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(54) Arranger module for wine bottles and similar

(57) The object of the invention is an arranger module for wine bottles and similar, the peculiariry of which is to be selectively constituted in a separator to be contained in a box-container like those used to contain several bottles, and in a support-cellar of the type used for storing bottles in a laying position.

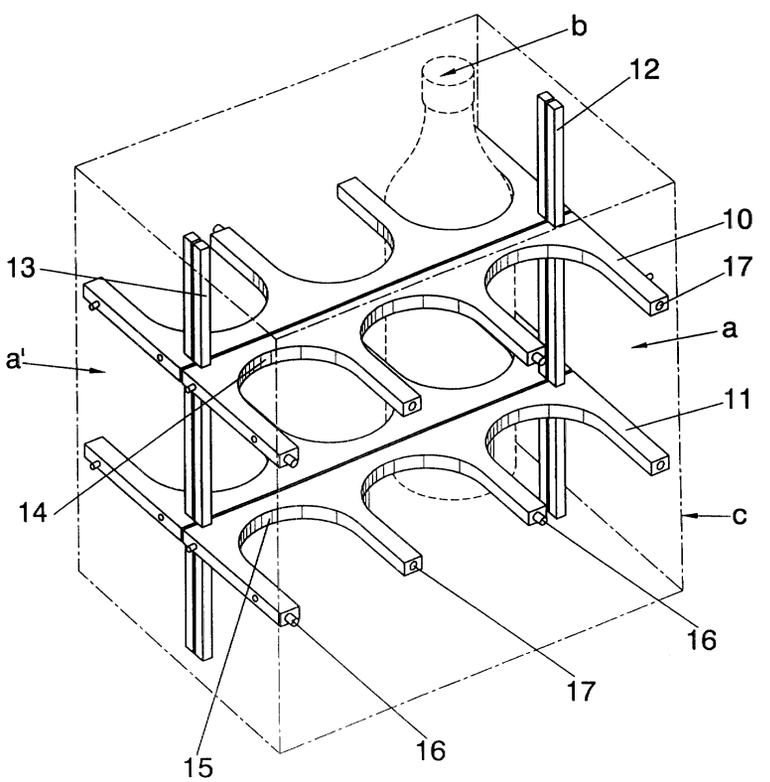

FIG. 1

EP 1 142 510 A1

Description

FIELD OF THE INVENTION

[0001] The present invention relates to a novel arranger module for wine bottles and similar, the peculiarity of which is to be selectively constituted in a separator to be contained in a box-container carrying several bottles, and in a support-cellar of the type used for storing bottles in a laying down position or arrangement.

BACKGROUND OF THE INVENTION

Related art

[0002] It is known the use of cardboard boxes or containers for wine bottles and other drinks, in general, for three and six bottles. Also, it is extended the use of said separator boxes in order to minimizae the relative displacements of bottles during their transport and stowage, avoiding them to smash each other and break.

[0003] These known separators consist of cardboard sheets located in a box, in vertical and cross-shaped arrangement, in two orthogonal senses, and having slots for a reciprocal fit of all the sheets each other, forming an arrangement of vertical cells, each of which receives one bottle.

[0004] It is also know a separator constituted by cardboard sheets having a configuration similar to that of the box base, which have perforations arranged in an appropiate'way, with diameters which are congruent with the bottle diameters. These sheets, two in general, are horizontally placed, a lower sheet having perforations which are congruent with the section of the bottle body, and a upper sheet having perforations congruent with the section of the bottle neck.

[0005] All known separators for box-containers of bottles are differentiated each other in the fact that they offer a greater or smaller fastening of the bottles, and have only that specific use, so that once the box has been opened, they have no other utility, are to be rejected.

[0006] Supports and cabinets known as "small cellars" for storing a number of bottles in a laying down position are also known, and they different configurations, but, basically, they consist of a case or cabinet the front and rear walls of which are formed by horizontal sheets having, on the upper edges, consecutive inlets for fitting the bottles. Of course, the separation between the sheets forming the front and rear walls is smaller than height of the bottles so that said bottles rest correctly.

[0007] There is a large variety of cabinets of the above type even some of them configured by means of frames, as explained above. These frames are pilable, so allowing to increase the capacity of the "small cellar" at will.

[0008] These supports and cabinets are also designed for a specific use, that is to say, for storing bottles in a laying down position.

