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## (54) Dispensing device for labels, holder for use in the dispensing device and blank therefor

(57) The present invention relates to a dispensing device (1), comprising a holder (2) and a dispensing means (3), which dispensing means (3) is accommodated in the holder (2) and comprises a strip of carrier material (4) and labels (5) detachably attached to the strip (4), which holder (2) has at least two walls (6,7) which are directed transversely to each other and are connected to each other, each of the walls (6,7) of the holder (2) have at least one opening (11,12) through which the strip of carrier material (4) is passed, the dispensing means is passed through a first opening (11) in one of the walls (6) to the outside of the holder (2) and through a second opening (12) in the other wall (7) into the inside of the holder (2), and in which the strip of carrier material (4) between the two openings (11,12) runs in a relatively sharply curved manner, so that as a result of said relatively sharp curvature in the strip of carrier material (4) the labels (5) are released from said strip of carrier material (4).

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## Description

**[0001]** The invention relates to a dispensing device for labels, comprising a holder and a dispensing means, which dispensing means is accommodated in the holder and comprises a strip of carrier material and labels detachably attached to the strip, which holder has at least two walls which are directed transversely to each other and are connected to each other by means of a connecting line, such as a crease, fold line or hinge line and the like, and at least one of which walls has at least one opening through which the dispensing means is passed.

**[0002]** Such dispensing devices are known, for example from DE 36 05 876. The principle of the dispensing of the individual labels lies in the fact that the strip is fed through the individual openings in such a way that the strip has a bent-over part, so that the labels are released by moving the strip.

**[0003]** A disadvantage of the dispensing device from DE 36 05 876 is that the strip is fed through the openings in quite a complicated way. For example, the strip runs twice through the same opening, with all the adverse consequences that this entails, inter alia quite high friction from the parts of the strip sliding over each other in opposite directions. The strip is wound into a roll. Said roll lies unattached in a holder which is open at the top. Such a design is often not permitted for hygienic reasons, for example for applications in the catering trade.

**[0004]** The invention overcomes these disadvantages by providing a dispensing device which makes it possible to feed the dispensing means through the respective openings in a simple way and to dispense the labels in an efficient and hygienic way. This is achieved according to the invention by the fact that the opening is situated near the connecting line.

**[0005]** Owing to the fact that the opening is situated near the connecting line between two walls, one of said walls can be used as a lid or cap. By means of said lid, the roll or rolls can be properly screened off from the environment, which provides excellent protection and provides guaranteed hygiene. The distance between the first opening and the connecting line is preferably short, such as less than the thickness of the first opening. The advantage in the case of such a design is better dispensing of the labels, at any rate by comparison with a dispensing device in the case of which the first opening is provided at a distance from the edge. The distance between the first opening and the edge is preferably less than 1 cm.

**[0006]** In particular, both walls of the holder which are directed transversely to each other can have at least one opening, the dispensing means can be passed through a first opening in one of the walls to the outside of the holder, the strip of carrier material of the dispensing means can be passed through a second opening in the other wall to the inside of the holder, and the strip of carrier material between the two openings can run in a relatively sharply curved manner, so that as a result of said relatively sharp curvature in the strip of carrier material the labels are released from said strip of carrier material. By these measures, the required bent-over part in the strip can already be set up with two openings, and no additional measures such as a special bend-over edge or feeding the strip twice through the same opening are needed.

**[0007]** In a further preferred embodiment the strip of carrier material is passed from the second opening through a third opening to the outside of the holder. The advantage here is that the part of the strip of carrier material projecting from the third opening can be pulled, so that the labels are released. The third opening is preferably situated in the wall in which the second opening is situated, so that the dispensing means are fairly easily passed through the individual openings, an operation which is usually performed by hand.

**[0008]** In another preferred embodiment the two connecting walls form an acute or a right angle with each other. The advantage is that the strip of carrier material in the case of this design runs in an even more sharply curved manner, or at any rate in a manner more curved than if the connecting walls are provided transversely to each other. An even sharper bend will improve the dispensing of the labels.

