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(54) **Wall system**

(57) Wall system for supporting a wall, comprising a support body, wherein the support body is provided with a supporting surface for supporting a wall on the top side of the support body, wherein the support body comprises a cable duct for guiding conduits, wherein the cable duct can be accessed through an opening in the supporting surface extending in longitudinal direction and wherein at least one guide profile beam is provided, wherein the guide profile beam is also adapted to guide conduits.

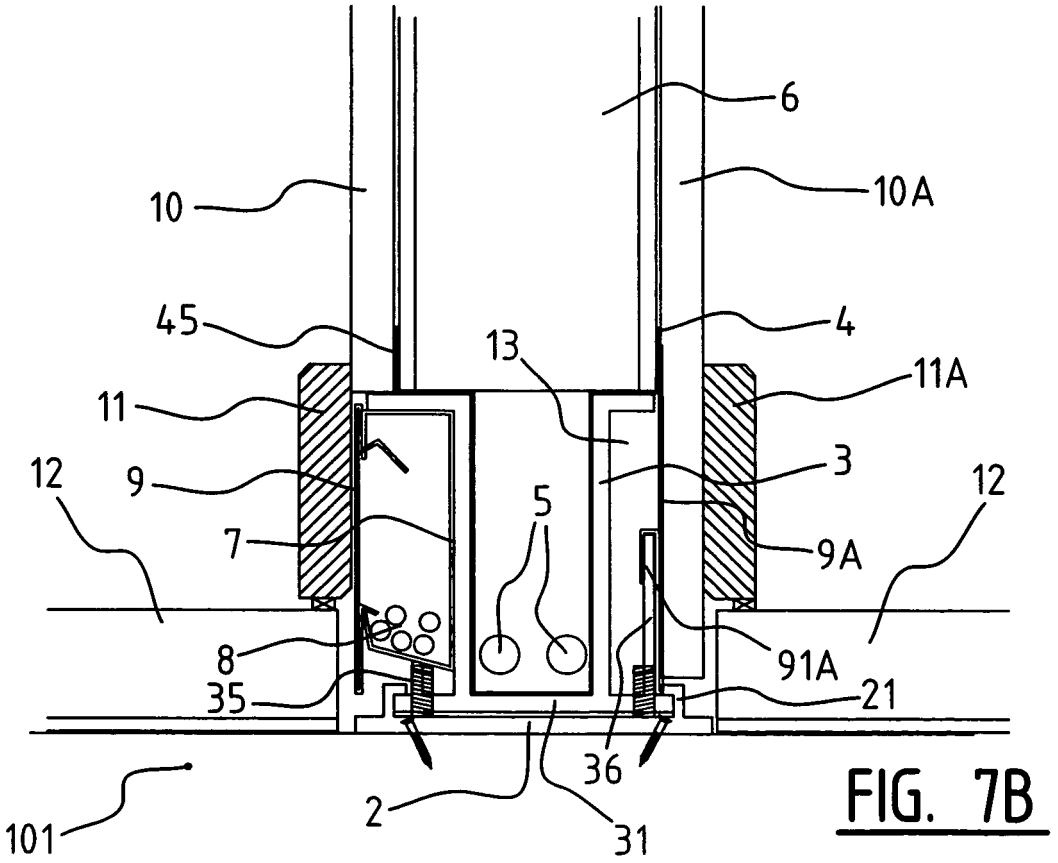

FIG. 7B

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Description

[0001] The invention relates to a wall system for supporting a wall, comprising a support body, wherein the support body is provided with a supporting surface for supporting a wall on the top side of the support body, and wherein the support body comprises a cable duct for guiding conduits. The invention also relates to the separate components of the wall system.

[0002] Such systems are generally known.

[0003] Both in public utility construction and in house building there is a great need for a system for elegant concealment of conduits in a wall. In this context conduits can for instance be understood to mean electrical wiring, data cables and conduits for installations. Various systems are available for this purpose on the market, of which the conventional surface-mounted cable duct is perhaps the best known. The conduits are here guided through a generally plastic duct, on which surface-mounted sockets and surface-mounted data connection points are arranged at predetermined distances. Such cable ducts are however often perceived as adversely affecting the appearance of the wall.

