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(54) **Compartmentalizer for boxes of fruit and vegetable products and such like**

(57) Especially devised to be implemented in boxes of fruit and vegetable products and such like, the compartmentalizer of the invention is formed by a laminar body, wherein a central rectangular core (1) is established, of length in accordance with the width of the box (2) to be compartmentalized, wherein a pair of longitudinal folding lines (4) are defined, centrally disposed and distanced from one another by a magnitude equal to the

width of the partition to be formed, folding lines (4) through which two lateral sectors (5) and one central sector (6) are defined, so that by the folding of same the compartmentalizer partition is formed. From each end of the lateral sectors (5) emerge respective tabs (9) formally and dimensionally suitable to be internally adapted to the sides (10) of the box, coming up against the ends (3) through its free ends.

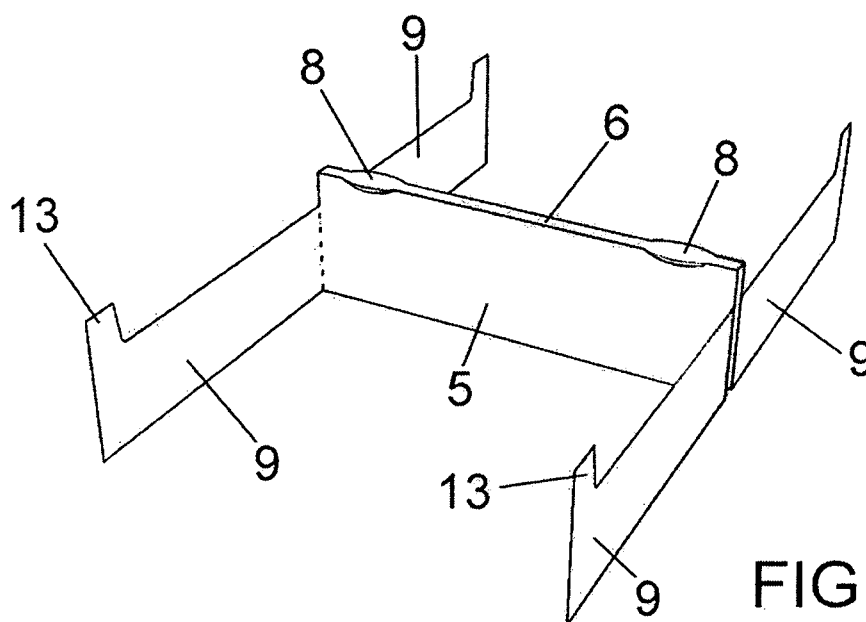


FIG. 2

Description

OBJECT OF THE INVENTION

[0001] The present invention relates to a device which has been especially devised to be implemented in boxes of fruit and vegetable products and such like, in order to form a barrier which makes it possible to compartmentalize said box, as well as avoiding that the content of same piles up at one end of the box when it is placed on an inclined surface, such as the display stand of a greengrocer shop or such like, so that the presentation of the product offered is the optimum.

BACKGROUND OF THE INVENTION

[0002] As is known, boxes of fruit and vegetable products are, on many occasions, placed on inclined surfaces, such as the counters of greengrocers and such like, that said arrangement means that the products stored therein tend to pile up at one of the two ends of the box, due to the effect of gravity, in correspondence with the lowest point of said arrangement, so that part of the product stored is not visible, as it is covered by other products of the same class.

[0003] Likewise, not having internal compartmentalizers means that when the boxes are not totally full, the products bump against one another during the transport of said boxes, due to the inertia of same, and said products are damaged by the bumps, with the consequent and negative impact on costs this involves.

[0004] Trying to obviate this problem, the implantation of separators is known materialized in the form of a kind of transversal partition, which, in most cases, does not have fastening means of same, for which reason its stability is inadequate, or they are fixed by non-detachable means, such a glue, staples and such like, not allowing easy removal of same in those cases where said compartmentalizer is not necessary.

DESCRIPTION OF THE INVENTION

[0005] The compartmentalizer proposed by the invention resolves in a fully satisfactory manner the aforementioned problem in the different aspects commented.

[0006] Therefore, and more specifically, the device of the invention is formed from a laminar body, preferably cardboard, wherein a central rectangular core is defined, of width according to the inner width of the box, a sector wherein a pair of longitudinal folding lines are defined very close to one another and disposed in the middle area, which determine two lateral sectors and an intermediate sector, so that the folding of same defines a compartmentalizer partition, preferably of a height in accordance with the height of the box. This also provides a support for the base of the box which is superimposed in the stacking.

