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(54) Wrap around packaging dispenser with interior ramp and its method of assembly

(57) The packaging which is the object of the invention comprises a sheet of material which is provided with sectors (1,2,3,4) defined by fold lines which constitute the walls of the packaging once it has been configured. The packaging is particularly characterised in that one of the end sectors (4) comprises an extension (4.1) de-

signed to be situated in operating position inside the packaging with the extension (4.1) being provided with means for positioning so that it forms an angle with the sector (3) designed to form the lower wall of the packaging so that it defines a ramp for dispensing the product (5). The method of assembling the dispensing packaging is also the object of this invention.

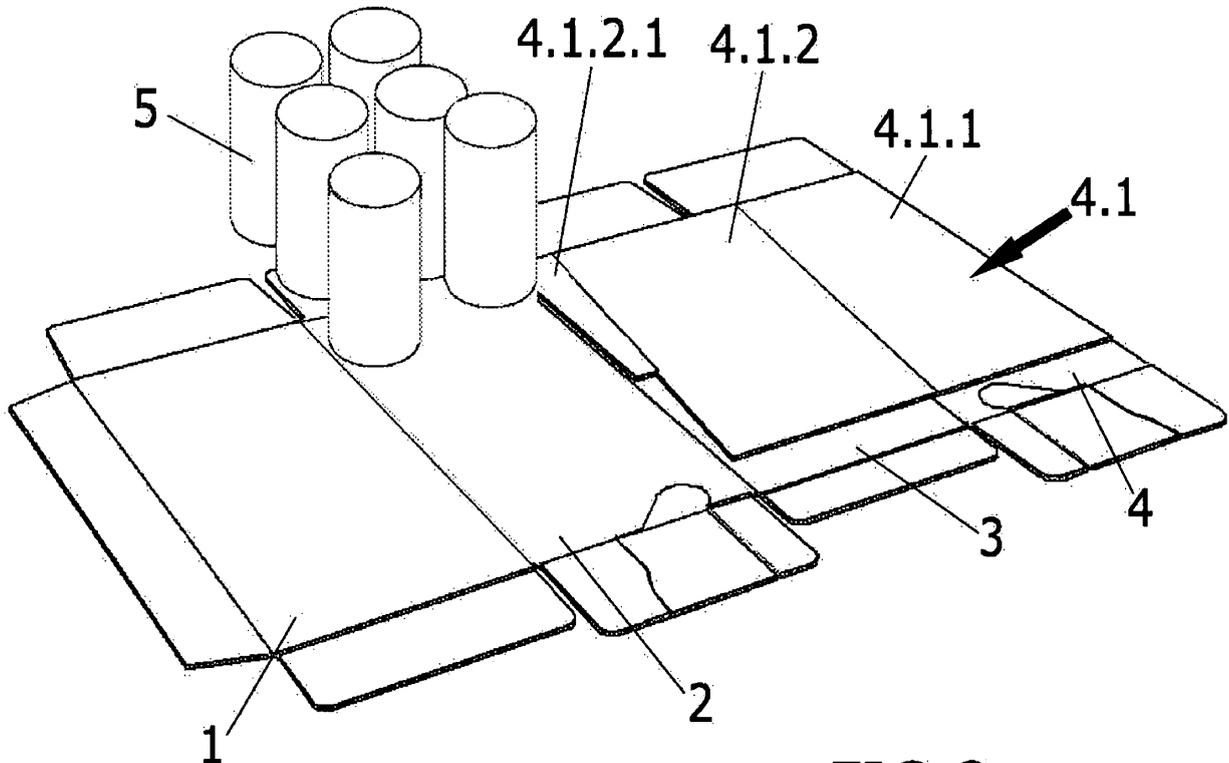


FIG. 2

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Description**OBJECT OF THE INVENTION**

[0001] The present invention refers to wrap around type packaging which is also provided with dispensing functions of the packaged product by means of a configuration which includes an internal ramp inside the packaging.