[0004] Systems are also known wherein the guiding is incorporated in the support of a wall system. The wall here supports on a supporting surface on the top side of a support body in which the conduits can be received. Such a system provides the advantage relative to the known surface-mounted cable duct that the guiding is largely hidden from view since it is situated beneath the wall in question. Such systems are however generally of a complicated nature, whereby they fall short in terms of convenience of use and the installation thereof. It is a drawback here that a carpenter for instance first makes the frame and provides half the wall with panelling, after which the conduits can be arranged, and only then is the other half of the wall provided with panelling. Modifications to the wall and the built-in installations for guiding of these conduits are difficult to realize after a structural wall has been completed.

[0005] It is an object of the present invention to provide a simple, flexible and/or inexpensive wall system which can be installed in simple manner and/or which enables a separation between "bearer" (= the structural wall consisting of the frame and the panelling) and the "built-in components", or installations.

[0006] For this purpose the wall system of the type stated in the preamble has the special feature according to the invention that the cable duct can be accessed through an opening in the supporting surface extending in longitudinal direction. The wall system according to the invention has the advantage here that the conduits can simply be laid in the opening through the supporting surface immediately after placing of the support body on for instance the ground. The cable duct is here at least partly open toward the top side of the support body, so that the conduits can be laid in the cable duct. The supporting surface here preferably extends at least substantially horizontally so that it can firmly support the wall. It is however also possible to opt to lay the conduit "after" the structural wall has been finished. It will be apparent that arranging conduits in a wall system according to the invention is highly efficient compared to the know wall systems, wherein the cables must generally be arranged from a side.

[0007] By separating the bearer and built-in components, the set of built-in components (i.e. installations) can moreover be arranged at any desired moment, thus as is customary "during" the erection of the structural wall, but also "after" the structural wall has been completely finished. Working processes are separated by means of the above stated invention, the carpenter no longer having to wait for a fitter before being able to completely finish the wall.

[0008] In a preferred embodiment of a wall system according to the invention the cable duct has an at least substantially U-shaped cross-section. Such a form readily provides a cable duct which can be accessed from the top, wherein after being arranged the conduits preferably extend close to the base of the U-shaped cross-section. The bottom of the cable duct preferably extends close to the underside of the support body. It is advantageous here to provide the bottom with fixing means for connecting the support body to the floor, such as for instance an adjusting profile or holes for connecting with bolts or screws. It can moreover be advantageous to provide at least one band or foam of elastic material between the support body and the ground in order to ensure good sound-damping, fire-resistant and/or heat-insulating properties.

[0009] In a further preferred embodiment of a wall system according to the invention the support body is manufactured from a plate-like element. The manufacture of the support body takes place here for instance by folding, bending and/or rolling a plate into the desired shape. The invention is therefore by no means limited to a specific manufacturing process. The supporting surface is preferably formed by bending at least one side wall of the cable duct, and the supporting surface is more preferably formed by bending the two side walls of the cable duct. The supporting surface here preferably extends transversely relative to the side walls. By folding the side walls of the preferably U-shaped cross-section of the cable duct a support body is obtained in simple manner, wherein the cable duct can be accessed through an opening, i.e. the top side of the cable duct, for the purpose of laying conduits.

[0010] In a preferred variant the supporting surface is formed by bending at least one side wall in lateral direction, wherein the supporting surface extends on the outer side of the cable duct. Both side walls of the cable duct are preferably folded outward, or in lateral direction, wherein the supporting surface extends outside the cable duct on both sides. It can however also be advantageous to fold one, or even two, of the side walls of the cable duct inward, i.e. in the direction of the centre line of the

support body. A more compact profile is hereby obtained, wherein at least one side wall of the body extends vertically.

[0011] In a further preferred embodiment of a wall system according to the invention the supporting surface is provided with upright edges for engaging the wall. The edges here extend close to the most lateral sides of the support body. The upright edges and the supporting surface here form as it were a U-shaped cross-section, wherein the base of the cross-section comprises the opening to the cable duct. The base of the U-shaped cross-section of the supporting surface and the upright edges preferably corresponds with the width of the wall system to be arranged on the support body, and the width more preferably corresponds with the uprights to be incorporated in the wall system. The upright edges here limit lateral movement of the wall relative to the support body. The upright edges are preferably formed by bending the supporting surface.

