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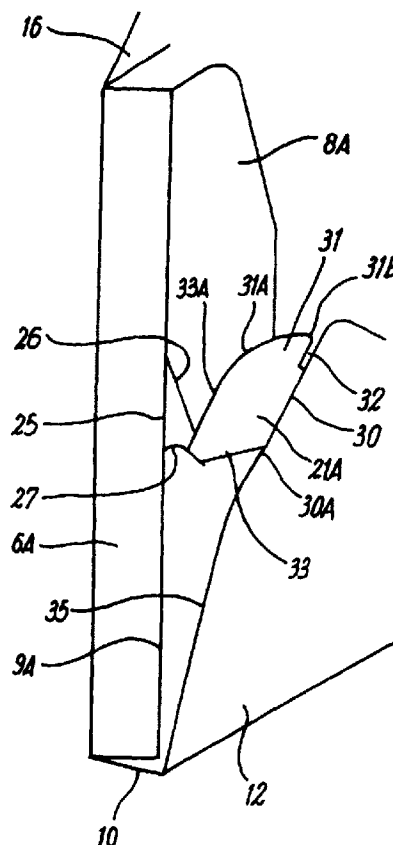
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### (54) Document holders

(57) A blank for the construction of a document holder or wallet is formed from a single sheet of material cut and provided with fold lines to enable the blank to be erected to form a holder or wallet having back (5), front (12), side (6A,6B) and bottom (10) panels. A closure member (17) is hingedly connected to the upper edge of the back panel (5) so as to be foldable over the front panel (12) to open or close the holder to give access to the interior. Latch means is provided to maintain the holder in its assembled condition, each latch means comprising a tongue (21A,21B) formed on one panel member (12) and engageable in a recess (20A,20B) in another panel member (8A,8B). The recess defines a first or engaging position in which the tongue may pass into the recess and a second or locking position into which the tongue may be moved following engagement with the recess and from which the tongue cannot be disengaged without returning it to the engaging position. Preferably the latch means serve in their engaged positions to impart increased front to back rigidity to the assembled holder.



**FIG. 2**

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## Description

The present invention relates to holders or wallets for containing documents or the like.

Holders or wallets for documents are known which are formed from a flat sheet of polypropylene or other synthetic plastics material cut to form a blank and provided with fold lines enabling portions of the blank to be folded upon one another to form a wallet or holder having a back panel, bottom and side edge panels connected to the back panel, a front panel connected to the bottom edge panel, and a lid connected to the back panel and adapted to fold over and be connected to the front panel to open or close the holder.

In order to maintain the holder in its erected condition, it is known to provide latch means comprising flexible tongue members engageable in complimentary apertures formed in appropriate portions of the blank and cooperable to maintain the various panels in their erected positions. However previously proposed constructions suffer from the disadvantage that the latch means are readily disengaged during normal use of the holder with the result that it comes apart and discharge the contents unintentionally.

It is an object of the present invention to obviate or mitigate this disadvantage.

According to one aspect of the invention there is provided a blank for the construction of a document holder or wallet, the blank being formed from a single sheet of material cut and provided with fold lines to enable the blank to be erected to form a holder or wallet having back, front, side and bottom panels, a closure member hingedly connected to the upper edge of the back panel so as to be foldable over the front panel to open or close the holder to give access to the interior, and latch means operable to maintain the holder in its assembled condition, the or each latch means comprising a tongue formed on one panel member and engageable in a recess in another panel member, the recess defining a first engaging position in which the tongue may pass into the recess and a second locking position into which the tongue may be moved following engagement with the recess and from which the tongue cannot be disengaged without returning it to the engaging position.

Preferably said recess is of generally triangular form having a relatively long side defining said engaging position and a shorter side defining said locking position, the base of the triangle incorporating means for constraining the associated tongue member to locate against one or other of said sides.

Preferably said base is curved between its ends to constrain said tongue member to move to one or other corner of the triangle when subjected to external pressure in a locking or unlocking direction.

