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(54) **MOUNTING PARTITIONING PANELS**

(57) A generally elongate channel member defines a channel with an opening adapted to receive a lower edge portion of a generally vertical partitioning panel at or adjacent floor level. The channel member mounts therewithin at least two internally threaded sockets at spaced positions along the length of the channel. The channel member is provided with at least two headed threaded members, each threadedly engaged with a respective said socket. The lower edge portion is adapted to rest on the respective heads of the threaded members.

A partitioning panel may be adjustably mounted between such a channel member and an upper generally elongate channel member with an opening adapted to receive an upper edge portion of the panel, with a lower portion of the panel received to rest on the respective heads of the at least two threaded members. One or more of the at least two headed threaded members is/are rotated in the/their threaded socket(s) to adjust for height and/or to counteract minor irregularities in the distance between the respective channel members.

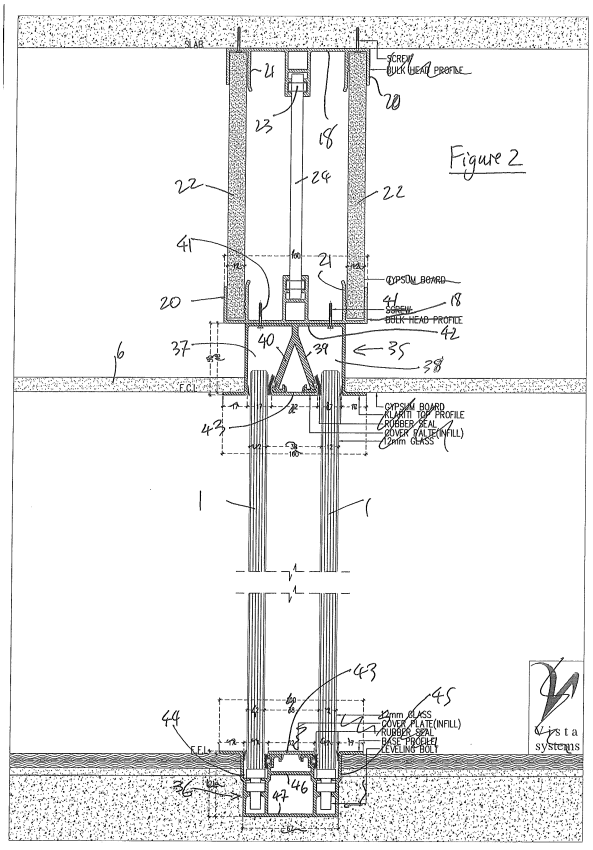

Figure 2

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Description

[0001] This disclosure relates to the mounting of partition panels.

[0002] It is a common practice to provide partitioning panels, typically of glass, in offices mounted in respective upper and lower channels. The channels may not be perfectly parallel due to sloping or irregular surfaces in which they are formed or to which they are attached. Heretofore, it has generally been necessary to employ packing to make up for minor height differences.

[0003] The present disclosure has arisen from work seeking to provide a more reliable alternative to packing.

[0004] In accordance with a first aspect of this disclosure there is provided a generally elongate channel member defining a channel with an opening adapted to receive a lower edge portion of a generally vertical partitioning panel at or adjacent floor level; the channel member mounting therewithin at least two internally threaded sockets at spaced positions along the length of the channel, and being provided with at least two headed threaded members, each threadedly engaged with a respective said socket; the lower edge portion being adapted to rest on the respective heads of the threaded members.

[0005] Such channel members are particularly useful for supporting glass panels. To accommodate a double glazing arrangement suitable to reduce sound transmission between offices or between an office and a corridor, the channel member may additionally define a second identical channel extending parallel to the first.

[0006] In preferred embodiments, the channel opening has an elastomeric sealing strip extending along each side thereof.