SUMMARY OF THE INVENTION

[0009] It is an object of the invention to propose a bottle arranger the purpose of which is to be used first in a box-container like a bottle separator, and then to be taken out like a support or "small cellar". The bottle arranger as proposed has a simple conception, is very economic, and constitutes an efficient solution to both mentioned functions.

[0010] From the essential constructive point, this novel arranger for wine bottles and similar is characterized in that it comprises at least two substantially rectangular, flat parts, having, respectivelly, a plurality of frets having a diameter which is congruent with that of the bottles to be contained in it, said parts being separated in parallel each other, arranged with the respectibe frets axially coincidental, and joined by, at least, a pair of stiff elements, said parts presenting perimetric elements of union for a reciprocal fit. Other characteristics and advantages of the object of the invention will be explained in the below description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] In that respect, and in order that the present invention can be easily understood, a description with reference to an example of enbodiment which has been diagrammatically represented in the accompanying drawings, is given as follows. In the drawings:

[0012] Figure 1 is a schematic view in perspective showing two modules in accordance with the object of the invention, linked together in a position constituting a separator for bottles contained in a box-container,-showing the shape of said box, and that of one of the bottles.

[0013] Figure 2 is other schematic view in perspective showing the two modules of the arranger linked together in other position, wherein they form a support or cellar-cabinet, showing, in part and in broken lines, another module to illustrate other way of linking for this ope- rative position.

[0014] Figures 3 and 4 are partial views in perspective of two modules shown separated in linked position, two variants of embodiment of linking between modules being included in these figures.

[0015] Figure 5 is a partial view in perspective of two modules in the position of figure 2, showing a third variant of embodiment for said'linking means between modules.

[0016] In said figures, same reference numerals correspond to same or corresponding parts.

LISTING OF MAIN REFERENCES

[0017]

(a) and (a') Arranger module

(b) Bottles

(c) Box-container containing several bottles (b)

(10) and (11) Substantially rectangular, flat parts, parallel each other

(12) and (13) Straight elements stiffly linking the parts (10) and (11)

(14) Consecutive décolletage-shaped frets of part (10)

(15) Consecutive décolletage-shaped frets of part (11)

(16) Assembly element, stub or tenon type

(17) Assembly element cooperating with (16), orifice or notch type

(18) Assembly element, tab type (dovetail)

(19) Assembly element, slot type, cooperating with-the tab (18)

(20) Assembly element, staple type

(21) Assembly element, groove type, cooperating with staple (20)

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0018] In the preferred embodiment mode, each arranger module (a) and (a') for wine bottles and similar, comprises two substantially rectangular, flat parts (10) and (11), for instance, two similar wood small boards stiffly joined by two equal straight elements (12) and (13), for example, rods made of same material as the small boards. A stiff union can be performed by engaging and, sticking said parts and rods.

[0019] These small boards (10) and (11) have respective shaped frets, preferably constituted by décolletages (14) and (15), having a "U"-shape, which are open towards one of the major edges of the small board. It is proposed that said décolletages (14) and (15) have a diameter congruent with the diameter of the body of each bottle (b), that same point towards the same major side of module (a), and that the décolletages (14) of small board (10) axially coincide with décolletages (15) of small board (11).

[0020] The small boards (10) and (11) are separated each other in parallel, having a separation each other preferably not greater than the height of the bottle body (b).

[0021] In the embodiment shown in drawings, the rods (12) and (13) have a length equivalent to the inner height of the box-container (c) used for containing several bottles (b), so that in the operative position as a separator (figure 1), said rods also serve as structurañ reinforcement of box-container (c). Also, in this mode, the small boards (10) and (11) are equidistant from the rods (12) and (13) ends. Nevertheless, the rods (12) and (13) can have sufficient length for resting an end on the box bottom (c), and for positioning the small boards (10) and (11) at the required height of the bottle bodies (b).

[0022] The parts or boards (10) and (11) are fitted with perimetric elements of union, having a reciprocal fit with equal modules (a').

[0023] These union elements are assembly elements, selected from stubs or tenons (16), combined with congruent orifices or notches (17), as shown in Figs. 1 to 3. Fig. 4 shows a variant according to which the assembly elements in question are of dovetail type, formed by congruent tab (18) and slots (19)

[0024] Referring to figure 5, another solution to implement the detachable union of two equal modules (a) and (a') consist of a provision of staples (20) constituted by prehensile parts made of metal plate or other appropiate material. These staples (20) have a "U"-shape cross section, forming small wings ending in protuberances having a claw shape inserted into grooves (21), formed on the major faces of the substantially rectangular, flat parts, adjacent to the perimetric edges of said parts.