[0012] In a further preferred embodiment of a wall system according to the invention the supporting surface extends on either side of the side walls of the cable duct, wherein the supporting surface and the cable duct as it were form a T-profile. It is advantageous here that the cable duct has an at least substantially U-shaped cross-section, whereby the supporting surface is formed by end parts of the walls extending transversely relative to the side walls of the U-profile.

[0013] In another variant it may be possible for at least one side wall to extend inclining laterally outward, wherein the top side of the side wall thus points outward to some extent. Both side walls of the cable duct preferably point outward to some extent. The side walls which extend inclining outward make it possible to place different support bodies nestably in each other, whereby they are easier to transport.

[0014] In a further preferred embodiment of a wall system according to the invention the support body is manufactured from a material chosen from the group of metal, plastic or wood. Although the manufacturing process is described above by means of bending or folding of a plate-like material, it may also be possible to manufacture the support body by means of extrusion or (injection) moulding.

[0015] In a further preferred embodiment the support body comprises a support profile beam extending in longitudinal direction of the wall. The support profile beam here preferably has the same length as the wall to be supported, wherein the cable duct extends under the full length of the wall. At least one of the side walls of the cable duct is preferably provided with an opening for making the conduits accessible from the side wall. The side wall is preferably provided with a plurality of openings placed at a predetermined distance from each other. An opening here has such dimensions that the conduits in the cable duct can be reached by hand. An opening here preferably has a height of about 6 cm. The width of an opening can for instance be 20 cm.

[0016] It can also be advantageous to provide the bottom of the cable duct with at least one passage for throughfeed of conduits. Conduits which are for instance arranged in the floor can then be led into the cable duct by means of these passages via the bottom of the support profile beam.

[0017] In a further preferred embodiment the support body comprises at least one support bracket. The support bracket is preferably adapted to support an upright of the wall. The support bracket is more particularly adapted to indicate the dimensioning of and to adjust the wall. A support bracket is herein then situated at predetermined distances in the wall system, preferably under each upright of the wall for placing. It is advantageous here when the length of a support bracket corresponds at least substantially with the size of an upright in the longitudinal direction of the wall. By only supporting the wall at the position of an upright an efficient guiding system for conduits can be provided with limited means. After placing of the wall the conduits can then still be accessed from the side between the individual support brackets.

[0018] It is also advantageous if the support bracket is adapted to receive a support profile beam in the cable duct. In this variant the wall is supported by support brackets arranged at a distance from each other as well as by a support profile beam, wherein the support profile beam is arranged in the U-shaped cable duct of the support brackets. The support brackets can then serve as support for the support profile beam, whereby a space is created between the floor and the support profile beam. It is here advantageous to fill this space with for instance foam in order to obtain, among others, good insulating properties. The support brackets can also be provided with adjusting means for correcting unevennesses in the floor, so that the arranged support profile beam extends at least substantially level.

[0019] When the support brackets are used, optionally in combination with a support profile beam, the cable duct formed by the support bodies for arranging of the wall can also be accessed from the top, this resulting in simple placing according to the invention of the conduits in the support bodies at any desired moment in the construction process or during use.

In a further preferred embodiment of a wall system according to the invention at least one guide profile beam is provided, wherein the guide profile beam is also adapted to guide conduits. It is hereby possible in simple manner to comply with the legal obligation to guide electrical leads separately of for instance data cables, in particular the separation of low voltage (230V/50Hz) and a weak current such as data/utp, telephone, coax and signal cable. The guide profile beam preferably extends adjacently of a side wall of the cable duct and under the supporting surface of the support body. The guide support beam here as it were slides into the recess formed by the underside of the supporting surface and the outside of a side wall, wherein the guide profile beam extends laterally relative to the cable duct of the support body. It is

advantageous here to arranged the electrical conduits in the support body since they generally need be accessed less frequently, and to arrange the data cabling in the guide profile beam, since this is easier to access.

