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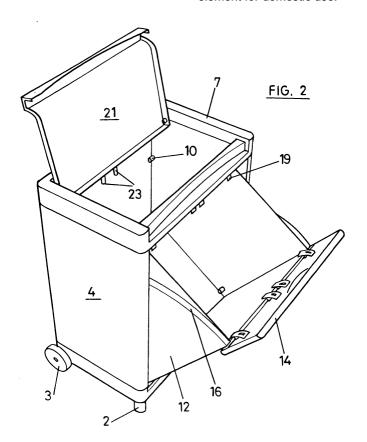
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## (54) REFUSE SORTING CONTAINER

(57) A selective garbage container having a prismatic body, open at the front, the bases of which are carried out in respective rectangular frames (7), such that the body is open at the top and bottom. A pivoting

drawer (12) is housed inside this body that can be accessed both from the front area of the body and from the top area by means of pivoting of a top tray (21) acting as a cover. The container is especially designed as an element for domestic use.



#### Description

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

**[0001]** The present invention refers to a garbage container, specifically to a container for domestic use or the like, that allows selecting different types of garbage housed inside it in respective bags.

**[0002]** The object of the invention is to obtain a modular container with an appearance similar to that of a piece of kitchen furniture and, accordingly, easy to integrate in the aesthetics of a room of this type, which can be joined both horizontally and vertically to other similar modules due to its modular nature in order to enhance the containing capacity, which is easily extractible for transport thereof by means of incorporating wheels and a handle thereto, such that the container itself is usable as a means of carrying the garbage bags to the site where they are finally thrown out.

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

**[0003]** Different types of selective garbage containers for domestic use are known, but all of them have the common denominator of being made with a multicompartmental body which sometimes forms an autonomous element and which other times is intended for being integrated into the kitchen furniture, but which in any case has drawbacks mainly focusing on the following aspects:

- The compartmentalization of the container is carried out beforehand, such that sometimes it will adjust to the specific needs of each user, but in most cases the compartmentalization is not the most suitable.
- Its lack of modular design also makes it impossible to increase its overall capacity when this is required.
- When it is an autonomous element, it cannot be built into the kitchen furniture.
- Sometimes it is accessed from the front and other times from the top, which also limits the possibility of its practical use in both cases.
- The bags containing the different types of garbage must be extracted from inside the container in its working area and manually taken to the final site where they are thrown out.

## **DESCRIPTION OF THE INVENTION**

**[0004]** The selective garbage container proposed by the invention fully resolves in a satisfactory manner the drawbacks previously set forth in each and every one of the different aspects discussed.

**[0005]** To that end and more specifically the container is formed from a basically rectangular prismatic body resting on a pair of legs and a pair of wheels, which body is provided with a front opening and another top open-

ing, a pivoting tray being arranged on the latter such that in the closed position it can be used to place any type of object thereon, whereas in an open position it allows direct access to the inside of the body and, accordingly, to the garbage bags arranged therein.

**[0006]** For its part, the front opening closes by means of a door simulating the door of a piece of kitchen furniture, finished on the top portion with a type of drawer front through which it is aesthetically integrated into the kitchen furniture, said door forming part of a pivoting drawer at its front bottom edge such that said drawer is accessible from the front in the pivoting or open position for the door, while at the same time it can be accessed from the top when the top tray is lifted.

**[0007]** Two zipper-type horizontal guides are arranged in said drawer that allow introducing a plurality of clips with positional adjustment ability for fixing the opening of the bags, such that both the number of bags used and the width of the effective opening thereof may be varied.

**[0008]** Finally and according to another feature of the invention, there is a handle in the top frame of the body where said tray pivots that facilitates manual transport of the container on the pair of bottom wheels.

## **DESCRIPTION OF THE DRAWINGS**

**[0009]** To complement the description being made and for the purpose of aiding to better understand the features of the invention, according to a preferred practical embodiment thereof, a set of drawings is attached as an integral part of said description in which the following has been shown with an illustrative and non-limiting character:

Figure 1 shows a perspective view of a schematic representation of a selective garbage container carried out according to the object of the present invention, which container is completely closed.

Figure 2 also shows a perspective view of the container of Figure 1, now completely open.

Figure 3 shows an exploded perspective view of the same container.