OPERATION

[0025] With reference to figure 1, it shows a commercial introduction mode of the present arranger module, to be used in a box-container (c) having a rectangular prismatic shape with a capacity for six bottles (b). For this modality of preferred introduction, two similar modules are included, under the main references (a) and (a').

[0026] In these modules (a) and (a'), the major sides of the rectangular, flat parts (10) and (11) have, respectively, a length equivalent to that of major sides of the lower and upper walls of the box-container (c), while the length of the minor sides of said parts is equal to half the length of the minor sides of the mentioned walls of the box-container.

[0027] As plainly follows from said figure 1', the modules (a) and (') are joined each other by means of reciprocal assemblies envisaged on the major edges opposite to décolletages (14) and (15) of parts or small boards (10) and (11), respectively. In this position, said modules constitute a separator avoiding the bottles (b) to move and collide each other during transport and stowage.

[0028] Given that the assembly elements have all their perimetric edges with the parts (10) and (11), taking out the modules (a) and (a') from the box, the same can be linked to any of the options shown in figure 2, even with a greater amount of equal modules, forming a'support or "cellar-cabinet" for storing the bottles (b) in a hor-

izontal position or arrangement.

[0029] Having so described and determined the nature of the present invention, and the way in which is to be carry out in the practice, what is desired to claim as invention and of exclusive property is:-

Claims

1. An arranger module for wine bottles and similar, capable of selectively constituting a separator to be contained in a box-container carrying several bottles, and a support-cellar of the type used for storing the bottles in a laying down position, **characterized in that** it consists of, at least, two substantially rectangular, flat parts presenting, respectivelly, a plurality of frets having a diameter congruent with that of the bottles to be contained ; said parts being separated in parallel each other, arranged with the respective frets axially coincidental, and joined by, at least, a pair of stiff elements, said parts presenting perimetric elements of union of reciprocal fit.

2. An arranger module for wine bottles and similar, according to claim 1, **characterized in that** it consists of, at least, two modules, in which, the substantially rectangular, flat parts of each module have major sides with lengths equivalent to the major sides of the lower or upper faces of the box-container, and minor sides the lengths of which are equivalent to half the minor sides of said faces of the box-container.

3. An arranger module for wine bottles and similar, according to claim 1, **characterized in that** the stiff elements joining each other the substantially rectangular, flat parts constitute a separator means of said parts with the bottom of the box-container.

4. An arranger module for wine bottles and similar, according to claim 1, **characterized in that** the separation between the substantially rectangular, flat parts is not greater than the height of the bottle body.

5. An arranger module for wine bottles and similar, according to claim 1, **characterized in that** the stiff elements joining each other the substantially rectangular, flat parts have a length similar to the inner height of the box-container used to contain severalbottles, said parts being positioned at points equidistant from the opposite ends of said elements.

6. An arranger module for wine bottles and similar, according to claim 1, **characterized in that** the frets are "U" shaped, and are open towards one of the major sides of each substantially rectangular, flat part.

7. An arranger module for wine bottles and similar, according to claim 1, **characterized in that** the frets of the two parts have equal diameter.

8. An arranger module for wine bottles and similar, according to claim 1, **characterized in that** the perimetric means of union includes prehensile clamps having a "U"-shaped cross section, having small wings ended at protuberances pointed towards the interior, the same being capable of be inserted into grooves formed in the major faces of the substantially rectangular, flat parts, adjacent to the perimetric edges of said parts.

9. An arranger module for wine bottles and similar, according to claim 1, **characterized in** the the perimetric means of union are assembly elements selected from slots and tabs (dovetail), stubs or tenons, and orifices or notches.

