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(54) Packaging for pot plants

(57) A packaging for nursery small pot plants comprises a casing (1) inside which a vase-carrier (2) is arranged provided with a plurality of seats suitable to receive the vases (3) of the small pot plants. The packaging further comprises a first blocking means (4) of the vases (3), arranged on the upper surface of said vase-carrier (2) and integral therewith, and a second blocking means

(6) of the vase-carrier (2) arranged between the bottom of the casing (1) and the upper surface of the vase-carrier (2). The packaging according to the present invention prevents its content from coming out and overturning even in case of a complete overturn during transportation, thus avoiding the damage and/or the loss of the small pot plants contained therein.

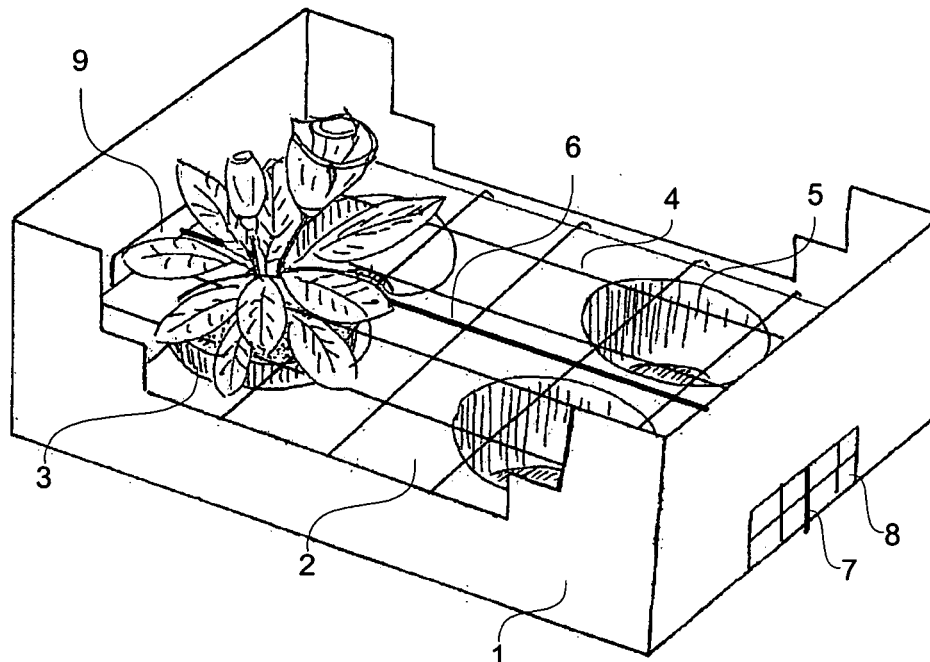


Fig. 1

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Description

[0001] The present invention relates to an improved packaging for nursery small pot plants.

[0002] It is known that pot plants of small size cultivated in nurseries are sold in batches and transported by means of suitable packagings. The packagings are usually comprised of an outer casing, for example a carton box, containing a vase-carrier tray made of plastic into which the vases containing the small pot plants are fitted. In order to prevent the small pot plants from moving with respect to the vase-carrier or even overturning during transportation, the vase-carriers are usually provided with a plurality of frustum-shaped cavities, or seats, suitable to receive the small vases of corresponding geometry with a minimum play. In this way, each vase is inserted in a corresponding seat in the vase-carrier and this allows to keep the small pot plants in the proper position during transportation at an adequate distance from each other.

[0003] One problem of the known packagings is that, in case of strong stresses during transportation, the small pot plants can easily come out from the respective seats formed in the vase-carrier, thus damaging themselves or the adjacent plants. In the extreme case of the overturning of the whole casing, all the small pot plants contained in the vase-carrier may overturn resulting in even unreparable damages.

[0004] It is therefore an object of the present invention to provide a packaging free from said disadvantages. Said object is achieved with a packaging, whose main features are disclosed in claim 1 and other features are disclosed in the remaining claims.

