesive-carrying third section 25.

[0058] The closed and sealed envelope is then delivered to another party in accordance with the delivery instruction on the delivery consignment note 21.

[0059] On receipt, the other party opens the envelope by detaching the tear strip 31 from the flap 11.

[0060] The FIGS. 5 to 9 embodiment is similar in many respects to the FIGS. 1 to 4 embodiment and the same reference numerals are used for both embodiments.

[0061] One difference between the two embodiments is the designs of the envelopes that allows the envelopes to be re-closed.

[0062] The flap 11 of the FIGS. 5 to 9 embodiment has a simplified design compared to that of the FIGS. 1 to 4 embodiment. Specifically, the flap 11 of the FIGS. 5 to 9 embodiment does not include the fourth section 29, the tear strip 31, and the adhesive strip 35 that are parts of the flap 11 of the FIGS. 1 to 4 embodiment. In addition, the FIGS. 5 to 9 embodiment is formed so that the envelope front panel 3 has a flap 41 that extends substantially across the width of the envelope front panel 3. The flap 41 has an adhesive strip (not shown) on an inwardly facing surface of the flap 41. As is described in more detail below, the flap 41 can be secured to the third section 25 of the flap 11 via the adhesive strip and thereby re-close the opening 13.

[0063] The flap 41 of the front panel 3 is connected to the envelope front panel 3 by lines of weakness 43 that define the sides of the flap 41.

[0064] In addition, the flap 41 is connected to the envelope front panel 3 via a tear strip 45.

[0065] In use of the FIGS. 5 to 9 embodiment as a prepaid return envelope, a sender locates documents in the envelope via the opening 13 and thereafter closes the opening as described in relation to the FIGS. 1 to 4 embodiment.

[0066] In addition, a third party opens the FIGS. 5 to 9 embodiment by detaching the tear strip 19 as described in relation to the FIGS. 1 to 4 embodiment.

[0067] Furthermore, the third party re-closes the envelope by firstly detaching the second section 17 of the flap 11 from the remainder of the flap 11 as described in relation to the FIGS. 1 to 4 embodiment.

[0068] At this point, the FIGS. 5 to 9 embodiment is as shown in FIG. 8. Specifically, the third section 25 is the only remaining section of the flap 11. The third party then folds the flap 41 of the front panel 3 of the envelope outwardly and thereby tears the lines of weakness 43 that define the sides of the flap 41 and separates the flap 41 along these lines of weakness. The outward movement of the flap 41 makes it possible to fold the third section 25 of the flap 11 onto the remaining sections 47 on the sides of the front panel 3 of the envelope so as to partially close the opening 13. The flap 41 is then folded back towards the plane of the front panel 3 into the subsequently closed position and contacts the downwardly folded third section 25 of the flap 11. The adhesive strip on the inwardly-facing surface of the flap 41 secures the flap 41 to the third section 25 and thereby secures the third section 25 to the front panel 3. In this position the envelope is re-closed.

[0069] The envelope can then be forwarded to another party and opened up by that party by removing the tear strip 47. Removal of the tear strip 47 facilitates access to the envelope via the opening 13.

[0070] The above-described envelopes enable effective and convenient delivery of documents to a third party and on-forwarding of the same and/or other documents in a safe manner to a further party.

[0071] The design of the envelopes shown in the figures is such that the envelopes can be formed at high production volumes by folding and gluing a blank of a suitable material, such as paperboard or paper, using folding and gluing machines.

[0072] This is a further advantage of the envelopes.

[0073] In addition, the envelopes can be manufactured at high production volumes by folding and gluing machines and the machines may be operated to automatically attach delivery consignment notes 21 to the envelopes.

[0074] FIG. 10 illustrates a right angle gluing machine. The FIGS. 5 to 9 embodiment is formed by the machine by carrying out the following sequence of folding and gluing steps on a pre-cut, pre-creased, and pre-printed blank.

[0075] The blank, generally identified by the numeral 51, is fed from a feed hopper onto the left-hand end of the machine as shown in the figure and is moved along the first arm of the machine. As the blank moves along this arm the side edge flaps 57 of the blank are first folded inwardly onto the rear panel 5 and glue is then dispensed onto the folded side edge flaps 57 from glue pots 53. The glue is retained in position on the folded-in side edge flaps 57 by static ploughs (not shown) for the remainder of the folding and gluing operation.

