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(54) Filing frame device for office furniture filing drawers

(57) A filing frame device for office furniture filing drawers consisting of a pair of lateral frames (4) which are identical to one another having the form of a bridge capable of being installed between the front (2) and rear (3) panels and which determines a longitudinal member (5) which extends the length of the drawer (1) elevated above the respective side of the same, and two supports (6) whose external dimension is set such as to exceed the internal dimension of the drawer (1) and having in the external direction and in mutual opposition upper (7) and lower (8) means of assembly which are vertically aligned, each of which simultaneously but independently acts selectively in conjunction with one or other of those formed by upper (9) and lower (10) horizontal pairs of complementary means of installation which, within each horizontal pair (9 and 10), are designated as external (9a and 10a) and internal (9b and 10b) in accordance with whether they are in greater proximity to or more remote from the side of the drawer (1).

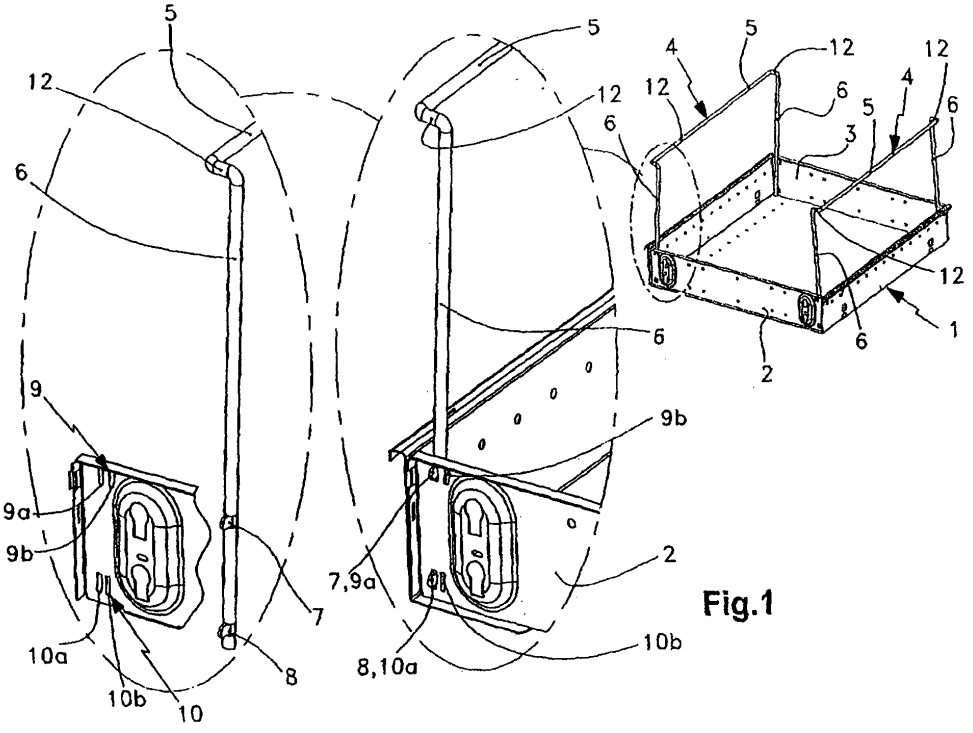

Fig.1

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Description

BACKGROUND OF THE INVENTION

[0001] The present invention relates to a device destined for application in the drawers of office furniture which serve to archive suspension files.

[0002] More particularly the device disclosed is destined for drawers of which at least their front and rear panels are of metal or plastic laminiform construction.

DESCRIPTION OF THE PRIOR ART

[0003] There exists a wide variety of suspension files which, although all are dimensioned to house subfiles corresponding to the DIN-A4 standard size, for the purposes of their suspension they have end hooks which require different spans or widths between supports; in practice it may be considered that a large proportion of the suspension files in the market correspond to three distinct suspension widths.

[0004] In addition, the manufacturers of office furniture are not those who also manufacture the suspension files for their filing drawers, such that the manufacturer of the furniture selects for its filing drawers a specific dimension of suspension files which will be the only one suitable for them.