Preferably said tongue member when in said locking position is of greater longitudinal extent than the length of said shorter side of the recess. Advantageously

ly said tongue is longer in said locking position than the length of said longer side of the recess, but is of shorter dimension than said longer side in an alternative direction, whereby the tongue may be inserted into the recess in a pre-engaging position and may be rotated into said engaging position in which it projects beyond at least one end of the long side of said triangle.

Preferably an outer surface of said tongue member is of arcuate form to facilitate rotating movement between said pre-engaging and engaging positions.

Preferably also said tongue is provided with a neck portion corresponding in length to the length of the shorter side of said recess, portions of the tongue projecting in opposite directions from said neck portion whereby to lie beneath the associated panel in the locked position of the latch means and retain the tongue against disengagement from the recess.

Preferably the dimensions of said tongue and said recess are such that the tongue may be inserted into the recess and manipulated into the engaged and locked positions without substantial deformation of the tongue.

Preferably the blank is provided with attachment panels hingedly connected to said side panels and adapted in the erected condition of the holder to overlie the back panel, said front panel being adapted to overlie said attachment panels and to be connected thereto by said latch means.

Preferably a pair of latch means are provided at respective opposite sides of the holder to interconnect the front panel to respective ones of said attachment panels.

Preferably each of said recesses is formed in the associated attachment panel with the shorter edge aligned with the fold line between the attachment panel and the associated side panel, the associated tongue being foldably connected to and projecting from the corresponding side edge of said front panel.

Advantageously said front panel is of lesser extent than said back panel whereby to form a front opening to the assembled holder adapted to be closed by said closure member. Cooperating attachment means may be provided on the front panel and the closure member to retain the closure member in its closed position.

Preferably said tongue member is adapted when in said locking position to lie flush against the adjacent side panel of the assembled holder. Preferably also the width of the tongue member is substantially equal to the width of the adjacent side panel member.

The invention also provides a document holder or wallet formed from a blank constructed as aforesaid.

According to a further aspect of the invention there is provided a document holder or wallet formed by folding from a one piece blank and having back, front, bottom and side panel members and a closure member hingedly connected to said back panel and adapted to fold over and be connected to said front panel to open and close the holder, the holder being maintained in its erected condition by latch means which serve in their

engaged position to impart increased rigidity to the assembled holder.

Preferably the or each latch means is adapted in the engaged position to lie flush against a side wall panel of the folder to produce a localised double wall thickness.

Preferably said latch means comprise tongue members engageable in associated recesses in panel members of the holder, said recesses being so positioned that in the erected condition of the holder said tongue members project into the interior of the holder and lie flush against the side wall panels thereof.

Preferably also said tongue members are dimensioned such that in the engaged position they extend between the front and back of the assembled holder to thereby increase resistance to movement of the front and back towards one another.

Preferably said tongue members are disposed generally centrally of the height of the assembled holder to increase the strength in the central region of the assembled holder.

Preferably said recesses are shaped such that said tongues are first engaged with the recesses in an engaging position in which they are displaced from the side walls of the holder and may be disengaged from the recesses if required and may then be moved bodily into a fully engaged or locking position in which the tongues lie flush against the side wall panels of the holder and cannot be withdrawn from the associated recesses.

The invention also provides a method of assembling a document holder or wallet from a one piece blank comprising folding the blank about fold lines to a semi-assembled condition, engaging latch means on components of the holder with openings formed in adjacent components and moving the engaged latch members from engaging to locking positions in which they cannot be removed from the associated openings.

An embodiment of the invention will now be described, by way of example, only with reference to the accompanying drawings, in which:-

Fig. 1 is a plan view of a blank for use in forming a document holder or wallet according to the invention;

Fig. 2 is a fragmentary view of one end region of the holder or wallet showing the manner of assembly; and

Fig. 3 is a perspective view of the assembled folder or wallet in an open condition.

Referring to Fig. 1 there is shown a blank for forming a document holder or wallet. The blank is of one piece construction and preferably formed from polypropylene or other flexible plastics material, but may be formed from flexible card or board. The blank incorporates a central or back panel 5 adapted to form the back of the

assembled holder. Opposed, relatively narrow, side panels 6A and 6B are connected by fold lines 7A and 7B to opposite sides of the back panel 5 and attachment panels 8A and 8B are attached by fold lines 9A and 9B to the respective outer edges of the side panels 6A and 6B.

