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(54) Demountable partitioning system.

(57) A demountable partitioning system comprising upper track means (1) securable to a ceiling, connecting members (2) in sliding engagement with the track means (1), vertical stud members (3) the upper end of each of which is engaged with a connecting member (2), panel members (4) which extend between and engage the stud members (3), and means (5) for adjusting said panel members for height relative to the stud members (3). The panel members (4) have an upper position in which the connecting members (2) are at least partially concealed thereby and a lower position wherein access can be had to the connecting members (2) to enable a connecting member (2) and its associated stud member (3) to be moved relative to a panel member (4) to release the engagement of the panel member (4) with the stud member (3) for demounting of the partitioning.

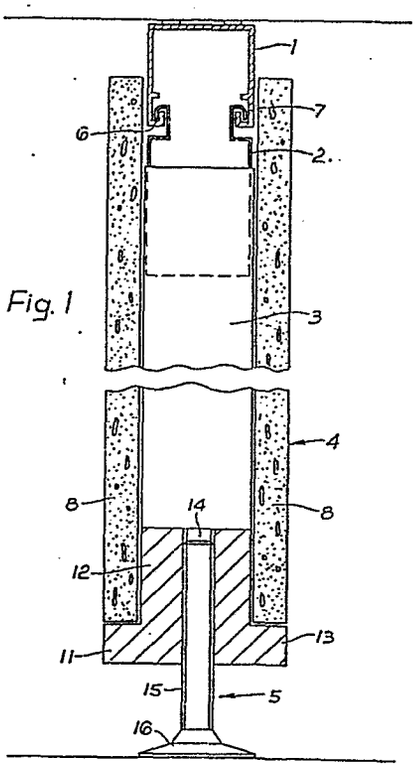

Fig. 1

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DEMOUNTABLE PARTITIONING SYSTEM

This invention relates to demountable partitioning systems.

Known demountable partitioning systems generally comprise upper and lower tracks which are securable to a ceiling and a floor respectively, vertical stud members which extend between the upper and lower tracks and which are secured thereto and panels opposite side margins of which are received in channels in the vertical stud members. Such known demountable partitioning systems suffer from the disadvantages that they can only be erected and demounted by working progressively from one end to the other with the result that if it is desired to demount a portion of the partitioning in an intermediate portion of a long run it is necessary to disassemble all of the partitioning from one end until the portion that is to be demounted is reached. Accordingly such known demountable partitioning systems require a lot of time and labour to erect and demount, particularly when demounting or rearrangement of an intermediate portion of a long run of partitioning is required.

The present invention has as its object to provide a demountable partitioning system which overcomes the aforesaid disadvantages with known systems.

The present invention provides a demountable partitioning system comprising upper track means which can be secured to a ceiling or like surface, spaced connecting members which makes sliding engagement with the track means, vertical stud members the upper end of each of which engages with a said connecting member, panel members which extend between and engage the stud members, and means for adjusting said panel members for height relative to said stud members, the panel members having an upper position in which the said connecting members are at least partially concealed

thereby and a lower position wherein access can be had to the connecting members.

Preferably the panel members engage the stud members with clearance. This enables a connecting member and its associated stud member, when a panel engaged therewith is in its lower position, to be slid relative to the panel member to release the engagement of the panel member with the stud member for demounting of the partitioning.

The upper track means and said connecting members may have cooperating flanges thereon. Thus, for example, the upper track means, which may be of channel section metal such as extruded aluminium, may comprise spaced inturned flanges and said connecting means may each have outwardly directed flanges thereon which cooperate with the inturned flanges of the upper track means. The flanges of the upper track means may turn inwardly and then upwardly to form upwardly open hook portions and the flanges of the connecting means may turn outwardly and then downwardly to form downwardly open hook portions adapted to engage with the hook portions of the upper track means. Preferably the connecting members comprise channel-section clips which can be sprung into and out of engagement with the upper track means to enable demounting of the partitioning even if there is no clearance between the panel members and the other members.

The upper ends of the vertical stud members may make spigot-and-socket engagement with the connecting members. Thus, the stud members may be hollow section members and the connecting members may be received in the upper ends thereof.

The lower ends of the stud members may be supported on a floor or like surface. Generally, no securing of the stud members to the floor or like surface is necessary since the weight of the partitioning is sufficient to prevent movement of the bottom of the

partitioning. Where, on a long run, securing of the lower end of one or more stud members to a floor or like surface is thought necessary or desirable then suitable means may be provided whereby a stud or studs can be secured to the floor or like surface. Such means may take the form of a said connecting member which can be secured to a floor or like surface and which can be engaged with the lower end of a said stud member to locate the lower end of the stud member.