[0076] On reaching the dead plate 59 at the end of the first arm the folded and glued blank is moved along the right hand arm of the machine. As the blank moves along this arm two adhesive strip tapes and two tear strip tapes are dispensed from rolls (not shown) and are applied to the blank. The tapes form the adhesive strips on the first section 15 of the flap 11 and the flap 43 of the envelope front panel 3 and the tear strips 19 and 45. The sketch of the blank identified by the numeral 51' shows the positions of the tapes on the blank. The tapes are identified by the numeral 65 in the sketch. The tapes are applied under tension in order to keep the tapes straight. One advantage of the FIGS. 5 to 9 embodiment over the FIGS. 1 to 4 embodiment is that there are two tapes on each side of the blank and the location of the tapes substantially balances the tension forces applied to the blank by the tapes. This is an advantage because the end result of the balanced tension forces is that the application of the tapes to the blank does not upset the alignment of the blank on the machine.

[0077] After the tapes have been applied, the front panel 3 is folded 180 degrees and affixed to the rear panel 5 via the side edge flaps 57, thereby to complete manufacture of the envelope.

[0078] Many modifications may be made to the preferred embodiments of the present invention described above without departing from the spirit and scope of the present invention.

[0079] By way of example, whilst the FIGS. 1 to 4 embodiment includes a tear strip 19 that connects together the first and the second sections 15, 17 and a tear strip 31 that connects together the third section and the upper section 29 of the flap 11, it can readily be appreciated that the present invention extends to any other suitable means for connecting together these sections of the flap 11.

[0080] Furthermore, similarly, whilst the preferred embodiments include a score line that connects together the second and the third sections 15, 17, it can readily be

appreciated that the present invention extends to any other suitable means for connecting together these sections of the flap.

[0081] Furthermore, whilst the FIGS. 1 to 4 embodiment includes adhesive strips that enable the first and third sections 15, 25 of the flap 11 to be secured to the envelope front panel 3, it can readily be appreciated that the present invention extends to any suitable means for securing together these sections of the flap 11 and the envelope. The FIGS. 5 to 9 embodiment is one such other means.

[0082] Furthermore, whilst the preferred embodiments include delivery consignment notes 21 attached to the front panels 3 of the envelopes, it can readily be appreciated that the present invention extends to any suitable means for providing information as to further destinations of the envelopes. Another suitable means is direct printing of delivery information onto the envelopes.

[0083] Furthermore, whilst the patent specification describes the manufacture of the FIGS. 5 to 9 embodiment of the envelope using a right angle folding and gluing machine, the present invention is not so limited and the envelopes of the invention may be made using any suitable high volume production machines, such as straight line folding and gluing machines.

[0084] Furthermore, the present invention is not limited to the described sequence of folding and gluing steps for the right angle folding and gluing machine and extends to any suitable sequence of steps.

1. A documents envelope that has one opening only for inserting documents into and removing documents from the envelope and a flap for closing the opening, which flap includes a series of sections, the sections including:

- (a) a first section that is at or towards an end of the flap and can be secured to a front face or panel (hereinafter referred to as "panel") of the envelope when the flap is in an initial closed position and thereby close the opening;
- (b) a second section that is adjacent to the first section and covers a section of the envelope front panel that can carry or does carry on-forwarding or return delivery information when the flap is in the initial closed position; and
- (c) a third section that is adjacent to the second section and can be secured to the envelope front panel when the flap is in a subsequent closed position and thereby reclose the opening.

2. The envelope defined in claim 1 wherein the flap includes a tear strip that separates the first and the second sections of the flap and facilitates separating the flap from the envelope when the flap is in the initial closed position.

3. The envelope defined in claim 1 or claim 2 wherein the flap includes a line of weakness that separates the second and the third sections of the flap and facilitates separating the second section from the third section.

4. The envelope defined in the preceding claims wherein the first section includes an adhesive for securing the first section to the envelope front panel.

5. The envelope defined in the preceding claims wherein the third section includes an adhesive for securing the third section to the envelope front panel.

6. The envelope defined in claim 5 wherein the flap includes a tear strip that separates the third section and a fourth section of the flap and facilitates opening the re-closed opening.

7. The envelope defined in any one of claims 1 to 4 wherein the envelope front panel includes a flap that has an adhesive for securing the third section to the envelope front panel.

8. The envelope defined in claim 7 wherein the flap is formed so that the flap can be folded out of the plane of the envelope front panel to allow the third section to be folded so that it extends across the location occupied previously by the flap and the flap can then be folded back to contact the third section and secure the third section to the envelope front panel via the adhesive strip and thereby re-close the opening.

9. The envelope defined in claim 8 wherein the envelope panel flap includes a tear strip that separates the flap and the envelope front panel and facilitates opening the re-closed opening.

10. The envelope defined in any one of the preceding claims formed by folding and gluing a blank of a suitable material, such as paperboard or paper.

11. The envelope defined in any one of the preceding claims further includes a rear panel, parallel side edges, and a bottom edge, with the flap being an extension of the rear panel.

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