Finally, Figure 4 shows a detail of one of the geared guides for assembly of the clips together with one of said clips.

## PREFERRED EMBODIMENT OF THE INVENTION

[0010] In view of the discussed figures, it can be seen how the container proposed by the invention is formed from a bottom skirting board (1) carried out in a rectangular frame where a pair of legs (2) and a pair of wheels (3) are arranged to facilitate both its settling on the floor and its movement, said skirting board (1) participating in a body in which a pair of side walls (4) also participate, provided with bottom cylindrical trunnions (5) for their coupling in housings (6) operatively made on the frame

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(1), as well as top trunnions (5') through which a top frame (7) is received which, together with a rear portion (8), complete said body, said rear portion (8) forming a type of tray with side openings (9) for the coupling of pivots (10) projecting from said sides (4) of the body, which is thus assembled by simple tongue and groove coupling between the different elements forming it.

[0011] The same sides (4) have in the area around their front bottom vertex a pivot (11) which, with the pivot on the other side, form the pivot shaft for a drawer (12) which in the opened position adopts the position shown in Figure 2, in which drawer (12) there is a front door (13) finished at the top with a type of drawer front (14) with its corresponding handle (15) to facilitate the pivoting of the drawer (12) itself on said shaft (11), with the collaboration of side guides (16) finished with stops (17) that act on complementary stops (17') of the sides (4) to limit the opening of the drawer (12).

**[0012]** Said drawer (12) incorporates on its front and back walls, at a suitable height level and preferably as a single-piece, respective geared guides (18) on which a plurality of clips (19) are arranged with positional adjustment that are usable for fixing several garbage bags receiving different types of wastes to the opening of the drawer (12), and subsequently to the guides (18).

[0013] As a complement of the described structure, the top frame (7) incorporates a pair of side pivots (20) acting as a pivot shaft for a top tray (21) configuring a receptacle with the frame (7) itself in the closed position and allowing, for example, arranging thereon reserve garbage bags, especially when the container is fitted under the kitchen furniture countertop, said frame (7) further incorporating outside the tray (21) a small back receptacle (22) in which there is a retractable handle (23) intended for facilitating transport of the container rolling on its bottom wheels (3).

**[0014]** It can be deduced from the described structure that the container of the invention can be laterally placed against another or other identical containers, that it also offers the possibility of stacking, and in either case, the different modules can be fixed to one another by means of a suitable clipping or quick attachment system. In the most standard case of use as another module in the kitchen furniture, its legs (2) are concealed by the classic skirting board that this type of furniture has.

