(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 447 377 A2**

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **91830094.8**

(51) Int. Cl.5: **B42F 7/14**

(22) Date of filing: **12.03.91**

(30) Priority: **14.03.90 IT 52490 U**

(43) Date of publication of application:
18.09.91 Bulletin 91/38

(84) Designated Contracting States:
AT BE CH DE DK ES FR GB GR LI LU NL SE

(71) Applicant: **DUE-CI S.r.l.**
Via Lauretana Zona Industriale C.I.A.N.
I-60026 Numana (AN)(IT)

(72) Inventor: **Evoli, Vincenzo**
Via Gradina, 3
I-60021 Camerano (AN)(IT)

(74) Representative: **Baldi, Claudio**
Piazza Ghislieri, 3
I-60035 Jesi (Ancona)(IT)

(54) Modular plastic folder.

(57) This invention relates to a sectional box-shaped plastic container for filing pamphlets, such as catalogues, publicity brochures, price-lists; said container can be fitted together by the user thanks to an ordered succession of perpendicular folds and the joining of the wings of a suitably marked plastic sheet.

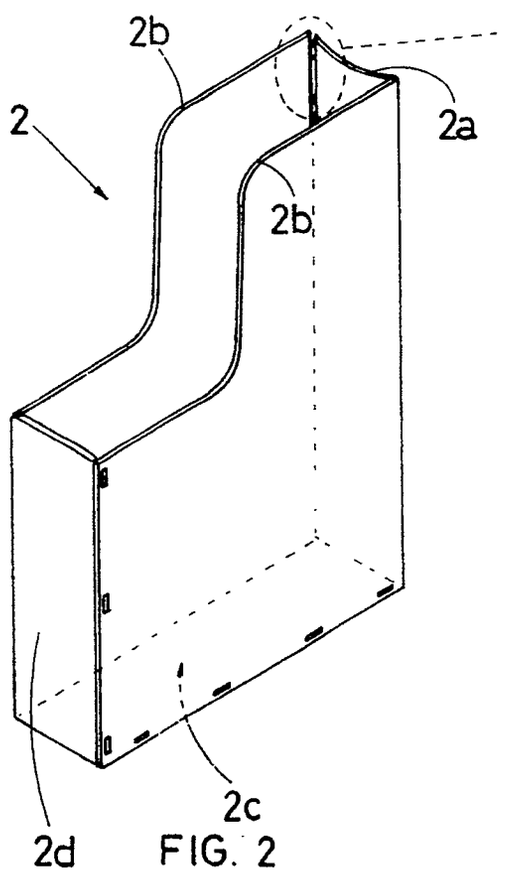

FIG. 2

EP 0 447 377 A2

This design patent application for a utility model relates to a sectional box-shaped plastic container for filing pamphlets, such as catalogues, publicity brochures and price-lists.

This invention was designed to improve the packing, transport and storing of standard pamphlet-holders normally used in offices.

Currently, "pocket" holders are available on the market which consist of parallelepiped box-shaped containers having a rectangular base in which one or more folders can be placed and stored neatly and whose back is partially visible above the top edge of the front side of the container whose height is about half that of the two sides, for this purpose.

In other words, these holders generally consist of a moulded plastic single-body, consisting of two identical opposite vertical sides, rectangular and connected transversely by a vertical top side and a horizontal bottom side as well as a third vertical front side which is shorter than the other vertical sides, all of which are the same height.

These holders are sold very successfully and are efficient. It should however be noted that a number of reservations are expressed regarding a lack of practicality and convenience during packing, transport and storing. Their box-shaped structure is fairly large so that even just a few of these holders occupy a considerable amount of space, for example, as in the case of a car boot or in a warehouse.

The main aim of this invention is to resolve these problems which are commonly encountered when using the current standard pamphlet holders, with an innovative solution. The invention involves a sectional holder which can be packed and transported in knocked-down form, which is consequently smaller, and then easily assembled by the user.

The model in question consists of a single moulded plastic sheet having a number of linear grooves positioned vertically and horizontally, which form rectangular areas corresponding to the different side walls of the box-shaped holder to assemble.