[0020] In a further preferred embodiment of a wall system according to the invention the guide profile beam comprises an at least substantially C-shaped cross-section. The upright side of the C-profile here extends against the outer side of a side wall of the cable duct, and for this purpose they preferably correspond in height. The top side of the C-profile lies against the underside of the support body, and in particular against the underside of the supporting surface. Adjusting means are preferably provided for adjustable arrangement of the guide profile beam on the support body. With such adjusting means, for instance co-acting slot-pin connections, it is possible to adjust the lateral position of the guide profile beam to the thickness of the wall panels to be arranged on the wall system. It will be apparent that, in the case of thicker wall panels, the guide profile beam must be arranged further outward, i.e. in a direction transversely of the longitudinal direction of the wall system. In such a situation it may be that the rear wall of the C-profile does not lie against the support body. It can also be advantageous for the bottom side of the C-profile to extend inclining upward to some extent, whereby the guide profile beam is easier to place under the wall system.

[0021] In a further preferred embodiment of a wall system according to the invention the guide profile beam is provided with connecting means for a skirting. The skirting serves here as closure of the guide profile for the purpose of concealing the conduits in the profile from view. The connecting means for a skirting are preferably adapted for releasable connection of the skirting. The means for connecting a skirting more preferably comprise an upright edge which can be received in a ridge arranged in a skirting. The lower side of the C-profile here preferably extends beyond the outer side of the wall system for placing, wherein the bottom side is preferably provided with the means for connecting a skirting. The skirting can here be arranged on the lower side of the C-profile and thus be connected to the outer side of the wall system.

[0022] In another variant the connecting means for a skirting and the guide profile beam are adapted to connect the guide profile beam clampingly to the support body during connection. The connecting means are herein placed between the legs of the C-profile, and the legs of the C-profile are herein moved apart, whereby the guide profile beam will be received clampingly under the wall system, preferably under the supporting surface of the support body and for instance the floor. A lower leg of the C-profile standing upward to some extent can be used here as resilient element. Through arranging of the connecting means this lower leg is then pressed for instance against the floor, and the guide profile beam is clamped fixedly. The guide profile beam and the connecting means for a skirting are here preferably provided with co-acting stop surfaces for clamping the guide profile beam.

[0023] In a further preferred embodiment of a wall system according to the invention the guide profile beam is provided with at least one opening, wherein the opening coincides with the opening arranged in the support profile beam. In this way the cable duct of the support profile beam can be accessed when a guide profile beam has been arranged. The dimensions of the opening preferably correspond with the opening in the support profile beam, and the guide profile beam is more preferably provided with a plurality of openings corresponding with the opening in the support profile beam.

[0024] In a further preferred embodiment of a wall system according to the invention the support body is arranged on an adjusting profile. Such an adjusting profile is preferably a profile extending in longitudinal direction of the wall system. A plurality of support brackets is here preferably arranged on the adjusting profile, wherein the adjusting profile determines the dimensioning of the wall system to be erected. Such an adjusting profile works highly advantageously in the case of level floors, for instance in dry construction, but unevenness in the surface can also be corrected in the case of uneven floors by means of glueing the adjusting profile. With a single operation, i.e. arranging the adjusting profile, optionally by means of glueing, a stable ground surface is provided for placing of the wall system, and such an adjusting profile moreover simplifies the placing of the support body, being either the support brackets or the support profile beam, since the adjusting profile is preferably provided with indicator means, for instance in the form of upright edges, for simple arranging of the support body. Such indicator means serve here as dimensioning for the wall system to be placed.

[0025] It will be apparent that the present invention provides a wall system which can be erected in very simple and efficient manner. Through placing of the adjusting profile the basis is laid for the wall and possible unevenness is corrected. The adjusting profile serves here as guide for arranging the support brackets, in which the support profile beam can then be accommodated. Laying of the conduits through the opening on the top intended for this purpose can take place at this moment, after which the wall system can be further erected. Laying of the conduits can however also take place after the wall has been fully erected. After arranging of the guide profile beam, for instance for the purpose of holding data lines, and the associated skirting, the wall system is completed. The fact that both the low-current and the weak-current cabling are still accessible after completion of the wall system is highly advantageous here.

[0026] The invention further relates to a support profile beam provided with a supporting surface for supporting a wall on the top side of the support profile beam, wherein the support profile beam comprises a cable duct for guiding conduits, wherein the cable duct can be accessed through an opening extending in longitudinal direction in

the supporting surface.

