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(54) **Support base for fixed column and rotating platform winding apparatus**

(57) The present invention refers to a support base for fixed column and rotating platform winding apparatus. The support base comprises a pair of horizontal side frames (2), on which are positioned a support plate (6) of the fixed column (7), a support plate (12) of the rotating platform (13) and a closing plate (26) of the space between said support plates (6, 12). Said support and closing plates (6, 12, 26) are fastened to the side frames

(2) by fastening means applied during the mounting phase, in particular by means of fastening bolts. The support plate (12) of the rotating platform (13) is in turn produced in the form of separate parts (22-24), that can be combined and fastened to each other and to the above-mentioned side frames (2) by similar fastening means applied during the mounting phase, in particular by means of fastening bolts.

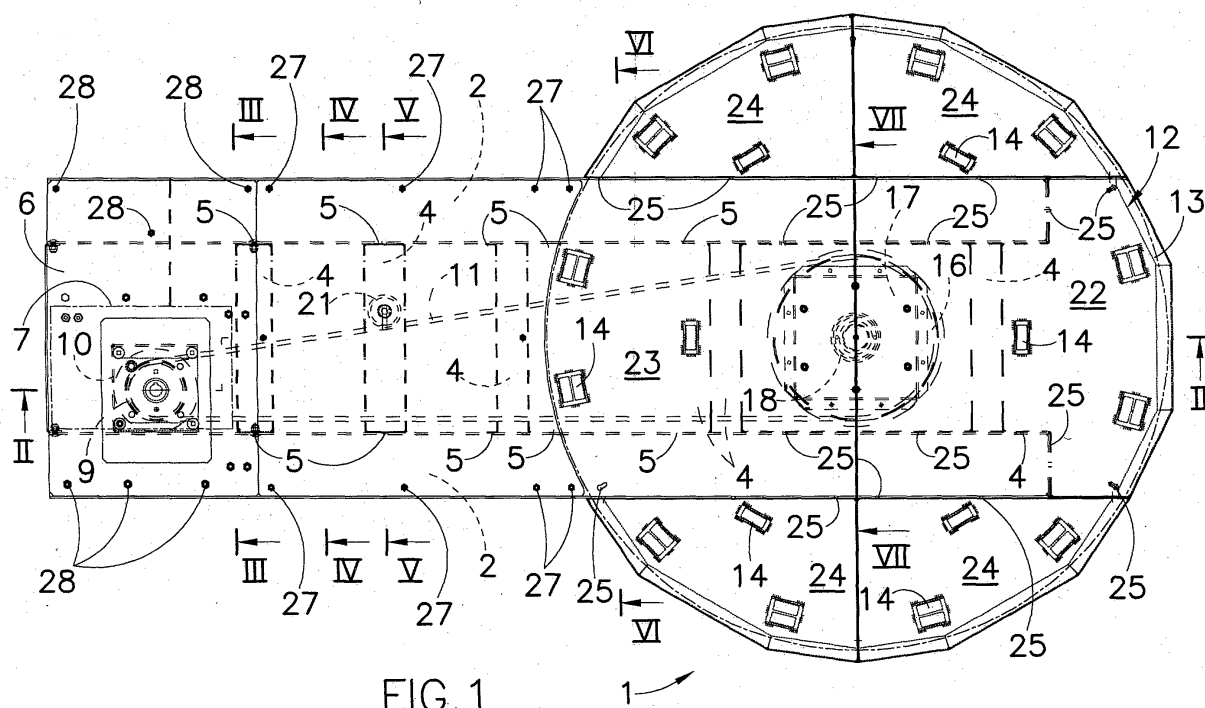


FIG. 1

Description

[0001] The present invention refers to a support base for fixed column and rotating platform winding apparatus.

[0002] For winding film or similar tape around an article or group of articles piled on a pallet or other suitable support, winding equipments that are made up of a support base including a motorized rotating platform and of a fixed column for a reel of windable film that rises and descends along the column are generally used.