This sheet consists of a narrow and high middle rectangular section, coinciding with the back wall of the assembled holder, at whose sides two identical rectangular flaps extend symmetrically, coinciding with the opposite side walls of the assembled holder; on the bottom horizontal side and on the external vertical side of one of these rectangular flaps, there are another two rectangular tabs which coincide with the bottom wall and with the front wall of the assembled holder, respectively.

By using the above premarked lines as folding lines, a box-shaped, parallelepiped container having a rectangular base which is open at the top to house the pamphlets, can be made quickly and easily.

The premarked lines facilitate and fix the folding to 90° of each sheet wing, while the sides of the wings converging into the same corner are stopped firmly and just as easily by a series of male and female hooking parts, consisting of tabs projecting along the external edge of the above rectangular tabs; these hooking parts fit into corresponding slots along the edge of one of the above two flaps.

As already mentioned, this assembly method is very quick and simple and something which any potential user of the pamphlet holder according to the invention, will be able to do; this allows the manufacturer of the device in question, to store, pack and transport the product completely knocked-down, eventually folded into two flat parts, placed over one another, thereby saving a considerable amount of space, time and money.

For major clarity the description of the invention proceeds with reference to the enclosed drawings which are intended for illustrative purposes and not in a limiting sense, where:

- fig. 1 shows the sheet from which the box-shaped holder according to the invention, is obtained;
- fig. 2 is an axonometric representation of the assembled holder in question;
- fig. 3 is another version of the preferred embodiment of the invention;
- figs 4 and 5 illustrate two blow-ups of figures 1 and 2.

With reference to figures 1 and 2, the model in question consists, in its preferred embodiment, of a plastic sheet (1) whose overall surface corresponds to the flat plane of the assembled holder (2).

The sheet (1) may be subdivided into the following internal areas, each of which coincides with one of the holder (2) walls:

a) a high and narrow rectangular center section (1a), corresponds to the vertical back wall (2a) of the holder (2);

b) two identical rectangular flaps (1b), symmetrically opposite the two sides of the center section (1a), and corresponding to the two opposite side walls (2b) of the holder (2);

c) a rectangular wing (1c) extending on the side and on the extension of the bottom horizontal side of left hand flap (1b) corresponding to the back wall (2c) of the holder (2);

d) a rectangular tab (1d) extending on the side and on the extension of the external vertical side of the left-hand flap (1b), corresponding to the front vertical wall (2d) of the holder (2).

Each of these areas is divided from the adjacent areas by a groove (3) having a transverse "V" shaped cross section, with concavity turned upwards to the internal face of the holder (2).

To make the sheet (1) easier to fold, at each groove (3) a number of thin lightening grooves (3a) with constant center to center distances, can be made so that the join between the different areas is produced by a number of welding beads (3b) which act as hinging pintles between the wall and the holder wall (2).

Along the bottom horizontal edge and the vertical side edge of the right-hand flap (1b), there are a number of thin slots (4a), made during moulding, which can house, by means of a slight pressure, a corresponding number of identical tabs (4b) projecting from the bottom edge of the wing (1c) and from the side edge of the left hand flap (1b).

It should be noted that both flaps (1b) have a wide L-shaped curve at their top external angle, forming a front push-in opening on the holder (2) which facilitates the removal and replacing of pamphlets, which can be slanted forwards during handling without forcing the user to make vertical movements.

The construction version of figure 3 differs from that shown in figs 1 and 2 because the rectangular wing (1c) is not attached to the left-hand flap (1b) but is attached under and on the extension of the center section (1a) with respect to which the width is the same.

In this version, wing (1c), has tabs (4b) on both its vertical sides, which fit into corresponding slots (4a) along the bottom side of both flaps (1b).

Claims

1. A sectional plastic container consisting of a box-shaped container (2) produced by the successive perpendicular folding and joining of the wings of a moulded plastic sheet (1), having grooves (3) along the folds which divide the surface of the sheet (1) into the following areas:
   a) a central, high and narrow rectangular section (1a), corresponding to the vertical back wall (2a) of the container (2);
   b) two identical rectangular flaps (1b), symmetrically opposite to the two sides of the center section (1a) corresponding to the two opposite side walls (2b) of the container(2);
   c) a rectangular wing (1c) extending on the side and on the extension of the left-hand bottom horizontal side of the flap (1b) corresponding to the bottom wall (2c) of the container (2);
   d) a rectangular wing (1d) extending on the side and on the extension of the external vertical side of the left-hand flap (1b), corresponding to the front vertical wall (2d) of the container (2); when the sheet (1) is moulded, a number of thin slots (4a), into which corresponding tabs (4b) projecting from the bottom edge of the wing (1c) and from the edge of the left flap (1b) fit, are made along the bottom horizontal edge and along the vertical side edge of the right-hand flap (1b);