The partitioning system of the present invention may have stud members and panels members one of which comprises channel portions adapted to releasably engage the other of said members. Thus, said panel members may each have a channel portion along opposed side margins thereof and said stud members may be received in the opposed channel portions of adjacent panel members. To this end the panel members may each comprise spaced panels having a filler therebetween and the filler may terminate short of opposed side margins of the panels to define said channel portions. Said filler may be of cellular or honeycomb construction.

Said adjusting means may comprise adjustable feet. Such adjustable feet may each comprise a threaded nut portion which engages the lower edge or margin of a panel member, a threaded bolt which makes screw-threaded engagement with the nut portion and a foot at the lower end of said bolt. A skirting may be provided which extends along the bottom of the partitioning on one or both sides thereof to conceal said adjusting means and the gap between the lower edges of the panel members and the floor.

Preferably the stud members are formed from a suitable metal such as aluminium or steel and the panel members are preferably pre-finished with a suitable decorative finish.

To erect the demountable partitioning of the present

invention, all that is required is to secure the upper track means to a ceiling or like surface, engage a connecting member with the upper track means, engage the upper end of a vertical stud member with the connecting member, slide the connecting member and vertical stud member to a required position, engage a panel member with the vertical stud member, engage a further connecting member with the upper track means, engage the upper end of a further vertical stud member with the further connecting member, slide the further connecting member and stud member into engagement with the opposite side margin of the panel member, and continue in this way until the partitioning is erected, the adjusting means being adjusted at any suitable time during the erection of the partitioning to raise the panel members so that they at least partially conceal the connecting members. Finally a skirting can be provided along one or both sides of the bottom of the partitioning and, if desired, a similar finishing strip along one or both sides of the upper end of the partitioning. Such skirting and finishing strip may be secured as by means of screws or the like to the stud members and the upper track means respectively. To remove a panel member at any point along the length of the partitioning, it is only necessary to remove the skirting and , where provided, the upper finishing strip in the region of the panel member to be removed, lower the panel member by actuation of said adjusting means to provide access to the connecting member at one end of the panel member, either slide the connecting member and its associated stud member along the upper track means and floor respectively to release the engagement between the stud member and the panel member or reduce the spring clip connecting member from the track means, and remove the panel member. It will thus be seen that the present invention provides a demountable partitioning system which is both quick and

easy to erect and which is equally quick and easy to demount either in whole or in part. Moreover, when a partitioning system according to the present system is demounted all of the component parts thereof are reusable.

The present invention will be more particularly described with reference to the accompanying drawings, in which:-

Figure 1 is a sectional elevation of a demountable partitioning system according to one embodiment of the present invention, and

Figure 2 is a sectional plan view of another embodiment of a demountable partitioning system according to the present invention.

Referring to Figure 1 it will be seen that the demountable partitioning system illustrated therein comprises an upper track means 1 securable to a ceiling or like surface, a connecting member 2 which makes sliding engagement with the track means 1, a vertical stud member 3 the upper end of which engages the connecting member 2, a panel member 4 and an adjustable foot 5.

The upper track means 1 is of channel section metal, e.g., extruded aluminium, and has opposed flanges 6 which turn inwards and then upwards to provide upwardly opening hook portions. The connecting member 2 is in the form of a channel section clip having spaced flanges 7 which turn outwards and then downwards to provide downwardly opening hook portions adapted to make sliding engagement with the hook portions of the upper track means 1 as shown. The clip 2 can be sprung into and out of engagement with the upper track means 1.

The stud member member 3 is of hollow rectangular section metal such as aluminium or steel the upper end of which receives the lower part of the clip 2 spigot-and-socket fashion. The lower end of the stud member 3 is

supported on a floor or like surface.

The panel member 4 comprises spaced panels 8 having a filler 9 (Figure 2) therebetween. As shown in Figure 2, the filler 9, which is of cellular or honeycomb construction, terminates short of the opposite side edges of the panels 8 to form channel portions 10 in which the stud member 3 is received with clearance. Normally, the stud member 3 will be received in the opposed channel portions of two adjacent panel members 4.

