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(54) **A cabinet, in particular a filing cabinet**

(57) A metal cabinet, in particular a filing cabinet, which is characterized in that walls of the cabinet are detachably interconnected in that the walls are provided, at least along part of their sides, with clampingly co-operating, profiled edges. The walls are made up of two side walls and a rear wall, or of an inside panel and an outside panel. In particular, at least one of the profiled edges has a substantially rectangular cross-section, or a substantially L-shaped cross-section.

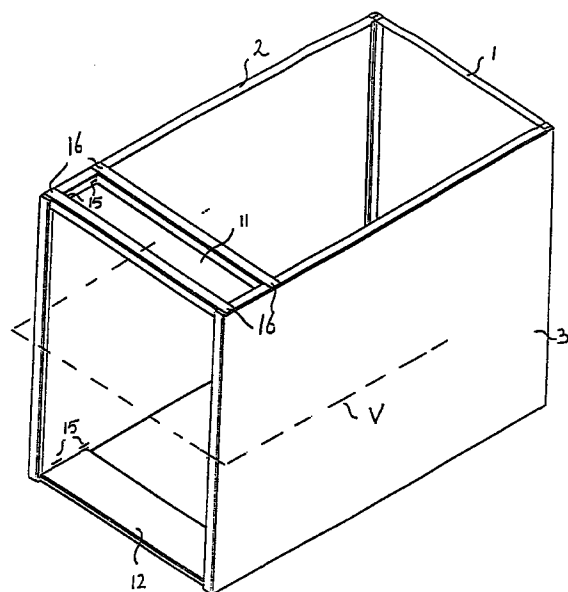


FIG. 1

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Description

[0001] The invention relates to a metal cabinet, in particular a filing cabinet. The invention furthermore relates to a method for manufacturing said metal cabinet.

[0002] A metal cabinet of this kind, in particular in the form of a filing cabinet for a desk, is generally known. The known desk filing cabinet is made of steel walls in a workshop, where it is subsequently assembled, after which distribution takes place to locations where further manufacturing operations are carried out.

[0003] Consequently, one drawback of the known metal cabinet is the fact that it occupies relatively much space in assembled condition during transport, which considerably adds to the cost, in particular as regards distribution/storage.

[0004] The objective of the invention is to provide a metal cabinet, in particular a filing cabinet, which can be transported and stored in an efficient manner, and in order to accomplish that objective, a metal cabinet of the kind referred to in the introduction is characterized in that walls of the cabinet are detachably interconnected in that the walls are provided, at least along part of their sides, with clampingly cooperating, profiled edges. More in particular, the walls are thereby made up of two side walls and a rear wall, or of an inside panel and an outside panel. This makes it possible to transport/store the walls of the cabinet separately, which enables an efficient transport/storage from the viewpoint of the amount of space that is occupied.

[0005] In one preferred embodiment of the cabinet according to the invention, at least one of said profiled edges has a substantially rectangular cross-section or a substantially L-shaped cross-section. This will be explained in more detail as yet with reference to the drawing.

[0006] In another preferred embodiment of a cabinet according to the invention, opposite walls are interconnected by means of at least one detachable connecting member. Said connecting member is provided, in particular on end, with projecting lips which co-operate clampingly with the recesses which are provided in said opposite walls. All this adds to the stiffness of the metal cabinet. Preferably, the connecting member has a U-shaped cross-section, which makes it possible to fit castors to the underside of the filing cabinet at that location.

[0007] In another preferred embodiment of a cabinet according to the invention, said cabinet is mirror symmetric, seen from its central longitudinal plane. This makes for a quick and reliable assembly, since a mechanic does not need to distinguish between the "upper side" and the "underside" of the cabinet.

[0008] The invention furthermore relates to a wall or an connecting member which is obviously suitable for use in a metal cabinet, as well as to a method for manufacturing said cabinet. With the method according to the invention, walls of the cabinet are detachably interconnected in that profiled edges clampingly cooperate

along at least part of the sides of said walls. More in particular, said profiled edges are slid one into another thereby.