[0005] In this situation the problem arises when the user of one of these items of furniture proposes to obtain further suspension files for their filing drawer, either to add to those already in existence or to replace those which have deteriorated. It is then typically a truly extended process to find the dimension of suspension files appropriate for their requirements as not all stores have available in stock every dimension of suspension files, the usual option being to place an order with the manufacturers to deliver a quantity of units which will always be very small for the manufacturer to lend itself to specially producing it if it does not have it available in its stock, in which case the probable response from the manufacturer will be to state that it has been removed from the catalogue and it is now not possible for it to supply it, unless the client is prepared to obtain a batch of a sufficient size to justify its manufacture; on other occasions cessation of its production by the original manufacturer is certain and there is no manner to find another product which is compatible. This situation may, in addition, be an inconvenience for the furniture manufacturer when a client goes to obtain a new item of furniture and wishes it to have filing drawers which are suitable for the same dimension of suspension file which they also have in their other office furniture in use.

SUMMARY OF THE INVENTION AND ADVANTAGES

[0006] In view of this state of affairs the subject of this invention is a filing frame device for office furniture filing drawers, in particular for a drawer in which at least its front and rear panels are of metal or plastic laminiform construction. In accordance with it the device advocated consists of a pair of lateral frames which are identical to one another, having the form of a bridge capable of being installed between the said front and rear panels and which determines a longitudinal member which runs the length of the drawer elevated above the respective side of the same, and two supports having an external dimension set such as to exceed the internal dimension of the drawer, the supports of which have in an external direction and in mutual opposition upper and lower means of assembly which are vertically aligned, each of which simultaneously but independently acts selectively in conjunction with one or other of those formed by upper and lower horizontal pairs of complementary means of assembly which, within each horizontal pair, are designated as external and internal in accordance with whether it is in greater proximity to or more remote from the side of the drawer, and which have between them an appropriate horizontal distance which is in combination with the length of the said supports and having desired dimensions of distance between the said longitudinal members, one on each side of the drawer, which same are coincident with a corresponding number of other actual widths of suspension files.

[0007] This simple device makes possible its adaptation to various width dimensions of suspension files, in principle for three different dimensions, although with the same constituent philosophy further dimensions could be obtained. For this purpose it is sufficient that on installing the supports of the two collateral bridge frames we select which of the upper and lower means of assembly shall be connected to the external or internal means of installation within their respective upper and lower pairs of means of installation: if the upper means of assembly is connected to the internal means of the upper means of installation and the lower means of assembly is connected to the external means of the lower means of assembly, then the separation between the collateral longitudinal members corresponds to the smallest of the three dimensions of suspension files; if the two upper and lower means of assembly are connected to the internal means of the upper and lower means of assembly, then the separation between the longitudinal members is that corresponding to the intermediate of the three dimensions of suspension files considered; and if this latter is effected with respect to the external means of the upper and lower means of installation, the result corresponds to the largest of the three dimensions of suspension files contemplated. In the detailed description which, in accordance with the appended drawings, is provided below, a preferred method of embodiment is envisaged in respect of the means of assembly and installation referred to.

[0008] Other positive qualities of this simple device are: that it does not complicate nor make more expensive the manufacture of the metal or plastic front and rear panels through having to incorporate the means of in-

stallation, which can be confirmed in the said preferred embodiment set out below; that its utilization is simple and quick, it can be carried out by any person without requiring tools and at any time, which is also evident from the detailed explanation provided below.

DRAWINGS AND REFERENCES

[0009] In order to better understand the nature of this invention in the attached drawings we demonstrate a preferred form of industrial embodiment, the nature of which is merely illustrative and not limitative.

[0010] Figure 1 is a perspective view of a metal drawer (1) which incorporates the filing frame device in accordance with the invention. Within this figure there are included two enlarged details demonstrating the device installed and uninstalled in relation to the left-hand side of the drawer (1).

[0011] Figure 2 is a front view of the drawer (1) in figure 1, in orthogonal projection, representing the position corresponding to the smallest dimension of suspension file and including an enlarged detail clarifying the same.

