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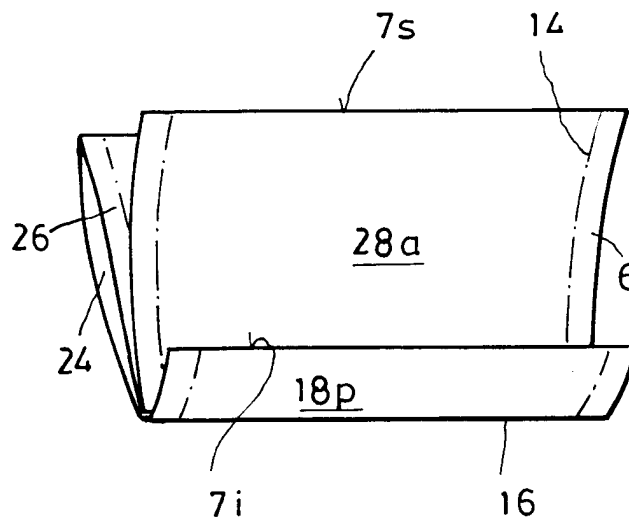
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(54) **Mailing form**

(57) It is formed by a sheet of paper comprising: a first line of fold (16) close to the lower transverse border (7i) and which determines a short lower end portion (18) of the sheet of paper; at least one pair of second lines of fold (20, 22, 120, 122), each pair formed by a near line of fold (20, 120) and a distant line of fold (22, 122). The sheet of paper has [i] a first fold about the first line

of fold (16), causing the face-to-face arrangement of front surface portions (18a, 28a); [ii] at least one second fold about the near lines of fold (20, 120), causing the face-to-face arrangement of front surface portions; and [iii] at least one third fold about one of the distant lines (22, 122), causing the face-to-face arrangement of rear surface portions.

FIG.3



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Description

Field of the Invention

[0001] The invention relates to a mailing form, of the type comprising a sheet of paper: which is provided with a front surface for containing a text, said front surface having two first longitudinal edge areas, having first portions capable of being glued; which is provided with a rear surface, opposite to said front surface, said rear surface having two second longitudinal edge areas, provided with second portions capable of being glued; which has an upper transverse border and a lower transverse border and which is adapted to be folded successively by a plurality of lines of fold substantially parallel to said transverse borders.

Description of the Related Art

[0002] Where correspondence, particularly advertising and other types of very stable, repetitive and generally single-sheet correspondence is concerned, the so-called self-sealing type is known, in which the letter itself acts as an envelope, which is achieved, on the one hand, by folding the letter in such a way that a size in accord with the standardised sizes is achieved, leaving the details of the addressee and his address visible, and on the other hand, closure of the contour of the folded document, by welds or gluing, to confer consistence thereon when being handled in the mail from the sender to the addressee, apart from achieving the desired degree of confidentiality. Different adhesives are applied to the printed form or letter, depending on the mechanism used for folding and sealing the contour. To facilitate opening of the correspondence by the addressee, perforated lines are formed along the adhesive layout.

[0003] In this type of correspondence, the letter heading is used for the details of the addressee that would appear on an envelope.

[0004] The advantage of these forms over the traditional types of letter enclosed in an envelope is that the degree of automated processing is higher, with fewer personnel generally being required, while a greater throughput is achieved.

[0005] All these forms require, further to a specific way of folding, distribution of the adhesives on the vertical side edges and one or more horizontal adhesive lines to guarantee the confidentiality of the content. Otherwise, it would be possible to see the content horizontally and read it easily either at the top, at the bottom or in the middle of the folded letter.

[0006] In this process, the desired folding offers no complications, since there is a wide range of folding machines for this aspect. There is no great difficulty either in applying the adhesives to the left and right hand sides of the printed form or letter. The application of the perforated opening lines corresponding to these adhesives is not complex either.

[0007] The problem arises when it is a question of metering horizontal or transverse lines of adhesive on the printed form and even more so when they have to be applied to precise points to make them coincide when folding and at the same time carry out the corresponding perforations. This makes the form more expensive and notably reduces the number of possible suppliers.

[0008] Likewise, the mechanisms required to seal or glue the item become more complicated and increase costs when it is required to have transverse adhesive portions on the printed form.

[0009] The conclusion of all the above is that a heavy investment and large volumes of correspondence are required to take advantage of these types of correspondence.

