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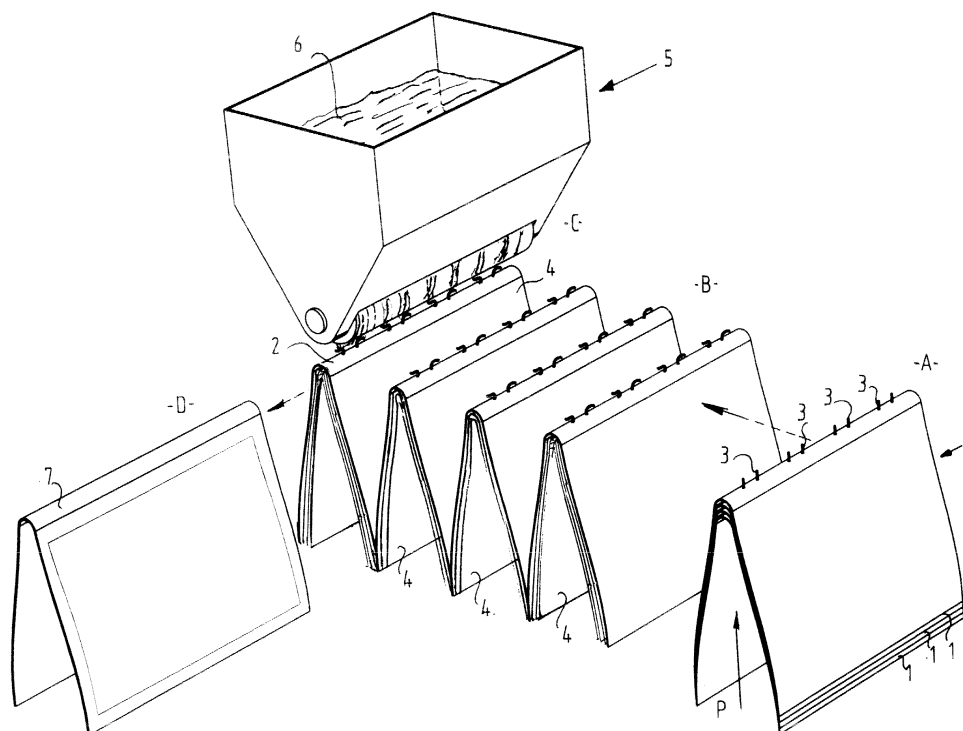
(54) Method for manufacturing a book and book manufactured according to this method

(57) The invention relates to a method for manufacturing a book, for instance a brochure, which method comprises the steps of:

- forming a section from double-folded sheets (1);
- arranging at least one pair of holes on the fold-line;
- threading a wire (3) through the pair of holes, wherein the ends of the wire (3) protrude outside

the section;

- applying an adhesive (6) to the spine (2) of the section;
- folding a covering element (7) round the section; and
- curing the glue (6), wherein the ends of the wire (3) are fixed in the glue (6).



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Description

[0001] The invention relates to a method for manufacturing a book, for instance a brochure, which method comprises the steps of:

- forming a section from double-folded sheets;
- arranging at least one pair of holes on the fold-line;
- threading a wire through the pair of holes, wherein the ends of the wire protrude outside the section.

[0002] Brochures are usually manufactured by placing a number of sheets onto each other and then stapling these sheets together. The sheets are then folded double, as a result of which a brochure or magazine is created.

[0003] The staples have the drawback that they easily snag against something or that they can injure the reader. In addition, the appearance of the brochure is less attractive, since the staples are visible on the spine of the brochure.

[0004] In the manufacture of thick books, such as part of an encyclopaedia or a bound book, it is usual to construct the book from different sections. Such a section is formed by stacking a number of sheets onto one another, folding the section double, arranging a pair of holes on the fold-line and threading a wire through the holes. A large number of these sections are then stacked onto each other, whereafter the spines of the sections are provided with an adhesive, whereafter the cover is folded round the sections.

[0005] It is an object of the invention to provide a method for manufacturing a book, for instance a brochure, wherein the above stated drawbacks are obviated.

