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(54) Multiple container assembly for the selective collection of waste

(57) The multiple container comprises at least one hollow body or unitary container (1,1') which, via its rear

part, incorporates a large lower opening (7,7') for introducing a receptacle (8,8') in its interior, inside which the waste introduced via a front opening (5) with lid (6).

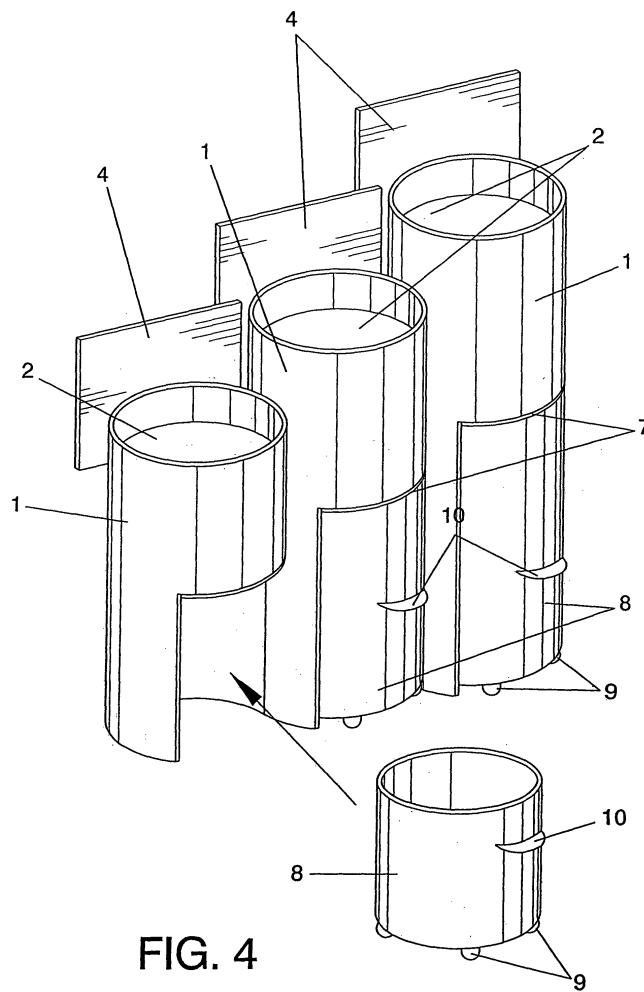


FIG. 4

Description**OBJECT OF THE INVENTION**

[0001] As stated in the title of this descriptive specification, the present invention relates to a multiple container for selective collection of waste, intended to provide the user with a comfortable connection between the environment and the corresponding selective collection deposit for the respective waste.

[0002] It is essentially applicable to containers for plastics, cardboard and paper, and glass, in such a way that its new structure facilitates the collection and extraction of waste.

BACKGROUND OF THE INVENTION

[0003] Nowadays, containers for organic waste, comprising a hinged lid occupying the entire upper surface of those containers, are perfectly well known.

[0004] Also known are containers for another type of waste, such as containers for plastics, cardboard and paper materials, and glass.

[0005] These latter containers usually incorporate at least one opening for introducing the waste in such a way that when the containers are emptied in order to remove the waste, the entire corresponding container has to be handled. In particular, in the case of containers for glass and paper (including cardboard) they incorporate an internal mechanism for removing the waste via the base of the corresponding container.

DESCRIPTION OF THE INVENTION

[0006] With the aim of achieving the objectives and avoiding the drawbacks mentioned in the above sections, the invention proposes a multiple container for selective collection of waste **characterized in that** it comprises at least one hollow body or unitary container which, via its rear part, incorporates a large lower opening for the fitting in its interior of a receptacle with wheels, inside which the corresponding waste will be deposited which the user has previously introduced via a front opening located in an upper part of each container. This upper opening incorporates a hinged lid with the aim of providing the user with a comfortable connection between the environment and the selective collection deposit of the waste.

[0007] So, once the corresponding receptacle with wheels has been filled, it is extracted outwards in order to empty it and, once emptied, it is reintroduced once again. The different receptacles incorporate some handles in order to facilitate their handling. The wheels are free-turning, which permits easy withdrawal of the container, with some conventional means of securing being previously unlocked by a cleaning operator in order to carry out the pertinent operations or removal of waste, cleaning and maintenance of the installation.