[0002] Wrap around packages are those in which the products to be packaged are grouped and subsequently a sheet of material is positioned perpendicular to or below this group of containers to form a packaging round it.

[0003] The packaging which is the object of the invention includes a sheet of material which can be stamped and which is provided with sectors defined by fold lines which constitute the walls of the container once it has been formed, as well as means of access to the product.

[0004] The packaging is particularly characterised by the fact that one of the end sectors comprises an extension designed to be situated in operating position inside the packaging with the extension being provided with means for positioning for forming an angle with the sector designed to form the lower wall of the packaging so that it defines a ramp for dispensing the product.

[0005] The method of assembling the dispensing packaging is also the object of this invention.

BACKGROUND TO THE INVENTION

[0006] One of the most frequent forms of protecting a group of containers, such as disposable bottles, tins, glasses, cans, tetra-briks, etc. is the cardboard box. This provides protection from light, impact, rubbing, and is easy to stack, it provides an information support in respect of the product it contains, in addition to providing appropriate promotional or advertising material at the sales point, due to the fact that it can be converted to a display stand, as the die-stamped cardboard can include tear-off zones.

[0007] Wrap around containers are those in which the products to be packaged are grouped, and subsequently a sheet of material, duly stamped and folded, is positioned perpendicular to or below the group of containers to form the box round it which will contain and protect them.

[0008] Prior to concluding closure thereon, during the formation process of the sheet of material which will form the box, an adhesive may be injected on the zones which will receive the closure tongues. Having finalised this process the box will be ready for storage.

[0009] Using wrap around type packaging as product dispensers involved making cuts to access the product, however this fact raises the difficulty of accessing the product inside without totally breaking the packaging.

[0010] There are models on the market which fulfil this function; however, they require handling of the back part of the box in order to obtain, by means of perforations, a

heel which provides the box with a slope.

[0011] The present invention resolves the previous problem by the fact that it has a ramp of the same material which makes up the box, in such a way that, by machining in a specific way, it is possible to form a sloping ramp which enables the product with a cylindrical or spherical form to descend through gravity.

DESCRIPTION OF THE INVENTION

[0012] The present invention refers to wrap around type packaging which is also provided with the functions of dispenser of the packaged product by means of a configuration which includes an internal ramp.

[0013] The container which is the object of the invention is provided with a sheet of material which comprises sectors defined by fold lines which constitute the walls of the container once it has been formed. It also provides means for accessing the product.

[0014] The dispensing packaging is characterised by the fact that one of the end sectors comprises an extension designed to be situated in an operating position internally in the packaging. This extension is provided with means for positioning in such a way that it forms an angle with the sector designed to form the lower wall of the packaging, in this way the extension defines a ramp for dispensing the product as it is slopes in respect to the wall on which the packaging will rest.

[0015] The sheet may be made from any material which can be die-stamped such as, for example, cardboard or plastic material.

[0016] The method of assembly of the dispensing packaging is also the object of this invention and comprises the following stages:

- Stage 1: in which the extension is folded on the internal face of the adjacent end sector.
- Stage 2: in which the products to be packaged are situated with their base on a sector adjacent to that on which the extension is situated.
- Stage 3: closure of the packaging.

DESCRIPTION OF THE DRAWINGS

[0017] The present descriptive report is complemented by a series of drawings which illustrate a preferred embodiment of the invention but which are at the same time in no way restrictive.

Figure 1 shows a view of a preferred embodiment of the laminar template which is the object of the invention.

Figure 2 shows a view of the first folding of the assembly of the laminar template corresponding to figure 1.

Figure 3 shows a view of a second folding of the

assembly in which the laminar template is situated around the product to be packaged.

Figure 4 shows a box corresponding to the laminar template of figure 1 in its assembled and transport position.

Figure 5 shows a view of the box corresponding to the laminar template of figure 1 in dispensing position.