**[0009]** In a further preferred embodiment the edge of the openings is concave. The advantage of this design is that during the dispensing of the labels a concave edge ensures that the labels are impeded less by the edges of the first opening.

**[0010]** The strip of carrier material is preferably wound into a roll, so that when all labels of the dispensing device have been dispensed and the strip is wound off, the dispensing device can easily be replaced by placing a new roll. The labels are preferably provided on the inside of the coil here, so that the labels are protected during, for example, transport and storage. This also has the advantage that it reduces the risk of faults occurring while the strip of carrier material is being fed in through the individual openings during the placing of a new roll.

**[0011]** In another preferred embodiment a plurality of rolls is provided, said rolls being separated from each other by separating elements. The advantage of this design is that different types of labels can be dispensed simultaneously with one dispensing device. This situation will often happen in practice, such as when the different labels form a series containing all days of the week. The separating elements are needed here to ensure that the respective rolls do not impede one another.

**[0012]** As already mentioned, the holder preferably comprises a substantially closed space and at least one hinged wall, which is situated opposite the wall where the second opening is situated. The advantage of a substantially closed space is that the labels on the strip of carrier material remain dust-free during use, which is important, for example, in the case of hygienic rooms, such as kitchens or operating theatres. For the replacement of a roll it is advantageous if the holder comprises a

hinged wall which defines an access to the closed space, so that the dispensing means can be changed easily. The hinged wall is preferably situated opposite the wall in which the second opening is situated, which is advantageous particularly when a plurality of rolls is provided. It means that during the changing of one of the rolls the other rolls can remain in position.

**[0013]** The invention also relates to a holder intended for use in a dispensing device, comprising at least two walls which are directed transversely to each other and are connected to each other by means of a connecting line, such as a crease, a fold line or an edge hinge line and the like, at least one of which walls has at least one opening through which the dispensing means is passed. This makes the holder easy to assemble by folding the flat blank together in the correct way.

**[0014]** The invention further relates to a flat blank for producing a holder comprising at least two panels which are connected to each other by means of a connecting line, such as a crease, which panels have at least one opening for passing through a dispensing means.

**[0015]** In a preferred embodiment at least one of the panels has several openings for passing through a dispensing means, the openings being substantially the same as each other. In practice, these openings will be punched out in the flat blank, this design therefore having the advantage that only a punching tool need be used. This is advantageous in particular if a plurality of dispensing means is being used within one holder and a panel of the flat blank therefore has to have several openings.

**[0016]** The invention will be explained in greater detail below by means of the description of a preferred embodiment of the invention, with reference to the drawings, in which:

Figure 1 shows a perspective view of the dispensing device;
Figure 2 shows a sectional view of the dispensing device along line II-II from Fig. 1;
Figure 3 shows a preferred embodiment of the dispensing device;
Figure 4 shows a flat blank for the production of a holder for the dispensing device according to Figure 3.

**[0017]** With reference to Figures 1 and 2, these figures show a dispensing device 1, comprising a holder 2 and a dispensing means 3 accommodated in the holder. The dispensing means comprises a strip of carrier material 4, which contains labels 5 detachably attached to the strip. The holder 2 comprises two walls 6, 7 which connect to each other and are directed transversely to each other.

**[0018]** In this embodiment the strip of carrier material 4 is passed through a first opening 11 to the outside of the holder 2, and from there through a second opening 12 into the inside of the holder, the first opening 11 being provided in the first wall 6, and the second opening being provided in the wall 7 connecting to said first wall. In the course of this procedure a sharply curved part 8 occurs in the strip of carrier material 4. From the second opening 12 the strip of carrier material is passed through a third opening 13, provided in the wall 7, to the outside of the holder.

**[0019]** The two connecting walls 6, 7 define a line 14, the distance C between the first opening 11 and the line 14 being short, for example less than the thickness of the first opening, preferably less than 1 cm.

**[0020]** The edge 15 of the first opening 11 is concave. A label 5 dispensed during the passing of the strip of carrier material 4 through the first opening 11 is consequently impeded less by the edge of the opening.