[0006] This objective is achieved with a method according to the invention which is characterized by

- applying an adhesive to the spine of the section;
- folding a covering element round the section; and
- curing the glue, wherein the ends of the wire are fixed in the glue.

[0007] With this method according to the invention it is possible to manufacture books which heretofore were assembled by means of staples, wherein on the outside no trace is visible of fastening means such as the staples, and wherein on the inside there is no danger of the fastening means, according to the invention the wires, being able to cause any damage.

[0008] In a preferred embodiment of the method according to the invention the covering element is a cover.

[0009] In another embodiment of the method according to the invention the covering element is a book manufactured according to the steps of claim 1. Folding of a previously formed section round a formed section and glueing it thereto makes it possible to obtain thicker books than is possible with only one section.

[0010] The invention further comprises a book manufactured according to the method according to the invention, comprising:

- a number of sheets placed together and folded double to form a section, wherein each sheet comprises at least one pair of holes, which pairs of holes are in register;
- at least one wire extending through the holes, wherein the ends of the wire protrude outside the section;
- a covering element folded round the section and glued thereto at the position of the spine of the section, wherein the ends of the wire are fixed in the glue.

[0011] The covering element can herein be a cover, or the covering element can comprise:

- a number of sheets placed together and folded double to form a section, wherein each sheet comprises at least one pair of holes, which pairs of holes lie mutually in line;
- at least one wire extending through the holes, wherein the ends of the wire protrude outside the section;
- a covering element folded round the section and glued thereto at the position of the spine of the section.

[0012] An embodiment of the method according to the invention is further elucidated with reference to the annexed figure.

[0013] At A a number of sheets 1 are folded double and pushed into one another in the direction of arrow P. A number of holes are then made from the inside in the spine 2 of the double-folded sheets 1, through which holes are threaded wires 3. This is known as yarn-welding. Such a formed section 4 is subsequently carried to an intermediate buffer B, whereafter the spine 2 of a section is provided with an adhesive 6 by means of a glueing device 5.

[0014] Once the spine 2 has been provided with an adhesive 6 at C, a cover 7 is placed over the section 4.

[0015] A second section 4 can of course also be placed hereover instead of a cover 7, whereafter a cover 7 is placed thereover.

Claims

1. Method for manufacturing a book, for instance a brochure, which method comprises the steps of:

- forming a section from double-folded sheets;
- arranging at least one pair of holes on the fold-line;
- threading a wire through the pair of holes,

wherein the ends of the wire protrude outside the section;

characterized by

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- applying an adhesive to the spine of the section;
- folding a covering element round the section; and
- curing the glue, wherein the ends of the wire are fixed in the glue. 10

2. Method as claimed in claim 1,

characterized in that

the covering element is a cover. 15

3. Method as claimed in claim 1,

characterized in that

the covering element is a book manufactured according to the steps of claim 1. 20

4. Book manufactured as claimed in any of the foregoing claims, comprising:

- a number of sheets placed together and folded double to form a section, wherein each sheet comprises at least one pair of holes, which pairs of holes are in register; 25
- at least one wire extending through the holes, wherein the ends of the wire protrude outside the section; 30
- a covering element folded round the section and glued thereto at the position of the spine of the section, wherein the ends of the wire are fixed in the glue. 35