PREFERRED EMBODIMENT OF THE INVENTION

[0018] Figure 1 shows a preferred embodiment of the extended sheet of the wrap around packaging which is the object of the invention.

[0019] The sheet comprises four sectors (1, 2, 3, 4) defined by fold lines. These sectors define the walls of the container once it has been formed.

[0020] The extension (4.1) of one of the end sectors defining the internal ramp is provided in the preferred embodiment with a first section (4.1.1) adjacent to the sector (4) designed to be connected thereto (4) followed by a second section (4.1.2) designed to configure the ramp which in operating position is situated in such a way that it forms an angle with the sector (3) designed to be the base of the packaging. The second section (4.1.2) is provided with a flap (4.1.2.1) designed to connect to the other sector (2) adjacent to the sector (3) which is provided with the ramp. The first section (4.1.1) and the flap (4.1.2.1) constitute means of positioning of the ramp in the internal walls of the packaging.

[0021] The folding line (4.1.3) between the first section (4.1.1) and the second section (4.1.2) form an angle with the folding line (4.2) between the end sector (4) and the first section (4.1.1).

[0022] In turn, the folding line (4.1.3) between the first section (4.1.1) and the second section (4.1.2) and the end line (4.1.4) of the second section (4.1.2) are parallel. In this way the interior ramp of the package is configured between two lines (4.1.3, 4.1.4).

[0023] The packaging in the preferred embodiment comprises extensions (1.1, 2.1, 3.1, 4.3) for configuration of the back part thereof.

[0024] The means of access to the product comprises front extensions (1.2, 3.2) of the corresponding sectors (1,3) which, in operating position, remain situated in the upper and lower part of the packaging and said lateral extensions (2.2, 4.4) are provided with tear lines (2.3, 4.5) for access to the product.

[0025] Finally, one of the end sectors (1) is provided with a tongue (1.3) which connects to the other end sector (4) thus closing the box.

[0026] Figures number 2 to 4 show the assembly sequence of the packaging which is the object of the invention.

[0027] Stage 1 in the preferred embodiment is made by means of connection of the first section (4.1.1) to the

adjacent sector (4). This connection may be for example by means of adhesive. The second section is therefore situated on the sector (2) contiguous to the sector (3) which the internal ramp.

[0028] Stage 3 for continuous closing of the packaging by means of elevation of the sector (3) provided with the ramp, situating the product(5) against it. Finally the other end sector is raised (1) and closed by means of the flap (1.3).

Claims

1. Wrap around dispensing packaging with internal ramp comprising a sheet of material which can be stamped and which consists of sectors (1, 2, 3, 4) defined by fold lines which constitute the walls of the packaging once it has been configured and means of access to the product (5) content, **characterised in that** one of the end sectors comprises an extension (4.1) designed to be situated in operating position internal to the packaging with the extension (4.1) being provided with the means for positioning said extension (4.1) forming an angle with the sector (3) designed to form the lower wall of the packaging such that it defines a ramp for dispensing the product.
2. Wrap around dispensing packaging with internal ramp according to claim 1, **characterised in that** the means of positioning the extension (4.1) comprise a first section (4.1.1) adjacent to the end sector (4) designed to be joined thereto (4) and a flap (4.1.2.1) designed to be joined to the sector (2) adjacent to the sector (3) designed to form the base of the packaging with the first section (4.1.1) followed by a second section (4.1.2) designed to configure the ramp which in operating position is situated forming an angle with the sector (3) designed to be the base of the packaging in dispensing position.
3. Wrap around dispensing packaging with internal ramp according to claim 2, **characterised in that** the fold line (4.3) between the first section (4.1.1) and the second section (4.1.2) form an angle with the fold line (4.2) between the sector (4) and the first section (4.1.1).
4. Wrap around dispensing packaging with internal ramp according to claim 2, **characterised in that** the fold line (4.3) between the first section (4.1.1) and the second section (4.1.2) and the end line (4.1.4) of the section (4.1.2) are parallel.
5. Wrap around dispensing packaging with internal ramp according to claim 1, **characterised in that** each sector(1, 2, 3, 4) comprises extensions (1.1, 2.1, 3.1, 4.3) for the configuration of the back part of the box.

