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## (54) Improved exhibitor container

(57) As set forth in the description, the present invention refers to an improved exhibitor container comprising a first body (33) forming the container enclosure for storing the products to be packed and a second body (34) adhered to and closing the container body, which

body (33) is a quadrangular truncated pyramid with one side (3) that is higher than the others (4,5), said side (3) presenting respective extensions along its lateral edges which are vertically cut up to half the body height, at which point the cut deviates horizontally to form an ample recess (22).

#### Description

#### **OBJECT OF THE INVENTION**

**[0001]** The object of the present invention is a new type of container with improved design, organization and assembly features.

**[0002]** The improved container being presented is formed by two independent bodies which, once assembled, adapt to one another to jointly form a closed container which appropriately covers the products contained therein. Each body is formed from respective preformed independent sheets of a stampable material, normally corrugated cardboard.

#### **BACKGROUND OF THE INVENTION**

**[0003]** A large number of containers known in the market are built from corrugated cardboard, fitted with closure lids and arranged in a manner that, upon lifting the lid from the container body, the contents of the box become exposed. Among these embodiments stands out the Spanish utility model No. 9901154, specially designed to contain certain perishable goods which must be packed in an upright position in order to prevent their spoiling.

**[0004]** When perishable products are packed one on top of the other, those on the lower levels become rapidly spoilt because of lack of airing. The present utility model foresees not only the protection of the product but also the possibility of exhibiting it after opening the box.

**[0005]** With these embodiments, very good quality containers are obviously formed, fitted with strong means allowing several boxes to be conveniently stacked and attached to one another. These embodiments present a drawback in that a great amount of cardboard is needed for forming the containers, resulting in a very expensive box.

**[0006]** The present invention intends to remove these inconveniences.

**[0007]** One object of the invention consists in providing a container of the above type which however uses less amount of cardboard and thus achieves an important cost reduction. This economy factor is very important, and in fact any other saving introduced, no matter how small, acquires great proportions when considered in terms of large scale production.

**[0008]** A further object of the invention consists in providing an exhibitor container which, although cost effective, will maintain a good mechanical strength.

**[0009]** The proposed model foresees that both the container body and the closure element are formed by respective independently preformed sheets and provided with flat surface bottoms of a substantially rectangular shape on the edges of which hinge the corresponding sides to form the container enclosure of a pyramidal body having a truncated rectangular shape, three sides

of the body being cut. The closing body is substantially similar, although capable of snugly fitting over the container body to close it.

**[0010]** The object of the above utility model No. 9901154 is to provide an exhibitor container of the above type fitted with its own means of assembly and disassembly through a manual process, its construction being considerably simplified and thus more economical.

**[0011]** The new proposed container presents characteristics similar to those of the previously described model, save for an important difference in that it offers mechanical mounting improvements to provide a permanently assembled container with good mechanical strength that is considerably more economic both in cardboard expenditure and labor.

**[0012]** A fuller idea of the container that is the object of the model is provided by the following description, in which reference is made to the attached drawings, wherein, in a somewhat schematic manner and exclusively in the form of a non-limiting example, the preferred model assemblies and details are shown according to the possible practical case of an embodiment.

[0013] In the drawings:

**[0014]** Figure 1 shows a preformed cardboard sheet forming the container for storing products in an upright position.

**[0015]** Figure 2 is a perspective view of the exhibitor container in its assembly phase.

**[0016]** Figure 3 shows the extension of the preformed cardboard sheet for forming the body that covers and closes the enclosure for storing the products packed in an upright position.

**[0017]** Figure 4 is a partial view showing, in perspective and in its assembly phase, the body covering and closing the container element.

**[0018]** Figure 5 is a perspective view of the assembly comprising the two bodies that form the container, shown facing each other in a mutually adaptable condition.

**[0019]** Concerning the drawings, number 1 identifies the preformed cardboard sheet used for fully shaping the main body or container 9, where the products to be stored and exhibited, such as asparagus, vegetables, greens and other horticultural plants are arranged in an upright position. Number 2 identifies the bottom or base of said container body, the large edges of which provide a hinge to extensions 3 and 4, the first of which is the larger one and rotates upwards to form a 90° angle with the bottom 2 to form the rear side of the container body. Said large rear side 3 laterally supports the packed goods, which are visible along their upper part, a free space being allowed above them for placing signs and indications generally related to the packed goods.