A relatively narrow bottom panel 10 is connected by a fold line 11 to the lower edge of the back panel 5 and a front panel 12 is hingedley connected by a fold line 13 to the outer edge of the bottom panel 10. A pair of tabs 14A and 14B are connected by fold lines 15A and 15B to the lower edges of the respective side panels 6A and 6B and lie alongside but are not connected to opposite ends of the bottom panel 10. A top panel 16 is connected by a fold line 16A to the upper edge of the back panel 5 and a closure flap 17 is connected by a fold line 17A to the outer edge of the top panel 16. A tab 18 is formed adjacent the free outer edge of the closure flap 17 and cooperates, when the holder is assembled, with a slot 19 formed adjacent the outer edge of the front panel 12 to enable the assembled holder to be opened and closed to gain access to documents or other items which may be contained in it. Apertures 20A and 20B are provided in the respective attachment panels 8A and 8B and are adapted in use to be engaged by projecting tongue members 21A and 21B connected by fold lines 22A and 22B to the opposite side edges of the front panel 12 adjacent the outer end thereof to maintain the holder in its assembled position as will be described hereafter.

The holder is formed from the blank of Fig. 1 by first folding the tabs 14A and 14B inwardly about the folds lines 15A and 15B and then folding the side panels 6A, 6B, the bottom panel 10 and the top panel 16 inwardly about the respective fold lines 7A, 7B, 11 and 16A. The attachment panels 8A and 8B are then folded inwardly about the fold lines 9A and 9B so as to lie parallel to the backpanel 5. The front panel 12 is then folded inwardly about the fold line 13 to a position in which it lies flush against the attachment panels 8A and 8B. These then require to be interconnected by engagement of the tongues 21A and 21B in the respective apertures 20A and 20B as will be described below. This retains the folder in the assembled condition illustrated in Fig. 3 and the closure flap 17 may then be pivoted about the fold line 17A and the tab 18 engaged in and released from the slot 19 as required to close and open the folder to gain access to the contents.

Each of the locking apertures 20A, 20B is of generally triangular form having two relatively long sides 25 and 26 interconnected by a relatively short third side or base 27. Side 25 is shorter than side 26 and is aligned with the fold line 9A. The relatively longer side 26 is inclined outwardly towards the free edge of the associated attachment panel so that when the attachment panel is folded into its assembled position as shown in Fig. 2, the side 26 of the opening 20A is displaced inwardly from the associated side wall panel 6A. The sides 25

and 26 of the aperture are straight whereas the relatively short base 27 is inwardly curved to define recesses 28A and 28B at the two bottom corners of the triangular aperture.

Each of the tongues 21A, 21B is attached to the associated side edge of the front panel by a neck portion 30 the length of which corresponds approximately to that of the side 25 of the aperture 20A. A nose portion 31 is set back from the neck 30 of the tongue and extends parallel thereto to define a slot 32 between the nose portion 31 and the adjacent edge of the front panel 12. The tongue extends outwardly from the opposite end of the neck portion 30 to define a tail 33 projecting in the opposite direction from the nose portion 31, the outer edge 33A of the tail portion 33 extending generally parallel to the neck 30 and the outer edge 31A of the nose portion 31 being of arcuate form. The distance between the end of the neck 30 adjacent the tail 33 and the tip of the nose portion 31 (that is the distance between points 30A and 31B) corresponds approximately to the length of the longer side 26 of the recess 20A.

The relationship between the tongue 21A and the associated recess 20A is such that the tongue cannot be inserted into the recess except adjacent the longer edge 26 and then only if the front panel is deformed as shown at 35 in Fig. 2 to permit the tail 33 of the tongue to enter the recess first. The tongue may then be moved inwardly until point 30A rests in the notch 28B of the recess 20A at which point the tongue may be rotated about point 30A until the tip 31B of the nose 31 passes into the recess at its apex. This movement is permitted by virtue of the curved outer surface 31A of the tongue and the fact that the distance between points 30A and 31B corresponds to the length of the longest side 26 of the recess.