**[0021]** The strip of carrier material 4 is wound into a roll 16, the labels 5 being provided on the inside of the coil. A plurality of rolls is preferably provided, said rolls being separated from each other by separating elements (not shown).

**[0022]** As shown in the preferred embodiment of Figure 3, the holder 2 can further comprise a hinged wall 17. Said wall 17 is hinged to the wall 6 of the holder. The wall 17 is provided opposite the wall 7 in which the second and third openings are situated, so that when a plurality of rolls is provided the other rolls can remain in position during the changing of a roll.

**[0023]** The holder is preferably made from a flat blank, but it can also comprise an injection moulded product. Fig. 4 shows this flat blank 18, by means of which the holder 2 of the dispensing device 1 according to Figure 3 can be produced, by folding said blank together in a suitable way. The flat blank 18 is therefore preferably made of cardboard or a similar material that is easy to fold. The flat blank 18 is further preferably printed on one side, for example printing showing, inter alia, a specimen of the inscription of the various labels.

**[0024]** The flat blank 18 comprises at least two panels 19, 20, which are connected to each other by a nominal fold line 21, such as a crease, which panels have openings for passing through a dispensing means. The fold line 21 and the panels 19, 20 in this case define the walls 6, 7 and the line 14 of the holder respectively which are folded from this flat blank. The various openings in the flat blank are substantially the same as each other, in any case as regards their shape and dimensions.

**[0025]** Figure 4 further shows the hinged wall 17 already described above, the two connecting walls 6, 7 that are directed transversely to each other, and the edge 14 between said two walls, the edge 14 being a fold line such as a crease. The lips 22 of the wall 17 are inserted between the side walls 30, which are folded double and the tabs 23 of which are locked in the slits 24 of the bottom 26.

**[0026]** The way in which the dispensing device works is described below. When a new dispensing means 3 is being placed, a holder 2 is opened by way of the hinged wall 17 or hinged walls 6 and 17. A roll 16 is placed, and

a free end of the strip of carrier material is fed through the individual openings 11, 12 and 13. After the holder has been closed again, it is ready for use. For dispensing of the labels 5, the free end 25 is pulled in the direction of arrow B. Thanks to the sharply curved part 8, the labels 5 are dispensed here one by one and pulled off the strip by hand.

## Claims

1. Dispensing device (1) for labels, comprising a holder (2) and a dispensing means (3), which dispensing means is accommodated in the holder and comprises a strip of carrier material (4) and labels (5) detachably attached to the strip, which holder has at least two walls (6, 7) which are directed transversely to each other and are connected to each other by means of a connecting line, such as a crease, fold line or hinge line (14) and the like, and at least one of which walls has at least one opening (11-13) through which the dispensing means is passed, **characterized in that** the opening (11, 12) is situated near the connecting line (14).

2. Dispensing device (1) according to one of the preceding claims, in which the distance (C) between the first opening (11) and the connecting line (14) is short, such as less than the thickness of the first opening.

3. Dispensing device according to Claim 1 or 2, in which the two walls (6, 7) of the holder (2) which are directed transversely to each other have at least one opening (11, 12), the dispensing means (3) is passed through a first opening (11) in one of the walls to the outside of the holder (2), the strip of carrier material of the dispensing means (3) is passed through a second opening (12) in the other wall into the inside of the holder (2), and the strip of carrier material (4) between the two openings runs in a relatively sharply curved manner, so that as a result of said relatively sharp curvature (8) in the strip of carrier material (4) the labels (5) are released from said strip of carrier material (4).

4. Dispensing device (1) according to one of the preceding claims, in which the strip of carrier material (4) is passed from the second opening (12) through a third opening (13) to the outside of the holder.

5. Dispensing device (1) according to Claim 4, in which the third opening (13) is situated in the wall in which the second opening (12) is situated.

6. Dispensing device (1) according to one of the preceding claims, in which the two connecting walls (6, 7) form an acute or right angle with each other.