[0008] The arrangement described here substantially facilitates the removal of the waste, as well as the cleaning and maintenance tasks for the installation, which includes the different volumes of the multiple container, as well of each of the deposits, as is evident.

[0009] Another characteristic of the invention is that, with the aim of integrating the multiple container forming the object of the invention into the urban landscape, provision is made for the creation of a recess in the upper face of said container, where different natural ornamental elements will be located, such as seasonal plants or fruit trees. Moreover, it is also suitable for incorporating a lighting element, such as a street-lamp, which can be fixed to the said upper face and provide the lighting needed for the proper functioning of the inventive device during the hours of darkness.

[0010] Furthermore, the multiple container forming the object of the invention also provides different ways of identifying the material or waste to receive. Provision is thus made for each of the containers to be decorated with different colors and also the incorporation of informative notices with the names of the materials of that waste.

[0011] Below, in order to facilitate a better understanding of this descriptive specification and forming an integral part thereof, some figures are attached in which, on an illustrative and non-limiting basis, the object of the invention has been represented.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012]

Figure 1.- Shows a perspective view of a multiple container for the selective collection of waste, forming the object of the invention. The view is seen from the front part.

Figure 2.- Shows another view similar to the previous one.

Figure 3.- Shows another view in perspective of the multiple container of the invention.

Figure 4.- Shows a perspective view of a multiple container with a receptacle housed in the lower part of the corresponding unitary container for the collection of waste, as it is introduced inside the respective container.

DESCRIPTION OF THE PREFERRED FORM OF EMBODIMENT

[0013] Considering the numbering adopted in the figures, the multiple container for selective collection of waste is defined on the basis of three unitary containers, 1, 1': one for plastic materials, another for paper and cardboard, and a third one for glass.

[0014] In correspondence with the upper base of the unitary containers 1, 1', there exists a depression or recess 2, 2' where different natural ornamental elements

will be able to be housed, such as plants 3 or supports with different adornments 4 or others.

[0015] In correspondence with the front panel of the unitary containers, there exist some upper openings 5 with hinged lids 6 via which the different waste will be introduced.

[0016] On the other hand, in correspondence with the rear panel there exist some large lower openings 7, 7', which permit the introduction inside the unitary containers 1, 1' of respective receptacles 8, 8' with wheels 9, these receptacles 8, 8' being able to be fitted against the inner face of the walls of the unitary containers 1, 1', in such a way that the waste that is introduced via the upper openings 5 will fill these receptacles 8, 8' which are then extracted, this being facilitated thanks to the wheels 9 and some handles 10 of the receptacles 8, 8'.

[0017] A preferred embodiment of the invention provides for the juxtaposition of the three unitary containers staggered in the same geometric configuration, though with different heights and joined together by conventional means, such as a common support where the three containers are located, for example some elements for joining between walls such as hooks and complementary holes, among others.

[0018] The unitary containers can be located in line or be grouped into other arrangements as well, as shown in figure 2, for example. It can also be pointed out that the number of unitary containers can be one, two, three or more and they do not have to be staggered.

[0019] Finally, as shown in figure 2, the unitary containers 1 can incorporate a closure body 11 adapted to the lower openings 7, 7'.

Claims

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1. MULTIPLE CONTAINER FOR SELECTIVE COLLECTION OF WASTE, which, being destined for the collection of different waste, is **characterized in that** it comprises at least one hollow body or unitary container (1, 1') which, via its rear part, incorporates a large lower opening (7, 7') for introducing a receptacle (8, 8') in its interior, inside which the waste introduced via a front opening (5), with lid (6) provided above is deposited.

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2. MULTIPLE CONTAINER FOR SELECTIVE COLLECTION OF WASTE, according to claim 1, **characterized in that** the receptacle (8, 8') incorporates wheels (9) in its base in order to facilitate the introduction and extraction of the receptacle (8, 8').

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3. MULTIPLE CONTAINER FOR SELECTIVE COLLECTION OF WASTE, according to claim 1 or claim 2, **characterized in that** the receptacle (8, 8') incorporates handles (10) in order to facilitate its handling.

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4. MULTIPLE CONTAINER FOR SELECTIVE COL-

LECTION OF WASTE, according to claim 1, 2 or 3, **characterized in that** the at least one unitary container (1, 1') incorporates a depression or recess (2, 2') in correspondence with the upper base of the container (1, 1') where an ornamentation of natural plants (3) or supports (4) with different ornaments or others is arranged.