6. Wrap around dispensing packaging with internal ramp according to claim 1, **characterised in that** the means of access to the product (5) comprise front extensions (1.2) 3.2) of the sectors (1, 3) which in operating position are situated in the upper and lower part of the packaging and lateral extensions (2.2, 4.4) which are provided with tear off lines (2.3, 4.5) for extracting the product. 5
7. Wrap around dispensing packaging with internal ramp according to claim 1, **characterised in that** one of the end sectors (1) is provided with a tongue (1.3) which connects to the opposite end sector (4). 10
8. Method for assembling the wrap around dispenser with internal ramp, according to the previous claims, **characterised in that** it comprises the following stages: 15
- Stage 1: in which the extension (4.1) is folded on the internal face of the adjacent end sector (4). 20
 - Stage 2: in which the products to be packaged (5) are situated with their base on a sector (2) adjacent to the sector (3) of the ramp. 25
 - Stage 3: closure of the packaging.
9. Method for assembling the wrap around dispenser with internal ramp, according to claim 8, **characterised in that** in stage 1 the connection of the first section (4.1.1) to the adjacent sector (4) is made with the second section being situated on the sector (3) contiguous to the end sector (4). 30
10. Method for assembling the wrap around dispenser with internal ramp, according to claim 9, **characterised in that** the connection between the first section (4.1.1) and the end section (4) is by means of adhesive. 35
11. Method for assembling the wrap around dispenser with internal ramp, according to claim 8, **characterised in that** in stage 3 the sector (3) which is provided with the second section (4.1.2) is raised. 40
12. Method for assembling the wrap around dispenser with internal ramp, according to claim 11 **characterised in that** the other end sector (1) is raised and closure is by means of the flap (1.3). 45
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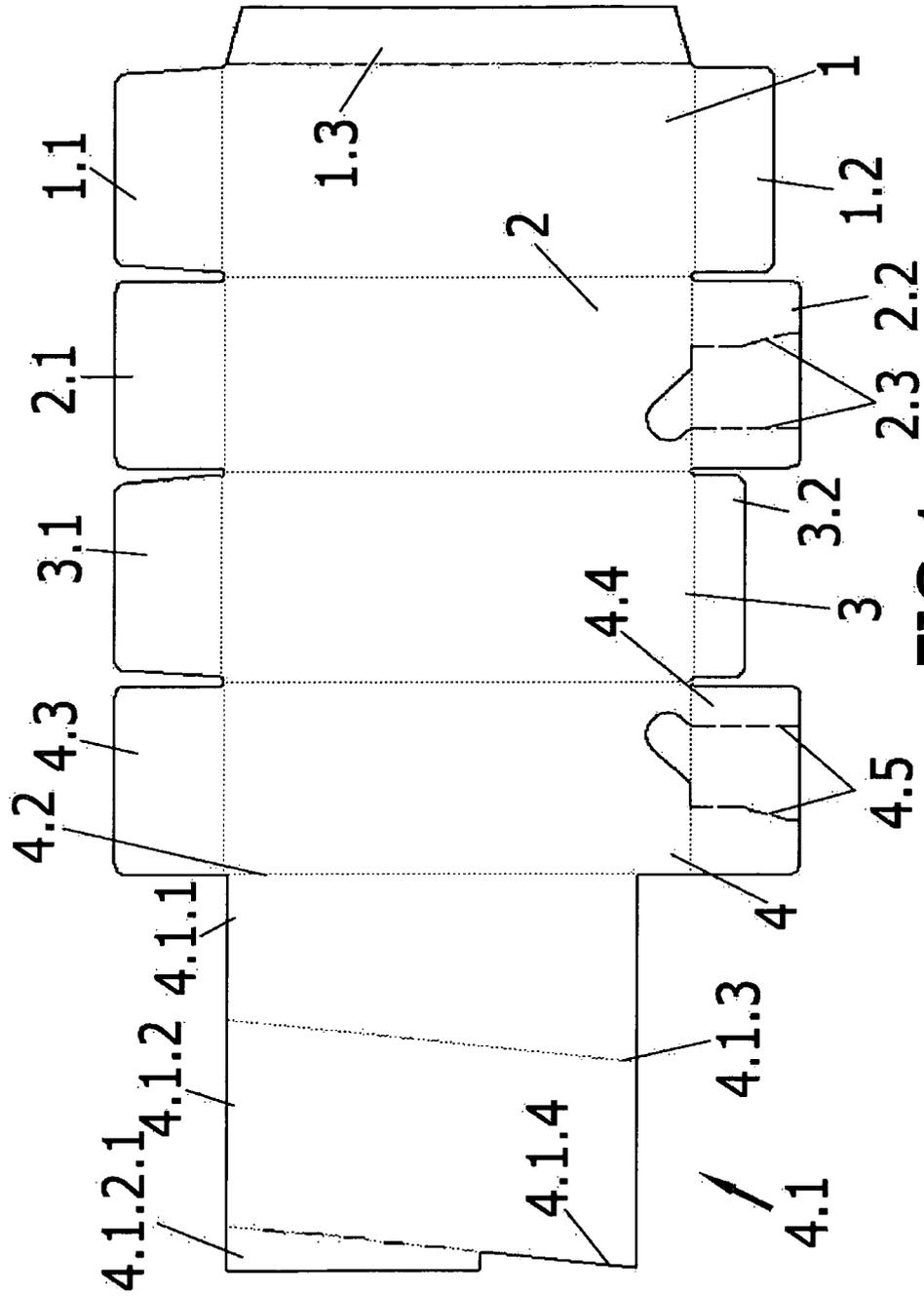