[0009] The invention will be explained in more detail hereafter with reference to the figures illustrated in a drawings of a preferred embodiment of a desk filing cabinet according to the invention, wherein:

- Figures 1 and 2 are schematic views of a first variant of a desk filing cabinet, showing said cabinet in, respectively, assembled and disassembled condition;
- Figure 3 is a detail of Figure 2;
- Figures 4 and 5 are schematic views of a second variant of a desk filing cabinet, showing said cabinet in, respectively, assembled and disassembled condition; and
- Figure 6 schematically shows a detail of Figure 5 in perspective view and in plan view.

[0010] Figures 1 and 2 show a desk filing cabinet according to the invention, comprising a rear wall 1 and two side walls 2, 3. The side walls 2, 3 each comprise an internal panel 4 and an external panel 5. Rear wall 1 is provided on both cross sides with a profiled edge 6 having a substantially L-shaped cross-section, with profiled edge 6 being slightly flanged at its end so as to form a hook-shaped end 7 (Figure 3). The two external panels 5 are each provided on one of their cross sides with a profiled edge 8 having a substantially rectangular section. Finally, the two internal panels 4 are likewise provided on one of their two cross sides with a profiled edge 9 having a substantially L-shaped cross-section. The assembly of the various parts takes place in the following manner.

[0011] First, rear wall 1 is slid 6 into profile 8 of external panel 5 with its profiled edge, in the direction indicated by arrow 10, whereby hook-shaped end 7 engages behind end 18 (Figure 3) of profiled edge 8. As is apparent from the drawing, profiled edge 8 is a three-flange edge, as it were. Then, the internal panel 4 is slid into the profiled edge 8 of external panel 5 with its profiled edge, likewise in the direction indicated by arrow 10, so as to engage therein. In order to fit internal panel 4 subsequently into external panel 5, said internal panel 4 is rotated from a position in which the profiled edges 8, 9 clampingly co-operate with each other to a position in which external panel 5 is fitted over internal panel 4. Subsequently, connecting members 11, 12 are fitted between the side walls 2, 3, and that in such a manner that the projecting lips 13 which are present at both transverse ends of the connecting members are inserted into corresponding recesses 14 which are formed in internal panels 4. In order to make the desk filing cabinet mirror symmetric, seen from central longitudinal plane V (illustrated in dotted lines in Figure 1), recesses 15 corresponding with recesses 14 are furthermore provided in internal panel 4. The advantage of

this is that there is no need to distinguish between the "upper side" and the "lower side" of the desk filing cabinet, which is conducive towards quick assembly. That is why connecting members 11, 12 are identical as well, that is, having a substantially U-shaped cross-section. This makes it possible to fit castors to the underside of the desk filing cabinet at that location. As can be derived from Figure 1, the connecting members 11, 12 comprise fingers 16, which rest on the edges of the desk filing cabinet in assembled condition. Possibly, an additional connecting member 17 is fitted between side walls 2, 3.

[0012] Those parts of Figure 3 that correspond with parts shown in Figures 1 and 2 are indicated by the same numerals as in the said figures.

[0013] Figures 4 and 5 show another variant of the desk filing cabinet according to the invention, showing said cabinet in, respectively, assembled and disassembled condition, wherein parts that correspond with parts already shown in preceding figures are indicated by the same numerals as in the said figures. The figures show a desk filing cabinet of mirror-symmetric configuration, seen from central longitudinal plane V (illustrated in dotted lines in Figure 5), comprising a rear wall 1 and two side walls 2, 3, which walls are single walls, that is, they do not comprise an internal panel 4, so that they only form an external panel 5. Rear wall 1 and external panels 5 are identical to those shown in Figures 1, 2 and 3. In this embodiment, two frame-shaped elements 18 are used instead of internal panels 4 and connecting members 11, 12 and 17.