[0012] Figure 3 is in accordance with figure 2, but referring to the intermediate dimension of suspension file.

[0013] Figure 4 is in accordance with figures 2 and 3, but referring to the largest dimension of suspension file.

[0014] Figure 5 demonstrates a possible embodiment of the means of assembly of the supports (6), differing from that of the previous figures.

[0015] Figure 6 demonstrates the embodiment of supports (6) of figure 5 actually connected to the drawer (1).

[0016] In these figures the following references are employed:

1	Drawer
2	Front panel of drawer (1)
3	Rear panel of drawer (1)
4	Lateral frames
5	Longitudinal member of lateral frames (4)
6	Supports of lateral frames (4)
7	Upper means of assembly or upper planar fin
8	Lower means of assembly or lower planar fin
9	Upper pair of means of installation or apertures
9a	External means of installation of the upper pair (9) or upper external aperture
9b	Internal means of installation of the upper pair (9) or upper internal aperture
10	Lower pair of means of installation
10a	External means of installation of the lower pair (10) or lower external aperture
10b	Internal means of installation of the lower pair (10) or lower internal aperture
11	Vertical slot
12	Double bends

DESCRIPTION OF PREFERRED EMBODIMENTS

[0017] With respect to the drawings and references provided above, the drawings appended illustrate a preferred method of embodiment of the invention referring to a device destined to support suspension files of the kind which go in office furniture filing drawers wherein the drawer (1) will have, as a minimum, its front (2) and rear (3) panels constituted laminiformly of metal or plastic; in the drawings appended the representation has been selected of a drawer (1) entirely of metal.

[0018] As figure 1 clearly illustrates, the device in accordance with the invention consists of a pair of lateral frames (4) which are identical to one another having the form of a bridge capable of being installed between the front (2) and rear (3) panels and which determine a longitudinal member (5) which runs the length of the drawer (1) elevated above the respective side of the same, and two supports (6) having an external dimension set such as to exceed the internal dimension of the drawer (1), which supports (6) have in an external direction and in mutual opposition upper (7) and lower (8) means of assembly which are vertically aligned, each of which simultaneously but independently acts selectively in conjunction with one or other of the means formed by upper (9) and lower (10) horizontal pairs of complementary means of installation which, within each horizontal pair (9 and 10), are designated as external (9a and 10a) and internal (9b and 10b) in accordance with whether it is in greater proximity to or more remote from the side of the drawer (1), and which have between them an appropriate horizontal distance which is in combination with the length of the said supports (6) and with desired dimensions of distance between the said longitudinal members (5), one on each side of the drawer (1), which same are coincident with a corresponding number of other actual widths of suspension files. One method of preferred embodiment consists in that the said upper (7) and lower (8) means of assembly of the said supports (6) are both appendices perpendicularly orientated to the said front (2) and rear (3) panels of the drawer (1), in conjunction with which the said complementary external (9a, 10a) and internal (9b, 10b) means of installation forming the said upper (9) and lower (10) horizontal pairs, consist of apertures of convenient width and height. And within this method of embodiment the invention envisages the particular case wherein the said appendices constituting the upper (7) and lower (8) means of installation are planar vertical fins, in conjunction with which the said apertures constituting the external (9a, 10a) and internal (9b, 10b) means of installation forming the upper (9) and lower (10) horizontal pairs of means of installation, are rectangular apertures orientated with a given inclination making them converge in an ascending direction with those of the opposite side of the drawer (1).

[0019] This preferred final configuration is that demonstrated in figures 1 to 4. Nevertheless, within the scope of the invention it is evident that the appendices now located on the supports (6) could be on the front (2) and rear (3) panels of the drawer (1) and vice versa; and alternatively, rather than being planar appendices they

could be round acting in conjunction with straight or curved apertures arranged with a horizontal orientation.