[0005] The packaging according to the present invention comprises a first blocking means for holding the small pot plants in the respective seats in the vase-carrier and a second blocking means for fixing the vase-carrier onto the bottom of the casing. This expedient allows to solve the problem at the basis of the present invention. Through its use the packaging prevents its content from coming out or overturning even in the case of a complete overturn during transportation, thus avoiding the damaging and/or the loss of the small pot plants contained therein.

[0006] An advantage offered by the present invention is that the first and the second blocking means are easily installable and removable, allowing the maximum packaging and opening ease of the packaging.

[0007] Moreover, the packaging according to the present invention is very inexpensive and easy to manufacture, thus contributing in a minimum amount to the final cost of the transported product.

[0008] Further advantages and features of the packaging according to the present invention will become clear to those skilled in the art from the following detailed and non-limiting description of an embodiment thereof with reference to the attached drawings, wherein:

- Figure 1 shows a packaging according to the present

invention; and

- Figure 2 shows the vase-carrier of the packaging shown in Fig. 1.

[0009] Referring to Figures 1 and 2, the improved packaging for small pot plants according to the present invention comprises in a known way a casing 1 inside which a vase-carrier 2 is arranged, provided with a plurality of cavities or seats suitable to receive the vases 3 of the small pot plants. During transportation, casing 1 is closed by means of a common cover (not shown). The packaging also comprises a first blocking means 4 of vase-carrier 2, arranged on the upper surface of vase-carrier 2 and integral therewith, and a second blocking means 6 of vase-carrier 2, arranged between the bottom of casing 1 and the upper surface of vase-carrier 2.

[0010] The first blocking means 4 serves to hold the vases 3 of the small pot plants in the respective seats of vase-carrier 2, while the second blocking means 6 serves to fix vase-carrier 2 onto the bottom of the casing. In such a way a packaging is achieved capable of withstanding the stresses of transportation, without damages to the small pot plants contained therein.

[0011] The first blocking means 4 is formed of a plurality of elastic meshes 5, each arranged in positions corresponding to the seats for the vases 3 and defining an aperture having an area lower than the area of the respective seat. The vase 3 of a small pot plant is inserted in its own seat into vase-carrier 2 by exploiting the elasticity of mesh 5, which dilates allowing the entrance of vase 3 and then closes above it, thus accomplishing a constraint in the vertical direction. In order to extract the small pot plant from vase-carrier 2, the elastic mesh 5 must be dilated, e.g. manually, up to enabling the passage of vase 3.

[0012] In a preferred embodiment, the first blocking means 4 of the vases 3 is a net formed of fibers made of an elastomeric material. In order to allow an easy mounting of the net onto vase-carrier 2, this has a tubular shape and is inserted so as to wrap vase-carrier 2 in a substantially complete way. This embodiment is particularly inexpensive and easy and fast to manufacture, thus responding to the main needs of the users of the packaging.

[0013] In a preferred embodiment, the second blocking means 6 of vase-carrier 2 comprises at least one thin rope 7 tightened between two opposite edges of the bottom of casing 1 and pressed against the upper surface of vase-carrier 2. The thin rope 7 goes in and out from casing 1 through a couple of opposite openings 8, 9 formed in its side walls in proximity to its bottom and defines a complete turn around vase-carrier 2 and the bottom of casing 1.

[0014] Alternatively, the second blocking means 6 of vase-carrier 2 may comprise a series of thin ropes tightened between the opposite edges of the bottom of casing 1 both in longitudinal and transverse directions. Similarly to what described above, the thin ropes go in and out from casing 1 through couples of opposite openings ar-

ranged on its side walls in proximity to the bottom of the casing. This solution is particularly suitable for the packaging of pot plants of a larger size, which provide the vase-carrier with a greater weight and consequently with a greater inertia during transportation.

[0015] When opening the packaging, vase-carrier 2 may be easily removed from casing 1 just by cutting the thin rope 7 from the outside of the casing.