2. A sectional plastic container, consisting of a box-shaped container (2) produced by the successive perpendicular folding and joining of the wings of a moulded plastic sheet (1), having grooves (3) along the folds which divide the surface of the sheet (1) into the following areas:
   a) a central, high and narrow rectangular section (1a), corresponding to the vertical back wall (2a) of the container (2);
   b) two identical rectangular flaps (1b), symmetrically opposite to the two sides of the center section (1a) corresponding to the two opposite side walls (2b) of the container (2);
   c) a rectangular wing (1c) extending under and on the extension of the bottom side of the middle section (1a) corresponding to the bottom wall (2c) of the container (2);
   d) a rectangular wing (1d) extending on the side and on the extension of the external vertical side of the left-hand flap (1b), corresponding to the front vertical wall (2d) of the container (2); when the sheet (1) is moulded, a number of thin slots (4a), into which tabs (4b) projecting from both the vertical side edges of the wing (1c), fit, are made along the bottom horizontal edge of the two flaps (1b).

3. A sectional plastic container according to the previous claims characterized in that when the sheet (1) is moulded, lightening slots (3a) are made along the grooves (3).

4. A sectional plastic container, according to claims 1 and 2 characterized in that flaps (1b) have a wide "L"-shaped curve at the top external corner.

FIG. 5

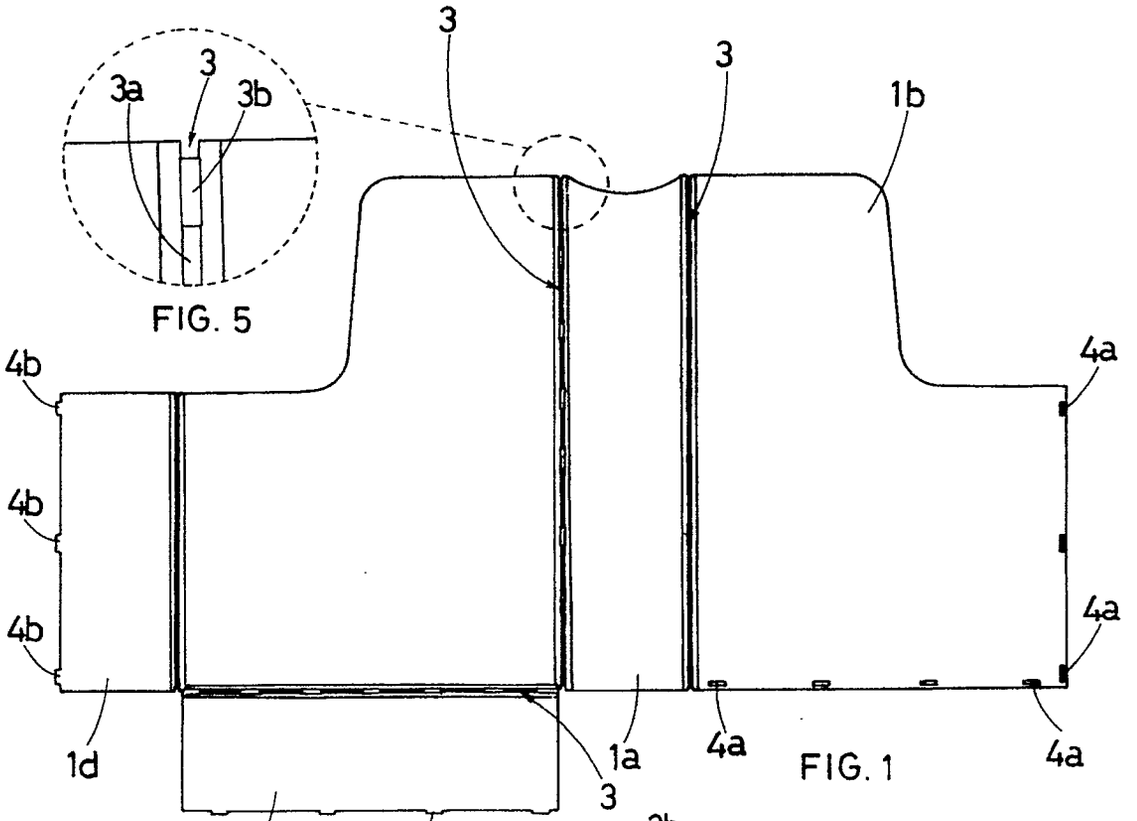

FIG. 1

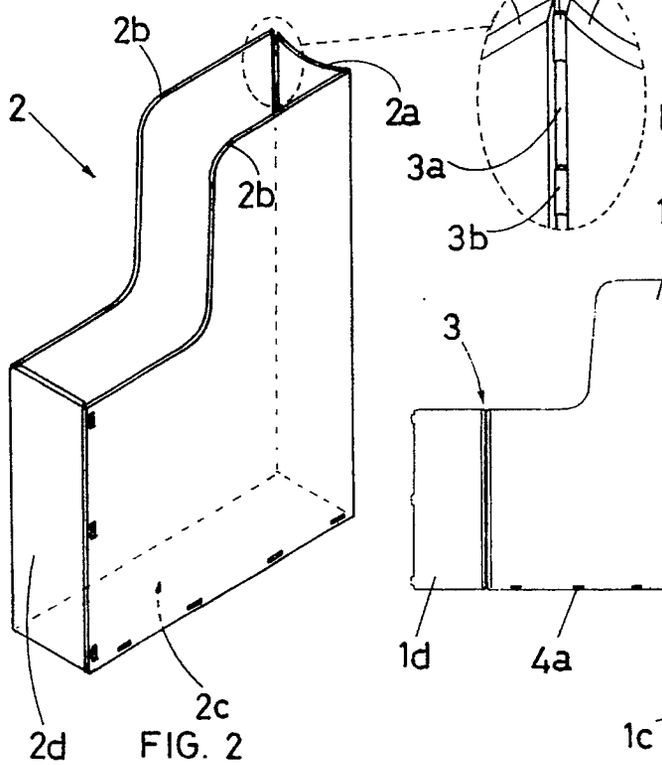

FIG. 2

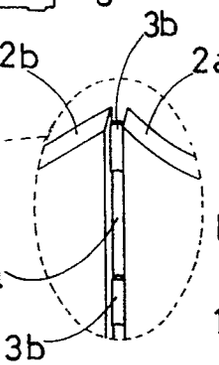

FIG. 4

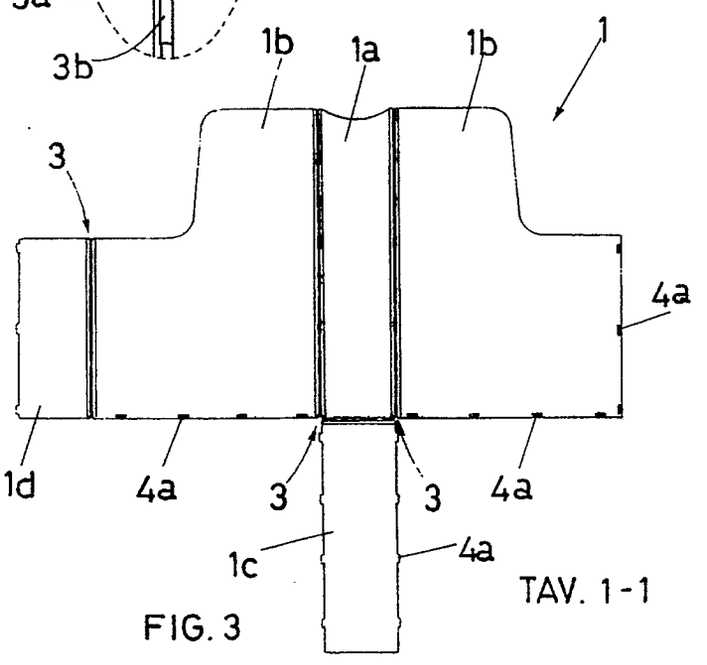

FIG. 3

TAV. 1-1