[0003] In the known equipments of that type the support base of the reel is made up of a plurality of parts welded together. This creates evident operating and storing problems.

[0004] The object of the present invention is to produce a support base for fixed column and rotating platform winding apparatus that entails less operating and storing problems.

[0005] In accordance with the invention said object is achieved with a support base characterized in that it comprises a pair of horizontal side frames on which a support plate for the fixed column, a support plate for the rotating platform and a closing plate for the space between said support plates are positioned, said support and closing plates being fastened to said side frames by fastening means applied during the mounting phase, in particular by means of fastening bolts.

[0006] In addition the support plate of the rotating platform is preferably produced in the form of separate parts, that can be combined and fastened to each other and to the above-mentioned side frames of similar fastening means applied during the mounting phase, in particular by means of fastening bolts.

[0007] It is evident that the production of the support base in parts that can be stored separately and fastened to each other during the mounting phase by means of fastening bolts simplifies considerably the operations to be carried out and permits significant saving of warehouse space. In addition it is possible to provide the support base with platforms of variable dimensions.

[0008] The characteristics of the present invention will appear evident from the following detailed description of an embodiment thereof represented in the enclosed drawings in which:

Figure 1 shows a top plan view of a support base according to the present invention;

Figure 2 shows said support base in longitudinal section according to line II-II of Figure 1;

Figure 3 shows said support base in transversal section according to line III-III of Figure 1;

Figure 4 shows said support base in transversal section according to line IV-IV of Figure 1;

Figure 5 shows said support base in transversal section according to line V-V of Figure 1;

Figure 6 shows said support base in transversal section according to line VI-VI of Figure 1;

Figure 7 shows said support base in transversal section according to line VII-VII of Figure 1.

[0009] The support base shown in the drawings, where it is indicated in its whole with the numerical reference 1, comprises a pair of side frames 2 with U-section turned downward, periodically closed by U-shaped section bars 3 turned upward (Figures 5-7). The side frames 2 extend almost for the entire length of the support base (Fig. 1) and are connected to each other by stiffening crossies 4 fastened to them by means of fastening bolts in correspondence with holes 5.

[0010] The side frames 2 support at one end a support plate 6 for a fixed column 7 (Fig. 2), which in turn supports a reel-holder trolley (not shown) which slides vertically. An electric motor 8 (Figures 1-3) is also mounted on the plate 6, which puts in motion a pulley 9 contained in a housing 10 placed below the plate 6 and open in the direction of the other end of the base 1 to let the belt pass 11 wound on the pulley 9. Plate 6 is fastened to the side frames 2 by means of fastening bolts in correspondence with holes 28.

[0011] The other end of the side frames 2 supports in turn a support plate 12 for a rotating platform 13 designated for the support of the articles to be wound (Figures 1, 2 and 7). The platform 13 rests on the plate 12 by means of idle rolls 14 and receives the motion from the electric motor 8 by means of a motion transmission that comprises the pulley 10, the belt 11 (duly made to pass through windows 15 of the crossies 4, as can be seen in the figures 3-6) and a pulley 16 fastened to the platform 13 by means of a plate 17 and rotatably supported by a hub 18 fastened to an underlying plate 19 placed in connection of the side frames 2 and fastened to them by means of fastening bolts in holes 20 (Figures 1 and 7). A belt tightener 21 associated to one of the crossies 4 (Figures 1 and 5) keeps the belt 11 in tension.

[0012] The support plate 12 is divided into six parts placed side-by-side (Figure 1), one of which (22) is placed at the end of the side frames 2, another (23) placed between the side frames 2 in position diametrically opposed to the part 22 and four others (24) placed on the sides of the side frames 2 to complete with parts 22 and 23 a circular shape suitable for supporting the idle rolls 14. The six parts of plate 22-24 are fastened to each other and to the side frames 2 by means of fastening bolts in correspondence with holes 25 (Figure 1).

[0013] Finally, in the space between the two support plates 6 and 12 a closing plate 26 is positioned on the side frames 2, which is fastened to the side frames 2 by means of fastening bolts in correspondence with holes 27.