[0016] The embodiment of the packaging according to the invention above described and illustrated is only an example susceptible of numerous variants. For example, the constraint between the vase-carrier and the casing could be achieved by means of hooks or clamps anchored to the bottom of the casing and suitable to engage the vase-carrier in correspondence to its upper surface or its side walls.

Claims

1. A packaging for nursery small pot plants comprising a casing (1) inside which a vase-carrier (2) is arranged provided with a plurality of cavities, or seats, suitable to receive the vases (3) of the small pot plants, **characterized by** further comprising a first blocking means (4) of the vases (3), arranged on the upper surface of said vase-carrier (2) and integral therewith, and a second blocking means (6) of the vase-carrier (2) arranged between the bottom of the casing (1) and the upper surface of the vase-carrier (2). 20
2. A packaging according to the previous claim, **characterized in that** said first blocking means (4) is provided with a plurality of elastic meshes (5) each arranged in positions corresponding to the seats for said vases (3). 25
3. A packaging according to the previous claim, **characterized in that** each of said elastic meshes (5) defines an aperture having an area lower than the area of the respective seat. 30
4. A packaging according to any of the previous claims, **characterized in that** said first blocking means (4) is a net formed of fibers made of an elastomeric material. 35
5. A packaging according to the previous claim, **characterized in that** said net is tubular-shaped and completely wraps the vase-carrier (2). 40
6. A packaging according to any of the previous claims, **characterized in that** said second blocking means (6) of the vase-carrier (2) comprises at least one thin rope (7) tightened between two opposite edges of the bottom of the casing (1) and pressed against the upper surface of the vase-carrier (2). 45
7. A packaging according to the previous claim, **characterized in that** said at least one thin rope (7) goes in and out from the casing (1) through a couple of opposed openings (8, 9) formed in its side walls in proximity to its bottom and defines a complete turn around the vase-carrier (2) and the bottom of the casing (1). 50
8. A packaging according to the claim 6 or 7, **characterized in that** said second blocking means (6) of the vase-carrier (2) comprises a series of thin ropes tightened between the opposite edges of the casing (1) both in longitudinal and transverse directions, said thin ropes going in and out from the casing (1) through couples of opposite openings arranged on the side walls in proximity to its bottom. 55