[0027] The invention also relates to a guide profile beam for guiding conduits, provided with means for connecting a skirting and wherein the guide profile beam has an at least substantially C-shaped cross-section. Although the guide profile beam can be applied in combination with the support profile beam in the wall system according to the invention, the guide profile beam can also be used to guide conduits on the underside of for instance a concrete wall. A wall, for instance a bearing wall, is provided for this purpose with a recess on the underside, in which the guide profile beam can be received.

[0028] It is advantageous here to provide the wall with at least substantially vertical recesses extending in the wall and running into the horizontally extending recess on the underside of the wall. The vertical recesses or bores can then be used to guide electrical cables to for instance a wall socket arranged in the wall. The wall socket is placed such that the rear side of the wall socket comes to lie in the vertical recess.

[0029] It is moreover advantageous to provide a space between the underside of the guide profile beam and the floor of the space, preferably by fixing the guide profile beam at a predetermined height, whereby it lies a slight distance from the floor. The space below the guide profile beam can then serve as a second guide space, whereby a guide system for conduits below a wall, thereby providing in simple manner a guide system for conduits under a wall which provides for separate guiding of for instance low and weak-current cables.

[0030] The invention will be further elucidated with reference to figures shown in the drawing of an exemplary embodiment of the wall system according to the invention, in which:

- Figures 1-6 show schematically the different steps of erecting the wall system according to the invention;
- Figures 7A and B each show a schematic cross-section of an embodiment of the wall system according to the invention;
- Figures 8A and B show schematically the connection of a skirting according to the invention;
- Figures 9, 10A and 10B show different cross-sections of a support body;
- Figures 11 and 12 show schematically two further embodiments of a wall system according to the invention; and
- Figures 13 and 14 show schematically the use of a guide profile according to the invention under a wall.

[0031] Figure 1 shows a space 100 in which the wall system 1 according to the invention will be erected. After determining the position of wall system 1, for instance on the basis of a wall 102 of space 100, an adjusting profile 2 is arranged on the ground 101. Such an adjusting profile 2 preferably extends along the full length of the wall system for placing and serves, among other purposes, as dimensioning for the other components to be placed in the wall system. Adjusting profile 2 is provided for this purpose with edges 21 of hook-shaped cross-section, as can be seen more clearly in figure 7A, which serve as indicator means for arranging of the other components. Adjusting profile 2 can for instance be connected using screws, although it is also possible to connect adjusting profile 2 to floor 101 using insulation foam, mastic or other type of for instance foam-like connecting means. In such a way possible irregularities in floor 101 are compensated and adjusting profile 2 provides for a stable, even surface for the wall system according to the invention.

[0032] As shown in figure 2, support brackets 3 are then placed at preferably regular mutual distances on adjusting profile 2 in the edges 21 intended for this purpose. Support brackets 3 impart strength to wall system 1. Support brackets 3 form with bottom 31 and side walls 34 a substantially U-shaped cross-section. The support bodies in the form of support brackets 3 are also provided with a supporting surface 33. Bottom 31, which can be used as cable duct, can be accessed from above through an opening 32 in supporting surface 33, and supporting surface 33 consists for this purpose of two parts extending on either side of side walls 34 of support bracket 3.

[0033] A support profile beam 4 is then arranged through passages 32 of support bracket 3, see figure 3. The bottom 41 of support profile beam 4, see figure 9 for a cross-section of support profile beam 4, therefore rests on bottoms 31 of support brackets 3 after being placed. Between support profile beam 4 and adjusting profile 2 there remains a gap between support brackets 3 which can be filled with insulation form in order to improve for instance the insulating and/or building-physics properties of the wall.

[0034] As shown, the cross-section of support profile beam 4 corresponds substantially with the cross-section of support brackets 3, with the difference that the cross-section of support profile beam 4 is somewhat smaller, so that it can be received in support brackets 3. Supporting surface 43 of support profile beam 4 is moreover provided on either side with upright edges 45. Cables 5, for instance electricity cables, can then be laid through a passage 42 in supporting surface 43. It will be apparent that laying cabling in this way is very efficient, since the cable duct is formed by the U-shaped cross-section which can be accessed through an opening 42 in supporting surface 43 of the support body in the form of support profile beam 4. In order to ensure that cables 5 can still be accessed after placing of the wall system, openings 48 are provided in side wall 43 of support profile beam 4. Openings 48 are sufficiently large to allow through for instance a hand, so that simple adjustments

and additions can be made to the cabling in the cable duct formed by support profile beam 4. It can also be possible to provide the bottom 41 of support profile beam 4 and adjusting profile 2 with openings at corresponding locations. Conduits lying under the floor can for instance be carried into the wall system through these openings. It can also be possible to lead vertically extending conduits, for instance water conduits or ventilation shafts for other floors, through wall system 1.