Claims

1. Support base for fixed column and rotating platform winding apparatus, **characterized in that** it com-

prises a pair of horizontal side frames (2) on which a support plate (6) for the fixed column (7), a support plate (12) for the rotating platform (13) and a closing plate (26) for the space between said support plates (6, 12) are positioned, said support and closing plates (6, 12, 26) being fastened to said side frames (2) by fastening means applied during the mounting phase, in particular by means of fastening bolts. 5

2. Support base according to claim 1, **characterized in that** the support plate (12) of the rotating platform (13) is produced in the form of separate parts (22-24), that can be combined and fastened with each other and to the above-mentioned side frames (2) by fastening means applied during the mounting phase, in particular by means of fastening bolts. 10 15

3. Support base according to claim 2, **characterized in that** said separate parts (22-24) of the support plate (12) of the rotating platform (13) comprise a first part (22) placed at the end of the side frames (2), a second part (23) placed between the side frames (2) in position diametrically opposed to the first part (22) and four other parts (24) placed at the sides of the side frames (2) to complete a circular shape with said first and second part (22, 23). 20 25

4. Support base according to claim 3, **characterized in that** said rotating platform (13) is supported in its rotating by idle rolls (14) supported by said parts (22-24) of said support plate (12) of the rotating platform. 30

5. Support base according to claim 1, **characterized in that** said side frames (2) are connected to each other by stiffening crossties (4) fastened by fastening means applied during the mounting phase, in particular by means of fastening bolts. 35

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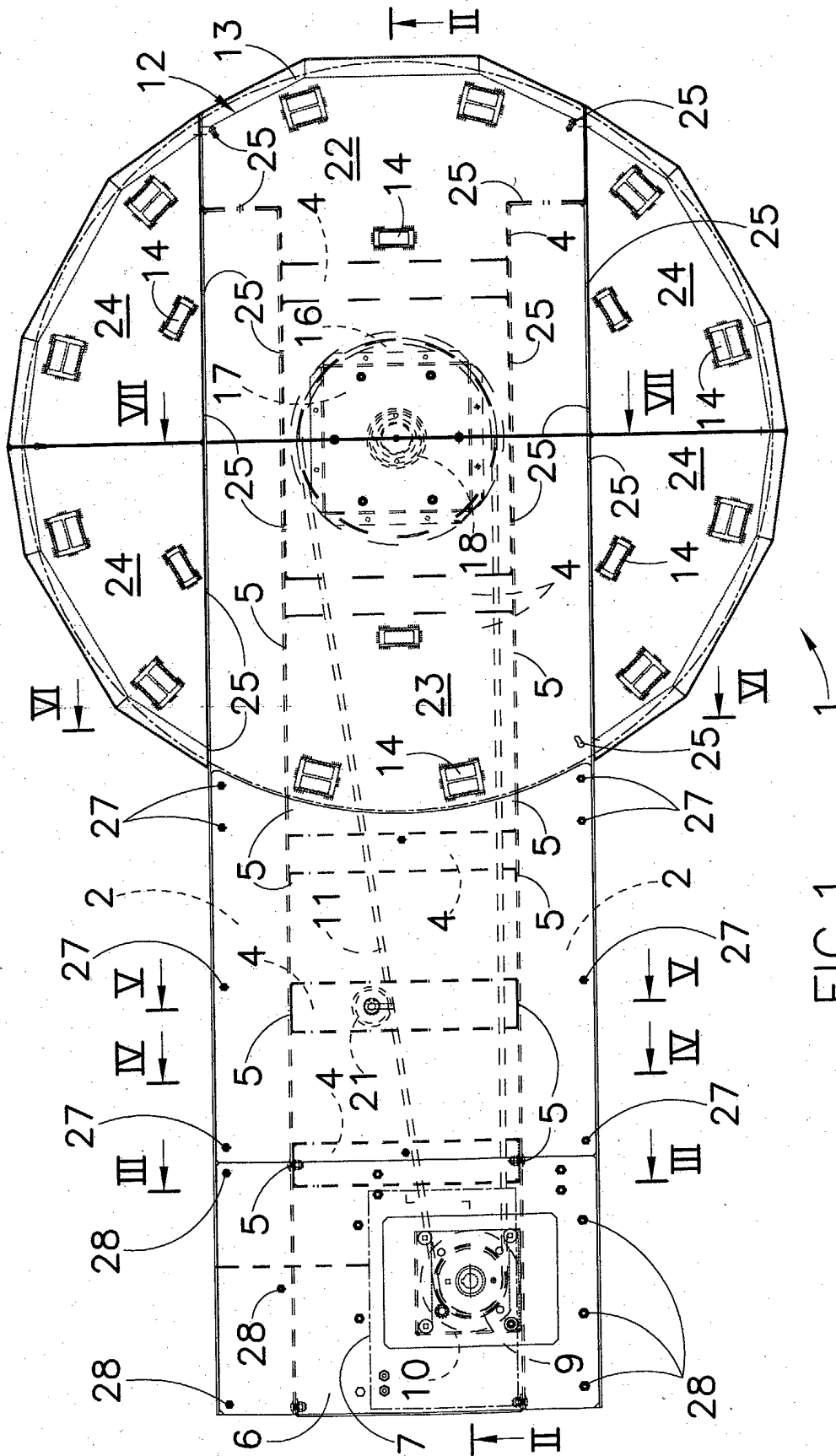