FIG.1

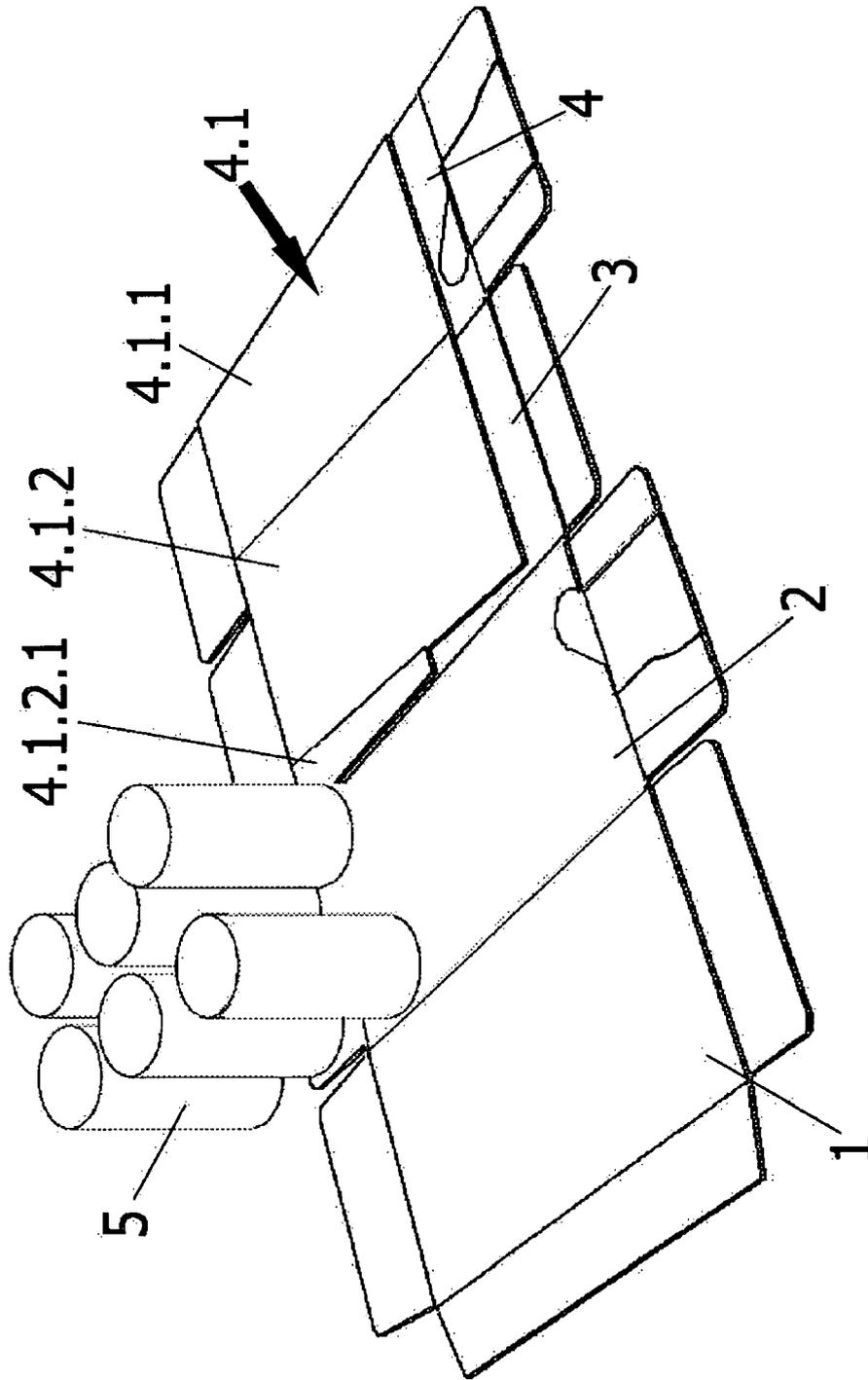