[0014] Rear wall 1 is attached to external panels 5 in an identical manner as described above with reference to Figures 1, 2 and 3. Then, frame-shaped elements 18 are each fixed with their lateral sides in external panels 5, that is, between the longitudinal edges 19 thereof. The frame-shaped element 18 positioned near rear wall 1 is thereby pressed into the respective edges 8 of external panels 5 with the profiled edges 20 which are present on either side thereof. The frame-shaped element 18 positioned remote from rear wall 1 possesses a slot 21 on either side thereof, in which respective profiled edges 22 of external panels 5 engage clampingly. Possibly, screwed bolts 22 are used, which can be inserted into corresponding holes 23 in external panels 5/frames 18.

[0015] Figure 6 is another schematic view of the interconnection between rear wall 1, external panel 5 and frame-shaped element 17. Hook-shaped end 7 of the profiled edge 6 of rear wall 1 engages behind end 18 of the profiled edge 8 of external panel 5. The profiled edge 20 of frame-shaped element 18 is clamped between the profiled edge 6 of rear wall 1 and the edge 24 of external panel 5.

[0016] Thus, a stainless steel desk filing cabinet according to the invention is realized, which can then be subjected to further operations (such as the fitting of a top and a bottom).

[0017] The embodiments of the invention as shown in the figures are to be considered as preferred variants. A great many variations and modifications are possible within the scope of the invention.

Claims

1. A metal cabinet, in particular a filing cabinet, characterized in that walls of the cabinet are detachably interconnected in that the walls are provided, at least along part of their sides, with clampingly cooperating, profiled edges.
2. A cabinet according to claim 1, wherein the walls are made up of two side walls and a rear wall.
3. A cabinet according to claim 1 or 2, wherein said walls are made up of an inside panel and an outside panel.
4. A cabinet according to claim 1, 2 or 3, wherein at least one of said profiled edges has a substantially rectangular cross-section.
5. A cabinet according to any one of the preceding claims 1 - 4, wherein at least one of said profiled edges has a substantially L-shaped cross-section.
6. A cabinet according to any one of the preceding claims 1 - 5, wherein opposite walls are interconnected by means of at least one detachable connecting member.
7. A cabinet according to claim 6, wherein said connecting member has an at least substantially U-shaped cross-section.
8. A cabinet according to claim 6 or 7, wherein said connecting member is provided on end with projecting lips, which co-operate clampingly with recesses which are provided in said opposite walls.
9. A cabinet according to any one of the preceding claims 1 - 8, wherein opposite walls are interconnected by means of at least one detachable frame-shaped element.
10. A cabinet according to any one of the preceding claims 1 - 9, wherein said cabinet is mirror symmetric, seen from its central longitudinal plane.
11. A wall or an intermediate member obviously suitable for use in a metal cabinet according to any one of the preceding claims 1 - 10.
12. A method for manufacturing a metal cabinet according to any one of the preceding claims 1 - 10, wherein walls of the cabinet are detachably inter-

connected in that profiled edges clampingly cooperate along at least part of the sides of said walls.