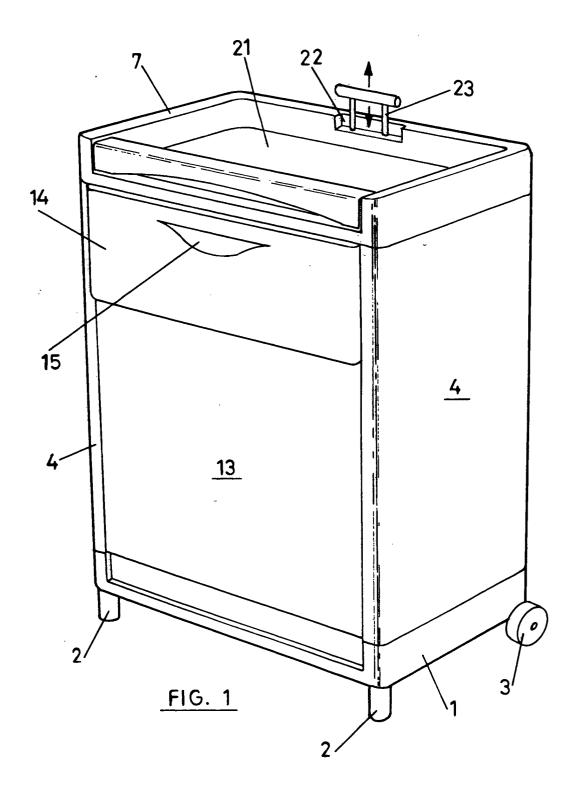
## **Claims**

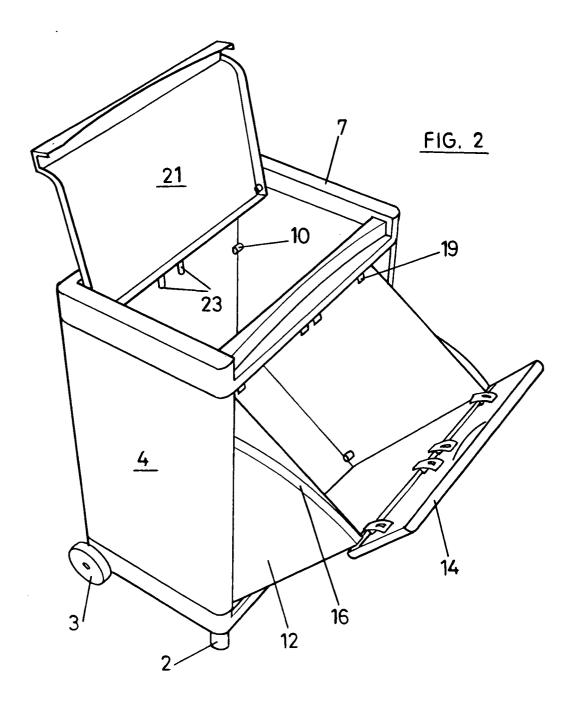
1. A selective garbage container being particularly designed as an element for domestic use, characterized by having a basically rectangular prismatic body opened at the front, the bases of which are carried out in respective also rectangular frames, such that it is also open at the top and bottom, inside which body there is a drawer having a similar configuration that pivots through an imaginary axis close to its front bottom edge, such that said drawer

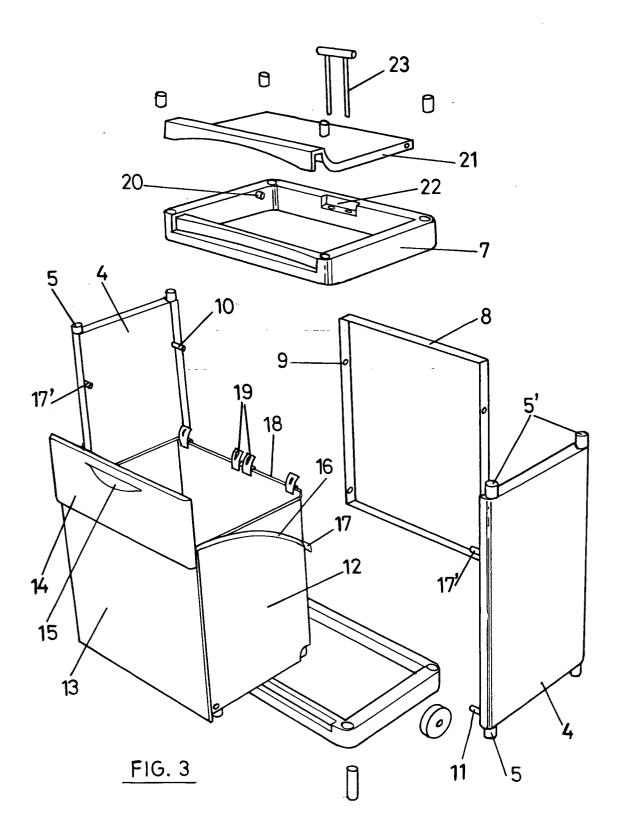
can be accessed from the front of the body by means of pivoting thereof in this direction, as well as from the top area through the also top frame.

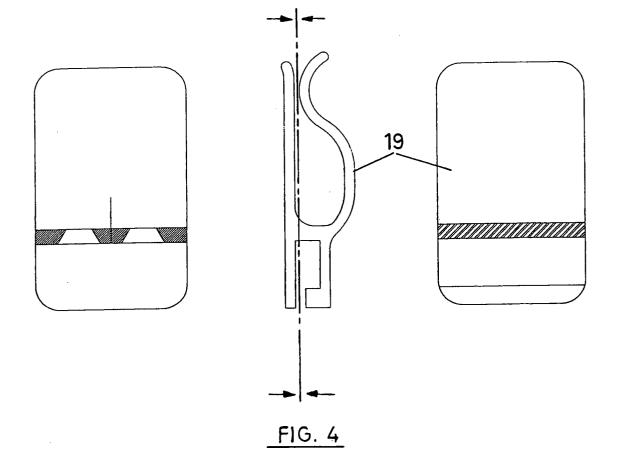
- 2. A selective garbage container according to claim 1, characterized in that said body incorporates in its bottom frame a pair of legs and a pair of wheels for support and sliding on the ground, and a pair of pivots on its top frame forming the pivot shaft for a tray functionally closing said frame, as well as a side recess in which there is a retractable handle.
- 3. A selective garbage container according to the previous claims, characterized in that inside the drawer two horizontal and geared guides are arranged, one on its front wall and another one on its back wall, where there is a plurality of clips with positional adjustment ability forming the fixing means for the bags receiving the wastes, such that the openings of said bags are determined by the spacing between the pair of clips supporting them.
- 4. A selective garbage container according to the previous claims, characterized in that the front wall of the pivoting drawer is similar to the door of a kitchen furniture module, with a simulated top drawer front provided with a handle for the pivoting thereof.