SUMMARY OF THE INVENTION

[0010] It is an object of the invention to overcome the above mentioned drawbacks. This object is achieved with a form of the type first mentioned above which is characterized in that: [a] it comprises a first line of fold close to said lower transverse border, said first line determining on said sheet of paper an lower end portion of very small longitudinal dimension; [b] it comprises at least one pair of second lines of fold, each of said pairs being formed by a near line of fold and a distant line of fold, said near line of fold being closer to said first line of fold than said distant line of fold; and [c] said sheet of paper being adapted for having: [i] a first fold about said first line of fold, such that said fold leads to the face-to-face arrangement of front surface portions; [ii] at least one second fold about one of said near lines of fold, such that each of said second folds leads to the face-to-face arrangement of front surface portions; and [iii] at least one third fold about one of said distant lines of fold, such that each of said third folds leads to the face-to-face arrangement of rear surface portions.

[0011] With the form of the invention, it is possible to keep the contents confidential, by the use of the glueable portions located on longitudinal areas and without the need of using transverse adhesive portions, which the present form lacks.

[0012] This result is achieved by making one or more folds in such a way that the content of the letter or correspondence to be kept confidential is on the inside of this fold or others previously made or to be made subsequently, but at least one of them intercepts the view between the folds since it is closed at the sides by the said adhesive application.

[0013] Thus: a letter is folded in a way that the front surface, with the content thereof, is covered by the fold; either partially, leaving the details of the addresses and his address visible, or completely or even with the foot of the letter overextending the head, until the details of the addressee and his address are made to coincide with a transparent window, similar to those used on envelopes, located just opposite the folds, making such

details visible. This fold alone does not keep the content confidential, even though the vertical side edges were sealed or glued because it could be read or seen from the horizontal edges.

[0014] A further enveloping fold is made, always leaving the details of the addressee and his address visible, either directly or through the window. This fold does intercept the view of the content therefrom, in such a way that it will be 100% of the content if the fold is made only with the overextending portion or a percentage if it is made by folding both parts of the previous fold.

[0015] One or more further folds may be necessary, depending on the length of the form, to adjust the correspondence to the appropriate sizes for the sending thereof. These folds may be in C or in Z, but always leaving the details of the addressee and his address visible.

[0016] The order of the folds may vary relative to what has been said above, i.e., they may be made in a different order, but the final appearance will be the same. This is because, even when the folds are made by hand, but moreso when using folding mechanisms, it may not be necessary to make the folds in that order to achieve the same appearance.

[0017] If the above is complemented with the sealing or gluing of the longitudinal edges of the different folds, further to obtaining the required consistency, a view of the content through these sides may be blocked and, precisely for the folds made, it is possible to keep the content of the correspondence confidential, without the need for transverse seals or gluing.

[0018] The confidential area may be indefinite on the front surface and on the rear surface, depending only on the length of the printed form.

[0019] The appearance may be completed by eliminating the perforated lines usually prepared along the arrangement of the glued lines, in this case only longitudinal, since there are no transverse adhesive lines. Where the perforations do not exist, the addressee may open the correspondence using scissors, by removing the glued longitudinal edges, without any risk of destroying the content of the correspondence, or the sealing machine can produce the said lines of perforations.

[0020] When the present invention is compared with the conventional types, the lower cost of the printed form and the simplification of the mechanisms to achieve confidentiality of the correspondence, with only vertical seals or glued lines being necessary, are obvious. In fact, although the folding operation is not particularly different, since the accuracy required by the metering of the conventional horizontal lines of adhesive is not necessary, normal writing paper may be used, if desired, with the longitudinal lateral lines of adhesive being metered at the same time as the folding is done, together with the corresponding perforations. All of this may be done using a rather more sophisticated folding machine than the usual one (for the adhesive metering devices and the toothed wheels producing the perforations) but never as complex as the mechanisms (folding and seal-

ing machines) used up to date.

[0021] Furthermore, should it be desired to use forms prepared with adhesives, since the transverse ones are not required, the number of suppliers capable of supplying them is multiplied by tens or hundreds and the cost of the forms is notably reduced. The adhesives may be normal ones, which must of necessity be applied during the folding operation itself, or special contact, wet sealing, impact, high pressure, hot-melt, etc. adhesives may be pre-applied to the form. These latter will require the corresponding mechanical closing or sealing operation, carried out simultaneously with the folding operation, or in a subsequent operation, carried out immediately after folding or totally independently.

