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(54) Information board.

(57) Information board comprising at least one base element of extrusion profile with protruding side edges, between the ends whereof an information carrying panel is received, said base element being closed off at its lengthwise ends with end covers gripping therein. At each lengthwise end of the base element at least one end stop is clamped in position which either in itself or together with a wall part of said base element defines a passage and that the associated end cover is provided with lips protruding into each passage and resilient in transverse direction, whereby said lips and end stops are provided with snap-coupling elements coming into engagement as a result of the spring force of said lips and whereby said end cover is provided with means for moving each lip from outside counter to its resilience in order to place the snap-coupling elements out of engagement.

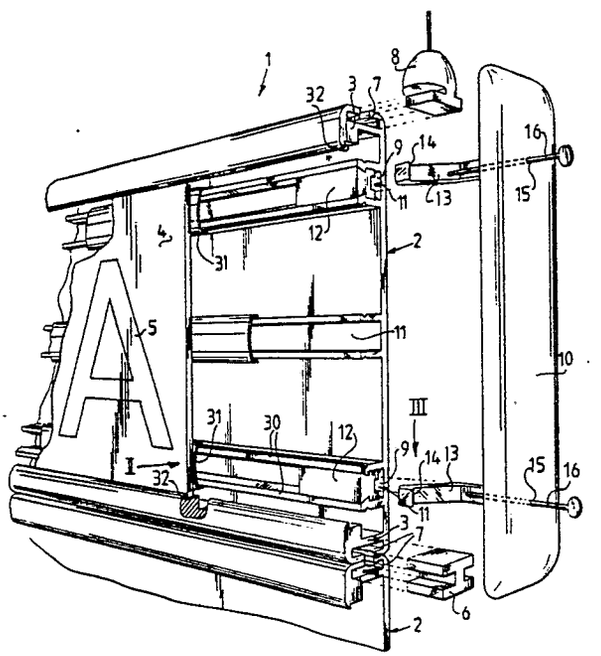

FIG. 1

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INFORMATION BOARD

The invention relates to an information board as described in the introductory part of claim 1.

Such an information board can be used, for example, as a directional system for both the inside and the outside of buildings. The panel carries for example a text and/or directional arrows. In its most simple form the information board can be a name indicator on a door. The panel can be extracted by removing one of the end covers and can be replaced for example with a panel having adjusted information. The removal of the end covers, which can be fixed in position in the base element with protruding parts in the usual manner, involves the risk of damage to the end cover concerned. This has a highly negative effect on the overall appearance of the information board. Moreover, after the end cover has been removed and refitted a number of times, it no longer clamps onto the base element in a reliable manner as a result of wear to the clamping elements.

The invention has for its object to provide an information board of the type described above in which these drawbacks are obviated.

This aim is achieved with the information board according to the invention by the steps of the characteristic of claim 1. In this way the end covers can be removed and subsequently refitted without the risk of damage and without causing wear.

A particularly favourable embodiment is characterized in claim 2. This embodiment is distinguished by simplicity of construction and moreover by the fact that from the outside it is not at all or hardly possible to see that the end covers can be removed, thus preventing removal of the end covers by unauthorized persons.

The embodiment as characterized in claim 3 has the advantage that the end covers and end stops can be manufactured by injection moulding with simple moulds. The step in claim 4 makes it possible for the block to take a very simple form whilst the end cover can still be very accurately positioned relative to the base element, since the channel is situated at a precise and previously determined position in the base element.

A further favourable development of the information board according to the invention in indicated in claim 5. This enables panels of varying thickness to be arranged in one and the same base element so that it is not necessary to set high standards for the thickness-tolerance of the panels. Furthermore, different materials that are immediately available on the market can be used for the panels and, if required, an additional clear protective plate can be inserted in front of the panel.

A very favourable, universally applicable construction is achieved with the characteristics of claim 6. This allows the resilient means to act along the entire length of the base element.

The U-shaped resilient plastic profile can be arranged in a favourable manner on the bounding walls of a channel in which end stops are received. The dual function thus achieved keeps the profile of the base element simple.