Once in this position the tongue is located within the holder, the front panel of which lies generally flush with the associated attachment panel but with the tongue lying generally parallel to the edge 26 of the recess 20A. The tongue may then be moved from this engaging position into a locking position by applying lateral pressure from within the holder to force the corner 30A to ride over the curved portion of the base 27 of the recess from the notch 28B into the notch 28A. In this position the nose 31 projects beyond the upper edge of the recess and the tail 33 beyond the lower edge with the tongue lying flat against the inner surface of the side wall panel 6A. It is not then possible by pulling on the front panel to disengage it from the body of the holder and the holder is thus securely held in its assembled condition. If it is desired subsequently to disengage the latch arrangement, the tongues 21A and 21B at opposite sides of the holder require to be moved inwardly to lie along the longer side 26 of the respective recesses, following which the tongues may be withdrawn from the recesses by reversing the movement effected to engage them initially.

It should be noted that the width of each tongue 21A, 21B, that is to say the dimension at right angles to

the associated fold line 22A, 22B is approximately equal to the width of the side walls 6A, 6B. By virtue of this arrangement, in the locked position the tongue extends across the full depth of the holder between the front panel 12 and the back panel 5. This resists crushing or flattening of the holder in use and also doubles the wall thickness in the region of the tongue, thereby increasing the rigidity of the assembled holder. Moreover as the tongues are located generally midway between the top and the bottom of the holder, this increase in rigidity is provided at the location which is otherwise least rigid and most susceptible to flattening or crushing movement.

By virtue of the arrangement described the cooperating parts of the latch means may be readily engaged with one another in the engaging position but rather than remaining there, the tongues are moved bodily outwardly into their locking positions in which they lie flush against the side walls of the assembled holder. In this position the assembly is securely locked in its assembled position and cannot inadvertently come apart causing spillage or loss of the contents. The latch means may also be disengaged if required by first moving the tongues into the engaging position and then withdrawing them from the respective apertures, although it will be appreciated that in general disengagement is infrequently required. The principal benefit of the construction resides in the fact that it may be transported and stored as a flat blank taking up minimum space and once assembled the holder will generally not require to be taken apart subsequently.

The location of the tongues adjacent the side wall panels of the assembled holder is also advantageous in that they do not interfere with documents being placed into or removed from the holder and even if such documents contact the tongues, it is not possible for them to effect disengagement of the tongues from the associated recesses.

Various modifications may be made without departing from the invention. For example while in the arrangements described the triangular recesses have their apices uppermost, they could be inverted if desired. The shape, size and dimensions of the tongues and the recesses may also be varied provided they afford an initial engaging position and a subsequent locking position in which it is not possible for the tongues to be withdrawn from the recesses. The use of the tongues to rigidify the assembled holder in the manner aforesaid may be incorporated in a holder not provided with a dual position locking movement and alternative forms of latch means operable to rigidify the assembled holder may be employed if desired. Moreover while it is preferred that the wallet or holder is formed from plastics material it could alternatively be formed from cardboard or other similar material.

Whilst endeavouring in the foregoing specification to draw attention to those features of the invention believed to be of particular importance it should be under-

stood that the Applicant claims protection in respect of any patentable feature or combination of features hereinbefore referred to and/or shown in the drawings whether or not particular emphasis has been placed thereon.