The adjustable foot 5 comprises a nut portion 11 having a spigot portion 12 which extends between the panels 8 and side flanges 13 which support the panels 8 and an internally screw threaded aperture 14 extending therethrough. In screw threaded engagement with the nut 11 is a threaded bolt 15 having a foot 16 at the lower end thereof. Preferably each panel member 4 is provided with at least two spaced adjustable feet 5. The adjustable feet 5 preferably provide for height adjustment of the panel member 4 in the range of from 50 to 80 millimeters, preferably about 70 millimeters. The feet 5 enable the panel member 4 to be moved between the raised position shown in Figure 1 wherein the clip 2 is concealed by the panels 8 and the upper margins of the panels 8 extend on either side of the upper track means 1 to provide stability at the upper end of the partitioning and a lower position (not shown) wherein access can be had to the clip 2 to enable the clip 2 and its associated stud member 3 to be slid relative to the panel member 4 to release the engagement between the panel member 4 and the stud member 3 and so enable the panel member 4 to be removed.

A suitable skirting (not shown) may be provided on one or both sides of the partitioning to conceal the feet 5 and the gap between the lower edge of the panel member 4 and the floor or like surface on which the partitioning is supported. Likewise a suitable finishing strip (not

shown) may be provided along one or both sides of the top of the partitioning to conceal the track means 1 and provide a neat finish. The skirting may be secured, e.g., screwed, to the stud members 3 whilst the upper finishing strip may be secured, e.g., screwed, to the upper track means 1.

It will be understood that whilst only a single stud member 3 and panel member 4 have been shown in Figure 1, normally each stud member 3 will be received between a pair of adjacent panel members 4 and each panel member 4 will extend between an adjacent pair of stud members 3.

The embodiment of Figure 2 is similar to the embodiment of Figure 1 and accordingly like parts have been given like reference numerals.

The embodiment of Figure 2 is for use where extended fire resistance is required for the partitioning and comprises, in addition to the normal stud member 3 between adjacent panel members 4, further stud members 17 of steel or like fire rated material to which the panel members 4 are secured as by means of screws 18. The further stud members 17 may be slidably engaged with the upper track means 1 by means of clips 2 as previously described and may be supported on or secured to a floor or like surface. Where the stud members 17 are secured to the floor or like surface, clips 2 may be used which are secured to the floor and which are received in the lower ends of the stud members 17. As will be seen, a stud member 17 is provided on either side of the stud member 3 and a clearance gap 19 is left between one stud member 17 and the stud member 3 to allow sliding movement of the stud member 3 towards said one member 17 to release the engagement of one panel member 4 with the stud member 3 when it is desired to demount the partitioning or remove a panel member 4.

CLAIMS

1. A demountable partitioning system comprising upper track means which can be secured to a ceiling or like surface, spaced connecting members which make sliding engagement with the track means, vertical stud members the upper end of each of which engages with a said connecting member, panel members which extend between and engage the stud members, and means for adjusting said panel members for height relative to said stud members, the panel members having an upper position in which the said connecting members are at least partially concealed thereby and a lower position wherein access can be had to the connecting members.

2. A demountable partitioning system according to claim 1, wherein the panel members engage the stud members with clearance, whereby when a panel member is in its lower position a stud member engaged thereby and its associated connecting member can be slid relative to the panel member to release the engagement of the panel member with the stud member for demounting of the partitioning.

3. A demountable partitioning system according to claim 1 or 2, wherein said upper track means and said connecting members have cooperating flanges thereon.

4. A demountable partitioning system according to claim 3, wherein the upper track means comprises spaced inturned flanges and said connecting means each have outwardly directed flanges thereon which cooperate with the inturned flanges of the upper track means.

5. A demountable partitioning system according to claim 4, wherein the flanges of the upper track means turn inwardly and then upwardly to form upwardly open hook portions and the flanges of the connecting means turn outwardly and then downwardly to form downwardly open hook portions.

6. A demountable partitioning system according to

claim 4 or 5, wherein the connecting members comprise channel-section clips which can be sprung into and out of engagement with the upper track means.

7. A demountable partitioning system according to any one of the preceding claims, wherein the upper ends of the vertical stud members make spigot-and-socket engagement with the connecting members,

8. A demountable partitioning system according to claim 7, wherein the stud members are hollow section members and the connecting members are received in the upper ends thereof.

9. A demountable partitioning system according to any one of the preceding claims, wherein the lower ends of the stud members are supported on a floor or like surface.