FIG. 1

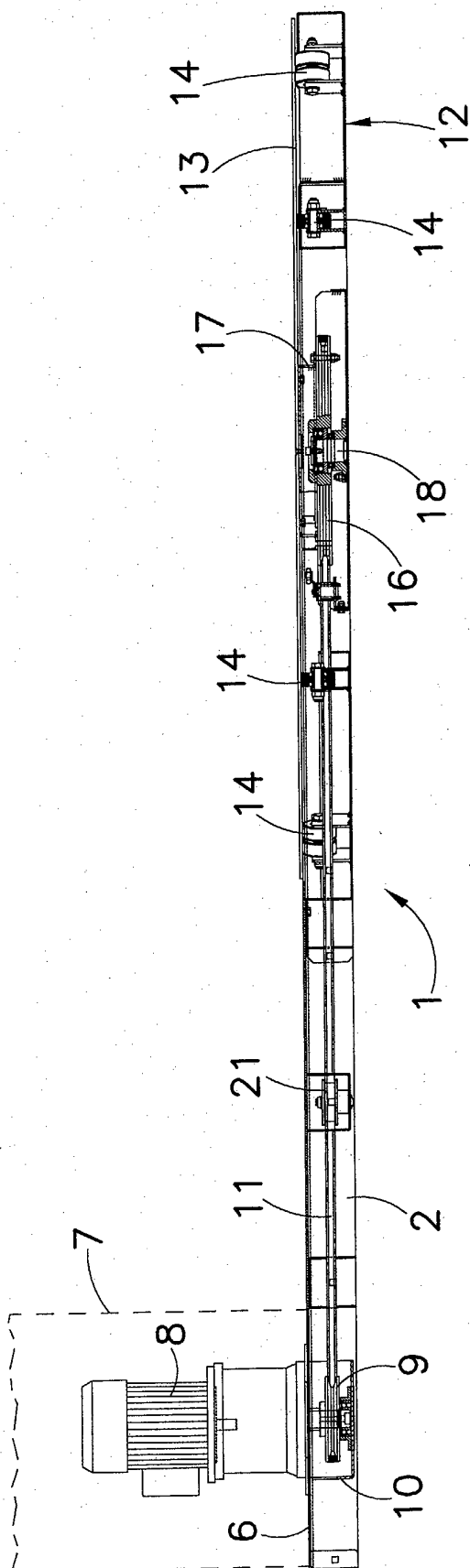


FIG. 2

FIG.3