A further development of the invention is characterized in claim 8. This embodiment is particularly suitable for an information board comprising a number of base elements, in the manner as described in claim 11. Even when the undercut channel-shaped profiles are not mounted precisely vertically, the entire information board assembled from a number of base elements can be set in precisely level position. Only the bottom base element has to be fixed into level position with the adjusting screws, after which the base elements located above automatically assume the correct position.

In accordance with a further favourable development the undercut channel in the base element can also be util ized for clamping thereon of the U-shaped resilient plastic profile and further for this manner is a simple profile with many posibilities for application.

The information board according to the invention can be assembled from one or more base elements and each base element can be manufactured in a great variety of embodiments. So for example the base elements can be used single-sidedly or double-sidedly with the possibility of connection to adjacent base elements.

The invention will be further elucidated in the following description with reference to a number of embodiments shown in the figures.

Fig. 1 shows a partly broken away perspective view of an information board according to a first embodiment of the invention.

Fig. 2 shows detail III in fig. 1 on a larger scale.

Fig. 3 shows the detail according to III in fig. 1.

Fig. 4 shows a perspective view of an information board according to the invention assembled from a number of base elements.

Fig. 5 shows a partly broken away perspective detail view along arrow V in fig. 4.

Fig. 6 shows a connecting element as indicated by arrow VI in fig. 5.

Fig. 7 shows in partly broken away view a detail along arrow VII in fig. 4.

Fig. 8 shows a partly broken away perspective view of a preferred embodiment of an end cover fixture according to the invention.

The information board 1 according to the invention shown in fig. 1 is assembled from a number of base elements 2 of extrusion profile. These base elements can for example be extruded from aluminium or plastics. Each base element 2 comprises protruding side edges 3, between the ends of which a panel 4 is received. This panel carries for example a text 5 or direction indication.

The base elements 2 are joined together by connecting blocks 6 of I-shaped cross section, the upper and lower flange of which respectively grip into the two facing grooves 7 of adjacent base elements 2. A number of suspension elements 8 slide into the groove 7 at the top of the uppermost element 2 and the information board 1 is suspended thereon.

Each base element 2 is closed off at its ends with an end cover 10, giving the base element a finished appearance and furthermore closing off the panel 4. According to the invention the end covers 10 are arranged on the base element by means of a detachable snap-coupling. In the embodiment shown in fig. 1 the snap-coupling comprises two end stops fixed into position in the channel 11 of the base element and resilient lips 138 co-acting therewith on the end cover 10. Each end stop 12 defines with the bottom of the channel 11 a passage 9 through which a lip 13 can be inserted. Each lip 13 is provided on its end with a nose-like protrusion 14 which can fall into place against the rear surface 17 of the end stop 12. All that is needed then to mount the end cover 10 is simply to insert the lips 13 in the passages 9 and to push the end cover into place, upon which the nose-like protrusions 14 lock the end cover 10 into its mounted position.

To remove the end cover 10, for example in order to replace the panel 14 with a panel with another message, boreholes 15 are formed close to the foot of each lip on that side towards which the spring force is forced the lip, that is in fig. 1 on the front and in fig. 3 on the rear, these holes being arranged substantially parallel to the lip 13, through which bores a pin 16 can be inserted. When the pin 16 is inserted into the hole 15, the lip 13 is pressed aside counter to its own resilience, whereby the nose-like protrusion 14 is released from the rear surface 17 of the end stop 12 and the end cover can then be slid out of the base element.

Another embodiment of a snap-coupling for an end cover is shown in fig. 8.

The base element 20 is hereby provided with a chanel 21 opening towards the rear which can further be used to fasten the base element in the manner to be described later with reference to figures 4 and 5. Again accomodated in the channel 21 is an end stop 22 which is provided in this embodiment with an protruding pin 23. The end cover 26 to be arranged against the base element 20 is again provided with a resilient lip 23 which however has a hole 25 that acts as clamping element by falling over the pin 23. As shown, the pin 23 is chamfered in order to guide the end of the lip 24 over the pin 23.

