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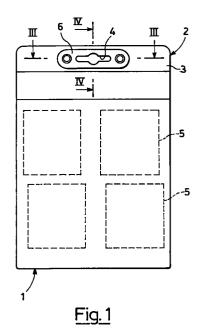
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#### (54)A cardboard box with a reinforced handle for hooking to a display case

(57)A cardboard box with a grasping handle (2) formed by two side-by-side cardboard flaps (3) cut so as to define a slot (4) for coupling to a display case has the same slot (4) bordered by a pair of reinforcing plates (6) in rigid synthetic material endowed with slits identical to those of said slot (4) and applied and fastened together on opposite sides with respect to the two flaps (3) that form the grasping handle.



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#### Description

The present invention relates to a cardboard box with a reinforced handle for hooking to a display case, in particular for gardening tools.

Articles of various types, in particular gardening tools such as fittings for flexible lines, nozzles for delivering water and so on, are usually packed for display in packages of the blister type, formed by a flat piece of cardboard endowed with a slot for coupling it to a display case and by a cover in transparent plastic, that holds the packaged article up against the piece of cardboard.

For this type of package serious problems have arisen recently, especially in some countries, that penalise it against other possible packings.

A first problem is represented by the fact that in some countries there is a tax on packages, that is based on the weight of the package (and thus is higher for plastics than for cardboard) and that the consumer has a right not to pay leaving the package at the cashier's, inside separate containers according to the material used. This penalises very much any mixed packages such as that described above of plastic and cardboard, because the glue that keeps the two materials together in fact prevents the separation of the same.

A second problem is represented by the ecological orientation of public opinion, that is against the use of plastics and that is often supported by special laws on the collection and recycling of packing materials.

On the other hand the need remains unchanged of packing the article so as to allow its hooking to a display case.

If the article to be packaged is small, as in the case of fittings for flexible lines, a solution may be represented by a cardboard box, that is closed in the upper part by two side-by-side flaps suitable for constituting a grasping handle endowed with a slot for hooking to a display case.

A handle formed in this way has, however, the disadvantage of deteriorating over time, in particular at the hooking slot, that suffers due to the repeated operations of hooking and releasing by the clients and, by breaking, can determine not only the falling down of the hanging box but also the opening up of the box itself and the consequent falling down of the packaged product.

In view of this, the object of the present invention has been to make a cardboard box of the abovementioned type, that is able to resist in a more effective manner to the repeated operations of hooking to and releasing from a display case.

According to the invention such object has been achieved with a cardboard box endowed with a grasping handle formed by two side-by-side cardboard flaps cut so as to define a slot for hooking to a display case, characterized in that said slot is bordered by a pair of reinforcing plates in rigid synthetic material endowed with slits identical to those of said slot and applied and fastened together on opposite sides with respect to the two

flaps that form the grasping handle.

In this way the hooking slot is adequately reinforced and the two side-by-side flaps of the grasping handle keep the box properly closed, preventing any undesired falling out of the packaged product.

The features of the present invention will be made more evident by the following detailed description of an embodiment thereof illustrated as an example in the enclosed drawings figures, wherein:

Fig. 1 shows in a front view a box with a reinforced handle according to the invention;

Fig. 2 shows the same box in a lateral view;

Fig. 3 shows the handle of said box in a cross-sectional view taken along the line III-III of Fig. 1;

Fig. 4 shows said handle in a cross-sectional view taken along the line IV-IV of Fig. 1.

In the drawings there is shown a cardboard box 1 of a parallelepiped shape, that is endowed with an upper grasping handle 2 consisting of a pair of opposite flaps 3 of the box itself side by side to one another and cut so as to define a shaped slot 4 for hooking to a display case. Inside the box the presence is hypothesised of packaged articles, represented diagrammatically and indicated with 5.