## Claims

1. A blank for the construction of a document holder or wallet, the blank being formed from a single sheet of material cut and provided with fold lines to enable the blank to be erected to form a holder or wallet having back, front, side and bottom panels, a closure member hingedly connected to the upper edge of the back panel so as to be foldable over the front panel to open or close the holder to give access to the interior, and latch means operable to maintain the holder in its assembled condition, the or each latch means comprising a tongue formed on one panel member and engageable in a recess in another panel member, characterised in that the recess (20A,20B) defines a first engaging position in which the tongue (21A,21B) may pass into the recess and a second locking position into which the tongue may be moved following engagement with the recess and from which the tongue cannot be disengaged without returning it to the engaging position.
2. A blank according to claim 1 characterised in that said recess (20A,20B) is of generally triangular form having a relatively long side (26) defining said engaging position and a shorter side (25) defining said locking position, the base (27) of the triangle incorporating means for constraining the associated tongue member (21A,21B) to locate against one or other of said sides.
3. A blank according to claim 2 characterised in that said base (27) is curved between its ends to constrain said tongue member (21A,21B) to move to one or other corner of the triangle when subjected to external pressure in a locking or unlocking direction.
4. A blank according to claim 2 or 3 characterised in that said tongue member (21A,21B) when in said locking position is of greater longitudinal extent than the length of said shorter side (25) of the recess.
5. A blank according to claim 4 characterised in that said tongue (21A,21B) is longer in said locking position than the length of said longer side (26) of the recess (20A,20B), but is of shorter dimension than said longer side in an alternative direction, whereby the tongue may be inserted into the recess in a pre-engaging position and may be rotated into said en-

gaging position in which it projects beyond at least one end of the long side of said triangle.

6. A blank according to claim 5 characterised in that an outer surface (31A) of said tongue member (21A, 21B) is of arcuate form to facilitate rotating movement between said pre-engaging and engaging positions.
7. A blank according to any of claims 4 to 6 characterised in that said tongue (21A,21B) is provided with a neck portion (30) corresponding in length to the length of the shorter side (25) of said recess (20A, 20B), portions (31B,33) of the tongue projecting in opposite directions from said neck portion whereby to lie beneath the associated panel (8A) in the locked position of the latch means and retain the tongue against disengagement from the recess.
8. A blank according to any preceding claim characterised in that the dimensions of said tongue (21A, 21B) and said recess (20A,20B) are such that the tongue may be inserted into the recess and manipulated into the engaged and locked positions without substantial deformation of the tongue.
9. A blank according to any preceding claims characterised by attachment panels (8A,8B) hingedly connected to said side panels (6A,6B) and adapted in the erected condition of the holder to overlie the back panel (5), said front panel (12) being adapted to overlie said attachment panels and to be connected thereto by said latch means.
10. A blank according to claim 9 characterised in that a pair of latch means (21A,21B) are provided at respective opposite sides of the holder to interconnect the front panel (12) to respective ones of said attachment panels (8A,8B).
11. A blank according to claim 10 characterised in that each of said recesses (21A,21B) is formed in the associated attachment panel (8A,8B) with the shorter edge (25) aligned with the fold line (9A) between the attachment panel and the associated side panel (6A,6B), the associated tongue (21A, 21B) being foldably connected to and projecting from the corresponding side edge of said front panel.
12. A blank according to any preceding claim characterised in that said front panel (12) is of lesser extent than said back panel (15) whereby to form a front opening to the assembled holder adapted to be closed by said closure member (17).
13. A blank according to claim 12 characterised in that cooperating attachment means (18,19) are provided

ed on the front panel (12) and the closure member (17) to retain the closure member in its closed position.

**14.** A blank according to any preceding claim characterised in that said tongue member (21A,21B) is adapted when in said locking position to lie flush against the adjacent side panel (6A,6B) of the assembled holder.

**15.** A blank according to claim 14 characterised in that the width of the tongue member (21A,21B) is substantially equal to the width of the adjacent side panel member (6A,6B).

**16.** A document holder or wallet characterised in that it is formed from a blank according to any preceding claim.

**17.** A document holder or wallet formed by folding from a one piece blank and having back, front, bottom and side panel members and a closure member hingedly connected to said back panel and adapted to fold over and be connected to said front panel to open and close the holder, the holder being maintained in its erected condition by latch means characterised in that said latch means (20A,20B; 21A, 21B) serve in their engaged position to impart increased front to back rigidity to the assembled holder.

**18.** A document holder or wallet according to claim 17 characterised in that the or each latch means (20A, 20B; 21A,21B) is adapted in the engaged position to lie flush against a side wall (6A,6B) panel of the folder to produce a localised double wall thickness.