[0022] Another important difference to be pointed out in the comparison of the invention with the conventional forms is that although the latter are limited to one sheet or, at the most, two, not so much for the possibility of making the various folds, but for the difficulty of opening the correspondence correctly, without tearing the letter (due to the transverse lines of adhesive), with the present form, the printed matter may comprise an infinite number of sequential sheets, limited in practice only by the manufacture of the continuous paper.

[0023] The form also allows parts of the printed matter to be used for special cases of correspondence, such as:

- Registered Mail with Acknowledgement of Receipt.
- Correspondence containing a Reply Card.
- Correspondence containing a Reply Envelope.
- Correspondence combining the previous cases.

[0024] In all cases, the confidentiality of the content is achieved by the longitudinal seals or lines of adhesive and, at the head and the foot, by the types of folds, independently of the number of folds made.

[0025] It is only possible to know the content of the letter by violating the letter or removing the adhesive from the edges, with the manipulation of the mail being easily recognisable.

BRIEF DESCRIPTION OF THE DRAWING

[0026] Further advantages and features of the invention will be appreciated from the following description in which preferred embodiments of the invention are described without any limitation and with reference to the accompanying drawings, in which:

[0027] Figure 1 is a plan view of the front surface of one embodiment of the mailing form of the present invention.

[0028] Figure 2 is a plan view of the rear surface of the mailing form according to Figure 1.

[0029] Figure 3 is a perspective view, on a smaller scale, of a form according to the previous two figures, during the folding process of the form.

[0030] Figures 4 and 5 are plan views of the front sur-

face of further embodiments of the mailing form according to the present invention.

[0031] Figure 6 is a perspective view of the form of Figure 4, during the folding process of the form.

DESCRIPTION OF PREFERRED EMBODIMENTS

[0032] The mailing form of the present invention comprises a sheet of paper in which it is obviously necessary to distinguish a front surface 2 and a rear surface 4. The front surface 2 is for containing the message or text it is wanted to send to the corresponding addressee. No text is required on the rear surface 4, although advantage may be taken of it to contain advertising matter, illustrations or any other information deemed desirable. The sheet of paper defines longitudinal edges 5, a transverse upper edge 7s and a transverse lower edge 7i. In the present description and claims, the longitudinal direction is understood to be the direction of the edges 5, extending from one transverse border 7 to the other. Likewise, the transverse direction is understood to be that of the edges 7, extending from one edge 5 to the other.

[0033] The front surface 2 is provided with first longitudinal edge areas 6 on which there are first glued portions 8. In turn, the rear surface 4 is provided with second longitudinal edge areas 10 where there are second glued portions 12. These portions 8, 12 are either glued or capable of being glued and it should also be said that these portions may be continuous or discontinuous.

[0034] When the folds to which further reference will be made hereinafter are made, some of these first portions 8 are superimposed on some of the second glued portions 12, whereby the sealing operation of the form is facilitated.

[0035] There are preferably provided weakening lines 14, to facilitate removal of the longitudinal edge areas 6, 10. Reference will be made hereinafter on the obvious effects of this removal. Nevertheless, the invention also comprises embodiments not having the weakening lines 14, in which case a cutting instrument, such as scissors must be used for opening the form.

[0036] The form comprises a first line of fold 16 close to the lower transverse border 7i. A lower end portion 18, of short longitudinal length, is defined between the lower transverse border 7i and the first line of fold 16 and has a front surface 18a and a rear surface 18p. According to the invention, a first fold made about the first line of fold 16 leads to the position shown in Figures 3 and 6, where it may be seen that the rear surface 18p of the lower end portion 18 is on the outside of the form and, consequently, the front surface 18a will face the front surface 2 of another portion of the sheet, all as disclosed hereinafter.

[0037] The form also comprises at least one pair of second lines of fold and each of these pairs is formed by a near line of fold 20 and a distant line of fold 22. It should be noted that the terms "near" and "distant" are

used relative to the said first line of fold 16.

[0038] In the embodiment according to Figures 1 to 3, there is only one pair of second lines of fold, while in the embodiment of Figure 5, there are two pairs of said second lines of fold. Further reference will be made to the embodiment according to Figures 4 and 6.

[0039] Between the near line of fold 20 and the first line of fold 16 there is defined a new portion 24 having a front surface 24a and a rear surface 24p, while between the near line of fold 20 and the distant line of fold 22 of one same pair, there is a new portion 26 having a front surface 26a and a rear surface 26p. Also, between the last distant line of fold 22 and the upper edge 7s, there is defined a further portion 28, also having a front surface 28a and a rear surface 28p.