10. A demountable partitioning system according to any one of the preceding claims, wherein a said connecting member is provided which can be secured to a floor or like surface and which can be engaged with the lower end of a said stud member to locate the lower end of the stud member.

11. A demountable partitioning system according to any one of the preceding claims, having stud members and panel members one of which comprises channel portions adapted to releasably engage the other of said members.

12. A demountable partitioning system according to claim 11, wherein said panel members each have a channel portion along opposed side margins thereof and wherein said stud members are received in the opposed channel portions of adjacent panel members.

13. A demountable partitioning system according to claim 12, wherein the panel members each comprise spaced panels having a filler therebetween and wherein the filler terminates short of opposed side margins of the panels to define said channel portions.

14. A demountable partitioning system according to

claim 13, wherein said filler is of cellular or honeycomb construction.

15. A demountable partitioning system according to any one of the preceding claims, wherein said adjusting means comprise adjustable feet.

16. A demountable partitioning system according to claim 15, wherein said adjustable feet each comprise a threaded nut portion which engages the lower edge or margin of a panel member, a threaded bolt which makes screw-threaded engagement with the nut portion and a foot at the lower end of said bolt.

17. A demountable partitioning system according to any one of the preceding claims, comprising a skirting which extends along the bottom of the partitioning on one or both sides thereof to conceal said adjusting means.

18. A demountable partitioning system according to any one of the preceding claims, wherein said upper track means is of channel section metal.

19. A demountable partitioning system according to claim 18, wherein said upper track means is of extruded aluminium.

20. A demountable partitioning system according to any one of the preceding claims, wherein said stud members are of aluminium or steel.

21. A demountable partitioning system according to any one of the preceding claims, wherein said panel members are pre-finished with a decorative finish.

22. A demountable partitioning system substantially as herein described with reference to Figure 1 or Figure 2 of the accompanying drawings.

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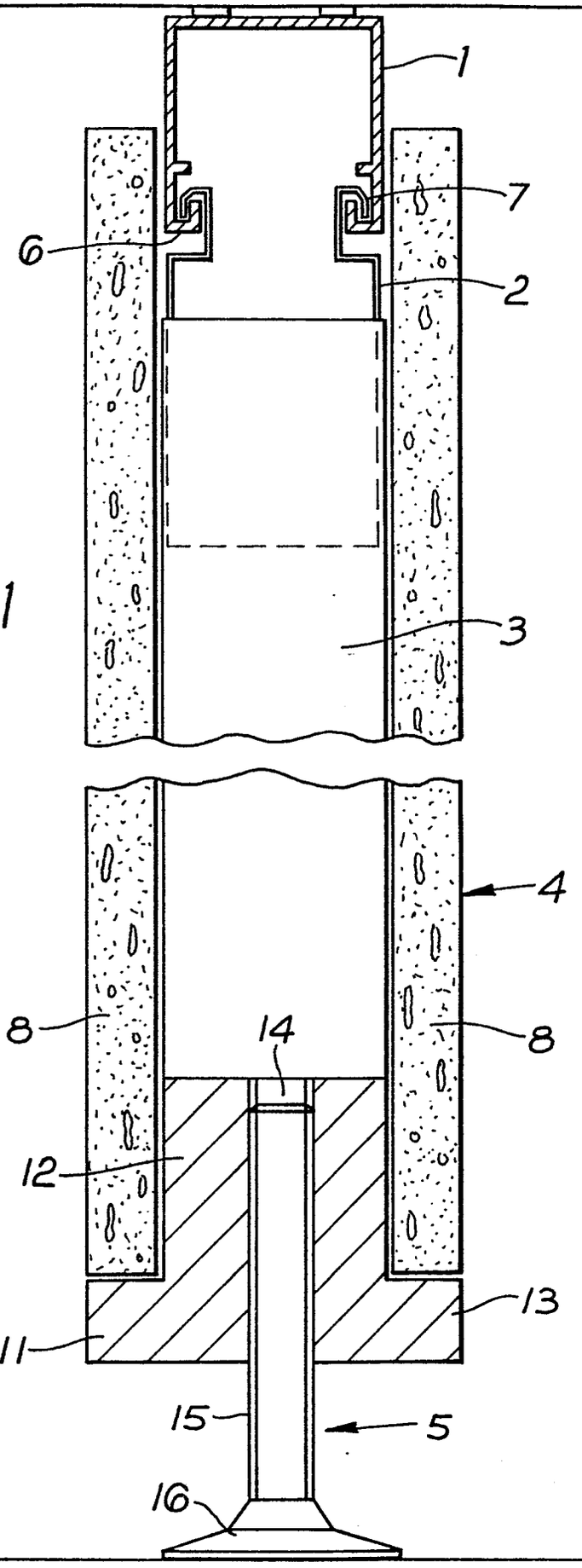