Next to the foot of the lip 24 a bore-hole 27 is arranged in the end cover 26 and through this bore-hole 27 a rod 28 can be placed to push aside the lip 24 counter to its resilience in order to release the pin 23 from the opening 25 in the lip 24 and to be able to pull the end cover 26 from the base element 20.

As can be seen in fig. 1, the side edges 3 of the base element 2 are provided with locking edges 32 for the panel 4 that face one another. The panel 4 is pressed against these locking edges 32 by resilient U-shaped plastic profiles 31. The U-shaped profiles grip in each case onto two standing walls 30 of the base element 2 which define a channel 11. As fig. 2 more clearly shows, the standing walls 30 are provided on the sides turned away from one another with a lengthwise groove 33 into which a bent back outer edge 34 of the U-profile slots. The curved form connecting portion of the U-profile presses against the rear side of the panel 4. Depending on the thickness of the panel 4, the U-profile can be pressed in to a greater or lesser degree so that panels 4 of varying thickness can be received into the information board without problem. A transparent protective plate for the panel 4 can also be received between the outer edges of the element 2.

The information boards according to the invention can be employed in different ways. As shown in fig. 1, they can be suspended. Fig. 4 shows an example of use whereby an information board 40 is fitted against a wall 44. For this purpose two profiles 42 are screwed roughly vertically into the wall 44 at a distance from each other. Each profile 42 comprises an undercut groove 43. A connecting element 45 is received in this groove 43 for each base element 41 of the information board 40. This connecting element can slide in the groove 43, but resilient wings 47 cause it to clamp into position to some extent therein.

In a similar manner the head 46 of the connecting element 45 grips slidably into an undercut channel 50 open towards the rear side of base element 41. As shown, a resilient U-profile 48 is clamped against the opposite walls of the channel 50 in this embodiment also. After screwing the channel profiles 42 onto the wall 44, the bottom base element 41 can be fitted using two connect-

ing elements 45. This bottom base element 41 is horizontally adjusted using the clamp blocks 49 shown in detail in fig. 7, which are clamped in place in the channel profile 42. The following base elements 41 can now slide simply into the channel profiles 42 from above and come to rest against the bottom horizontally set base element 41. The entire board 40 can thus be set in accurate horizontal position, even if the channel shaped profiles 42 have not been arranged in accurate vertical position. The different base elements 41 can be mutually connected with connecting blocks of the type shown in fig. 6.

Although fig. 4 shows that the channel profiles 42 are of a length such that they protrude above and below the information board 40, when the definite height of a board 40 is known a length can be chosen whereby the information board 40 precisely covers the channel profiles 42. In that case the bottom base element of the information board is clamped in position to the channel profiles 42 using adjusting screws arranged through the element.

As has already been discussed with regard to fig. 8, the channels opening towards the rear side can also be used to arrange therein end stops for the purpose of fastening the end covers. These channels can hereby fulfill three functions, namely the receiving of the head of a connecting element 45, the clamping thereon of a resilient U-profile 48 and the sliding of end stops onto the ends thereof.

Claims

1. Information board comprising at least one base element of extrusion profile with protruding side edges, between the ends whereof an information carrying panel is received, said base element being closed off at its lengthwise ends with end covers gripping therein, **characterized** in that at each lengthwise end of the base element at least one end stop is clamped in position which either in itself or together with a wall part of said base element defines a passage and that the associated end cover is provided with lips protruding into each passage and resilient in transverse direction, whereby said lips and end stops are provided with snap-coupling elements coming into engagement as a result of the spring force of said lips and whereby said end cover is provided with means for moving each lip from outside counter to its resilience in order to place the snap-coupling elements out of engagement.

2. Information board according to claim 1, **characterized** in that the means for moving each lip from outside counter to its resilience comprise a bore-hole arranged close to the foot of the lip, on that side towards which the spring forces the lip and largely parallel with the lip, for the passage of a rod-shaped tool.

3. Information board according to claim 1 or 2, **characterized** in that the snap-coupling elements comprise a nose-shaped protrusion on the end stop and an opening in the lip which falls thereover.