5. Book as claimed in claim 4,

characterized in that

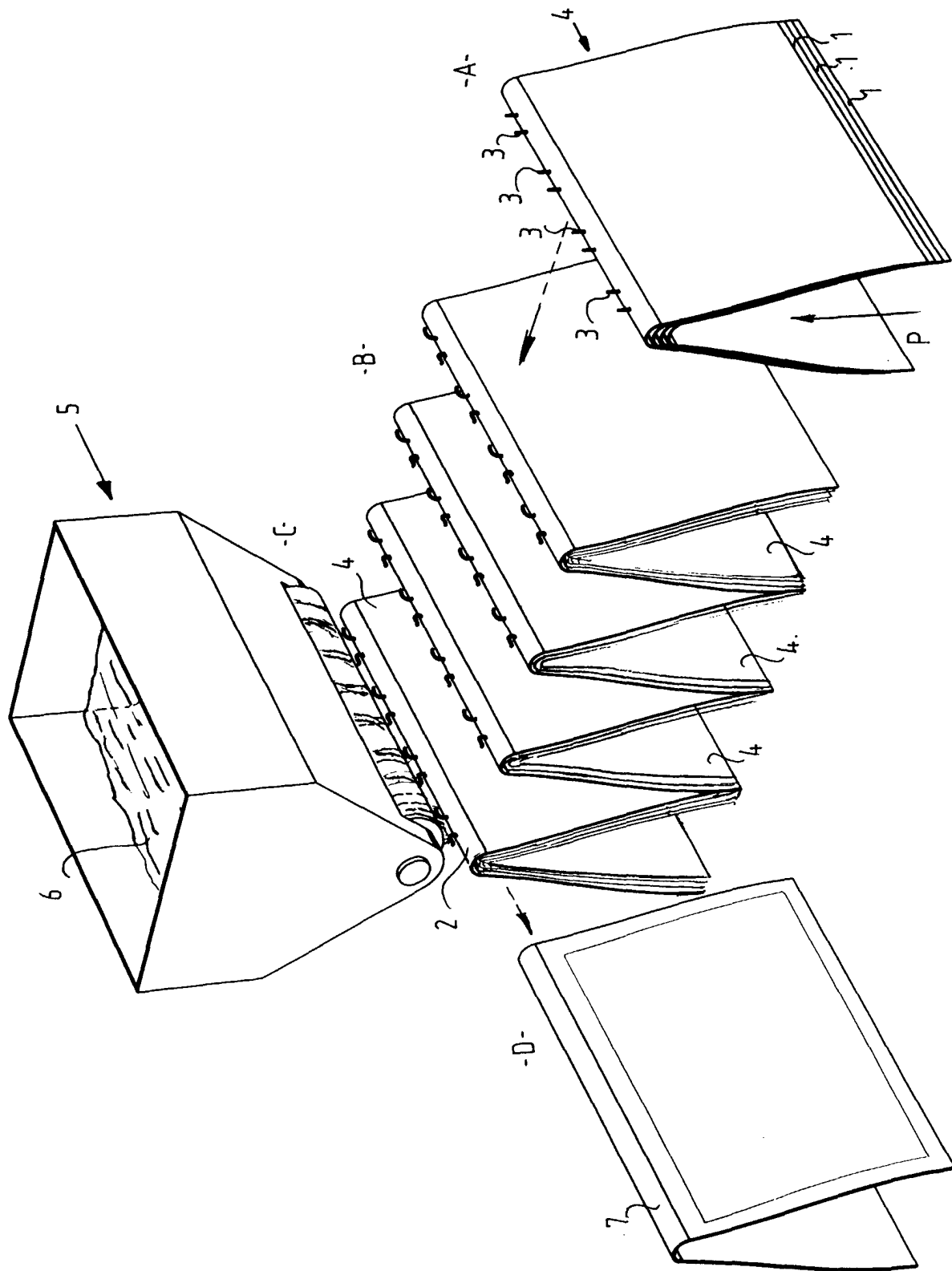
the covering element is a cover. 40

6. Method as claimed in claim 4,

characterized in that

the covering element comprises:

- a number of sheets placed together and folded double to form a section, wherein each sheet comprises at least one pair of holes, which pairs of holes lie mutually in line; 45
- at least one wire extending through the holes, wherein the ends of the wire protrude outside the section; 50
- a covering element folded round the section and glued thereto at the position of the spine of the section. 55





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EUROPEAN SEARCH REPORT

Application Number
EP 00 20 4373

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)
A	GB 1 394 162 A (THE RESEARCH ASSOCIATION FOR THE PAPER AND BOARD INDUSTRIES) 14 May 1975 (1975-05-14) * page 2, line 6 - line 63; figures 1-3 * ----	1,4	B42B4/00 B42C9/00 B42C11/02
A	US 5 921 752 A (SINKE, BAAS) 13 July 1999 (1999-07-13) * column 3, line 41 - column 7, line 24; figures 1-6 * -----	1,4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B42B B42C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 March 2001	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>			

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

EP 00 20 4373

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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20-03-2001

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
GB 1394162	A	14-05-1975	NONE		
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EPC FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82