**[0020]** On both vertical edges of the larger panel 3 hinge respective ample laps 5 which form the sides of the container body. These side panels 5 present an ample cut which starts on the upper part thereof, descends in a slightly slanting direction and then deviates horizon-

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tally toward the free lateral edge, this cut creating an ample recess 6. The lower edge of each side panel 5 hinges, along folding line 7, on a substantially rectangular lap 8 which rotates orthogonally and superposes bottom 2 to form a double reinforced wall.

**[0021]** By superposing the lower sector 8 of each side panel over the bottom 2, the side panels 5 become vertically superposed to bottom 2 in a manner that, upon raising the front sector 4 of the container body 9 and positioning the laps 11 at an angle over the edges 10 of bottom 2, said laps 11 become adhesively attached to the interior planes of the side panels 5 and thus definitely form the container enclosure wherein the vegetable products are deposited and maintained in upright position and which, on opening the container, become exposed along their upper part.

**[0022]** The container body 9 thus organized can be fitted with complementary arrangements, which are not the object of any particular claim in the application of this invention, such as cutouts which form handles, crests or anchoring undercuts for coupling on top of the container body 9 the second body 34 which covers it, both forming an homogeneous assembly with a considerable mechanical strength.

**[0023]** Referring once more to figure 3, it shows the extension of the second body 16 which closes the box by adapting onto the container body 9, closing it and covering the goods contained therein.

[0024] This second body 34 is formed by a corrugated cardboard sheet 16 advantageously stamped to a shape very similar to that of the container body 33 and also having a horizontal flat sector 17 which covers the upper part of the container and on whose larger edges respectively hinge the walls 18 and 19, the first of which is larger and shaped in the form of a trapezoid. On rotation, this wall forms, together with the upper horizontal sheet 17, a 90° angle. On both sides of said wall 18 hinge respective ample laps 20 which are each cut to form an ample recess 22; these laps 20 are rotated 90° and become positioned in reciprocally parallel planes, forming 90° angles with the central sector 17.

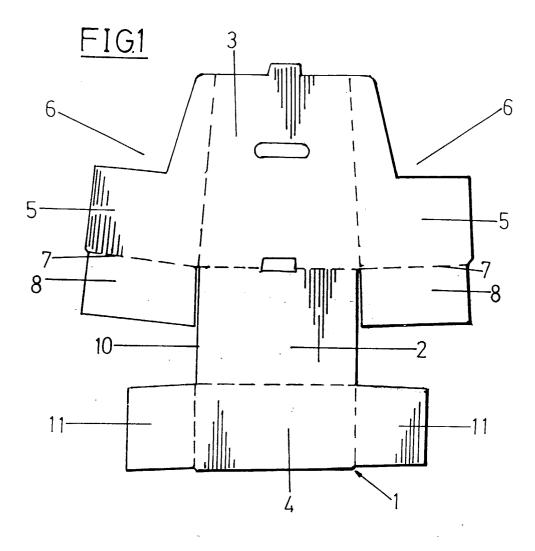
**[0025]** On their upper edge, said laps 20 present respective rectangular extensions 23 which rotate orthogonally and become adhered to the internal face of the upper sector 17, to jointly form a double wall.

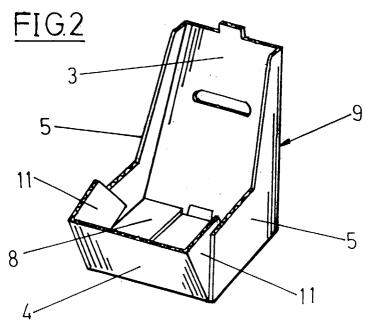
**[0026]** Said upper sector 17 presents, on the edge opposite that of the larger side 18, a rectangular lap 19 from whose lateral edges project respective extensions 26 which are rotated 90° to a vertical position over the upper panel 17 in order to adjoin the internal plane of undercut laps 20, onto which they are attached by adhesive or some other conventional means.