[0007] Reference may now be made to the accompanying drawings which illustrate particular embodiments of the mounting system, by way of example only, in which:-

Fig.1 is a sectional view through a partition panel mounted between a first extrusion in a suspended ceiling behind a bulkhead board and a second extrusion mounted in a sub-floor;

Fig. 2 is a sectional view similar to Fig. 1 in which a pair of glass panels are mounted in a double-glazed arrangement in modified extrusions.

[0008] Turning first to Fig. 1, a partition panel, suitably a glass panel 1, is shown mounted in a generally vertical orientation in an upper channel 2 defined by a first elongate extrusion 3 having a first extruded section and a lower channel 4 defined by a second elongate extrusion 5 having a second extruded section. The upper channel 2 is mounted at the edge of a suspended ceiling 6 suitably formed from gypsum board behind a bulkhead board 7 also suitably formed of gypsum board, the whole being suspended from ceiling proper 8.

[0009] In the illustrated arrangement, the first extrusion 3 has an internal cross-section in the form of a right trapezium with the upper channel opening 9 defining one of the two parallel sides of the trapezium and a rear internal wall 10 defining the other of the two parallel sides of the trapezium, internal wall 10 being greater in extent than the channel opening 9. A second wall 11 of the trapezium forms a right angle with rear wall 10 and provides support behind bulkhead board 7. The remaining wall 12 of the trapezium extends at an angle from the channel opening to rear wall 10. Upper channel opening 9 is provided with a seal in the form of respective elastomeric sealing strips 13, 14 along the respective elongate sides thereof.

[0010] Either side of upper channel opening 9, extrusion 3 has respective flanges 15, 16. Flange 15 supports an edge of bulkhead board 7, while flange 16 supports an edge of the suspended ceiling 6. A series of screws 17 positioned at spaced intervals along internal rear wall 10 of extrusion 3 mount the extrusion 3 to one of a pair of bulkhead profiles 18, each in the form of an elongate extrusion shown in section in Fig. 1, the other such bulkhead profile being fixed by screws 19 directly to ceiling proper 8. Each bulkhead profile 18 is formed with spaced parallel walls 20, 21 along each edge and inboard of each edge. A back board 22 is slotted into the gap between these walls, along one edge of the bulkhead profiles, while outer walls 20 along the other edge provide rear support to bulkhead board 7. Each bulkhead profile has respective captive nuts 23 and a tie bolt 24 is mounted between them. The tie bolt 24 has threads of opposite hand at its opposite ends, and the captive nuts have cooperating threads also of opposite hands in the two bulkhead profiles 18 so that turning the tie bolt 24 one way or the other will adjust the spacing between the two bulkhead profiles 18.

[0011] Flooring 25 such as a carpet, carpet tiles, luxury vinyl flooring, wood blocks, wood strips or wood panels is mounted over a subfloor 26, typically of concrete. Second extrusion 5 is sunk into the subfloor 26 beneath the visible flooring 25 through which it passes. Fig. 1 shows an internally threaded socket 27 within lower channel 4. A headed threaded member 28 is threadedly engaged with socket 27. At least one other, and preferably a plurality of, similar socket(s) and headed member(s) will be located at (a) position(s) spaced from the first socket along the length of extrusion 5. Respective elastomeric sealing strips 29, 30 extend along either side of lower channel opening 31.

[0012] In order to mount the panel 1, which it will be noted has a height greater than the separation between headed member 28 and the suspended ceiling 6, an upper edge portion 32 thereof is offered up to upper channel opening 9 at an angle to the vertical, and is slid past sealing strips 13, 14 at the said angle into space within the extrusion, the angled wall 12 of the cross-section of the extrusion 5 allowing for this. When the upper edge portion 32 has been slid sufficiently into upper channel 2 to allow a lower edge portion 33 of the panel 1 to be pushed forwardly into position above lower channel

opening 31 by rotating the panel within the upper channel 2 into a vertical plane, the lower edge portion 33 may be dropped into lower channel opening 31 past the sealing strips 29, 30 to rest on heads 34 of the headed members 28.