[0020] In order that the connection between supports (6) and front (2) and rear (3) panels be firmer and safer, within the scope of the invention an embodiment is envisaged in which the said appendices constituting the upper (7) and lower (8) means of assembly are planar vertical fins having in their lower edge a vertical slot (11), in conjunction with which the said apertures constituting the external (9a, 10a) and internal (9b, 10b) means of installation forming the upper (9) and lower (10) horizontal pairs of means of installation, are rectangular apertures orientated with a given inclination making them converge in an ascending direction with those of the opposite side of the drawer (1) and which at the lower side of their frame have a thickness which is arranged to be a sliding fit with respect to the width of the said vertical slot (11).

[0021] The functionality of the device described above is clearly illustrated by means of figures 2 to 4. From them it may be observed that in order to adjust the advocated device to the smallest dimension of the three which are possible, it is necessary for the upper planar fin (7) to be connected into the upper internal aperture (9b) whilst the lower planar fin (8) is connected into the lower external aperture (10a), as demonstrated in figure 2; in order for the device to be set to the intermediate size of suspension files it is necessary, as figure 3 demonstrates, that the upper (7) and lower (8) planar fins be connected into the upper (9b) and lower (10b) apertures respectively; and in order to achieve the position demonstrated in figure 4 for the largest dimension of suspension files, it will be necessary for the upper (7) and lower (8) planar fins to be connected into the upper (9a) and lower (10a) external apertures.

[0022] As may be deduced from the foregoing the device is very versatile based on modifying the horizontal distance between the paired apertures (9a and 9b; 10a and 10b) or the vertical distance between a pair of apertures (9a-9b) and the other pair of apertures (10a-10b); it is also possible to vary the length of the supports (6) within a given range. In this respect a particularity of the invention is that, in relation to their operational position of installation in the drawer (1), the said longitudinal members (5) of the side frames (4) are linked to the supports (6) by means of double bends (12) orientated towards the exterior of the drawer (1); it thus becomes evident that is possible to alter the actual length of the double bends (12) or orientate them towards the interior of the drawer instead of towards the exterior. In summary, the device advocated offers a great capacity for adaptation to future modifications without in its essence being varied.

Claims

1. Filing frame device for office furniture filing drawers, in which at least its front (2) and rear (3) panels are of metal or plastic laminiform construction, **characterised in that** it consists of a pair of lateral frames (4) which are identical to one another and in the form of a bridge which is capable of being installed between the said front (2) and rear (3) panels and which determines a longitudinal member (5) which runs the length of the drawer (1) elevated above the respective side of the same, and two supports (6) having an external dimension set such as to exceed the internal dimension of the drawer (1), which supports (6) have, oriented externally and in mutual opposition, upper (7) and lower (8) means of assembly which are vertically aligned, each one of which simultaneously but independently acts selectively in conjunction with one or other of those formed by upper (9) and lower (10) horizontal pairs of complementary means of installation which, within each horizontal pair (9 and 10), are designated as external (9a and 10a) and internal (9b and 10b) in accordance with whether they are in greater proximity to or more remote from the side of the drawer (1), and having between them an appropriate horizontal distance which is combined with the length of the said supports (6) and with desired dimensions of distance between the said longitudinal members (5), one on each side of the drawer (1), which are coincident with a corresponding number of other actual widths of suspension files.

2. Filing frame device for office furniture filing drawers according to claim 1, **characterised in that** the said upper (7) and lower (8) means of assembly of the said supports (6) are the same number of appendices orientated perpendicularly to the said front (2) and rear (3) panels of the drawer (1).

3. Filing frame device for office furniture filing drawers according to the foregoing claims, **characterised in that** the said external (9a, 10a) and internal (9b, 10b) complementary means of installation forming the said upper (9) and lower (10) horizontal pairs consist of apertures of appropriate width and height.

4. Filing frame device for office furniture filing drawers according to claim 2, **characterised in that** the said appendices constituting the upper (7) and lower (8) means of installation are planar vertical fins.

5. Filing frame device for office furniture filing drawers according to claims 2 and 3, **characterised in that** the said apertures constituting the external (9a, 10a) and internal (9b, 10b) means of installation forming the upper (9) and lower (10) pairs of means of installation are rectangular apertures orientated with a given inclination making them converge in an ascending direction with those of the opposite side of the drawer (1).