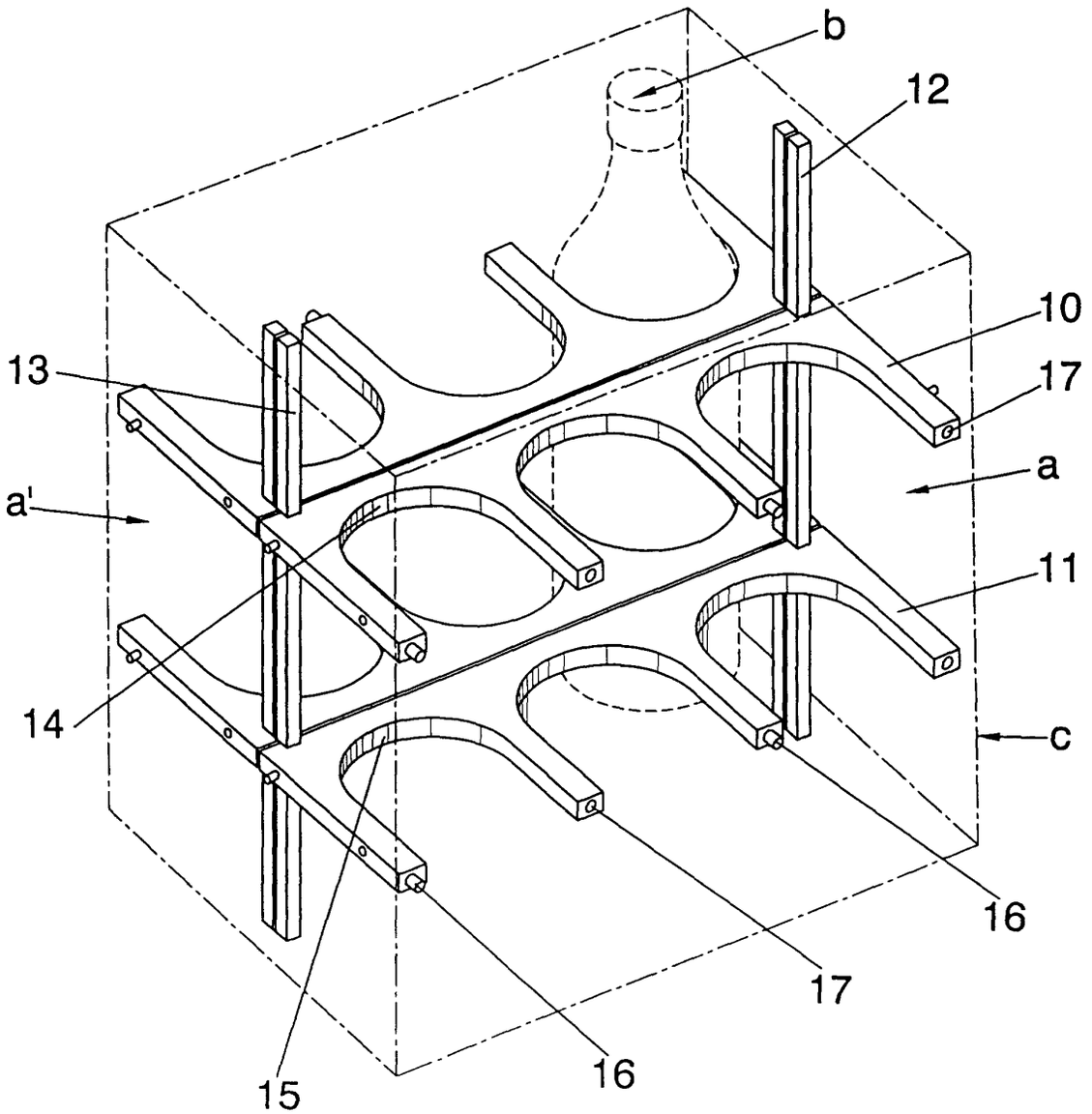

FIG. 1

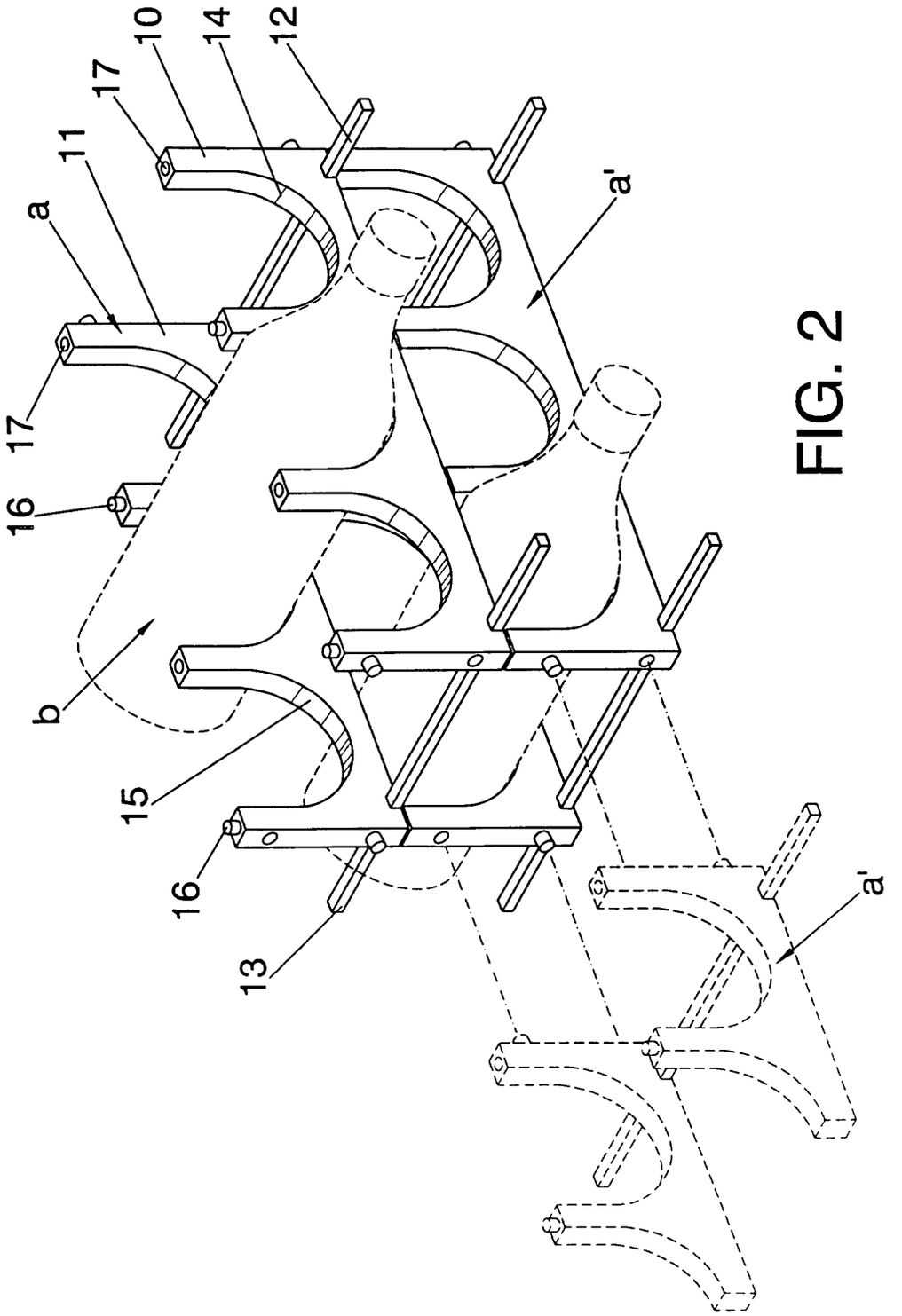

FIG. 2

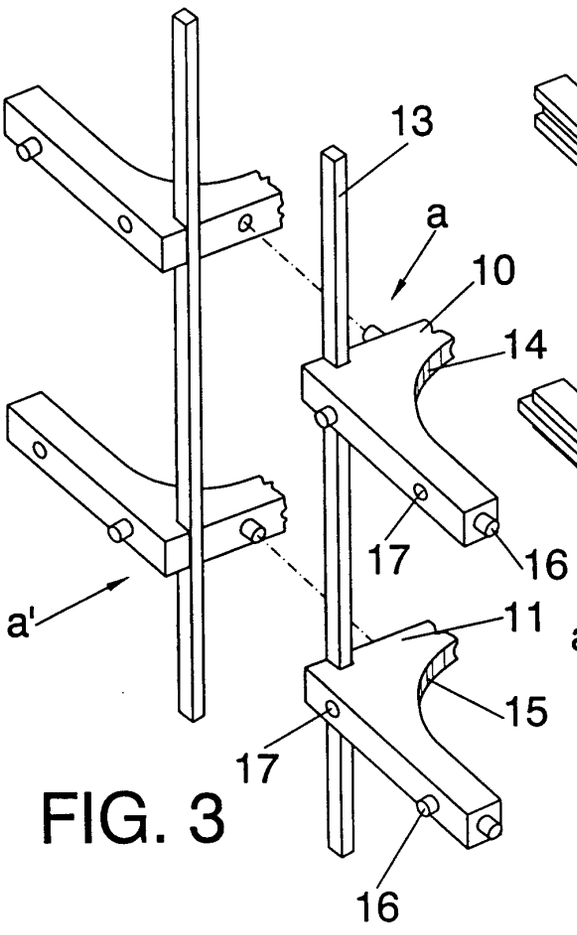

FIG. 3

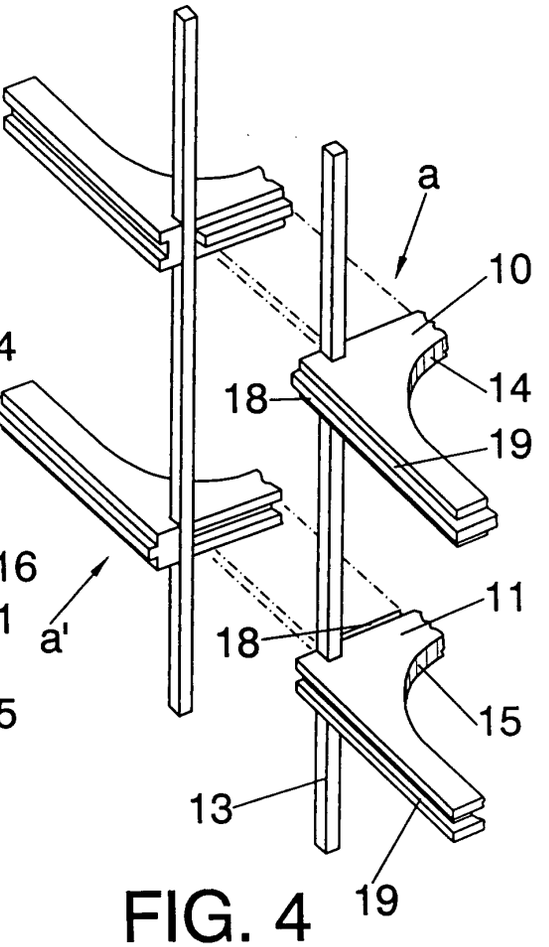

FIG. 4

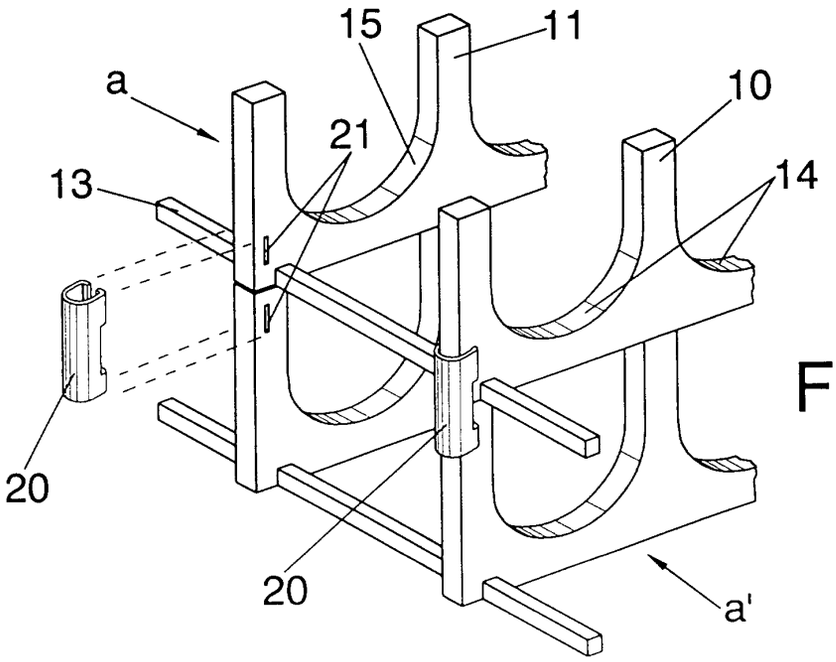

FIG. 5

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 50 0083

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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X	DE 295 07 076 U (BURKERT HEINZ C) 17 August 1995 (1995-08-17) * page 6, paragraph 8 - page 7, paragraph 1 * * page 7, paragraph 5; figures 1,3,4 *	1-5,7	
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A	DE 299 05 661 U (KUO YU PLASTIC ENTERPRISE CO) 10 June 1999 (1999-06-10) * figures 1,2,4 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A47B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	30 May 2001	Papadimitriou, S

CATEGORY OF CITED DOCUMENTS

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 01 50 0083

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30-05-2001

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82