[0035] Cables 5 can be placed before or after uprights 6 of the wall system as shown in figure 4 are placed. Uprights 6 are preferably placed on top of support brackets 3 so that these latter provide a stable surface for the wall system to be placed. Uprights 6 can be uprights of a generally known wall system. For this purpose the distance between upright edges 45 of support profile beam 4 preferably corresponds with the width of uprights 6, so that supporting surface 43 and upright edges 45 form a U-shaped channel for receiving uprights 6, so that uprights 6 are allowed substantially no lateral displacement.

[0036] Figure 5 shows the next step of the erection process in more detail, and the construction of the wall system with adjusting profile 2, support bracket 3 and support profile beam 4 is clearly shown. In order to enable guiding of weak-current cable separately of low-current cable in the wall system according to the invention, a guide profile 7 is provided which is placed to the side, i.e. laterally, of support brackets 3 and support profile beam 4. Guide profile 7 has a substantially C-shaped cross-section. Rear wall 74 of guide profile 7 herein lies against side wall 34 of support brackets 3 and the top side 71 extends below supporting surface 33 of the support brackets. The underside 72 of guide profile 7 then makes it possible to receive conduits 8. It will be apparent that conduits 8 can be introduced in simple manner in guide profile 7, since profile 7 is open to the side. In order to also make accessible the conduits 5 received in the cable duct formed by support profile beam 4, rear wall 74 is also provided with openings 78 corresponding with openings 48 in side wall 44 of support profile beam 4.

[0037] Although rear wall 74 of guide profile 7 lies against side wall 34 of support bracket 3 in this embodiment, it can also be possible to arrange guide profile 7 slightly further outward. This can for instance be advantageous when thicker wall panels are arranged. Supporting surface 33 of support bracket 3 can be provided for this purpose with adjusting means in the form of for instance three slots (not shown) which are placed laterally relative to each other and in which a pin arranged on the guide profile can be received. The lateral position of the guide profile can then be chosen subject to the chosen slot.

[0038] Wall system 1 can then be finished by placing wall panels 10 against uprights 6. It is advantageous here - although not essential - that, for the purpose of placing for instance a wall socket at the position of opening 15, the wiring guided in the cable duct of support profile beam 3 can simply be pulled upward since supporting surface 43 is provided with a passage 42. Cables 8 from guide profile 7 can also be guided in similar manner to opening 15 through passages 48 and 78. Insulating material can optionally be arranged between wall panels 10. Guide profile 7 will moreover also be closed using a skirting adapter 9, which will be discussed in more detail below.

[0039] Figure 7A shows in more detail a cross-section of a wall system of figure 6 according to the invention. Connecting edges 21 with a hook-shaped cross-section can particularly be seen in more detail. These edges 21 are adapted to receive the underside 31 of a support bracket 3 and thus connect support bracket 3 firmly to adjusting profile 2. Such a connection moreover makes it possible to place the support bracket in simple manner without having to make use of additional connecting means. Although the connection between the floor and adjusting profile 2 in figure 7A is shown with screws 22, as already noted it can also be possible to connect adjusting profile 2 using for instance glue.

[0040] The connection of skirting adapter 9 on the left-hand side of figure 7A is also shown clearly in figure 7B. The connection of the skirting adapter will however be explained in more detail with reference to figures 8A and B. In this embodiment a skirting adapter 9A without the possibility of cable guiding is provided on the right-hand side of support bracket 3. Skirting adapter 9A is connected by means of a hook 91A to an upright edge 36 of a support bracket 3. Skirting adapter 9A is bent twice at the top so that outer end 93A lies clamped between wall panel 10 and upright 6 close to upright edge 45 of support profile beam 4. A space 13 between skirting adapter 9A and support bracket 3 can be filled with insulation foam for the purpose of improving the insulating action of the wall system.