**19.** A document holder or wallet according to claim 18 characterised in that said latch means comprise tongue members (21A,21B) engageable in associated recesses (20A,20B) in panel members (8A,8B) of the holder, said recesses being so positioned that in the erected condition of the holder said tongue members project into the interior of the holder and lie flush against the side wall panels (6A,6B) thereof.

**20.** A document holder or wallet according to claim 19 characterised in that said tongue members (21A, 21B) are dimensioned such that in the engaged position they extend between the front and back of the assembled holder to thereby increase resistance to movement of the front and back towards one another.

**21.** A document holder or wallet according to claim 19 or 20 characterised in that said tongue members (21A,21B) are disposed generally centrally of the

height of the assembled holder to increase the strength in the central region of the assembled holder.

**22.** A document holder or wallet according to any of claims 19 to 21 characterised in that said recesses (20A,20B) are shaped such that said tongues (21A, 21B) are first engaged with the recesses in an engaging position in which they are displaced from the side walls (6A,6B) of the holder and may be disengaged from the recesses if required and may then be moved bodily into a fully engaged or locking position in which the tongues lie flush against the side wall panels of the holder and cannot be withdrawn from the associated recesses.

**23.** A method of assembling a document holder or wallet from a one piece blank comprising folding the blank about fold lines to a semi-assembled condition and engaging latch means on components of the holder with openings formed in adjacent components characterised by subsequently moving the engaged latch members (21A,21B) from engaging to locking positions in which they cannot be removed from the associated openings (20A,20B).