Fig. 1

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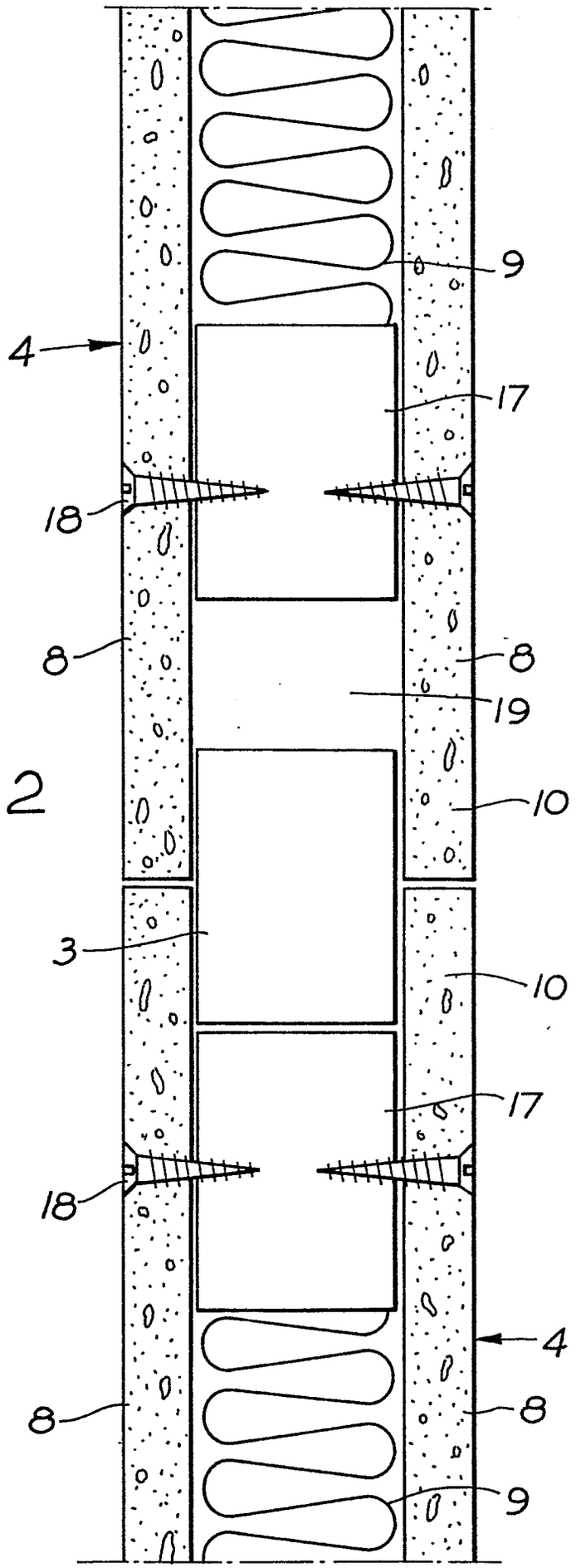

Fig. 2

European Patent Office

EUROPEAN SEARCH REPORT

0200491
Application number

EP 86 30 3129

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)
A	US-A-4 031 675 (ROBERTS & NILSON) * Column 4, lines 1-33; column 5, lines 35-69; column 6, lines 15-19; figures 4-6,11 *	1,2,8, 11-13, 15,16, 21	E 04 B 2/82
A	FR-A-2 121 406 (ETABLISSEMENT ADRIEN CLAUDE) * Page 3, line 1 - page 4, line 6; figures 1-9 *	1-6,9, 11-13, 17,21	
A	DE-A-2 830 280 (LOBE) * Page 12, lines 8-24; figure 3 *	1,15	
A	CAHIERS DU C.S.T.B., no. 1651, livraison 209, May 1980, Paris, FR; M. SERVAJEAN: "Avis sur la cloison FONTEX" * Page 2, lines 1-12; figures *	1	TECHNICAL FIELDS SEARCHED (Int Cl.4) E 04 B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	24-07-1986	PORWOLL H.P.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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E : earlier patent document, but published on, or after the filing date
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