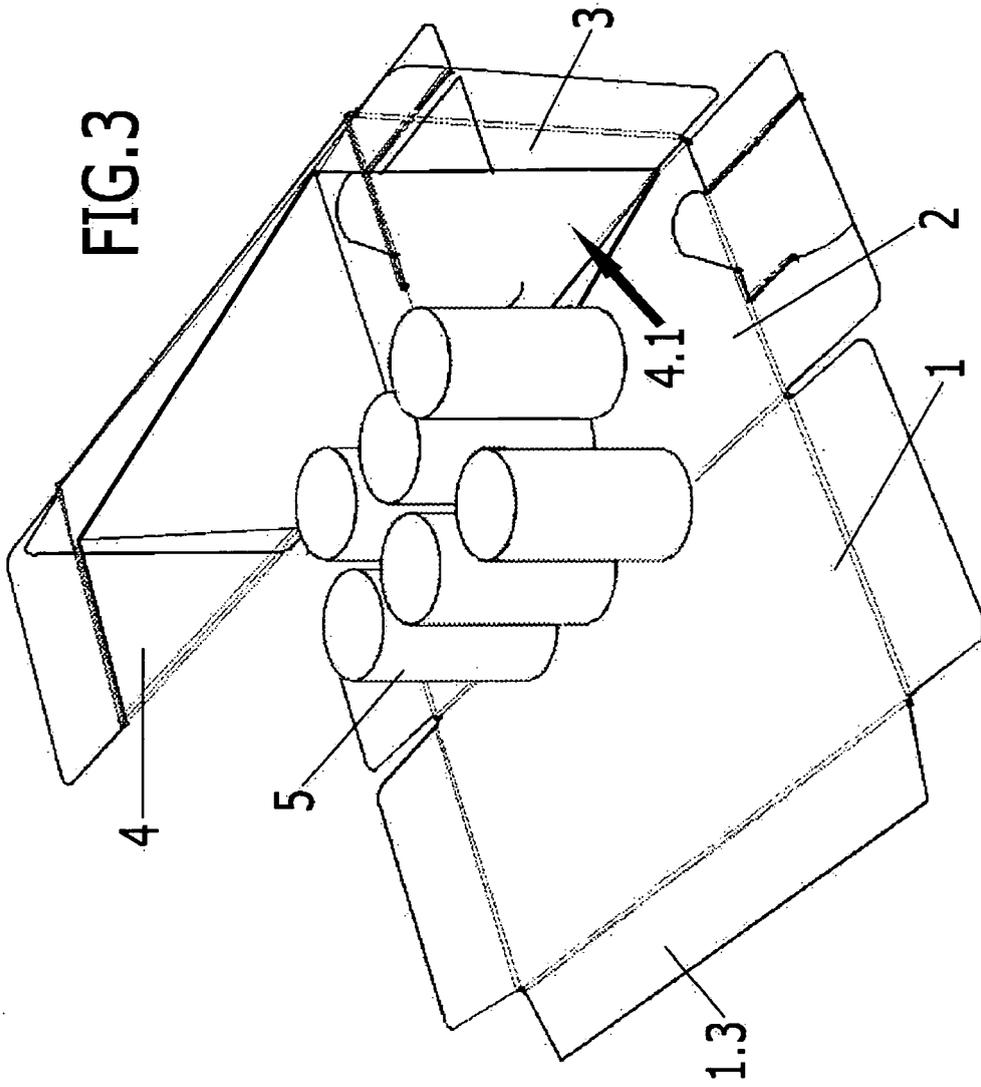