[0040] A second fold about the near line of fold 20 causes the front surfaces 24a and 26a of the portions 24 and 26 to be superimposed. Therefore, when the form is sealed, these front surfaces mutually cover themselves, ensuring the confidentiality of the text therebetween.

[0041] On the contrary, a third fold about the distant line of fold 22 causes the rear surfaces 26p and 28p of the portions 26 and 28 to be superimposed. In this way, the front surface 28a of the portion 28 is only covered in part by the front surface 18a of the first lower end portion 18. Nevertheless, instead of this circumstance being unfavourable, it forms one of the advantages of the invention, since the surface 28a of the portion 28 is the one for containing the name and address of the addressee, whereby in this way it is possible to print the whole text it is wanted to send, including details of the addressee, on the same front surface 2 of the sheet of paper.

[0042] In the embodiment shown in Figure 5, it also happens that the fold about the first line of fold 16 also causes the front surfaces 18a and 28a of the portions 18 and 28 to be superimposed. The second folds about the near lines of fold 20, 120 cause the corresponding front surfaces 24a, 124a and 26a, 126a to be superimposed, while the third folds about the distant lines of fold 22, 122 cause rear surfaces to be superimposed, to be precise the rear surface 26p on the rear surface of the portion 124 and superimposition of the rear surface of portion 126 with the rear surface of the portion 28. As in the previous case, the short initial end portion 18 partly covers the front surface 28a of the portion 28.

[0043] In the embodiment according to Figures 4 and 6, the portion 28 is limited by the line of fold 30 and on the other side of this line there is a portion 32 which, in the closed position of the form, is superimposed on the portion 28. This portion 32 may be used for containing an acknowledgement of receipt or other document.

Claims

1. A mailing form, of the type comprising a sheet of paper:

which is provided with a front surface (2) for
 containing a text, said front surface (2) having
 two first longitudinal edge areas (6), having first
 portions (8) capable of being glued;
 which is provided with a rear surface (4), oppo- 5
 site to said front surface (2), said rear surface
 (4) having two second longitudinal edge areas
 (12), provided with second portions (12) capa-
 ble of being glued;
 which has an upper transverse border (7s) and 10
 a lower transverse border (7i);
 which is adapted to be folded successively by
 a plurality of lines of fold (16, 20, 22, 120, 122,
 30) substantially parallel to said transverse bor-
 ders; 15

characterized in that: [a] it comprises a first
 line of fold (16) close to said lower transverse border
 (7i), said first line (16) determining on said sheet of
 paper an lower end portion (18) of very small longi- 20
 tudinal dimension; [b] it comprises at least one pair
 of second lines of fold (20, 22, 120, 122), each of
 said pairs being formed by a near line of fold (20,
 120) and a distant line of fold (22, 122), said near
 line of fold (20, 120) being closer to said first line of 25
 fold (16) than said distant line of fold (22, 122); and
 [c] said sheet of paper being adapted for having: [i]
 a first fold about said first line of fold (16), such that
 said fold leads to the face-to-face arrangement of
 front surface portions (18a, 28a); [ii] at least one 30
 second fold about one of said near lines of fold (20,
 120), such that each of said second folds leads to
 the face-to-face arrangement of front surface por-
 tions; and [iii] at least one third fold about one of
 said distant lines of fold (22, 122), such that each 35
 of said third folds leads to the face-to-face arrange-
 ment of rear surface portions.

2. The form of claim 1, characterized in that it is pro- 40
 vided with two longitudinal lines of weakening (14),
 each of which delimits one of said longitudinal edge
 areas (10).
3. The form of claim 1 or claim 2, characterized in that 45
 it is provided with a last line of fold (30) farther re-
 moved from said first line of fold (16) than said sec-
 ond lines of fold (20, 22, 120, 122) and in that said
 sheet of paper is provided with a last fold about said
 last line of fold (30), such that said last fold causes 50
 the face-to-face arrangement of rear surface por-
 tions.