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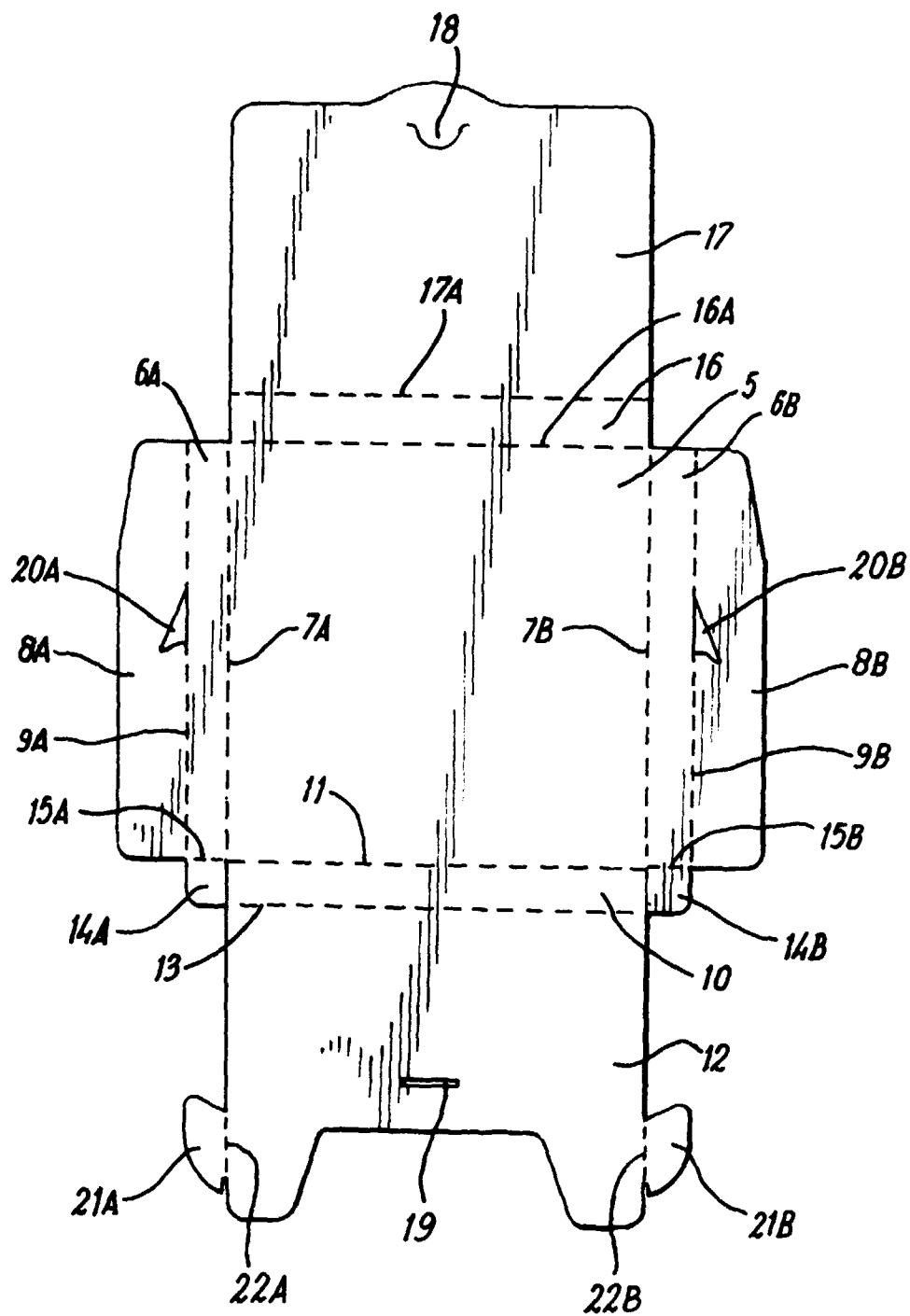
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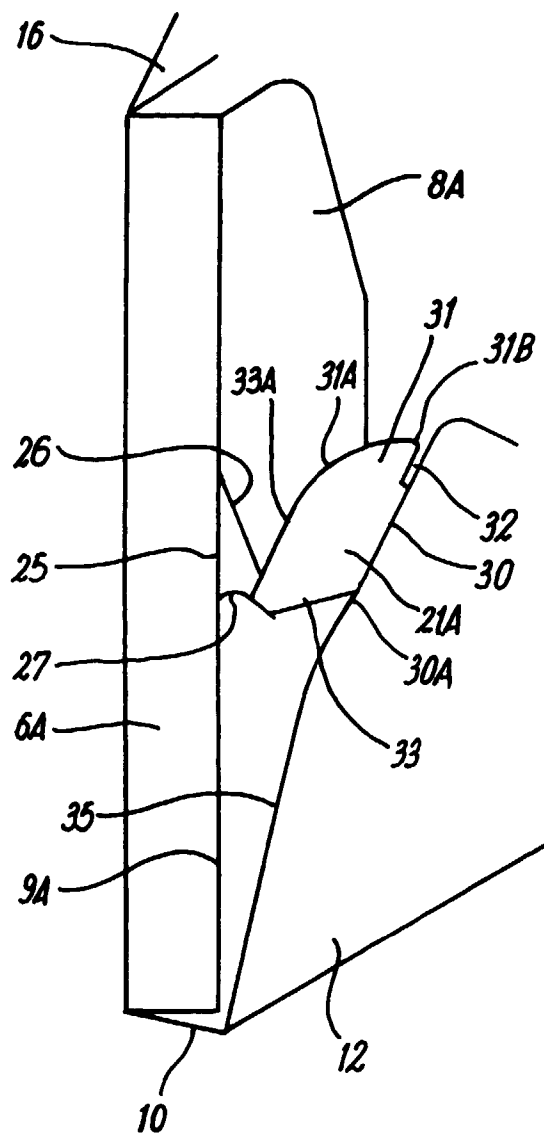
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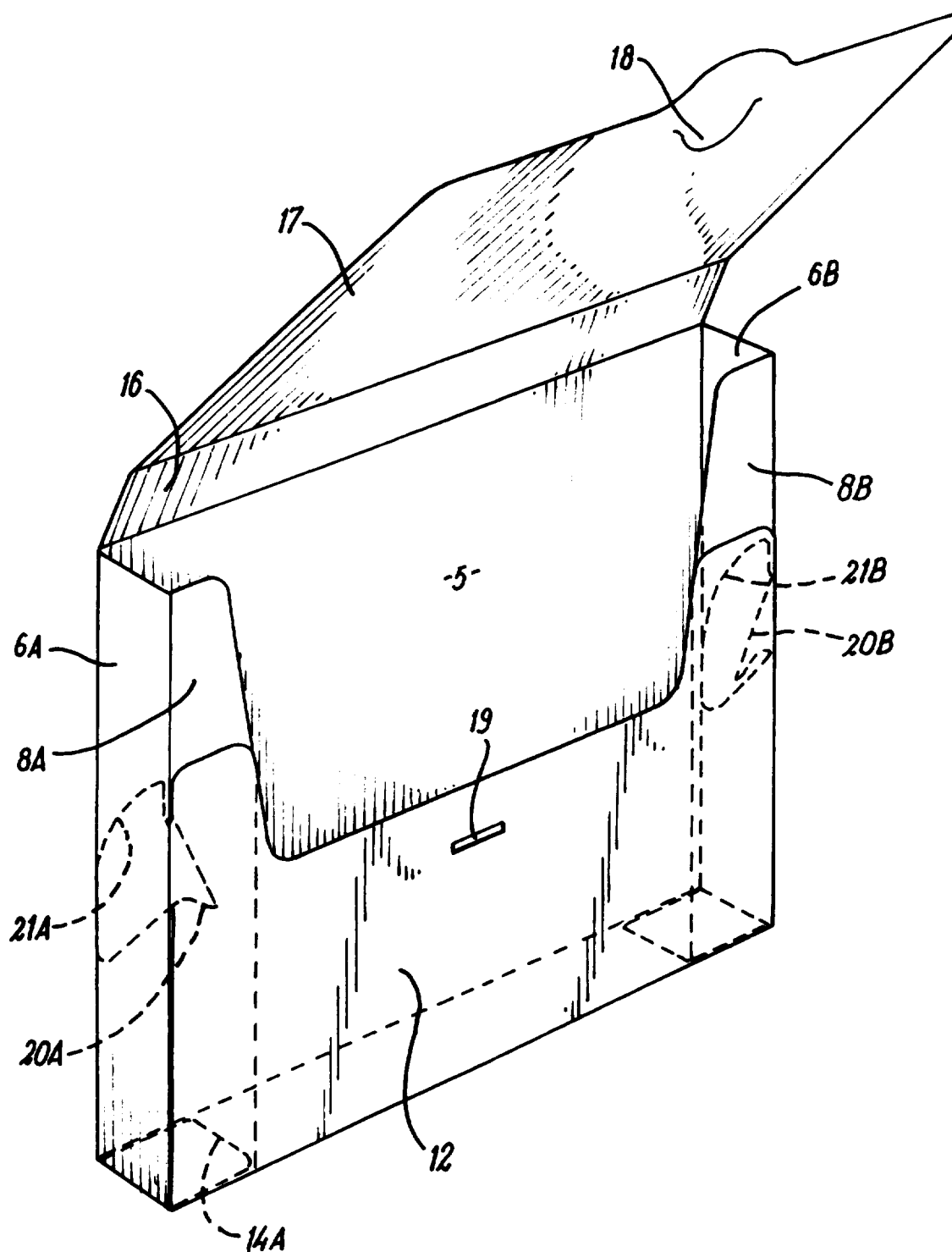


**Fig. 1**



**FIG. 2**





***Fig. 3***



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# EUROPEAN SEARCH REPORT

Application Number  
EP 97 30 3537

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.6)
X	GB 2 276 126 A (CORBISHLEY) * page 4, line 16 - line 18; figure 1 *	1	B42F7/02
A	FR 2 502 066 A (S.A. D'ACHATS ET DE DISTRIBUTION D'ARTICLES DE CLASSEMENT DITE ) * the whole document *	1	
A	GB 2 232 071 A (EASI-BIND INTERNATIONAL) * the whole document *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B42F
Place of search THE HAGUE		Date of completion of the search 25 August 1997	Examiner Evans, A
<p><b>CATEGORY OF CITED DOCUMENTS</b></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>&amp; : member of the same patent family, corresponding document</p>			

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