4. Information board according to one of the preceding claims, **characterized** in that each end stop is clamped in position in a channel of the base element.

5. Information board according to one of the preceding claims, **characterized** in that the slide edges of the base element comprise facing locking edges for the panel and that the resilient means forcing the panel against the locking edges are accommodated in the inner space of the base element defining by the protruding side edges.

6. Information board according to claim 5, **characterized** in that the resilient means comprise a substantially U-shaped, resilient plastic profile which grips with its legs round two standing walls of the base element.

7. Information board according to claim 6, **characterized** in that the standing walls are bounding walls of a channel receiving end stops.

8. Information board according to one of the preceding claims, **ccharacterized** in that the base element is provided with an undercut channel open towards its rear end for slidable receiving of a head of a connect ing element.

9. Information board according to claim 8, **characterized** in that wall bounding the channel carry exterior gripping means for the U-shaped resilient profile.

10. Information board according to claim 8, **characterized** in that end stops are received into the channel.

11. Information board according to one of the claims 8-10, **characterized** in that a number of base elements, each with connecting elements received slidably in substantially vertical undercut channel-like profiles, and the head of which is received slidably in the undercut channel of the base elements, are arranged above each other, whereby the lower base element is fixed in place to said channel-like profile by a slidably adjusting screw.

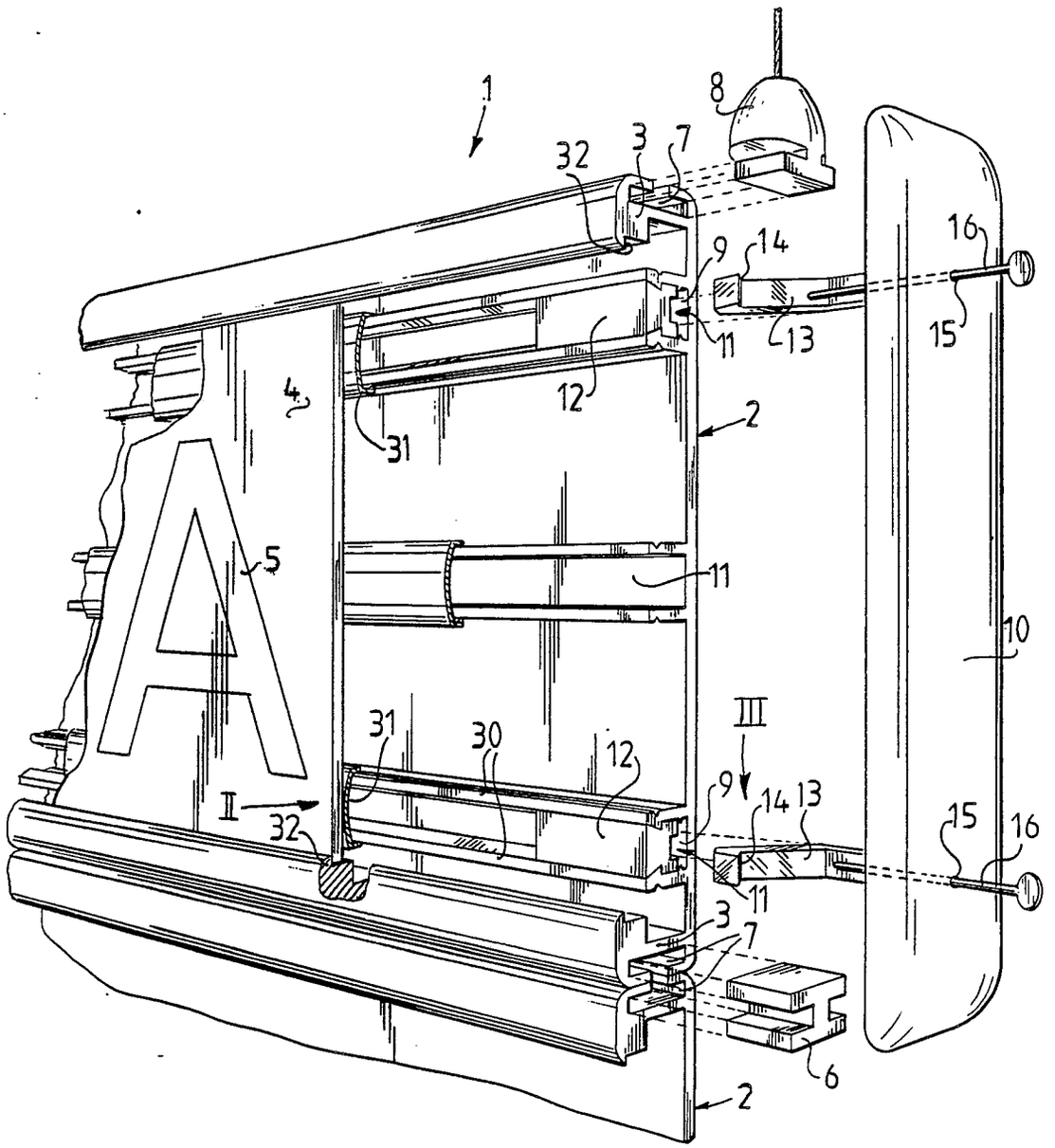


FIG. 1

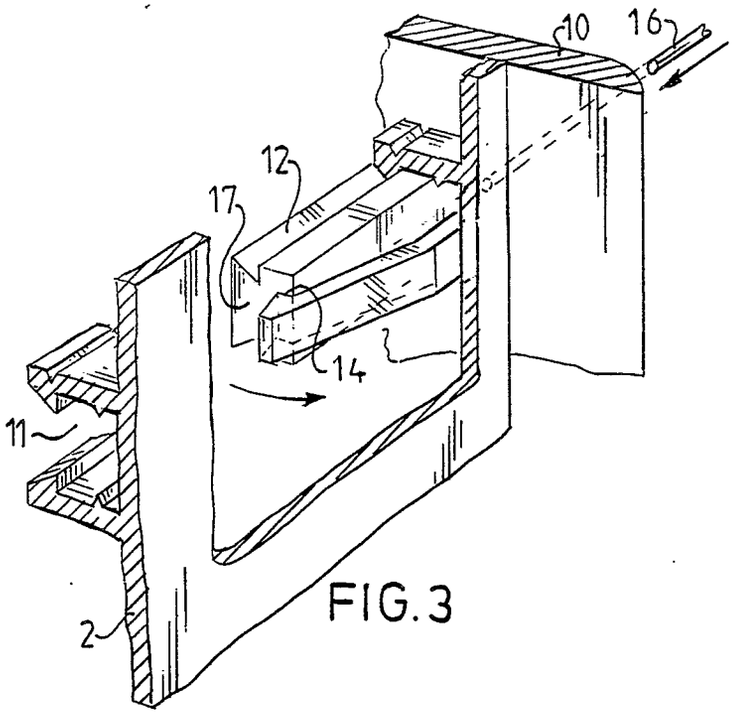
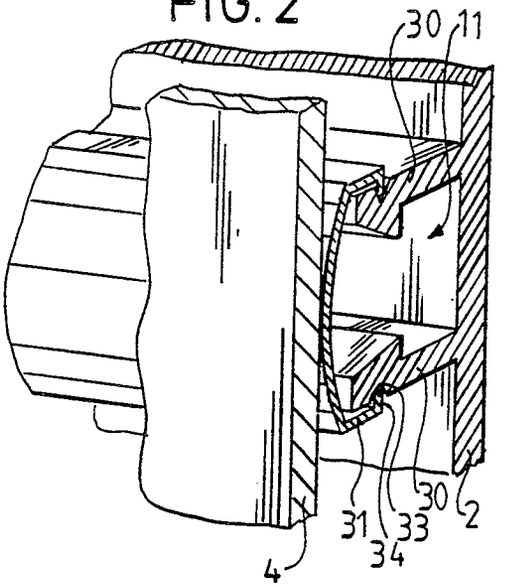