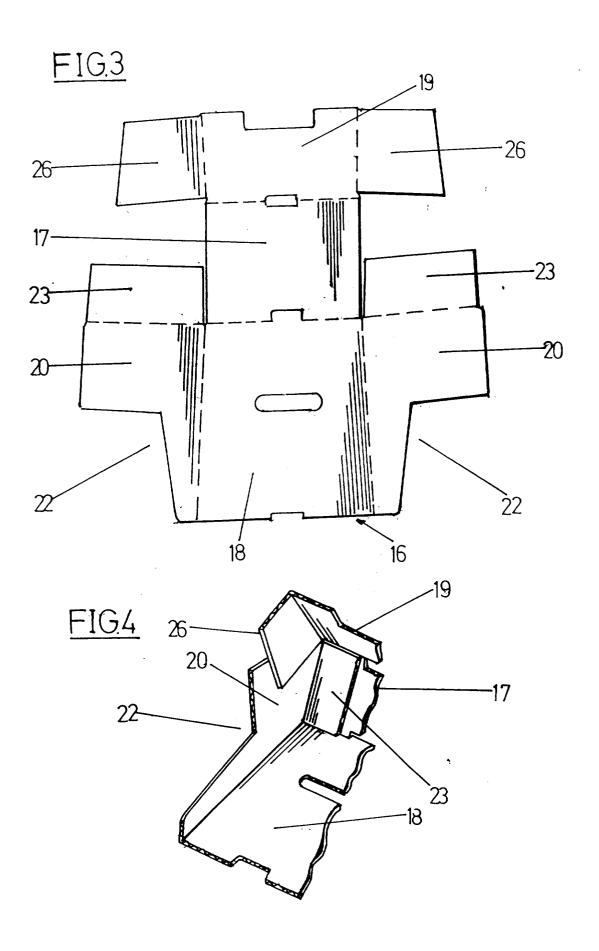
**[0027]** After conveniently describing the nature of the present invention it should be noted that the proposed exhibitor container is not strictly limited to the details as described, so that modifications in detail may be introduced provided said variations do not alter the essence of the container.

#### Claims

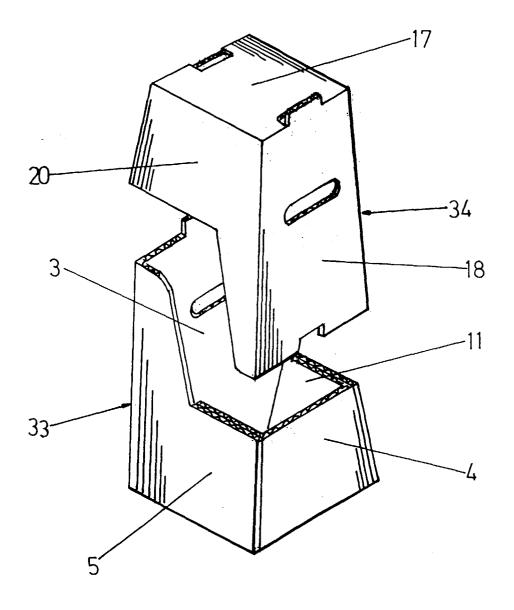
- 1. Improved exhibitor container comprising a first body forming the container enclosure for storing the products to be packed and a second body that fits onto and closes said container body in the shape of a quadrangular truncated pyramid, one side of which is higher than the other sides, said side being characteristic in that its lateral edges are fitted with respective extensions which are vertically undercut up to half their height, at which point the cut deviates horizontally to form an ample recess.
- 2. Improved exhibitor container according to claim 1, wherein the second body which closes the container enclosure for storing the products is shaped to form a quadrangular inverted truncated pyramid one side of which is higher than the others and whose vertical edges present respective extensions characteristic in that they are cut as from the upper edge to form an ample recess.
- 3. Improved exhibitor container according to claims 1 and 2, characteristic in that rotation of the side panels of the bodies forming the container causes them to become vertically positioned, with the end laps of the main shorter side lying adjacent and adhesively attached to their internal plane.







# FIG.5





# **EUROPEAN SEARCH REPORT**

Application Number

EP 99 50 0173

	DOCUMENTS CONSID	ERED TO BE RELEVANT			
Category	Citation of document with of relevant pas	ndication, where appropriate, sages		levant claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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					TECHNICAL FIELDS SEARCHED (Int.CI.7)
					B65D
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	The present search report has	Date of completion of the search			Examiner
	THE HAGUE	2 November 2000	,	Vol	lering, J
	ATEGORY OF CITED DOCUMENTS				
X : part Y : part docu	icularly relevant if taken alone icularly relevant if combined with ano ument of the same category	E : earlier patent after the filing ther D : document cite L : document cite	document, date ed in the ap d for other	but publi: plication reasons	shed on, or
O: non	nological background -written disclosure rmediate document	& : member of the document			

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

EP 99 50 0173

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

02-11-2000

cité	Patent document ed in search repo	ort	Publication date	F	Patent family member(s)	Publication date
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FORM P0459

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