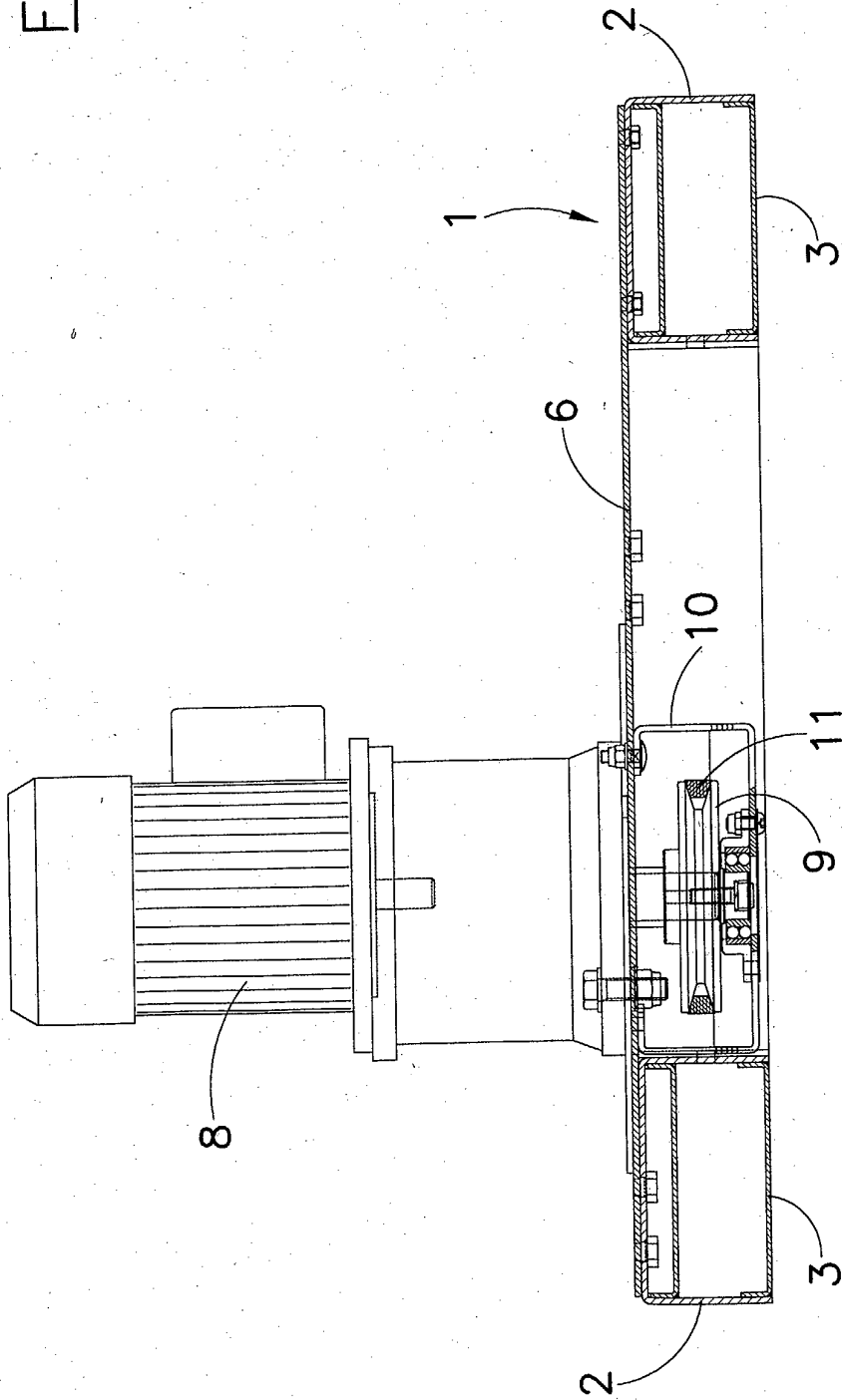
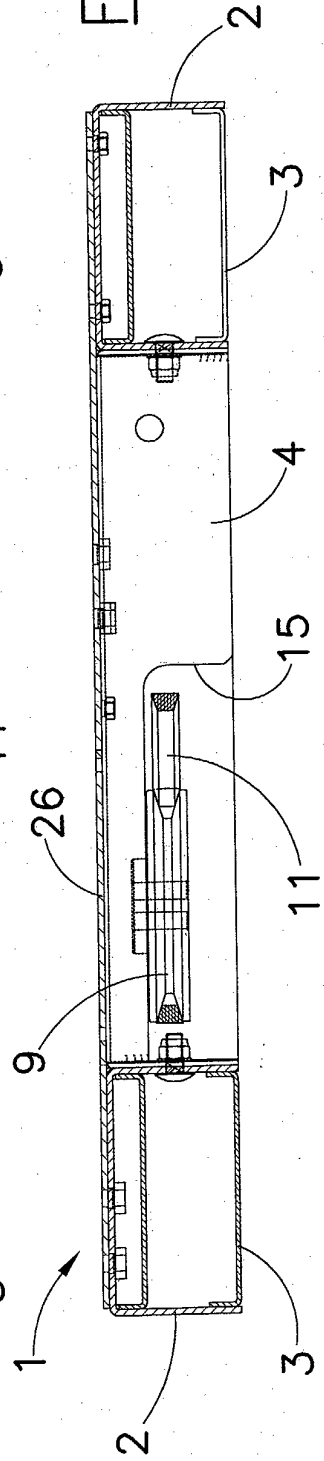