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## INTERNATIONAL SEARCH REPORT

International application No. PCT/ ES2004/000049

A. CLASSIFICATION OF SUBJECT MATTER

**IPC 7** B65F 1/14, B65F 1/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

## **IPC 7** B65F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

# CIBEPAT, EPODOC, WPI, PAJ

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
DE 3333316 A1 (KAMINSKY) 28.03.1985, The whole document	1,4.
WO2004000695 A1 (ROMEO) 31.12.2003, The whole document	1
ES 1040539 U (GÓMEZ ROBLES) 16.04.1999,  The whole document	. 1
US 5348222 A (PATEY) 20.09.1994, The whole document	1
FR 2683511 A (PICCOLI) 14.05.1993, página 2, línea 17 - <b>page</b> 5, líne 5; <b>figures</b>	1, 2
FR 2784362 A1 (MYSZOWSKI) 14.04.2000, The whole document	1
	DE 3333316 A1 (KAMINSKY) 28.03.1985, The whole document  WO2004000695 A1 (ROMEO) 31.12.2003, The whole document  ES 1040539 U (GÓMEZ ROBLES) 16.04.1999, The whole document  US 5348222 A (PATEY) 20.09.1994, The whole document FR 2683511 A (PICCOLI) 14.05.1993, página 2, línea 17 - page 5, líne 5; figures  FR 2784362 A1 (MYSZOWSKI) 14.04.2000,

x	Further documents are listed in the continuation of Box C.	X See patent family annex.			
* "A" "E"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance earlier document but published on or after the international filing date	"X" document of particular relevance: the claimed invention cannot be			
"L" "O" "P"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a presc			
Date	of the actual completion of the international search  02 APRIL2004 (02.04.04)	Date of mailing of the international search report  06 APR 2004 (06.04.04)			
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# INTERNATIONAL SEARCH REPORT

International application No.
PCT/ ES2004/000049

		FC1/E32004/	
C (Continuation	on). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relev	Relevant to claim No	
A	US 5984134 A (MARIO) 16.11.1999, column 2, líne column 4, líne 2; <b>figures</b>	60	1
A	AT 344609 B (RUTHNER) 10.08.1978, claims 1, 2; figures		3
A	US 5190252 A (SCHRAGER) 02.03.1993, column 1, líne 40 - column 2, líne 15; <b>figures</b>		3
<b>A</b> .	ES 1042113 U (FERNÁNDEZ MARTÍNEZ) 16.08.1999	•	

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

# EP 1 598 289 A1

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/ ES2004/000049

Patent document cited in search report	Publication date	on Patent familiy member(s)			Publication date
DE 3333316 A		28.03.1985	DE 8326524	4 U	10.11.1983
WO 2004000695 A		31.12.2003	ITRM20020120U		19.12.2003
ES 1040539 U		16.04.1999	ES 104053	39 Y	16.08.1999
US 5348222 A		20.09.1994	CA 21152	92 A	10.08.1994
FR2683511 A B		14.05.1993	NONE		
FR 2784362 A		14.04.2000	FR 278436	63 A	14.04.2000
US 5984134 A		16.11.1999	NONE		
AT 344609 B		10.08.1978	AT 581670	5 A	15.11.1977
US 5190252 A		02.03.1993	GB 227517	7 AB	24.08.1994
ES 1042113 U		16.08.1999	ES 104211	13 Y	01.01.2000

Form PCT/ISA/210 (patent family annex) (July 1992)