6. Filing frame device for office furniture filing drawers according to claim 2, **characterised in that** the said appendices constituting the upper (7) and lower (8) means of assembly are planar vertical fins having in their lower edge a vertical slot (11).

7. Filing frame device for office furniture filing drawers according to claims 3 and 6, **characterised in that** the said apertures constituting the external (9a, 10a) and internal (9b, 10b) means of installation forming the upper (9) and lower (10) pairs of means of installation are rectangular apertures orientated with a given inclination making them converge in an ascending direction with those of the opposite side of the drawer (1) and which on the lower side of their frame have a thickness which is arranged to be a sliding fit with respect to the width of the said vertical slot (11).

8. Filing frame device for office furniture filing drawers according to claim 1, **characterised in that** in relation to their operational position of installation in the drawer (1), the said longitudinal members (5) of the side frames (4) are linked to the supports (6) by means of double bends (12) and orientated towards the exterior of the drawer (1).

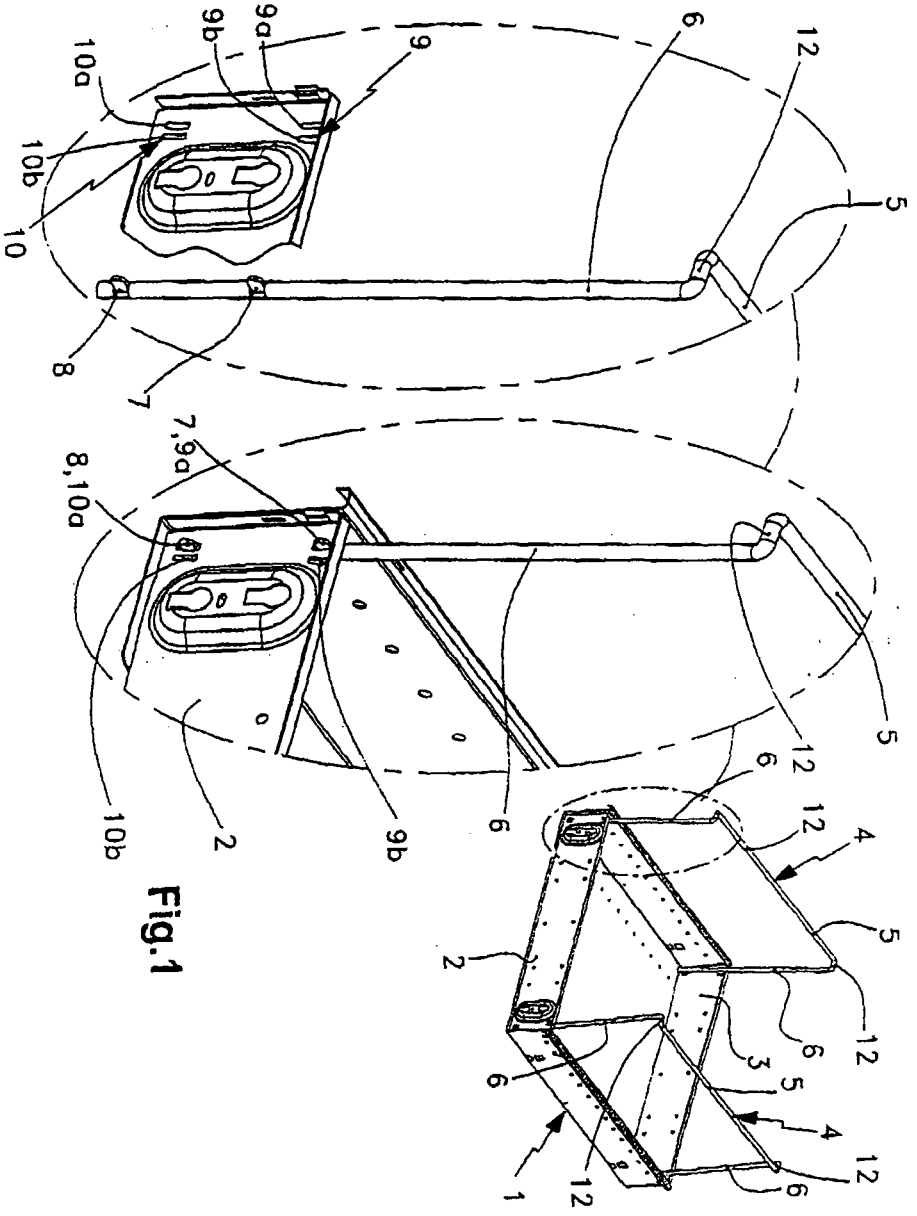
9b
9a
9
6
12
10a
10b
10
5
8
7
7,9a
8,10a
10b
2
9b
6
12
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Fig.1

