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(54) **BINDING ELEMENT FOR SHEETS OF PAPER**

ENDBINDEELEMENT FÜR PAPIERBÖGEN

ELEMENT DE RELIURE POUR FEUILLES DE PAPIER

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(56) References cited:
CH-A- 243 783
FR-A- 2 423 344
GB-A- 1 316 593

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Description

[0001] Even in a time when personal computers are widely used for both commercial and domestic purposes, the number of reports, contracts and the like which are issued, mailed or stored seems to increase rather than decrease.

[0002] Well-presented, "clean" reports are usually bound and provided with a spine, which is time-consuming and laborious and also undesirable from an environmental viewpoint. In addition, use is generally made for filing purposes of a binding element of metal arranged on a cover wherein two insertion end parts are placed through perforator holes arranged in sheets of paper and a counter-element with corresponding holes is placed thereover, whereafter the insertion end parts are fixed in place with slide elements. Due to their unattractive appearance these binding elements are little used for distribution of reports, contracts and the like.

[0003] Further known from the European patent application 81.101.039.6 is a connecting element with a stem and two holding members which can be placed through oval holes in a number of sheets of paper, whereafter this connecting element must be turned in order to hold together the sheets of paper. This connecting element requires a special type of perforating machine in order to make the oval holes.

[0004] Further known from CH-A-243 783 is a flat and elongate binding element with an insertion end portion, a second end portion and a body portion being wider than the end portions and positioned therebetween, wherein the transitions between the body portion and the end portions are formed by preformed bends.

[0005] The present invention provides an element for mutually binding two or more sheets of paper provided with perforator holes as defined in claim 1.

[0006] The binding element according to the present invention is preferably applied in combination with round holes of a usual perforator such as is available in most offices (and households), while the decorative part can be used in distinctive or humorous manner to draw the attention of the recipient of the sheets of paper to a logo or other message.

[0007] Further features and details of the present invention are defined in claims 2-5 and will be elucidated on the basis of the following description with reference to the annexed drawings, in which:

fig. 1 shows a view in perspective of a preferred embodiment of a binding element according to the present invention;
fig. 2 shows a front view of the binding element of fig. 1 in use; and
fig. 3 is a view in perspective of a second embodiment of the binding element according to the present invention in use.

[0008] A binding element 1 according to the present invention (fig. 1 and 2) comprises a body portion 2, an insertion end portion 3 and a second end portion 4 which is provided with a decorative part 5 which can take different forms, such as the decorative part 5' of fig. 3.

[0009] The decorative part 5 is preferably provided with a logo or other message printed thereon for the recipient of the report or contract formed by the sheets of paper S, S'. The decorative part 5' can likewise be printed and also be embodied in a desired colour composition.

[0010] After perforator holes H1 and H2 have been arranged in a plurality of sheets of paper S, S' using a normal perforator, the insertion end portion 3 is inserted through both holes and the decorative part 5 lies on the upper side thereof in a position easily visible to the recipient of the sheets of paper.

[0011] The body portion 2 and the end portions 3, 4 respectively are preferably manufactured from one piece of flexible metal, thus resulting in a low cost price and preventing the binding element from buckling during use. Silver-coloured metal is also easily visible.

[0012] The transition between body portion 2 and insertion end portion 3 and the second end portion 4 is formed by bends 6, 7 respectively so that the sheets of paper remain lying flat on a planar base.

[0013] Relative to the embodiment of fig. 1 and 2 the embodiment of fig. 3 has the further feature that the insertion end portion 3' is provided with a locking element 8 which can be fixed non-releasably to insertion end portion 3' whereby the sheets of paper, for instance together forming a contract, are joined together inseparably. The locking element 8 can for instance be snapped into the hole 9 in the insertion end portion 3' such that locking element 8 cannot be removed without noticeably damaging the insertion element 3'. Locking element 8 has a dimension which is larger than the diameter of the perforator holes (not shown in fig. 3) and can for instance be provided with a logo or the seal of a lawyer or the like.

[0014] The rights applied for are in no way determined by the above described embodiments. These are defined by the following claims.

Claims

1. Binding element for mutually binding two or more sheets of paper, the sheets being provided with a first and a second perforator hole, said binding element comprising:

   - a substantially flat and elongate body portion with a length roughly equal to a distance defined by the perforator holes;
   - an insertion end portion in the line of the body portion; and
   - a second end portion which can be decorated, said second end portion extending relative to the insertion end portion in opposing direction

relative to the body portion,

- wherein the transitions between the insertion end portion and the body portion and between the body portion and the second end portion are formed by respective preformed bends, the fixed length of said body portion corresponding to the distance between the two perforator holes;

characterized in that

the body portion, the insertion end portion and the second end portion are manufactured of one piece of strong metal, which is difficult to buckle, providing a fixed form to the binding element,

said insertion end portion has a width smaller than the diameter of the perforator holes, so that the insertion end portion can be inserted without turning through the first perforator hole and subsequently through the second perforator hole; and **in that**

said body portion has a width smaller than or equal to the perforator holes, so that the body portion can be inserted without turning through the first perforator hole.