FIG.3

FIG.2



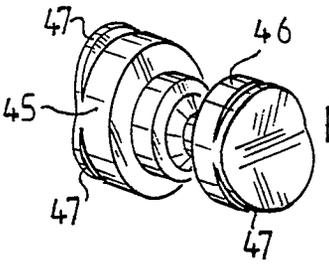


FIG.6

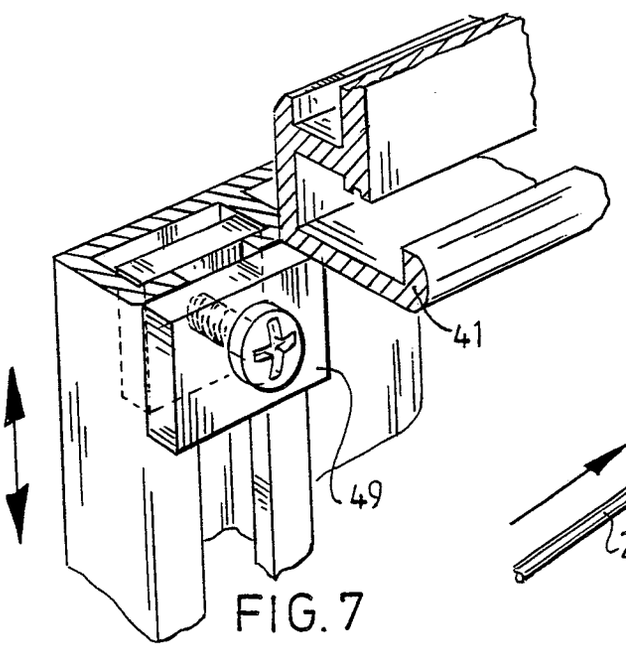