[0013] Fig. 2 shows how the system may be modified to accommodate double glazing, which may be important in offices to reduce sound transmission through the glass panels. A pair of glass panels 1 are mounted in upper and lower double channel extrusions 35, 36. Upper channel extrusion 35 defines respective left and right upper channels 37, 38. Right channel 38 is generally similar to the configuration of extrusion 3 shown in Fig. 1, while left channel 37 is its mirror image, the two being conjoined. Right channel 38 has an angled internal wall 39 corresponding to angled wall 12 of the Fig. 1 arrangement, allowing a panel 1 to be offered up to right upper channel 38 from the right, while left upper channel 37 has an angled internal wall 40 allowing the other panel 1 to be offered up to left upper channel 37 from the left. Upper channel extrusion 35 is mounted to bulkhead profile 18 by screws 41 extending through a rear wall 42 common to the two channels. A cover plate 43 serves as an infill between the two channels. Lower channel extrusion 36 defines left and right channels 44, 45 each similar to lower channel 4 of the Fig. 1 arrangement with interconnecting walls 46 and 47. A cover plate 43 again serves as an infill between the two channels.

Claims

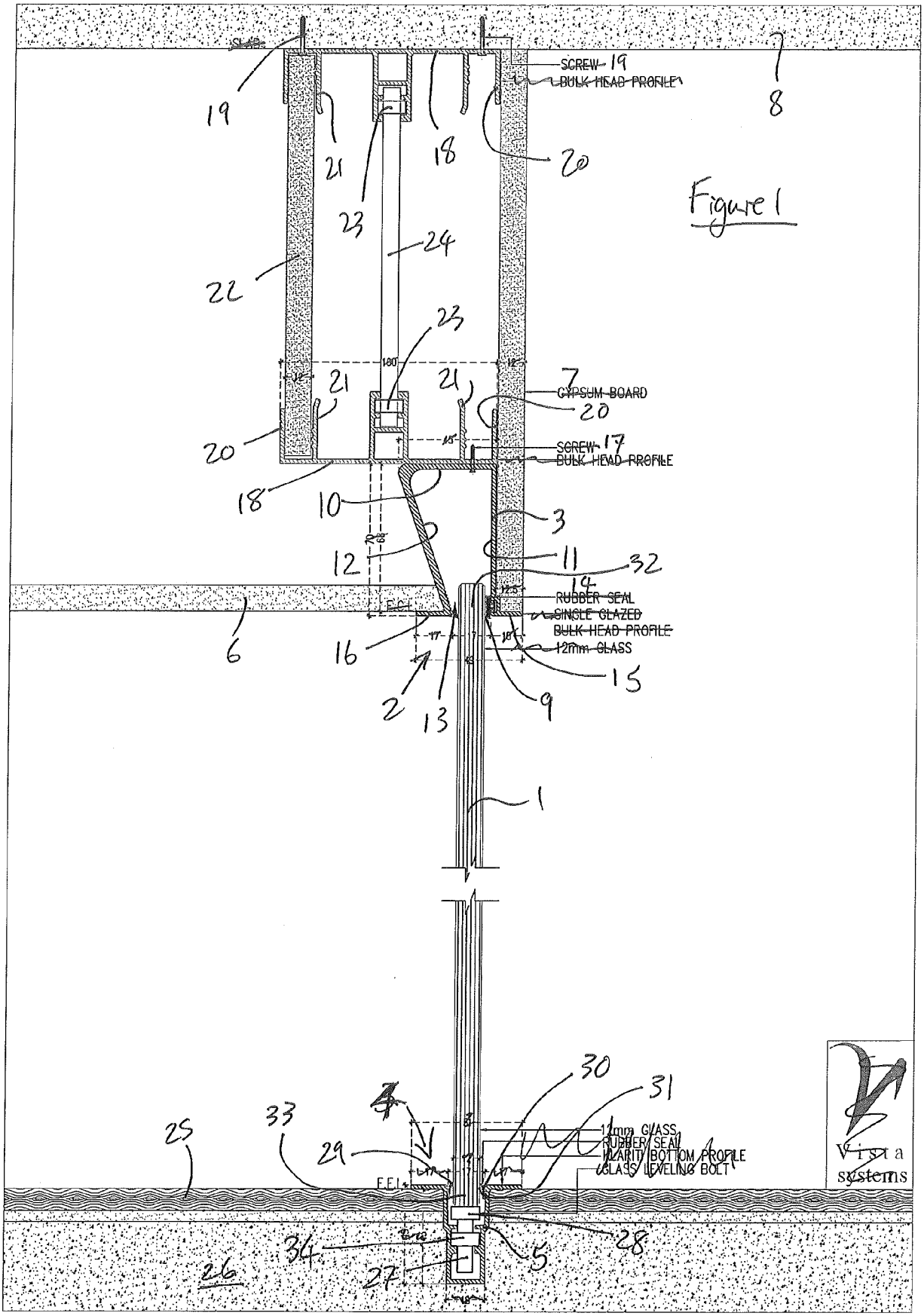
1. A generally elongate channel member (5, 36) defining a channel (4, 44, 45) with an opening adapted to receive a lower edge portion (33) of a generally vertical partitioning panel (1) at or adjacent floor level; the channel member (5, 36) being **characterised in** mounting therewithin at least two internally threaded sockets (27) at spaced positions along the length of the channel, and in being provided with at least two headed threaded members (28), each threadedly engaged with a respective said socket (27); the lower edge portion (33) being adapted to rest on the respective heads of the threaded members.