FIG.4



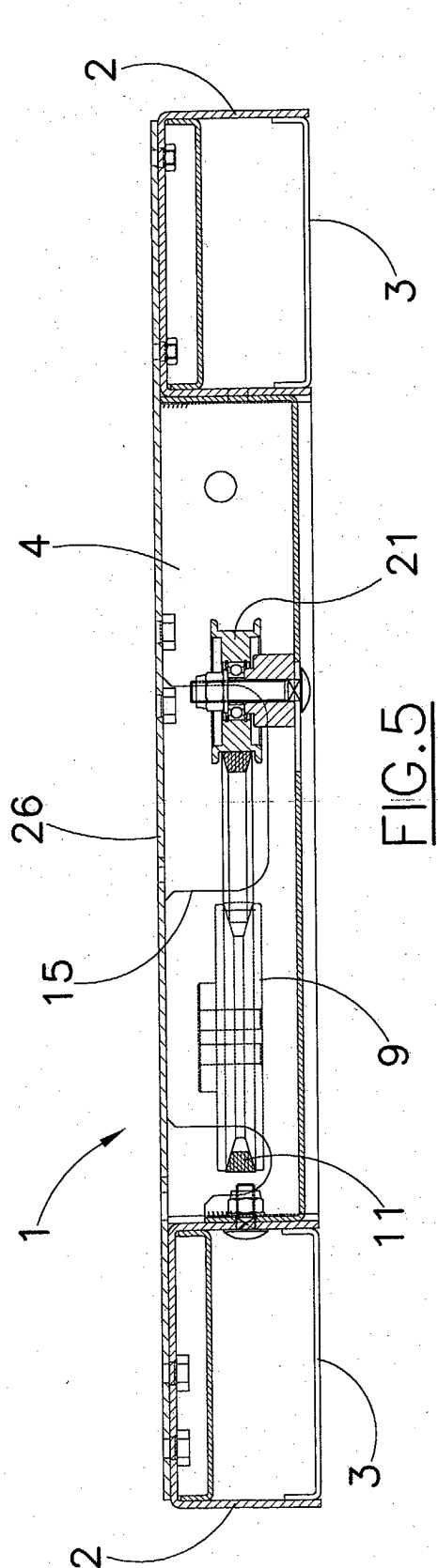


FIG. 5

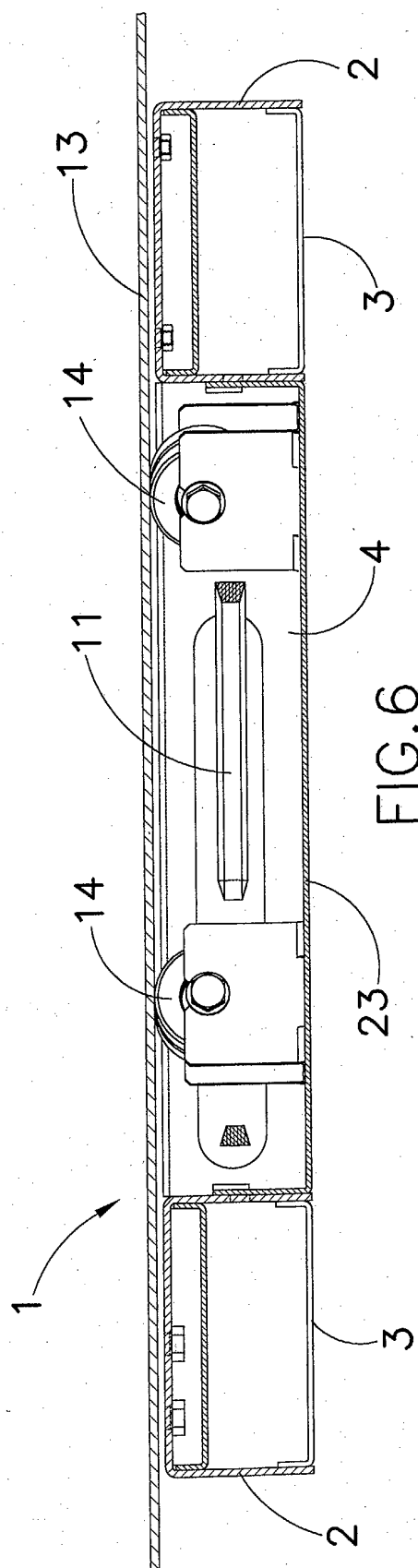


FIG. 6

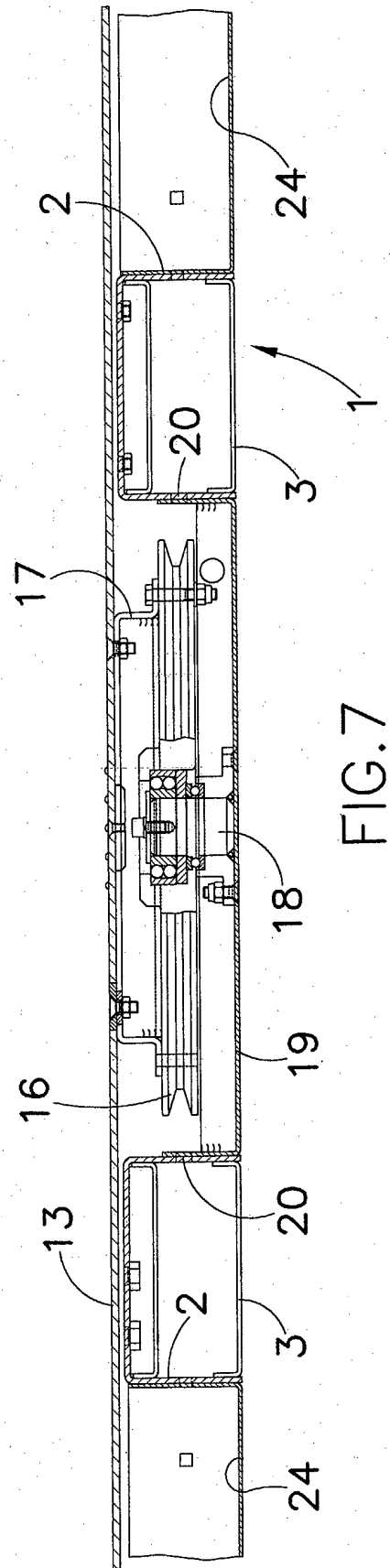


FIG. 7



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 03 07 5009

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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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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		4 April 2003	Grentzius, W
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 07 5009

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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04-04-2003

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