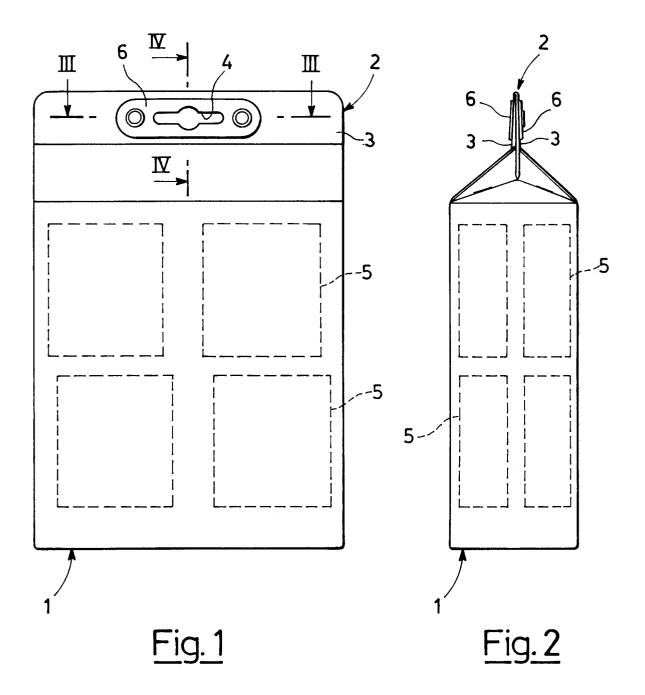
The slot 4 is bordered by a pair of reinforcing plates 6 in rigid synthetic material, that are endowed with slits identical to those of said slot 4 and are applied and fastened together on opposite sides with respect to the two cardboard flaps 3 that form the grasping handle.

Fastening is obtained as an example by means of a male-female coupling 7.

In addition to reinforcing the slot 4 the two plates 6 operate evidently as a resisting closing element of the box.

### Claims

- 1. A cardboard box with a grasping handle (2) formed by two side-by-side cardboard flaps (3) cut so as to define a slot (4) for hooking to a display case, characterized in that said slot (4) is bordered by a pair of reinforcing plates (6) in rigid synthetic material endowed with slits identical to those of said slot (4) and applied and fastened together on opposite sides with respect to the two flaps (3) that form the grasping handle.
- A cardboard box according to claim 1, characterized in that said reinforcing plates (6) are fastened together by means of male-female couplings (7).



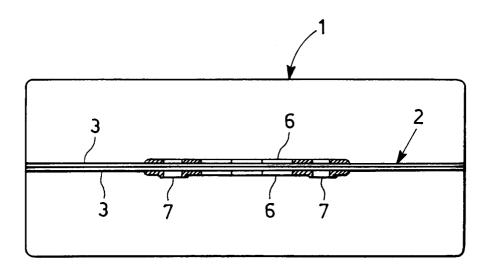
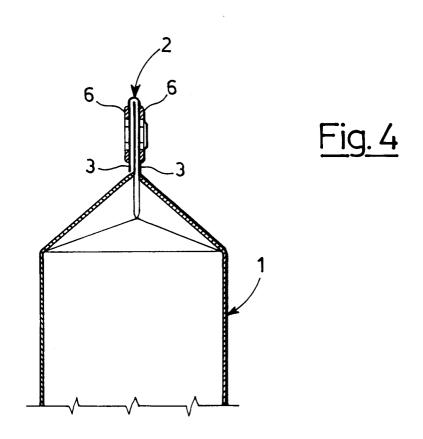


Fig. 3





## **EUROPEAN SEARCH REPORT**

Application Number EP 96 20 3224

Category	Citation of document with indication of relevant passages		Relevant to claim	CLASSIFICATION OF THI APPLICATION (Int.Cl.6)	
A	EP 0 454 521 A (SARL) * abstract; claims 1,2,8	3-10; figures *		B65D5/42	
A	DE 78 32 215 U (EHM) * claims; figures *	1	,2		
A	GB 2 278 342 A (SCHERING * page 1, line 13 - line * page 3, line 21 - page	22; figures *			
A	GB 2 246 114 A (MORPLAN) * abstract; figures *	1			
A	DE 30 34 363 A (ZEYEN)				
	·			TECHNICAL FIELDS SEARCHED (Int.Cl.6)	
				B65D	
	The present search report has been draw	vn up for all claims			
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