5. MULTIPLE CONTAINER FOR SELECTIVE COLLECTION OF WASTE, according to claim 1, 2, 3 or 4, **characterized in that** the at least one unitary container (1, 1') incorporates a closure body (11) adapted to the lower opening (7, 7').

15. MULTIPLE CONTAINER FOR SELECTIVE COLLECTION OF WASTE, according to claim 1, 2, 3, 4 or 5, **characterized in that** the receptacle (8, 8') is fitted against the inner faces of the side walls of the at least one unitary containers (1, 1').

20. MULTIPLE CONTAINER FOR SELECTIVE COLLECTION OF WASTE, according to claim 1, 2, 3, 4, 5 or 6, **characterized in that** the unitary containers (1, 1') are attached to each other.

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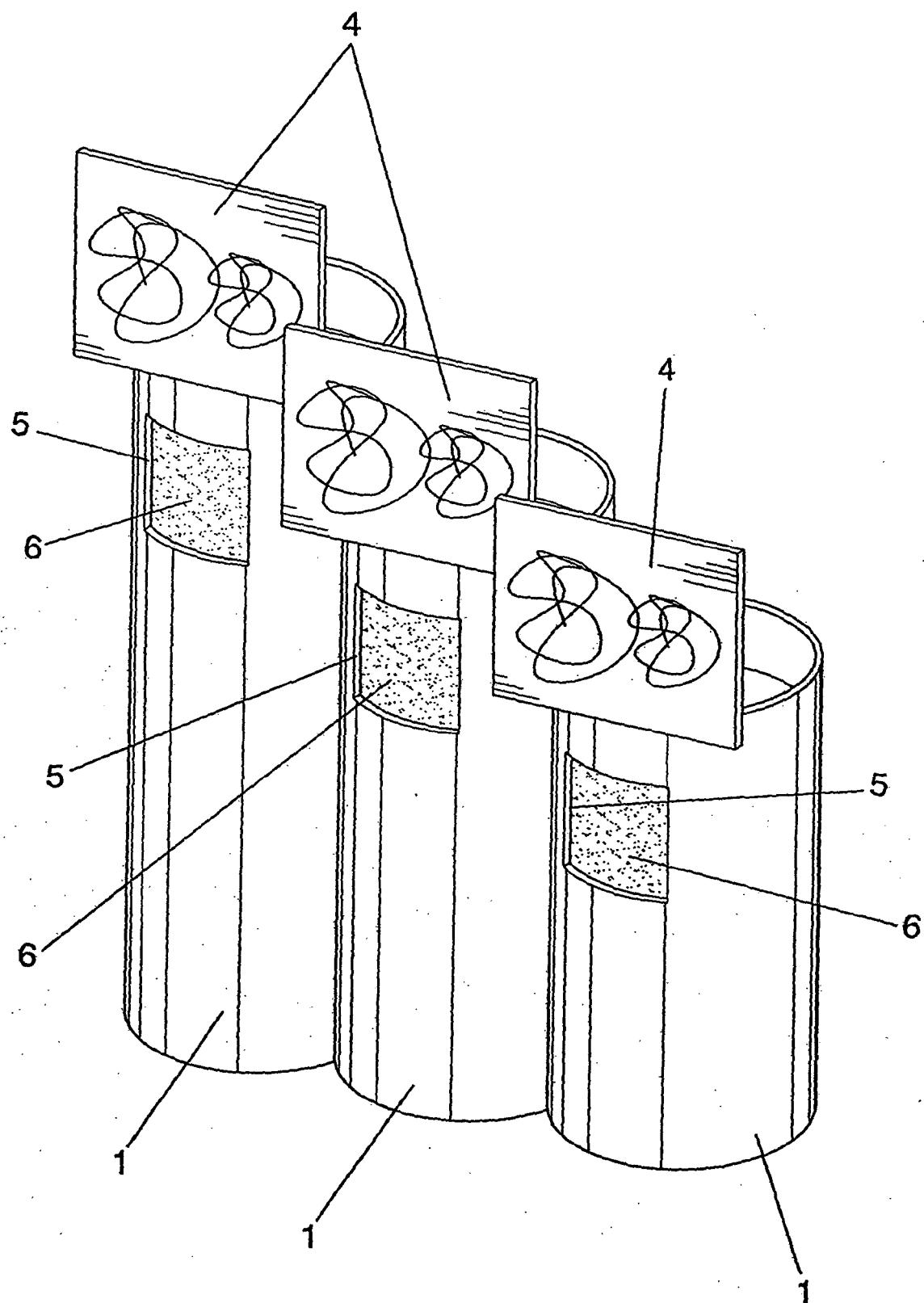