FIG. 2



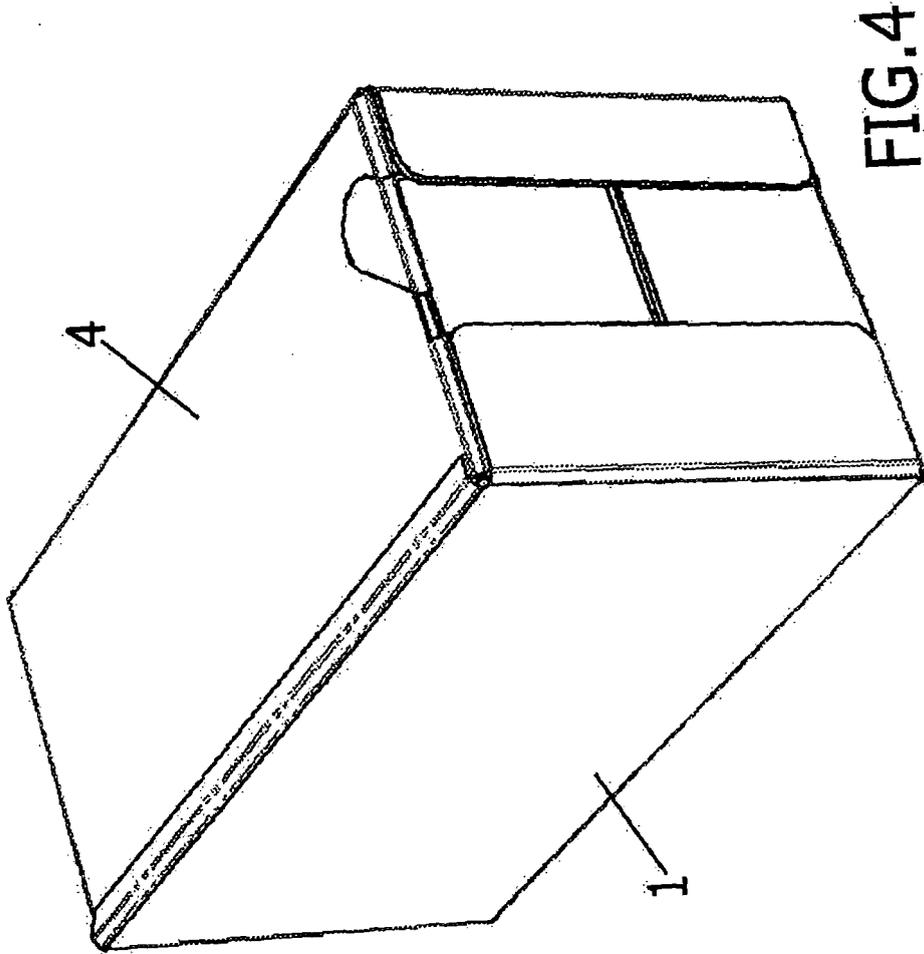


FIG. 4

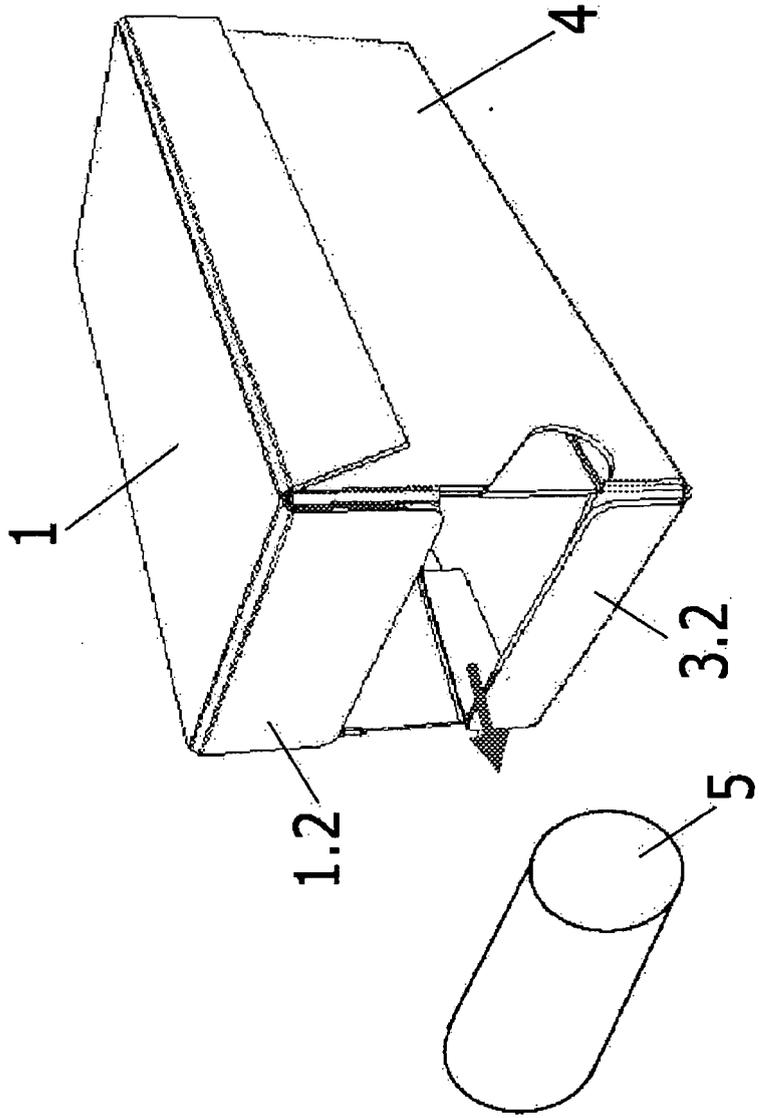


FIG. 5



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 039 118 A (KAWAOKA TERU) 2 August 1977 (1977-08-02) * column 2, line 15 - column 4, line 3 * * figures 1-4 * -----	1-12	INV. B65D71/36 B65D5/72
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X	DE 41 05 169 A1 (BROMUND VOLKER [DE]) 27 August 1992 (1992-08-27) * column 1, line 65 - column 2, line 3 * * figures 1,2 *	1	
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 19 May 2008	Examiner Rodriguez Gombau, F
CATEGORY OF CITED DOCUMENTS 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		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 & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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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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19-05-2008

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