2. Binding element as claimed in claim 1, wherein the second end portion is provided with a decorative part which is wider than the insertion end portion.

3. Binding element according to claim 2, wherein the decorative part is wider than a perforator hole.

4. Binding element as claimed in any of claim 1, 2 or 3, wherein said binding element is provided with a locking element.

5. Binding element as claimed in any of the preceding claims, wherein the width of the insertion end portion, the body portion and the second end portion are substantially the same.

Patentansprüche

1. Einbindeelement zur gegenseitigen Einbindung von zwei oder mehreren Papierblättem, die mit einem ersten und einem zweiten Perforationsloch versehen sind, wobei das Einbindeelement die folgenden Teile umfasst:

- einen im Wesentlichen flachen und langgestreckten Mittelteil, dessen Länge etwa dem Abstand zwischen den Perforationslöchern entspricht;

- einen Einsteckendabschnitt, der auf den Mittelteil ausgerichtet ist; und

- einen zweiten Endabschnitt, der ausgeschmückt werden kann, wobei der zweite Endabschnitt sich relativ zu dem Einsteckendabschnitt in Gegenrichtung zum Mittelteil erstreckt;

- wobei die Übergänge zwischen dem Einstekkendabschnitt und dem Mittelteil und zwischen dem Mittelteil und dem zweiten Endabschnitt durch vorgeformte Abkröpfungen gebildet werden und die feste Länge des Mittelteils dem Abstand zwischen zwei Perforationslöchern entspricht;

dadurch gekennzeichnet, dass

der Mittelteil, der Einsteckendabschnitt und der zweite Endabschnitt einstückig aus einem massiven Metall hergestellt sind, das nur schwer eingeknickt werden kann und dem Einbindeelement eine feststehende Form verleiht,

der Einsteckendabschnitt eine Breite besitzt, die kleiner ist als der Durchmesser der Perforationslöcher, so dass der Einsteckendabschnitt ohne Abbiegung durch das erste Perforationsloch und darauf durch das zweite Perforationsloch gesteckt werden kann; und

der Mittelteil eine Breite besitzt, die kleiner oder gleich den Perforationslöchern ist, so dass der Mittelteil durch das erste Perforationsloch ohne Abbiegung eingesteckt werden kann.

2. Einbindeelement nach Anspruch 1, bei welchem der zweite Endabschnitt mit einem Schmuckteil versehen ist, der breiter ist als der Einsteckendabschnitt.

3. Einbindeelement nach Anspruch 2, bei welchem der Schmuckteil breiter ist als ein Perforationsloch.

4. Einbindeelement nach einem der Ansprüche 1, 2 oder 3, wobei das Einbindeelement mit einem Verriegelungselement versehen ist.

5. Einbindeelement nach einem der vorhergehenden Ansprüche, bei welchem die Breite des Einstekkendabschnitts, des Mittelteils und des zweiten Endabschnitts im Wesentlichen gleich ist.

Revendications

1. Élément de reliure destiné à relier entre elles deux ou plusieurs feuilles de papier, les feuilles étant dotées de première et deuxième perforations, ledit élément de reliure comprenant :

- une portion de corps sensiblement plate et allongée d'une longueur à peu près égale à une distance définie entre les perforations ;

- une portion d'extrémité d'insertion en alignement avec la portion de corps ; et
- une deuxième portion d'extrémité qui peut être décorée, ladite deuxième portion d'extrémité s'étendant par rapport à la portion d'extrémité d'insertion dans une direction opposée par rapport à la portion de corps,

les transitions entre la portion d'extrémité d'insertion et la portion de corps et entre la portion de corps et la deuxième portion d'extrémité étant formées par des coudes préformés respectifs et la longueur fixe de ladite portion de corps correspondant à la distance entre deux perforations ;

caractérisé en ce que

la portion de corps, la portion d'extrémité d'insertion et la deuxième portion d'extrémité sont fabriqués à partir d'une seule pièce de métal résistant, qui est difficile à déformer, conférant une forme fixe à l'élément de reliure,

ladite portion d'extrémité d'insertion a une largeur inférieure au diamètre des perforations, de sorte que la portion d'extrémité d'insertion peut être insérée sans la tourner dans la première perforation et ensuite dans la deuxième perforation ; et

ladite portion de corps a une largeur inférieure ou égale à celle des perforations, de sorte que la portion de corps peut être insérée sans la tourner dans la première perforation.

2. Élément de reliure selon la revendication 1, dans lequel la deuxième portion d'extrémité est dotée d'une pièce décorative qui est plus large que la portion d'extrémité d'insertion.

3. Élément de reliure selon la revendication 2, dans lequel la pièce décorative est plus large qu'une perforation.

4. Élément de reliure selon l'une quelconque des revendications 1, 2 ou 3, dans lequel ledit élément de reliure est doté d'un élément de verrouillage.

5. Élément de liaison selon l'une quelconque des revendications précédentes, dans lequel la portion d'extrémité d'insertion, la portion de corps et la deuxième portion d'extrémité ont sensiblement la même largeur.