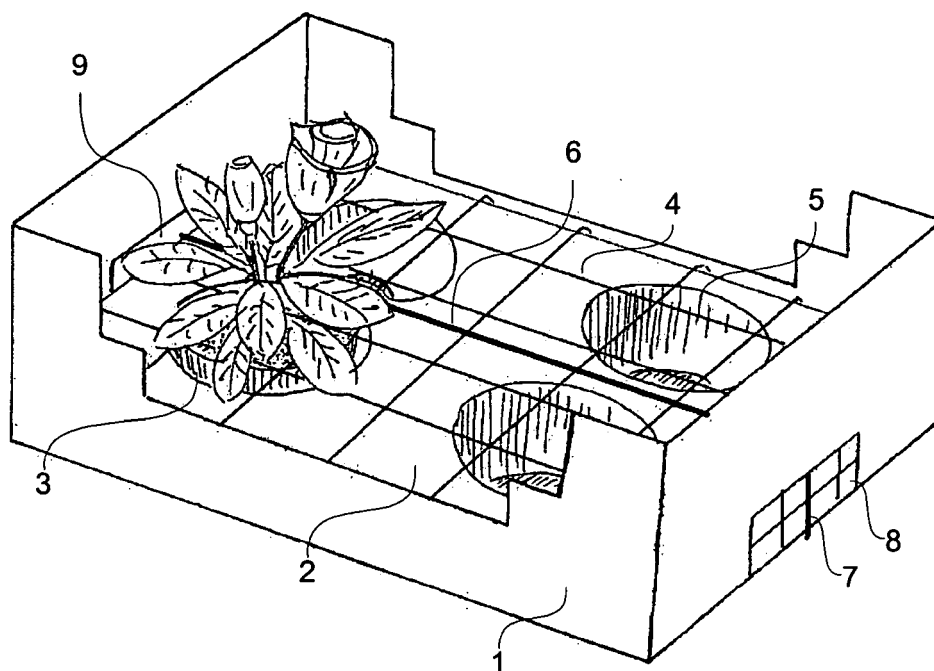


Fig. 1

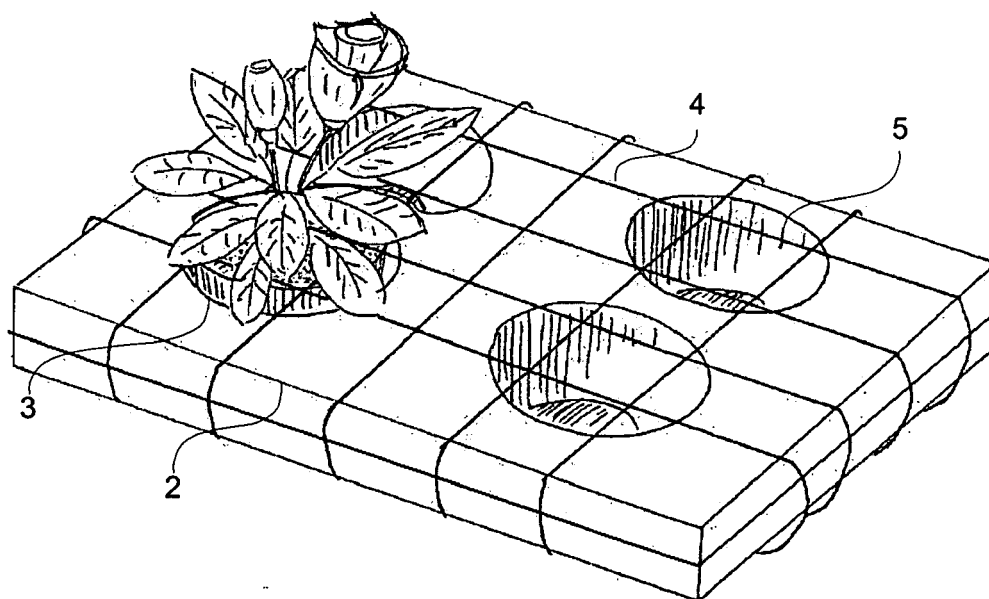


Fig. 2



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 42 5017

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 3 028 005 A (SHAFFER ROBERT J) 3 April 1962 (1962-04-03) * the whole document *	1	INV. B65D5/50 B65D85/52
A	GB 2 258 454 A (MOULDED PLASTICS [GB]) 10 February 1993 (1993-02-10) * the whole document *	1	
A	FR 1 361 055 A (ROULLEAU-GALLAIS J C) 15 May 1964 (1964-05-15) * the whole document *	1	
A	GB 1 186 264 A (DUFFIN CONTAINERS LTD) 2 April 1970 (1970-04-02) * the whole document *	1	
A	FR 2 681 578 A1 (EMBALLAGES STE MEDITERRANEE [FR]) 26 March 1993 (1993-03-26) * the whole document *	1	
A	DE 201 06 917 U1 (SCA PACKAGING DEUTSCHLAND AG & [DE]) 26 July 2001 (2001-07-26) * the whole document *	1	TECHNICAL FIELDS SEARCHED (IPC) B65D
A	US 2 089 728 A (BROGDEN ERNEST M) 10 August 1937 (1937-08-10) * page 3, column 1, lines 49-56; figure 1 *	1	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 27 June 2007	Examiner Visentin, Mauro
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.**

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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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27-06-2007

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3028005	A	03-04-1962	NONE	
GB 2258454	A	10-02-1993	NONE	
FR 1361055	A	15-05-1964	NONE	
GB 1186264	A	02-04-1970	NONE	
FR 2681578	A1	26-03-1993	NONE	
DE 20106917	U1	26-07-2001	NONE	
US 2089728	A	10-08-1937	NONE	