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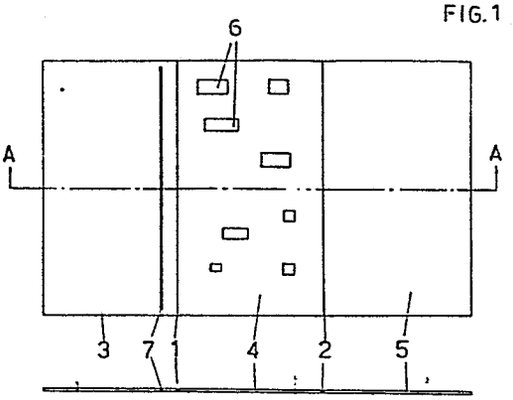
(54) **Method of manufacturing an information slide or information disc.**

(57) Method for manufacturing an information slide or -disc, in which a piece of planar material, such as cardboard, is subdivided by parallel fold lines into at least three sections and out of at least one section a slide- or disc shaped information carrier is cut out with the exception of a portion or portions of its periphery close to a free end edge of the section which then is enclosed by two sections folded together and or glued together into an envelope, after which the points of attaching of the enclosed section with the information carrier are cut off by which the information carrier become slidable or rotatable in its envelope.

FIG.1

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# Method of manufacturing an information slide or information disc.

The present invention relates to a method of manufacturing an information slide or-disc, which slide or disc is provided with two cover sheets, particularly of cardboard, and which are folded and/or glued into a flat envelope, at least one of said cover sheets being provided with windows, through which an information carrier,which is slidably or rotatably arranged in the envelope,may be read.

According to a known method for manufacturing an information slide the envelope which is provided with windows and the information carrier in the shape of a card are separately from each other made and after which the card is slid into the envelope.
The envelope may be formed from two cover sheets connected to each other via a foldline and which cover sheets on the end edges away from the foldlines are glued to each other.

According to another known method the envelope is formed by that two separate cover sheets on their side edges are glued to each other via cardboard-strips with the thickness of the information carrier, and whereupon the information card or -slide is slid into the envelope.

According to a known method to manufacture an information disc the envelope again is made according to one of the above methods and whereupon the disc carrying the information is slid into the envelope to be fixed then in the envelope by a pin or similar element applied through the centre of the disc.
The disc then may be rotated around this pin to bring certain information before the respective windows.

All these known methods have the disadvantage of being cumbrous, time consuming and costly.

The invention now provides a method by means of which an information slide or -disc may be manufactured in an efficient and cheap manner.

The method according to the invention is characterized in that for manufacturing the information slide or -disc a piece of planar material with two parallel side edges and an upper- and a lower edge is printed with information and provided with windows and then is divided according to parallel with the side edges extending foldlines in at least two cover sheets and at least one section from which the information carrier is to be formed, while the information carrier partly is cut loose from the piece, such, that this information carrier remains near the upper- and/or lower edge of the piece fixed thereto, whereupon the cover sheets then are folded into an envelope round the section containing the information carrier and which section outside the information carrier at least locally is glued to one or both cover sheets, and after which by cutting off a strip of material along the upper- and/or lower edge of the folded up piece of planar material, the attachings of the information carrier are cut off, by which the information carrier becomes slidable or rotatable between the cover sheets.

In the method according to the invention the cover sheets and the information carrier remain in forming one piece until the attachings of the information carrier to the piece are cut off.

When applying the invented method to manufacture an information disc, the disc shaped information carrier is supported on its periphery by the section of the piece of planar material from which the information carrier is cut loose, such as contrasted with the known information disc, in which the disc shaped information carrier is not supported on its periphery, but is supported in the envelope by means of a pin or similar element mounted through the centre of the disc shaped information carrier.

By applying the invented method various forms of information slides and -discs may be manufactured.

Favourably the piece of planar material is divided into a section from which the information carrier is to be formed, and which section is provided on the one side with a free end edge, which also is the side edge of the piece of planar material and on the other side is connected via a first foldline to two cover sheets connected to each other via a second foldline.