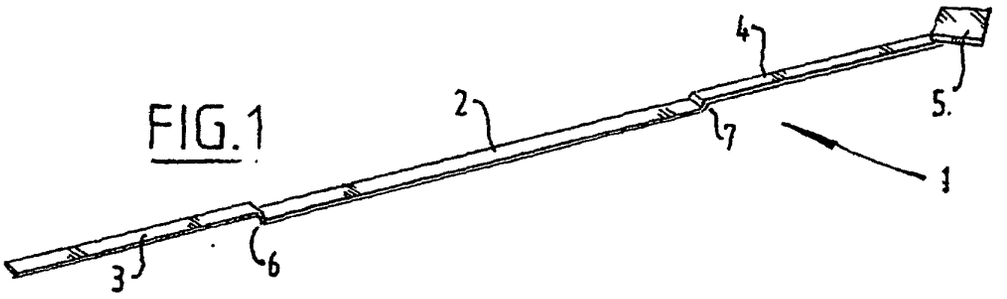


FIG.1

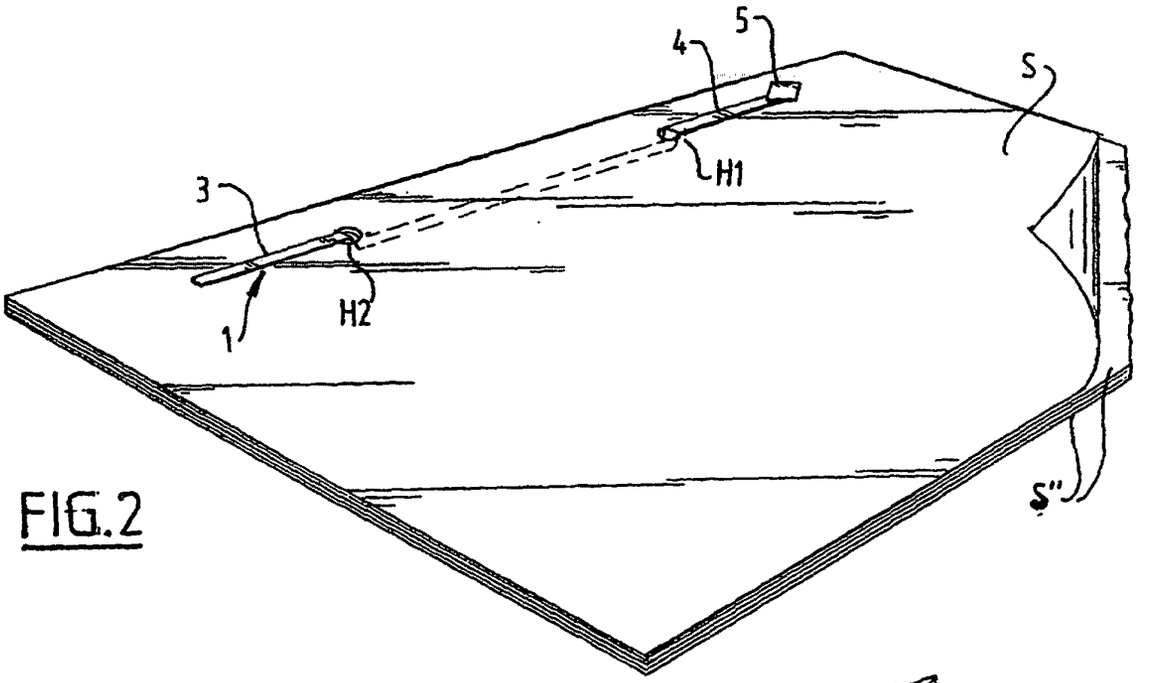


FIG.2

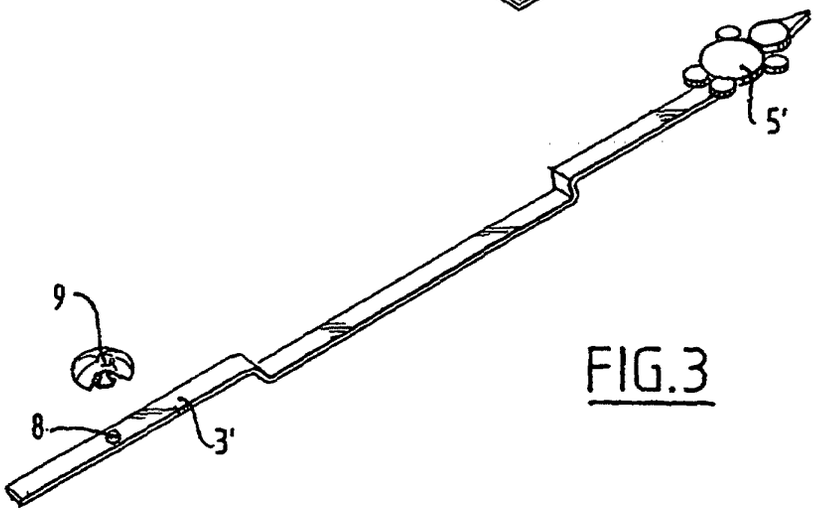


FIG.3