FIG.7

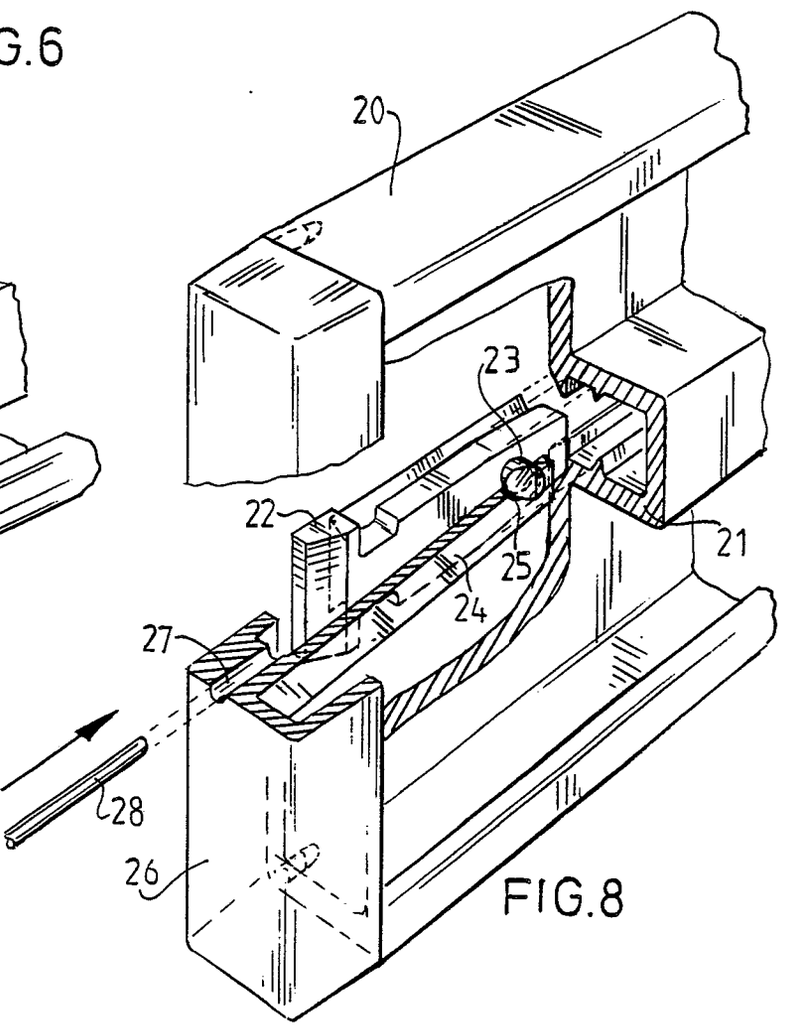
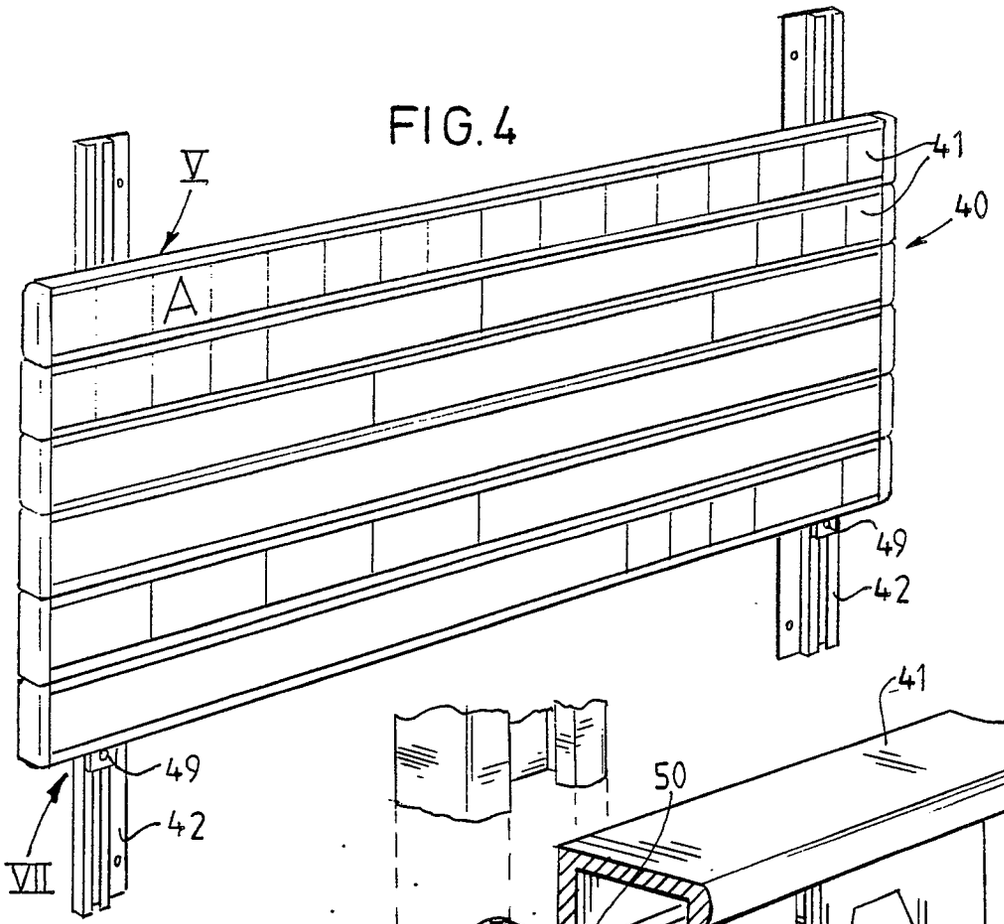