55

FIG. 1

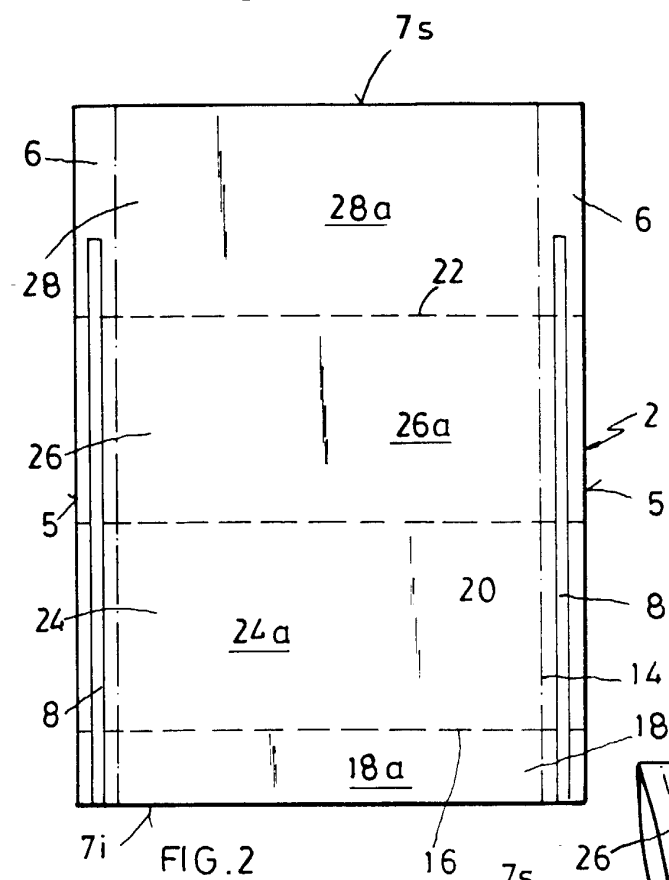


FIG. 2

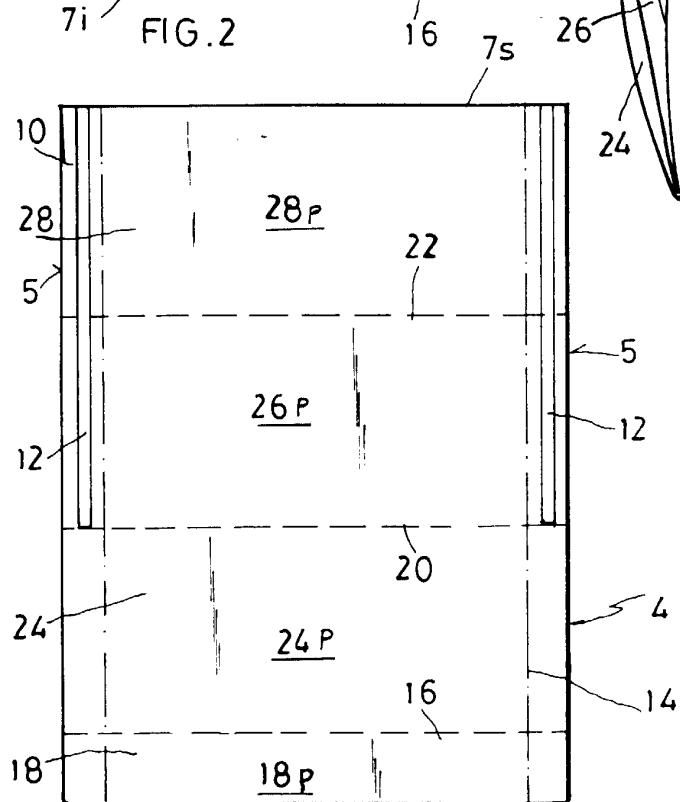
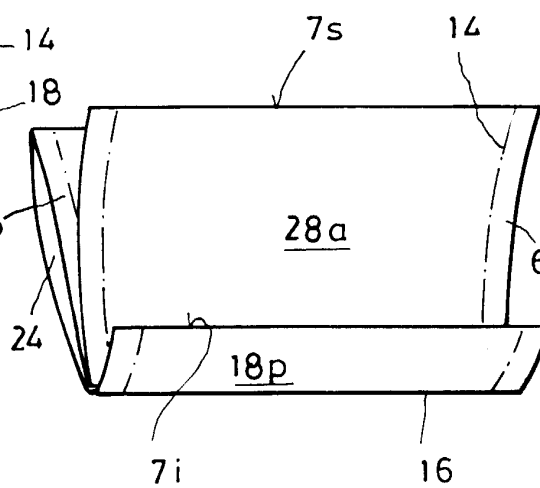
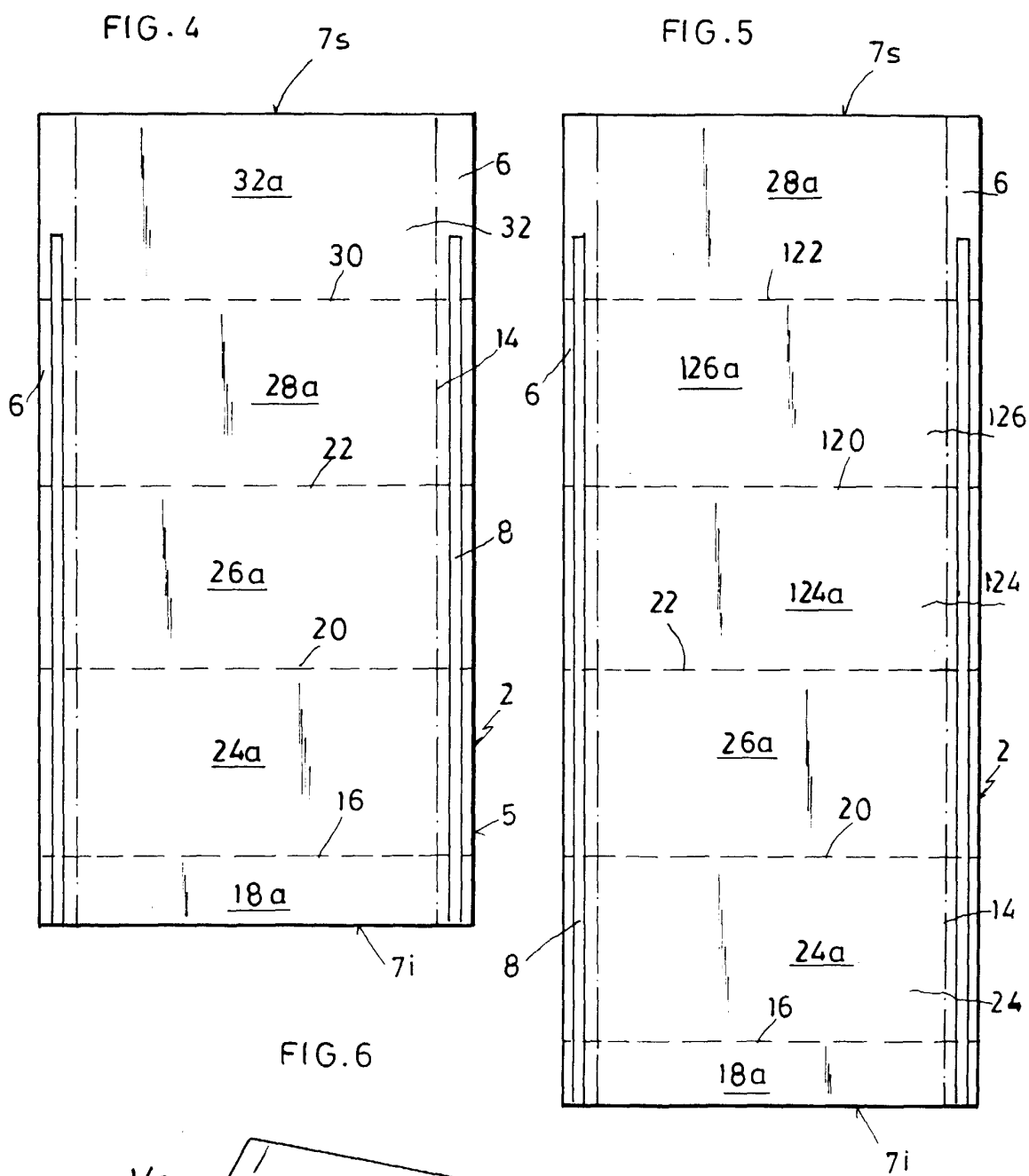


FIG. 3







European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 99 50 0117

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	CH 270 850 A (J.EVERSHED)	1,3	B42D15/08
Y	* page 2, line 10 - page 3, line 12; figures 1-3 *	2	
Y	EP 0 225 135 A (DOCUMAIL) 10 June 1987 (1987-06-10) * column 4, line 39 - column 6, line 20; figures 1-11 *	2	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B42D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 October 1999	Examiner Evans, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/82 (P04/C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 50 0117

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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29-10-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CH 270850 A		NONE	
EP 225135 A	10-06-1987	GB 2183203 A	03-06-1987