13. A method according to claim 12, wherein said profiled edges are slid one into another.

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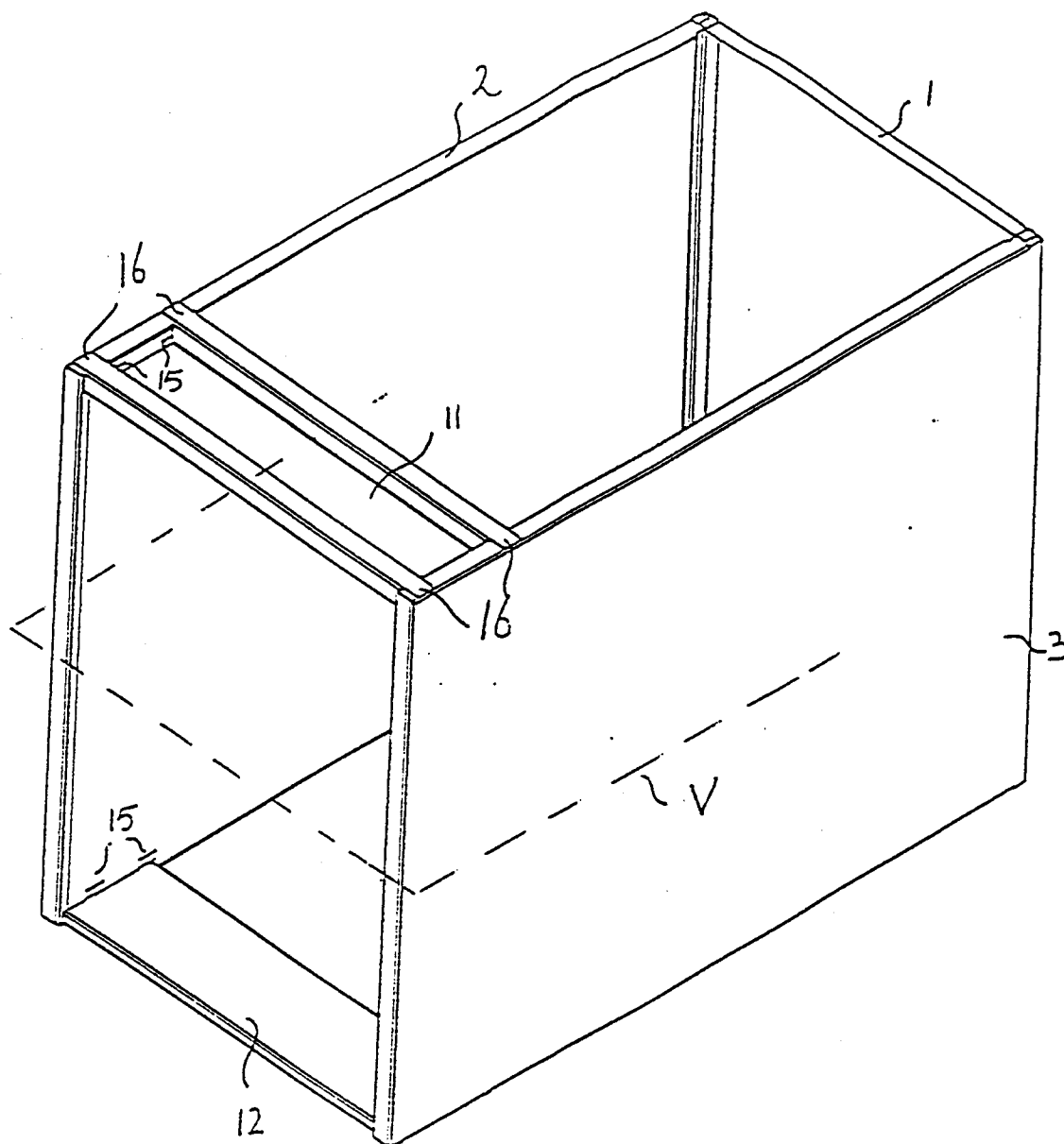