2. A channel member according to Claim 1, further **characterised in that** the channel opening has an elastomeric sealing strip (29, 30) extending along each side thereof.

3. A channel member according to Claim 1 or Claim 2, further **characterised in that** the channel member (36) defines a second identical channel (45) extending parallel to the first (44), the channel member being adapted to mount two parallel panels.

4. A double glazed partition adapted to reduce noise transmission between offices or between an office and a corridor, **characterised in that** the partition comprises a pair of glazed partitioning panels (1) mounted in parallel between a first lower channel member (36) according to Claim 3, and a second upper channel member (35) defining first and second parallel identical channels (37, 38) and adapted to receive respective upper edge portions of the glazed partitioning panels.

5. A method for adjustably mounting a partitioning panel (1) between a first upper generally elongate channel member (3, 35) with an opening adapted to receive an upper edge portion (32) of the panel, and a second lower generally elongate channel member (5, 36), the second channel member comprising a channel member according to any of Claims 1, 2 or 3, in which a lower portion (33) of the panel is received to rest on the respective heads of the threaded members (28); and the method comprising the step of rotating one or more of said at least two headed threaded members (28) in the/their threaded socket(s) (27) to adjust for height and/or to counteract minor irregularities in the distance between the first and second channel members.


SLAB
SCREW 19
BULK HEAD PROFILE
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8
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29