[0007] In accordance with another of the characteris-

tics of the invention, it has been provided that, for a better stabilization of the compartmentalizer partition, from each end of the lateral sections emerge respective tabs which shall internally adapt to the sides of the box, of length in accordance with the distance between the ends and said compartmentalizer partition, so that the tabs act as stabilizing elements which, supported on said ends, prevent the displacement or rotation of said compartmentalizer partition.

DESCRIPTION OF THE DRAWINGS

[0008] To complement the description being made and in order to aid towards a better understanding of the characteristics of the invention, in accordance with a preferred example of practical embodiment thereof, a set of drawings is attached as an integral part of said description, wherein, with illustrative and non-limitative character, the following has been represented:

Figure 1. Shows a plan development of a compartmentalizer for boxes of fruit and vegetable products made in accordance with the object of the present invention.

Figure 2. Shows a perspective view of the device of figure 1 suitably mounted.

Figure 3. Shows, finally, according to a similar view to that of figure 2, the compartmentalizer device implemented in a box of fruit and vegetable products.

PREFERRED EMBODIMENT OF THE INVENTION

[0009] In light of the figures referred to it can be observed how the compartmentalizer claimed is formed from a laminar body, preferably cardboard, wherein a central rectangular core (1) is established, of length in accordance with the width of the box (2) to be compartmentalized, and of width slightly more than double that of the height of the ends (3) of said box, so that through a pair of longitudinal folding lines (4), centrally disposed and distanced from one another by a magnitude equal to the width of the partition to be formed, said partition is obtained from two lateral sectors (5) and one central sector (6).

[0010] The central sector (6) can have indentations (7) of different configuration, for example the curved configuration shown in the drawings, so that when the folding of the lateral sectors (5) is performed, a surface (8) is defined which can hold advertising or information, being considerably visible, although the rest of the surface of said laminar body may also carry advertising or information.

[0011] As previously mentioned, from both lower ends of the lateral sectors (5) emerge rectangular tabs (9), of a height preferably in accordance with the height of the sides (10) of the box (2) and with a length suitable to stabilize said compartmentalizer partition preventing its

longitudinal displacement, as said tabs rest on the ends (3).

[0012] For this purpose, said tabs (9) have an end sector (11) which can be folded along a folding line (12), designed to be adapted on the edges of said ends, so that, given the boxes of fruit and vegetable products of this type, the ends (3) usually have a greater height than the sides (3), said end sector (11) has an upper appendage (13) to perfectly adapt to said discontinuity produced between sides and ends.

Claims

1. Compartmentalizer for boxes of fruit and vegetable products, **characterized in that** it is formed from a laminar body, preferably cardboard, wherein a central rectangular core (1) is established, of length in accordance with the width of the box (2) to be compartmentalized, wherein a pair of longitudinal folding lines (4) are defined, centrally disposed and distanced from one another by a magnitude equal to the width of the partition to be formed, folding lines (4) through which two lateral sectors (5) and one central sector (6) are defined, having provided that from each end of the lateral sectors (5) emerge respective tabs (9) formally and dimensionally suitable to be internally adapted to the sides (10) of the box wherein the compartmentalizer is designed to be implemented, coming up against the ends (3) through its free ends.
2. Compartmentalizer for boxes of fruit and vegetable products, according to claim 1, **characterized in that** the tabs (9) have a height preferably in accordance with the height of the sides (10) of the box wherein the compartmentalizer is designed to be implemented, with the special characteristic that, by their free end, they are finished in an end sector (11) which can be folded along a folding line (12), and with an upper expansion or appendage (13) which gives said unit a height in accordance with the height of the end.
3. Compartmentalizer for boxes of fruit and vegetable products, according to claim 1, **characterized in that** the central sector (6) has indentations (7) of configuration in accordance with any design line, so that, when the lateral sectors (5) are folded on the upper edge of the determining partition of the compartmentalizer, a surface (8) is defined which can hold advertising or information.