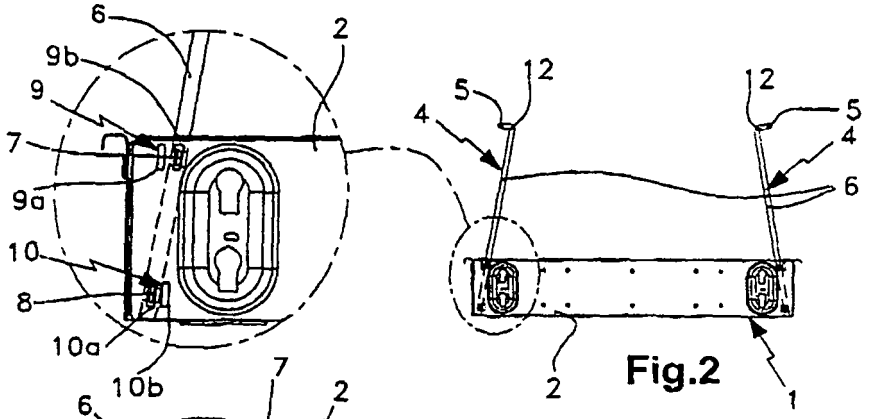

Fig.2

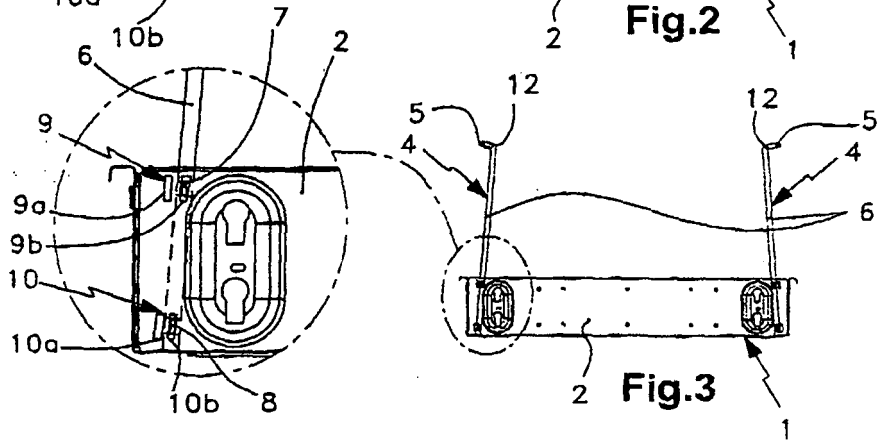

Fig.3

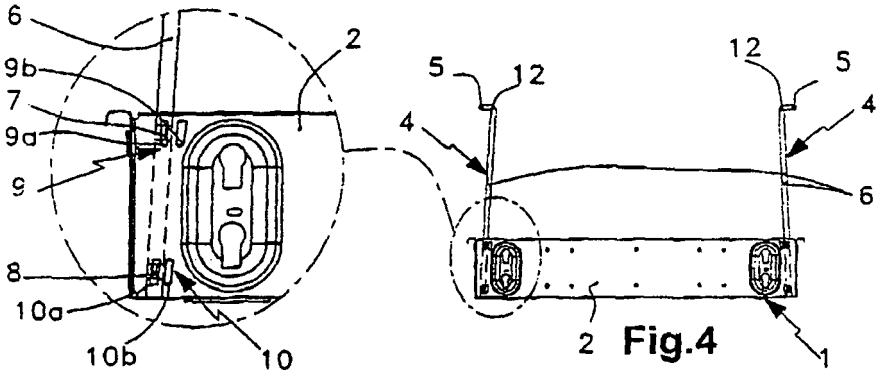

Fig.4

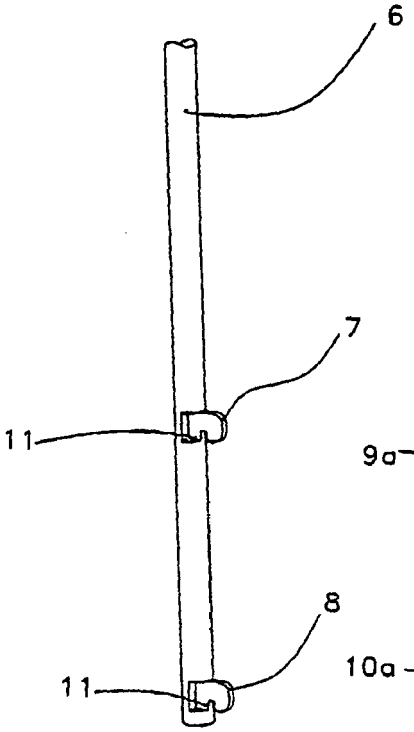

Fig.5

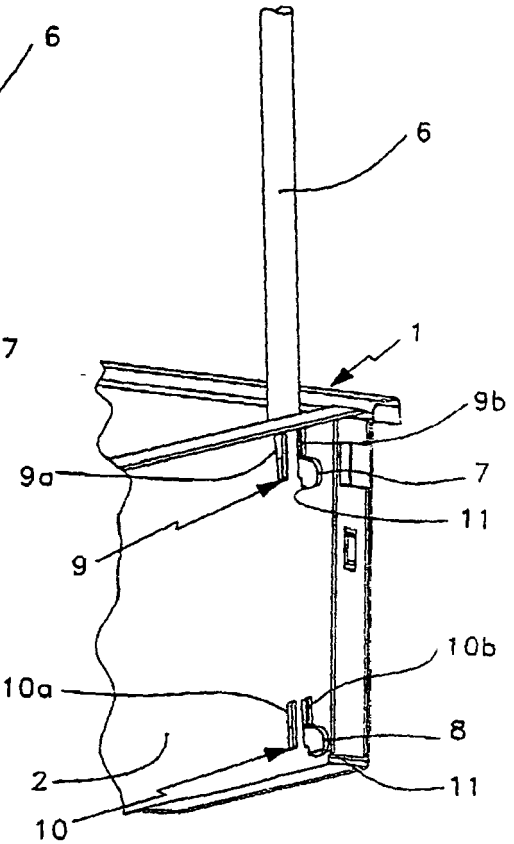

Fig.6

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 02 3683

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 0 948 920 A (HAEFELE GMBH & CO) 13 October 1999 (1999-10-13) * paragraphs [0002] - [0004]; figures 1,2 *	1-3,8	A47B88/00 B42F15/00
Y		4-7	

Y	US 4 219 247 A (LITCHFIELD ET AL) 26 August 1980 (1980-08-26) * figures 1,3,5,6 *	4-7	

TECHNICAL FIELDS SEARCHED (IPC)

A47B
B42F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	13 March 2006	Haller, E

CATEGORY OF CITED DOCUMENTS

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13-03-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0948920 A	13-10-1999	CN 1235000 A	17-11-1999
		DE 29805193 U1	28-05-1998
		HR 990086 A1	29-02-2000
		ID 22247 A	23-09-1999
		JP 11309976 A	09-11-1999
		TR 9900630 A2	21-10-1999
US 4219247 A	26-08-1980	AU 512368 B2	09-10-1980
		AU 2376677 A	05-10-1978
		GB 1580430 A	03-12-1980
		NZ 183744 A	14-11-1980
		SE 7609962 A	11-10-1977

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