In this embodiment of the invented method a simple information slide is obtained, consisting of two cover sheets folded together into a flat envelope, which on the one side are connected to each other via a foldline, and on the other side are glued to each other while inside of which envelope the card shaped information carrier is slidably disposed.

In another embodiment of the invented method the piece of planar material is divided into two sections, each intended for forming an information carrier and adjoining each other via a foldline, of which sections one section is provided with a free end edge, while the other section is connected via a foldline to four cover sheets coupled to each other via foldlines.

Favourably in this embodiment the sections located next to each other are folded over by cover sheets located next to each other in pairs. In a further development of this embodiment of the invented method the foldline between one or both pairs of cover sheets is cut through up to close to the upper and/or lower edge of the piece of planar material.

In this embodiment of the invented method a double information slide is obtained with two card shaped information carriers located next to each other and which may be slid parallel to each other and are covered on their upper- and lower side by pairs of cover sheets, while further by the presence of a cut through the foldline between two cover sheets located next to each other, this double information slide may be folded together.

In a further embodiment of the invented method the piece of planar material is divided into two sections intended to form two information carriers, each of which is provided with a free side edge with in between five cover sheets connected to each other via foldlines.
When applying this embodiment of the invented method also a double information slide is obtained in which the envelopes containing the card shaped information carriers are coupled to each other via an intermediate cover sheet.

To obtain a proper slidability of the card shaped information carrier in its envelope it is necessary that the information carrier has a certain clearance in its envelope.
To obtain this clearance at least one of the cuts, according to which the information carrier is partly cut loose from the piece of planar material, may possess a form of a slit with a certain width.

In the accompanying drawing the various manufacturing steps are illustrated in the figures 1,2,3 and 4 for manufacturing an information slide consisting of a flat envelope with two cover sheets and provided with windows in which a card shaped information carrier is slidably mounted.

In figure 1 is shown a piece of planar material with two foldlines 1 and 2 and by which the piece is divided into a section 3 intended for forming the information carrier, which, in this case, is a card shaped information carrier, a section 4 and a section 5 which together will form the envelope.
Section 4, in a known way, may be provided with windows 6 while on that portion of section 3, which will form the information carrier, information may be printed.
When applying the windows in the cover sheet 4 a cut 7 in section 3 may be applied at the same time and which cut 7 defines the information carrier at its right side, as seen in the drawing.
Cut 7 has been applied on a short distance from the foldline 1 and extends up to close before the upper edge and the lower edge of the piece. In figure 2 is shown a section of a piece of planar material according to figure 1 and according to line A-A.

As is shown in this figure 2 the three piece sections 3,4,5 are connected to each other via the foldlines 1 and 2. In this figure 2 is further shown the cut 7 defining the right side of the card shaped information carrier 8.

In figure 3 the piece of planar material provided with printing, windows, cuts and foldlines has been folded together and is its cover sheet 5 along the free end edge glued to the portion of section 3 located between foldline 1 and cut 7. Figure 4 is a view of the information slide according to line B-B of figure 3.

In this figure 4 the windows 6 of the cover sheet are indicated as well as the left free side edge of the information carrier 8 and the cut 7.

The information carrier 8 is, as is shown in the drawing, only connected via the attachings 9 to the folded piece so that by cutting off these attachings by cutting off the strips of material along the upper- and lower edges of the piece according to lines 10, the card shaped information carrier becomes slidable in the envelope as formed by the cover sheets 4 and 5 which have been folded together.

# C L A I M S

1. Method of manufacturing an information slide or disc, which slide or disc is provided with two cover sheets, particularly of cardboard, and which are folded or glued to a flat envelope, at least one cover sheet being provided with windows through which an information carrier slidably or rotatably disposed in the envelope may be read, characterized in that a piece of planar material with two parallel side edges and an upper- and lower edge is printed and provided with windows and is divided according to parallel to the side edges extending foldlines into at least two cover sheets and at least one section containing the information carrier which partly is cut loose, such, that the information carrier remaines attached to the piece of planar material close to its upper and lower edges, after which both cover sheets are folded to a sleeve around said section which at least locally and outside the information carrier is glued to one or both cover sheets, and after which by cutting off a strip of material along the upper and/or lower edges of the folded piece the attachings of the information carrier are cut off by which the information carrier becomes slidably or rotatably between the cover sheets folded to the envelope.