FIG. 1

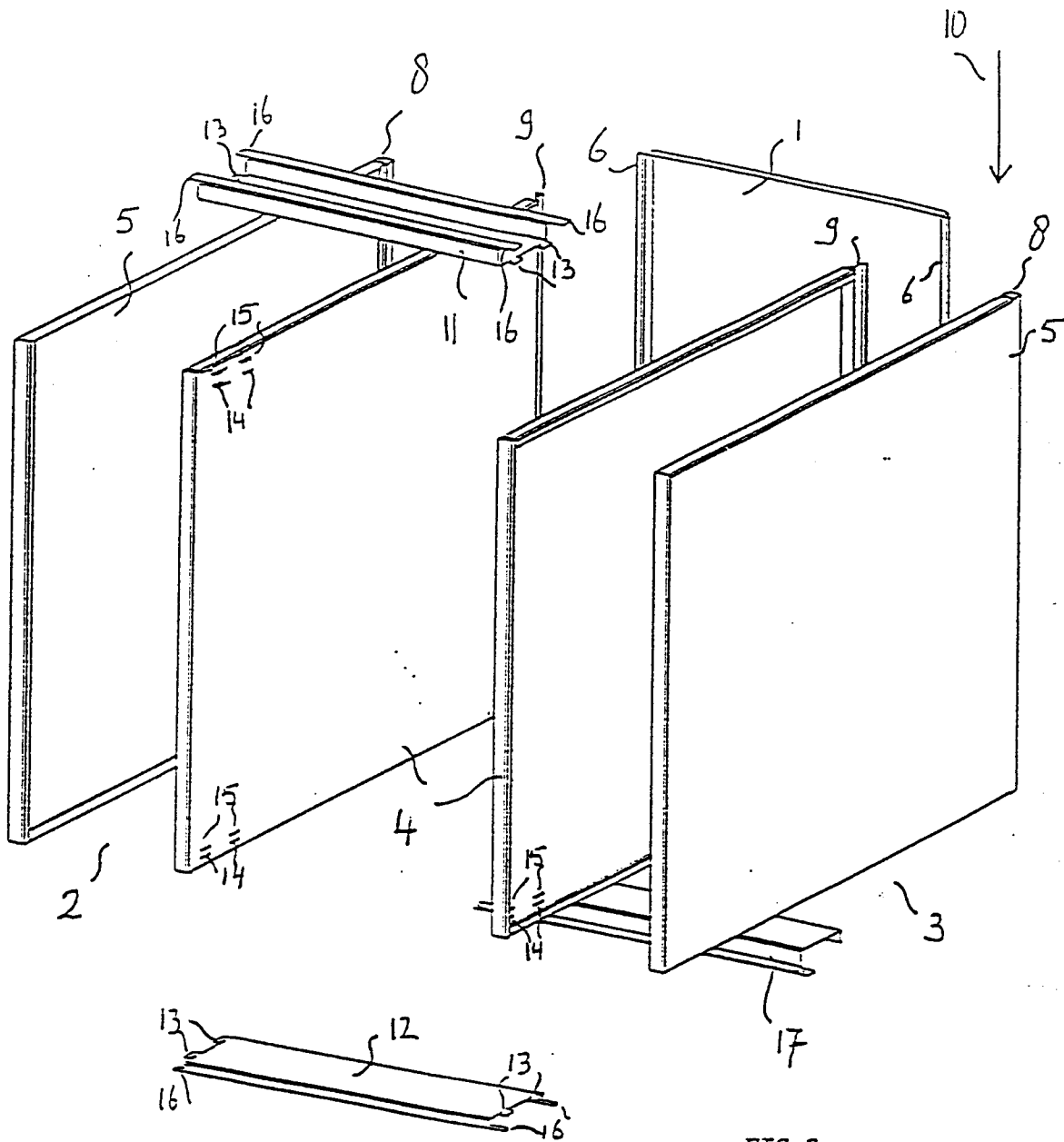


FIG. 2

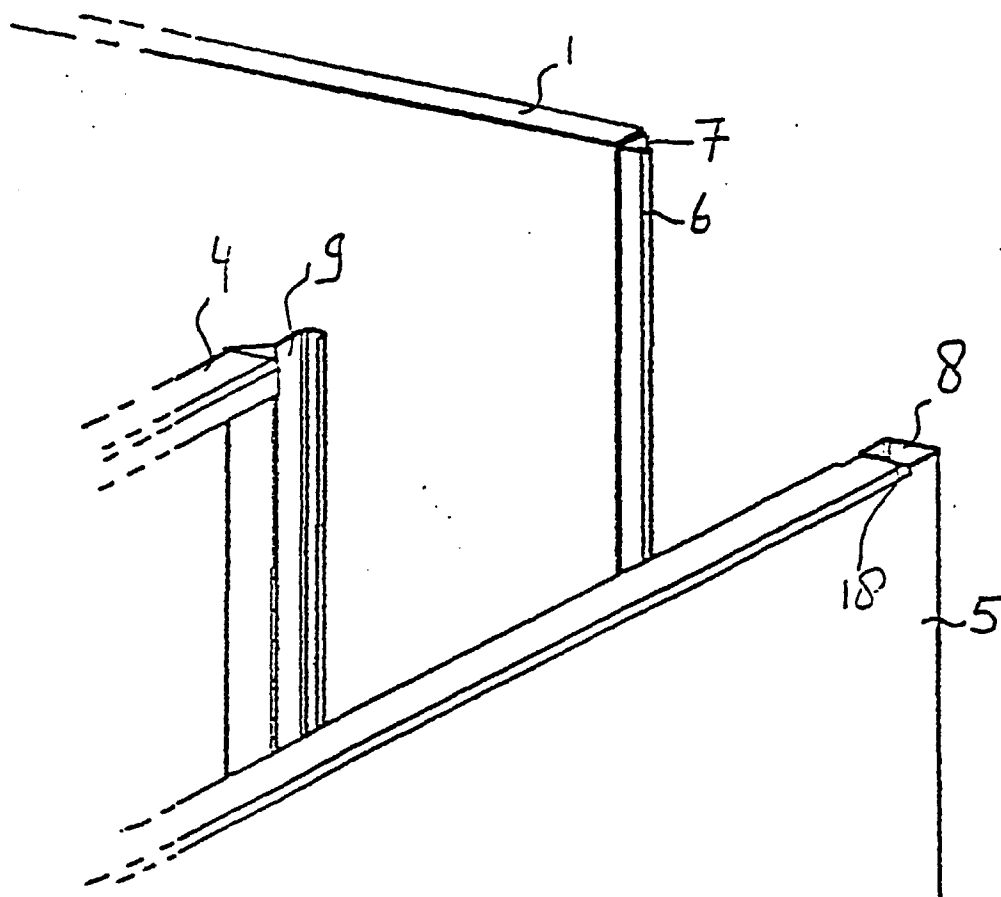


FIG.3

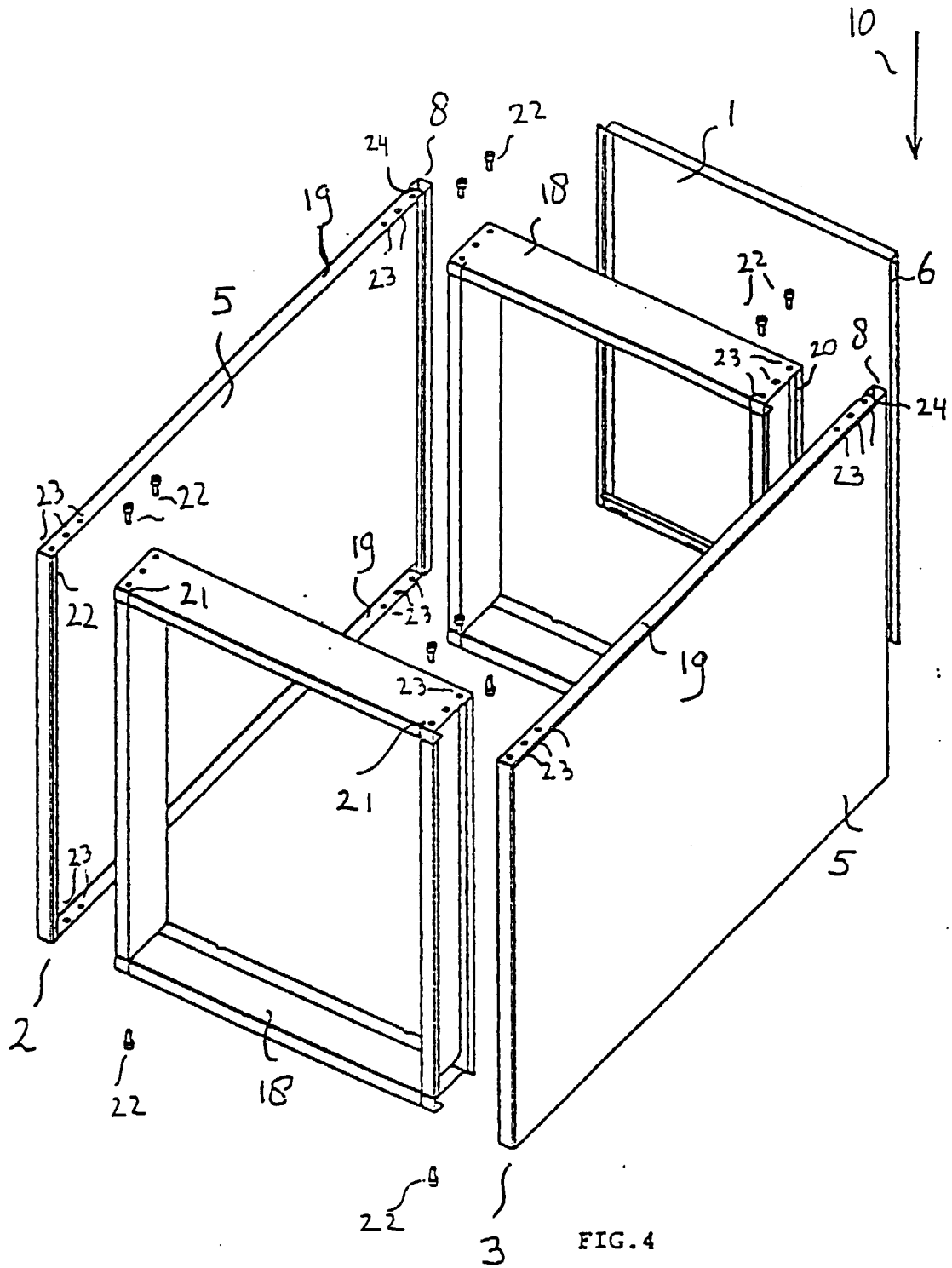


FIG. 4

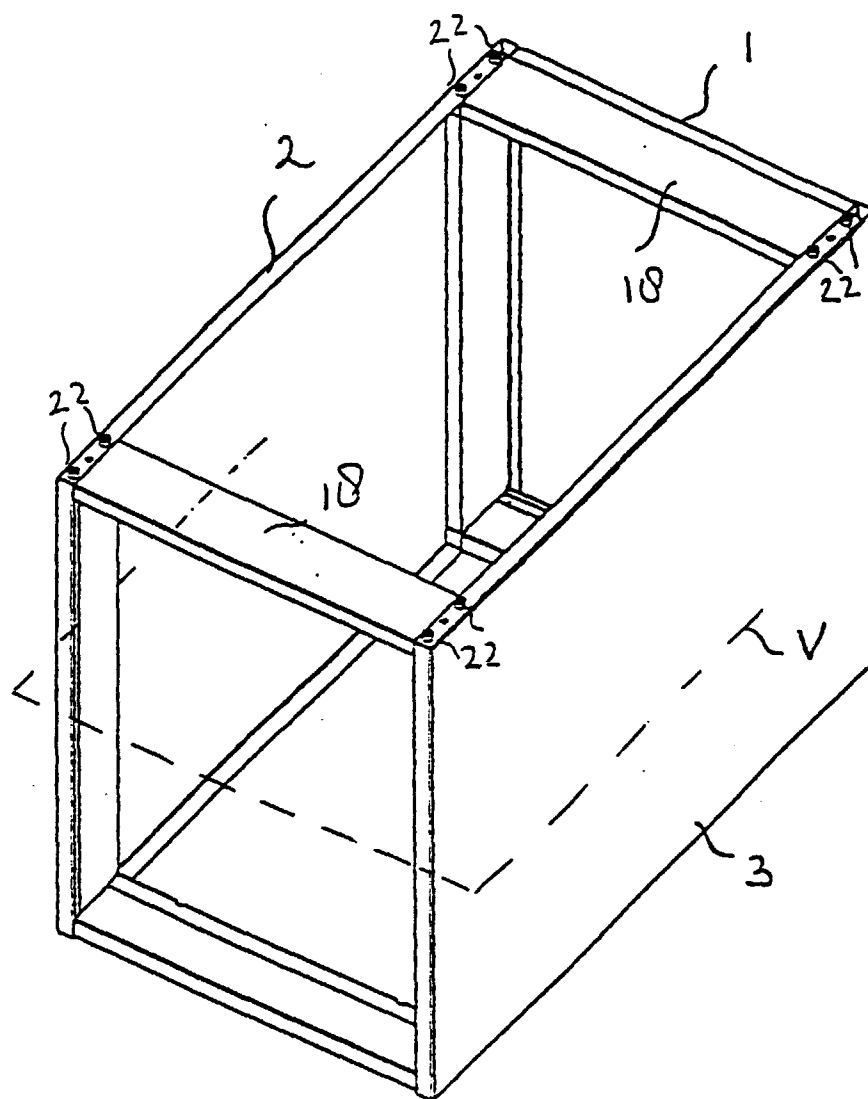


FIG. 5

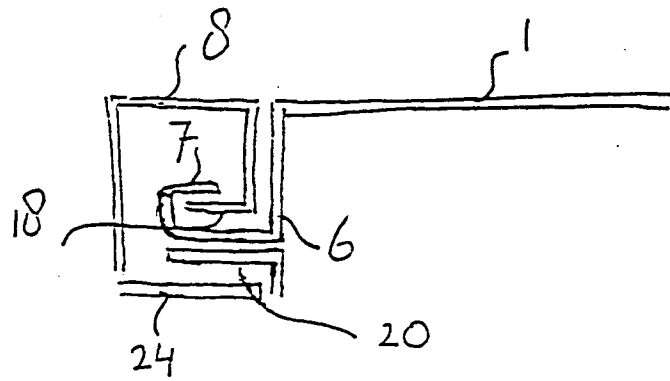
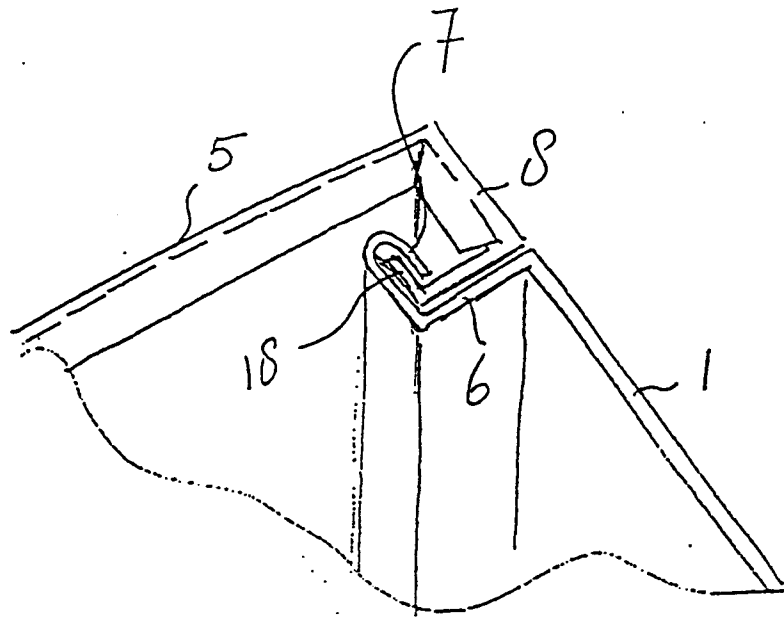


FIG. 6



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EUROPEAN SEARCH REPORT

Application Number
EP 99 20 0297

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.6)
X	CH 658 171 A (ELECTROLUX CONSTUCTOR AKTIEBOLAG) 31 October 1986 * page 2, column 1, line 28 - page 3, column 1, line 12; figures 2A-2F *	1, 2, 4, 6, 9, 11, 12	A47B47/02 A47B67/04
X	US 3 856 374 A (CHRISTEN) 24 December 1974 * abstract; figures 1-9 * * column 1, last paragraph - column 2, line 48 *	1-3, 12, 13	
A	FR 1 437 141 A (COMPAGNIE DU RONEO) 6 July 1966 * page 2, column 1, last paragraph - page 2, column 2, paragraph 3; figures 1-3 *	2, 6, 7, 9, 10	
A	CH 442 650 A (SOCIÉTÉ CIVILE DE RECHERCHES ET D'ÉTUDES INDUSTRIELLES) 31 January 1968 * column 2, paragraph 3; figures 1-7 *	2, 6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A47B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 26 May 1999	Examiner Jones, C
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 20 0297

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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26-05-1999

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