FIG.8

FIG. 4



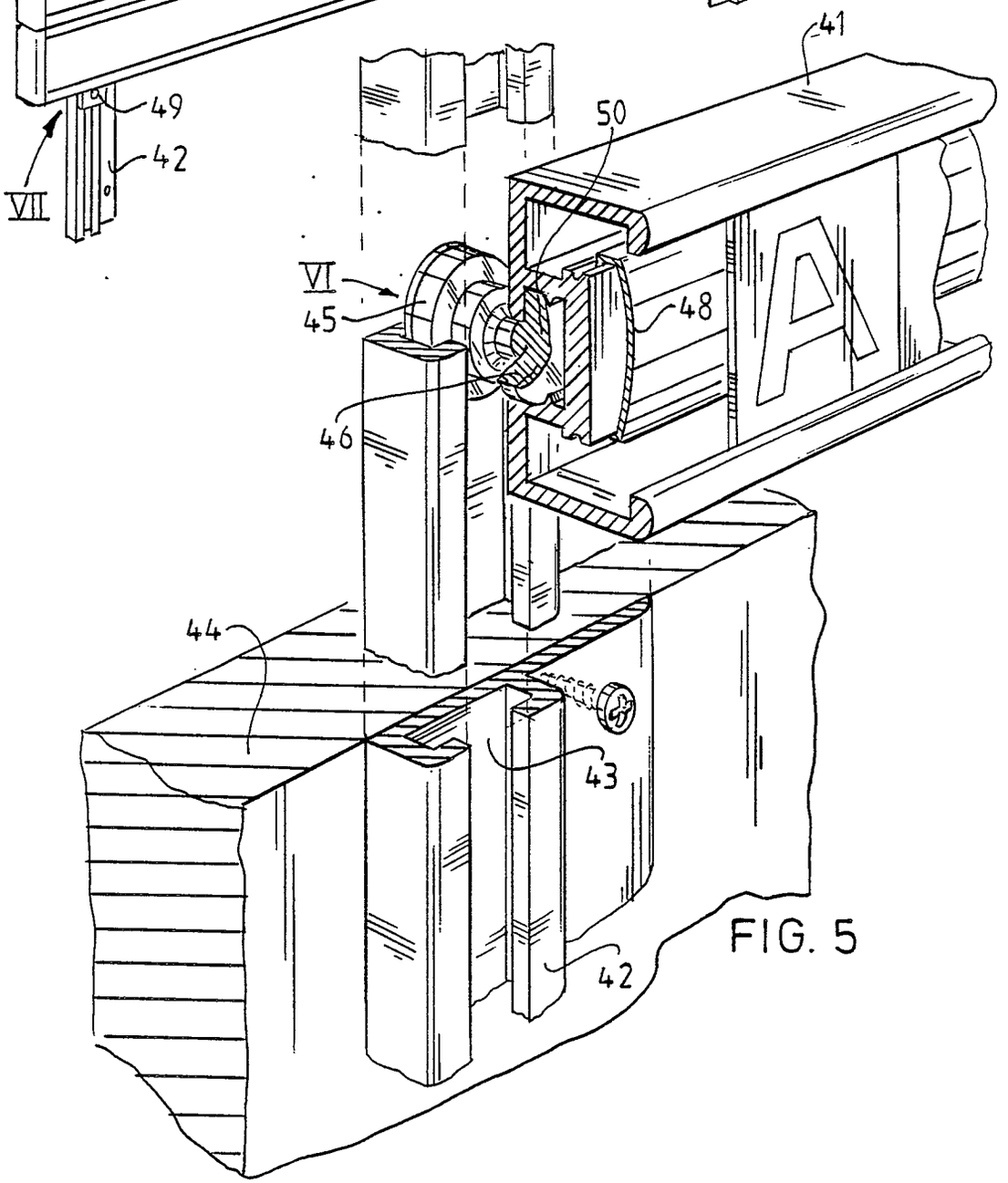


FIG. 5

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EUROPEAN SEARCH REPORT

Application Number

EP 89 20 0255

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.4)
X	NL-A-7 713 529 (B.V. V/H H.P.A. KEMPERMAN) * Claims 1,9-10; page 7, line 8 - page 8, line 14; figures 1,2,4,6-8 *	1-3	G 09 F 7/02 G 09 F 7/10
A		4	
A	CH-A- 658 925 (KVBI WALDEMAR) * Claim 1; page 3, left-hand column, line 31 - right-hand column, line 53; figures 1-3 *	1,2	
A	US-A-1 834 423 (G.S. RIDER) * Page 2, lines 11-39; figures 1,3,5 *	5	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

G 09 F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	17-05-1989	FRANSEN L.J.L.

CATEGORY OF CITED DOCUMENTS

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