7. Dispensing device (1) according to one of the preceding claims, in which the edge (15) of one of the openings (11-13) is concave.

8. Dispensing device (1) according to one of the preceding claims, in which the strip of carrier material (4) is wound into a roll (16).

9. Dispensing device (1) according to one of the preceding claims, in which a plurality of rolls is provided, said rolls being disposed next to each other.

10. Dispensing device (1) according to one of the preceding claims, in which the holder defines a substantially closed space.

11. Holder for use in a dispensing device according to one of the preceding claims, comprising at least two walls (6, 7) which are directed transversely to each other and are connected to each other by means of a connecting line, such as a crease, fold line or hinge line (14) and the like, at least one of which walls has at least one opening (11-13) through which the dispensing means is passed, **characterized in that** the opening (11-12) is situated near the connecting line (14).

12. Flat blank (18) for a holder (2) according to Claim 11, comprising at least two panels which are connected to each other by means of a connecting line (14), such as a crease, which panels have at least one opening (11-13) for passing through a dispensing means, **characterized in that** the opening (11, 12) is situated near the connecting line (14).

Fig 1

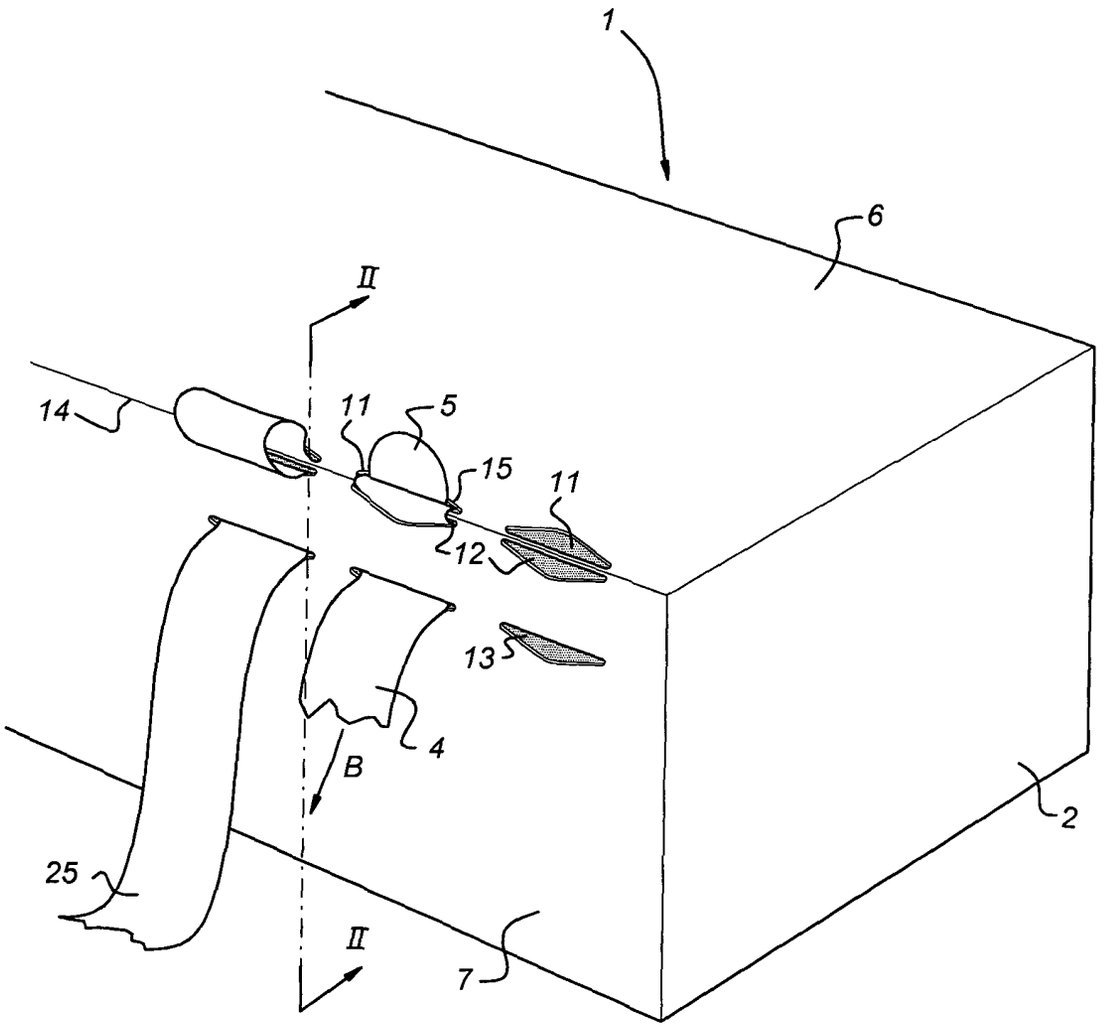


Fig 2

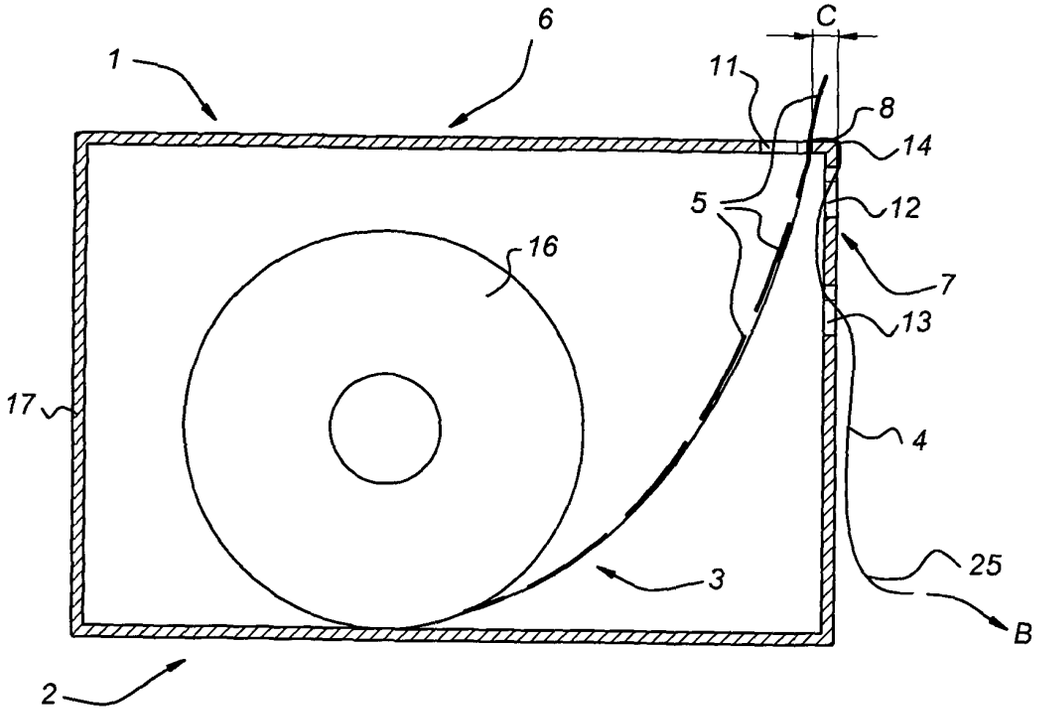



Fig 3

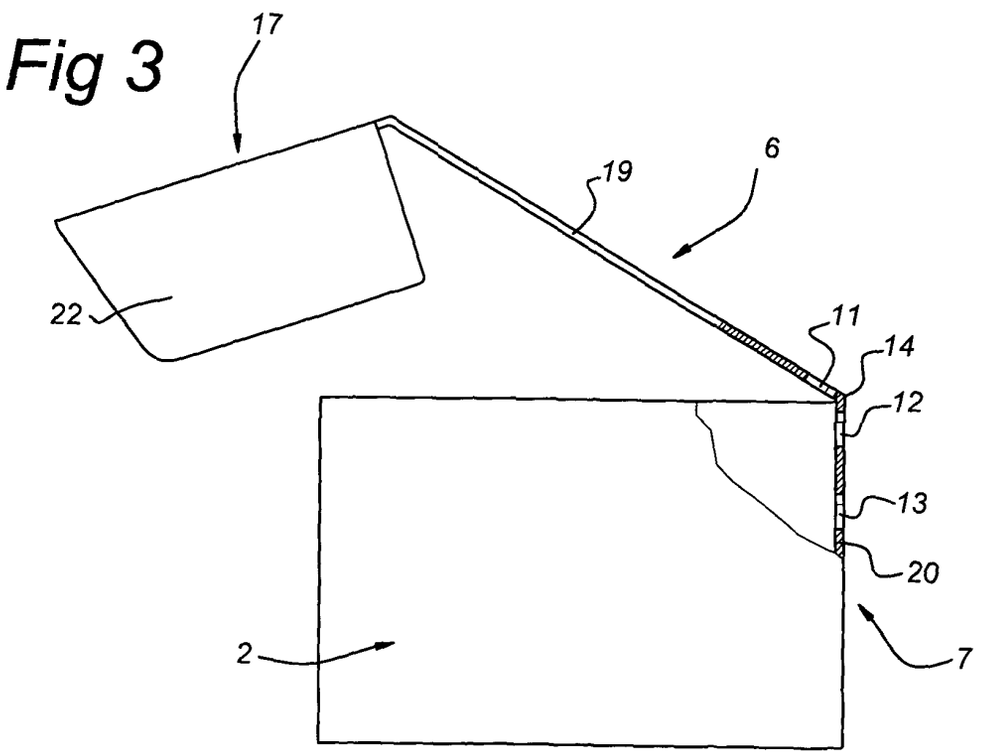
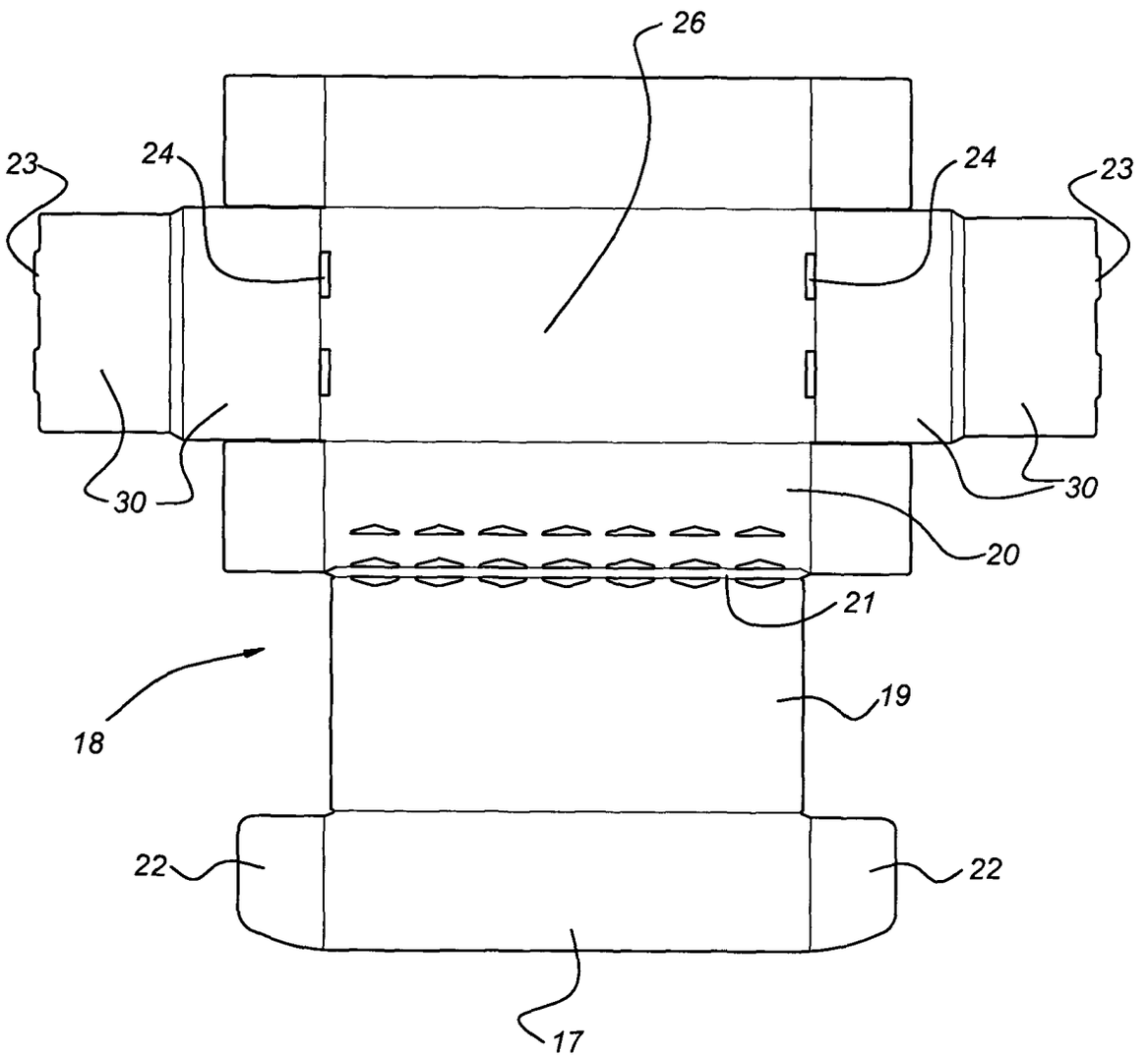