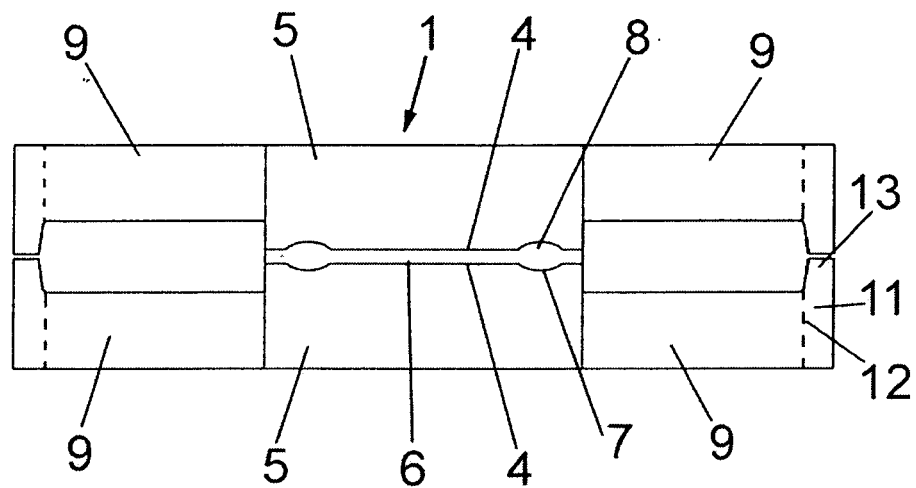


FIG. 1

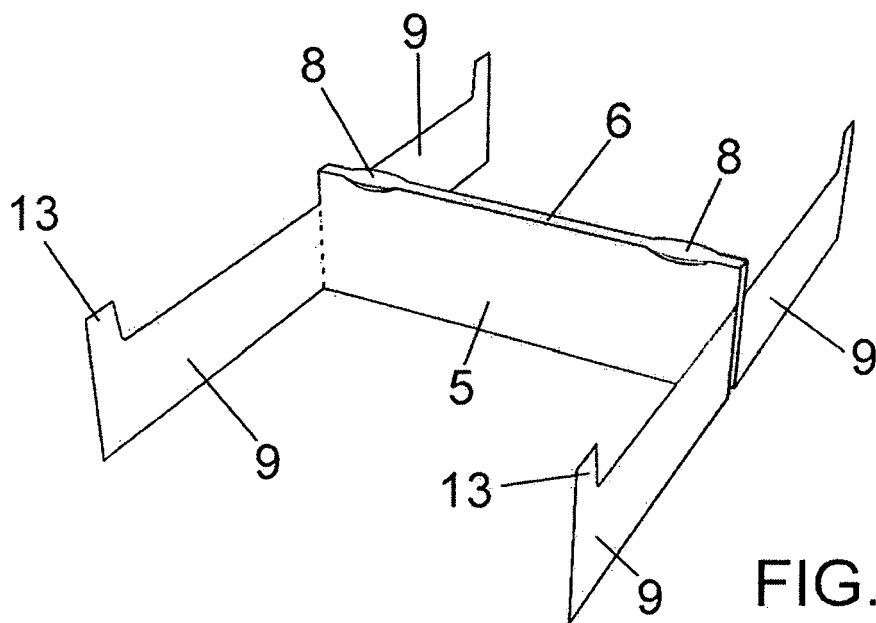


FIG. 2

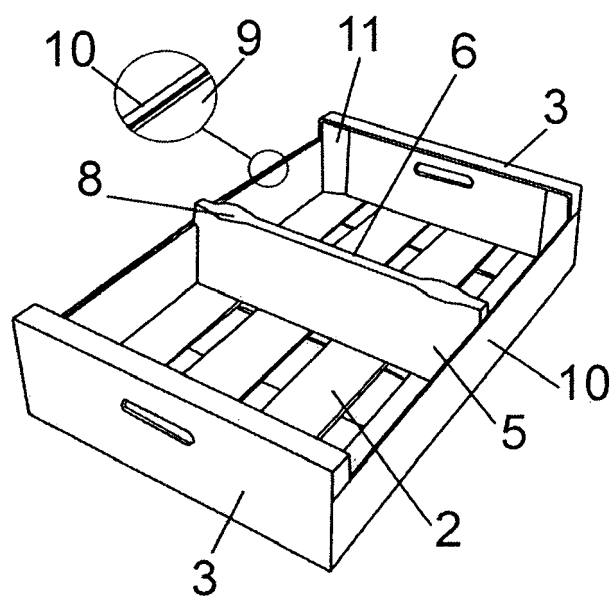


FIG. 3



EUROPEAN SEARCH REPORT

Application Number
EP 10 38 0009

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 3 048 318 A (SABIN JOHN U) 7 August 1962 (1962-08-07) * the whole document *	1,2	INV. B65D5/48
A	----- * the whole document *	3	
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A	----- US 2003/116613 A1 (MCLEOD MICHAEL B [US] ET AL) 26 June 2003 (2003-06-26) * the whole document *	1,2	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
Place of search		Date of completion of the search	Examiner
The Hague		8 June 2010	Gino, Christophe
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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EPO FORM 1503 03.82 (P04C01)

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

EP 10 38 0009

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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08-06-2010

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