FIG. 1

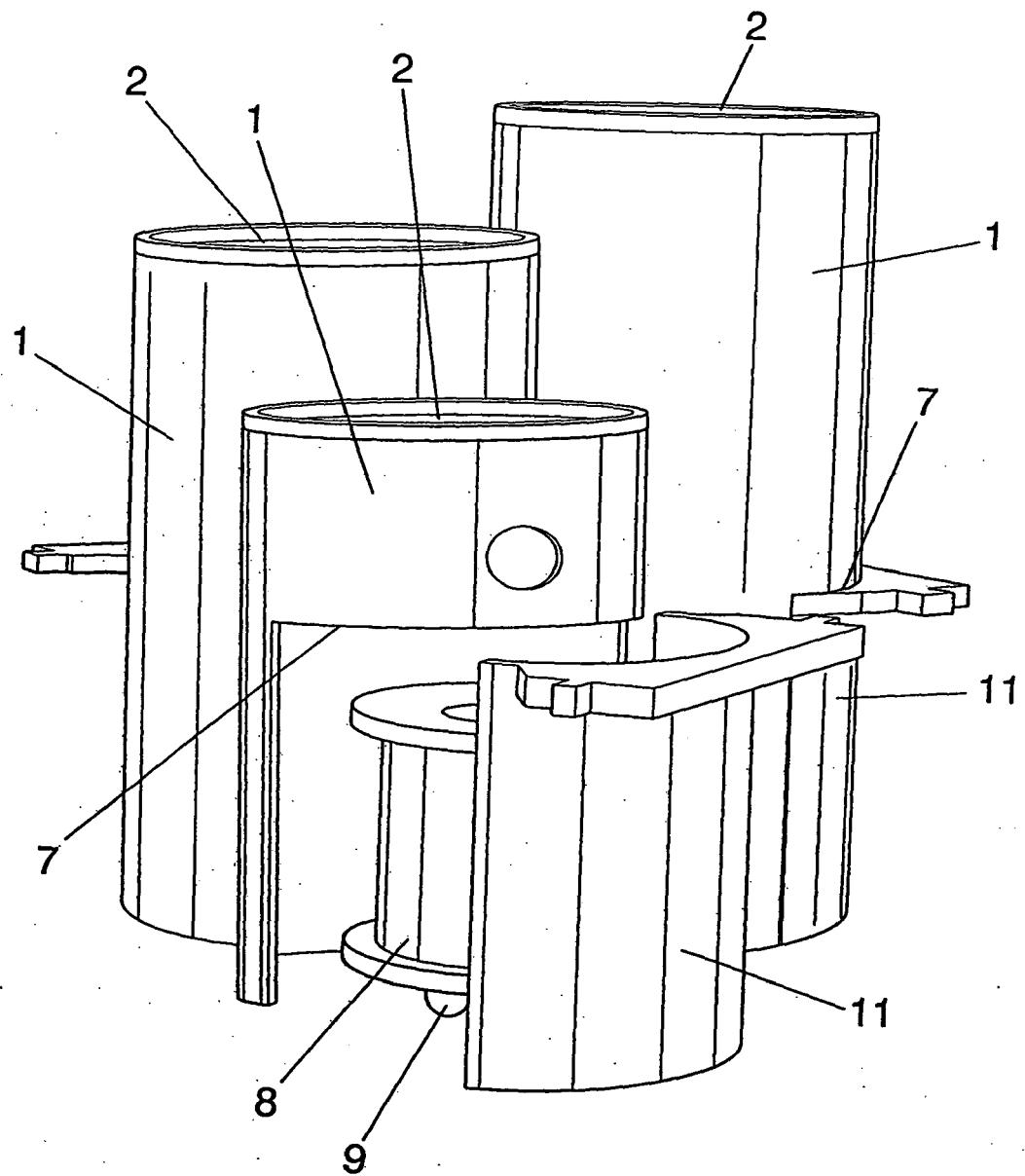


FIG. 2

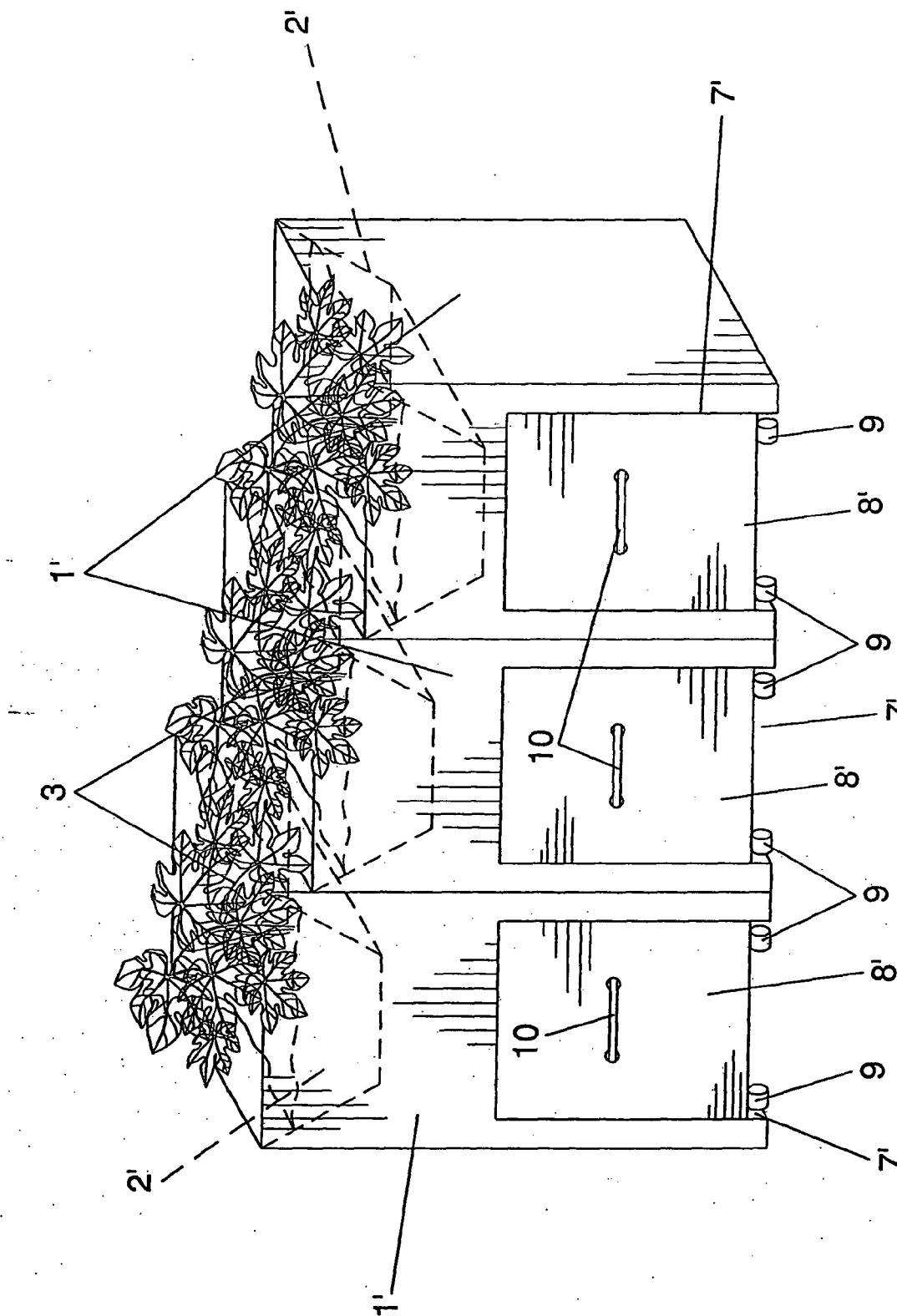


FIG. 3

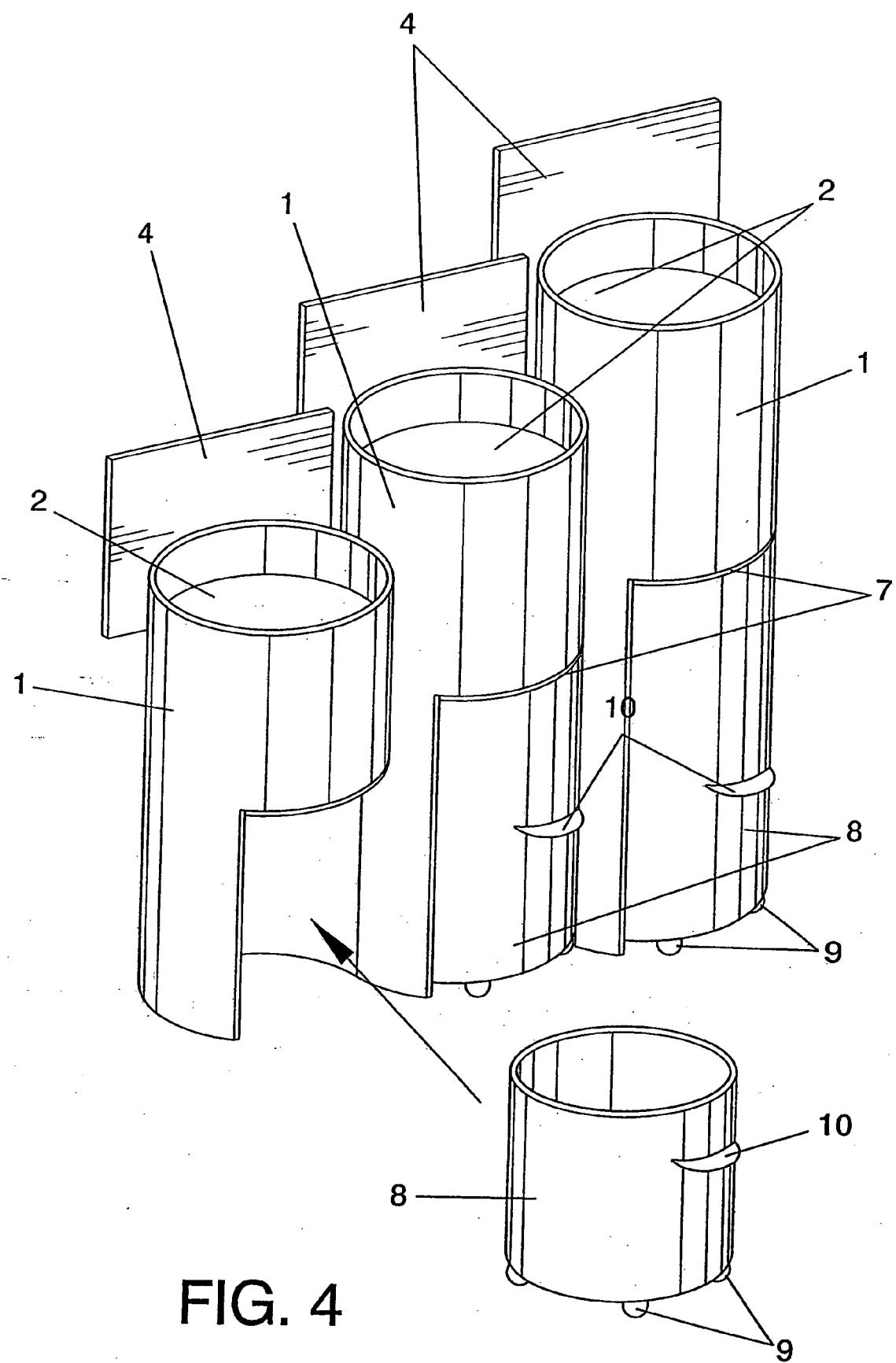


FIG. 4



EUROPEAN SEARCH REPORT

 Application Number
 EP 09 38 0088

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	GB 2 312 828 A (PDG LTD.) 12 November 1997 (1997-11-12)	1,5-6	INV. B65F1/14
A	* page 5, line 2 - line 11 * * page 6, line 2 - line 11 * * figures 1,4-6 *	2-4,7	
X	-----		
X	GB 2 393 102 A (VALPAK LTD.) 24 March 2004 (2004-03-24)	1,5-7	
A	* page 2, line 16 - page 3, line 7 * * figures 1-4 *	2-4	
X	-----		
X	US 5 377 907 A (P. GUARD) 3 January 1995 (1995-01-03)	1-3,5	
A	* column 3, line 46 - column 5, line 4 * * figures 1-3 *	4,6-7	
A	-----		
A	US 5 105 968 A (B. FITERMAN ET AL.) 21 April 1992 (1992-04-21) * the whole document *	1-7	

			TECHNICAL FIELDS SEARCHED (IPC)
			B65F
The present search report has been drawn up for all claims			
1	Place of search	Date of completion of the search	Examiner
	The Hague	24 August 2009	Smolders, Rob
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 C : 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			

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

EP 09 38 0088

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24-08-2009

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