Fig 4



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# EUROPEAN SEARCH REPORT

Application Number
EP 05 07 5511

## 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) |
|---|---|---|---|
| X | US 2 838 171 A (W. KASPAR)<br>10 June 1958 (1958-06-10)<br>* column 2, line 38 - column 5, line 68 *<br>* figures 1-9 * | 1-6,8,<br>10-12 | B65C11/00 |
| X | US 6 189 729 B1 (S. KELLER)<br>20 February 2001 (2001-02-20)<br>* figures 1-3 * | 1,2,6,<br>8-12 | |
| X | DE 19 54 838 U (FA. HEINRICH HERMANN)<br>2 February 1967 (1967-02-02)<br>* page 6, line 1 - line 3 *<br>* figures 1,2 * | 1,2,6,8,<br>10-12 | |
| A | US 2 373 092 A (R. AVERY)<br>10 April 1945 (1945-04-10)<br>* page 3, right-hand column, line 21 - line 59; figures 13-15 * | 1,3-6,8,<br>10-12 | |
| A | DE 87 01 433 U (ID AUSWEISSYSTEME GMBH)<br>12 March 1987 (1987-03-12)<br>* page 5, line 19 - page 7, line 33; figure 1 * | 1,2,6,8,<br>10 | TECHNICAL FIELDS SEARCHED (Int.Cl.7)<br>B65C<br>B65D |
| A | US 4 954 210 A (J. DESMOND)<br>4 September 1990 (1990-09-04)<br>* column 2, line 46 - column 3, line 19 *<br>* figures 1,3 * | 1,2,8,10 | B65H |

The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| The Hague | 28 April 2005 | Smolders, R |

CATEGORY OF CITED DOCUMENTS

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## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 07 5511

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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28-04-2005

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---|---|---|
| US 2838171 A | 10-06-1958 | NONE | |
| US 6189729 B1 | 20-02-2001 | AU 2778499 A<br>WO 0007916 A1 | 28-02-2000<br>17-02-2000 |
| DE 1954838 U | 02-02-1967 | NONE | |
| US 2373092 A | 10-04-1945 | NONE | |
| DE 8701433 U | 12-03-1987 | DE 8701433 U1 | 12-03-1987 |
| US 4954210 A | 04-09-1990 | NONE | |

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