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12mm GLASS
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GLASS LEVELING BOLT
F.F.L
28
34
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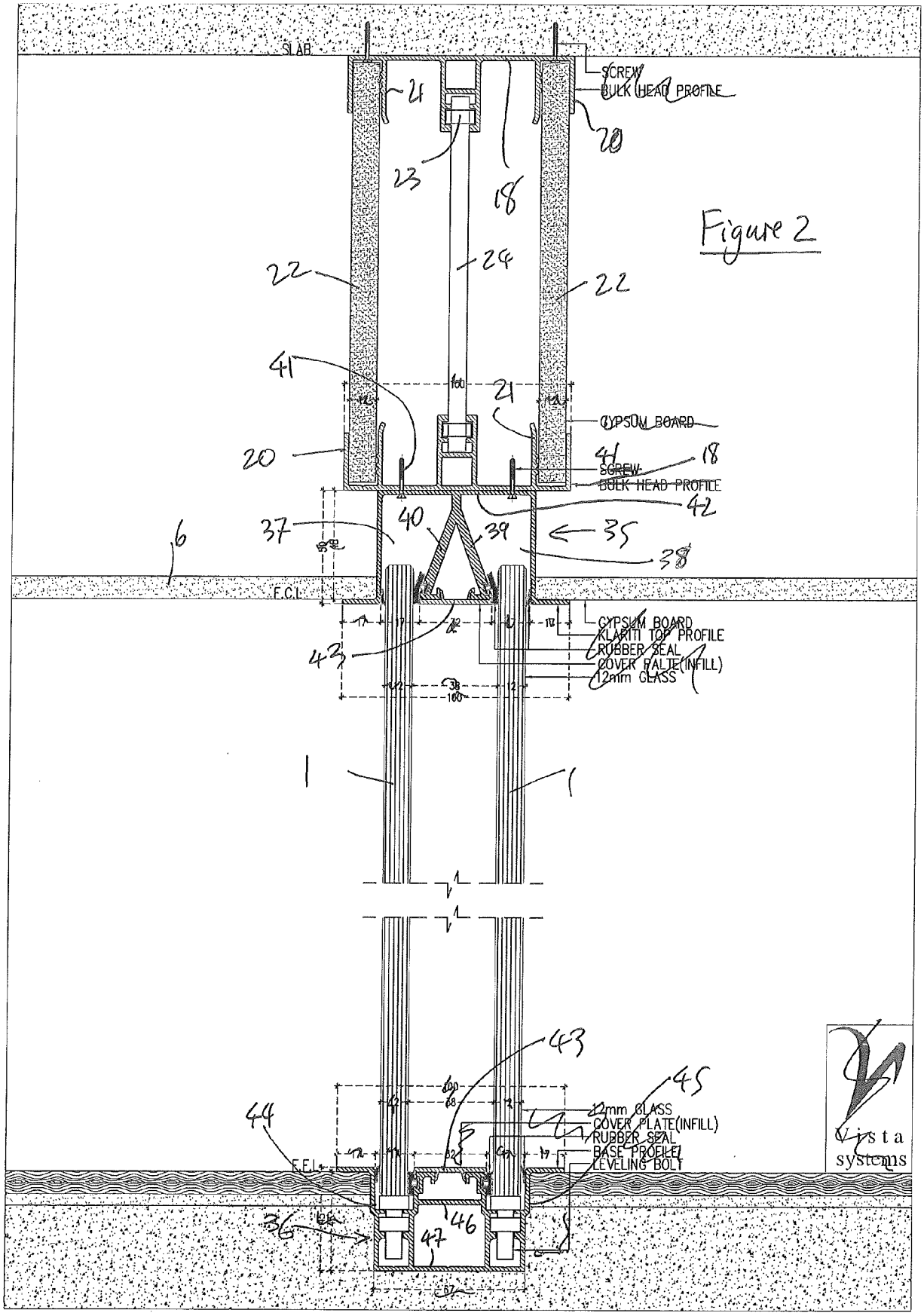
27
Vista systems

Figure 1


SLAB
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GYPSUM BOARD
KLARITI TOP PROFILE
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RUBBER SEAL
BASE PROFILE
LEVELING BOLT
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F.F.L
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47
Vista systems

Figure 2

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EUROPEAN SEARCH REPORT

Application Number
EP 18 02 0247

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 Y	WO 2015/075586 A1 (TECNO SPA) 28 May 2015 (2015-05-28) * paragraph [0050] - paragraph [0186] * * figures *	1,2,5 3,4	INV. E04B2/74 E04B9/00 E04B2/72
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X	DE 10 2009 044421 A1 (ELMER NATALIYA [AT]) 12 May 2011 (2011-05-12) * paragraph [0021] - paragraph [0033] * * figures *	1	
Y	CN 2 493 681 Y (LANZIDA ENTPR CO LTD [CN]) 29 May 2002 (2002-05-29) * figures *	3,4	

TECHNICAL FIELDS SEARCHED (IPC)

E04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	24 September 2018	López-García, G

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
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O : non-written disclosure
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E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

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EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 18 02 0247

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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24-09-2018

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82