2. Method as claimed in claim 1, characterized in that the piece of planar material is divided into a section intended for forming the information carrier, which on the one side is provided with a free side edge, and on the other side is connected via a foldline to two cover sheets connected to each other via a foldline.

3. Method as claimed in claim 1, characterized in that the piece of planar material is divided into two sections connected to each other via a foldline and intended for forming two information carriers, of which one section is provided with a free side edge, while the other section is connected via a foldline to four cover sheets connected to each other via foldlines.

4. Method as claimed in claim 3, characterized in that both sections located next to each other are enclosed by cover sheets located in pairs next to each other.

5. Method as claimed in claim 4, characterized in that the foldline between one of both cover sheet pairs is cut through to close to the upper- and/or lower edge of the piece of planar material.

6. Method as claimed in claim 1, characterized in that the piece of planar material is divided into two sections intended for forming two information carriers, each of which is provided with a free side edge and with, in between, five cover sheets coupled to each other via foldlines.

7. Method as claimed in one of the preceding claims, characterized in that at least one of the cuts, by which the information carrier partly is cut loose from the piece of planar material is slot-shaped.

8. Information slide or disc, characterized in that same is obtained by applying the method as claimed in one of the preceding claims.

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FIG. 1

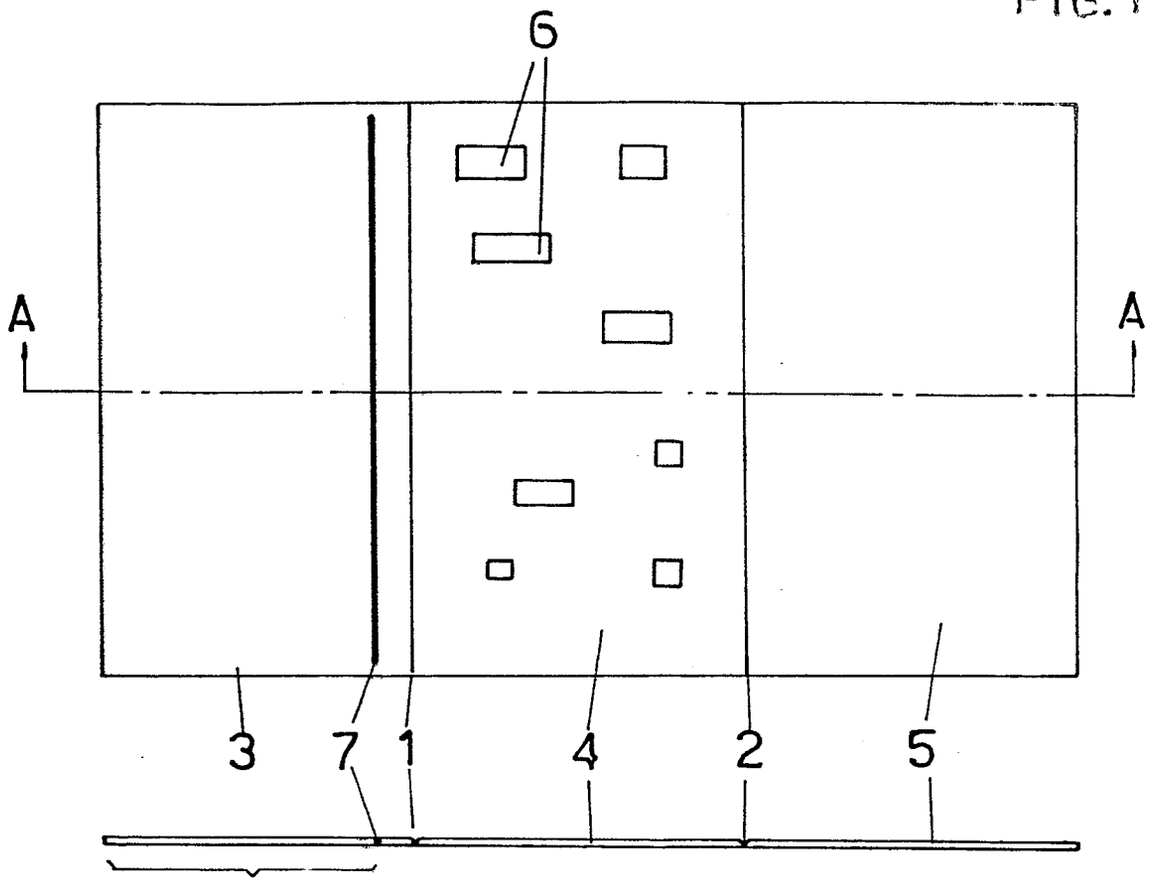


FIG. 2

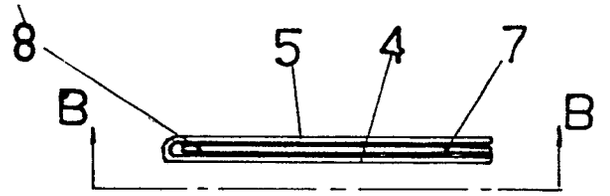


FIG. 3

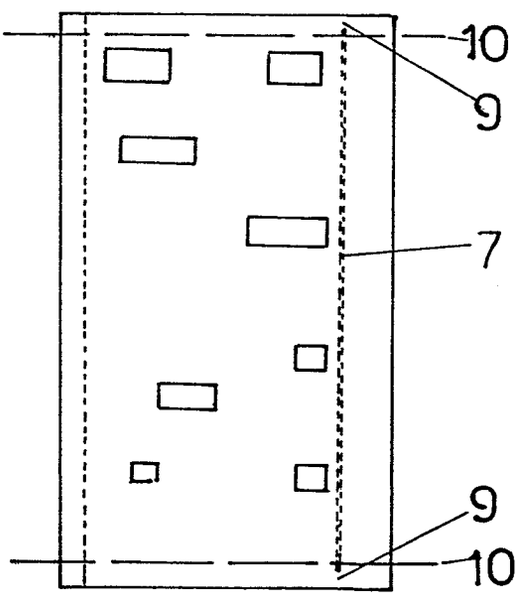


FIG. 4

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# EUROPEAN SEARCH REPORT

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Application number

EP 84 20 1635

## 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.4) |
|---|---|---|---|
| Y | US-A-4 093 117 (MORSE)<br>* Figures 1-6; column 2, line 41 - column 4, line 31 * | 1,8 | G 06 C 3/00 |
| A | | 2,7 | |
| | --- | | |
| Y | US-A-3 845 698 (SCHOLLE)<br>* Figures 1-3; column 2, line 43 - column 4, line 8 * | 1,8 | |
| A | | 5,7 | |
| | --- | | |
| A | FR-A-2 017 394 (LYON)<br>* Figures 1-5; page 5, line 18 - page 7, line 20 * | 1,8 | TECHNICAL FIELDS SEARCHED (Int. Cl.4)<br>G 06 C<br>G 06 K<br>B 65 D |
| | --- | | |
| A | US-A-3 883 069 (VOLKERT)<br>* Figures 1-9; column 1, line 41 - column 3, line 59 * | 3-6 | |
| | --- | | |
| A | US-A-3 562 940 (GULBRANSEN et al.)<br>* Figures 1-9; column 2, line 16 - column 4, line 22 * | 3,4,6 | |
| | ----- | | |

The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| THE HAGUE | 19-02-1985 | FORLEN G.A. |

CATEGORY OF CITED DOCUMENTS

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