[0041] Figure 7B shows another embodiment of a wall system, herein also provided with skirtings 11 and 11A and floor covering 12. In this embodiment the skirting adaptor 9A on the right-hand side of figure 7B extends against upright edge 36 of support bracket 3 and wall panel 10A continues to the underside 31 of support bracket 3. In this embodiment skirting adaptor 9A is also connected by means of a hook 91A over upright edge 36, thereby providing for a simple connection. Upright edge 36 imparts strength to the underside of wall 10(A) when the underside is pushed in a direction to the left in the figure. Edge 36 prevents the possibility of wall panel 10 (A) detaching from for instance uprights 6 due to a lever action, which could be the case in the absence of the resistance of edge 36.

[0042] As shown, a skirting 11, 11A can either be connected to a skirting adapter 9 or to a wall panel 10A. The fixing of skirtings 11 and 11A can take place in known manner, for instance by means of screwing or glueing. Since skirting 11 is connected to skirting adapter 9 on the left-hand side in figure 7B, the conduits 8 therein can be accessed by removing skirting adapter 9 from guide profile 7. Since no guide profile is arranged on the right-hand side, it is not necessary to be able to remove skirting

11A on this side. In another embodiment it can however be possible to provide both sides of support bracket 3 or support profile beam 4 with a guide profile 7. In this embodiment the support brackets 3 then take a mirror-symmetrical form.

[0043] The mounting of skirting adapter 9, to which a skirting 11 is for instance fixed (not shown), is shown in more detail in figures 8A and 8B. Skirting adapter 9 is provided with two clamps 91 and 92. The distance 99 between the two clamps is herein greater than the distance 79 between the top and bottom sides 71 and 72 of guide profile 7. As shown in figure 8A, the bottom side 72 of guide profile 7 extends upward to some extent, whereby it does not contact an upright edge 35 of support bracket 3. In another embodiment the top side 71 of guide profile 7 can also extend downward so that it does not yet lie against supporting surface 33 of support bracket 3. During mounting of skirting adapter 9 the lower clamp 92 is preferably placed first over bottom side 72. The inclining surface 91A of clamp 91 is then arranged against top side 71 and pushed to the right in the figure. Since guide profile 7 is manufactured from material having resilient properties, for instance metal, the distance 79 will increase due to this inclining surface 91A until part 91A moves beyond top side 71 so that the top side engages on part 91B of the clamp. Part 91B slopes down to the other side relative to part 91A, so that skirting adapter 9 cannot easily be detached from guide profile 7. By increasing the distance 79 to 79A, see figure 8B, by placing skirting adapter 9, the bottom side 72 will eventually clamp against upright edge 35 so that, by arranging skirting adapter 9, guide profile 7 is clamped firmly in support bracket 3.

[0044] Figure 9 shows a cross-section of a support body, in this case a support profile beam 4. The cable duct of support profile beam 4 has an at least substantially U-shaped cross-section and is formed by bottom 41 and side walls 44. At the top the side walls 44 extend perpendicularly of these side walls 44, so that they form supporting surface 43, which comprises part-surfaces 43a and 43b. As shown, supporting surface 43 extends on either side of support profile beam 4. Also shown is passage 42 in supporting surface 43a, 43b, whereby the cable duct is accessible from the top side for simple placing of cables in support profile beam 4. The outer edges, i.e. the most lateral side, of supporting surface 43 then once again extend parallel to side walls 44 for the purpose of forming upright edges 45. Upright edges 45 and supporting surface 43 also form an at least substantially U-shaped cross-section in which the uprights of the wall system for placing can be received.

[0045] Figure 10a shows a variant of supporting beam 4 of figure 9, wherein a part-surface 43b of supporting surface 43 extends toward the centre of supporting beam 4. Upright edge 45b and side wall 44b here extend at least substantially in the same plane. Such an embodiment can be advantageous when a guide profile 7 need only be arranged on the left-hand side in the figure. A wall panel 10 can then be placed against upright edge 45b and side wall 44b.

[0046] Figure 10b shows another variant, wherein a side wall 44a takes an inclining form. Such an inclining side wall 44 makes it possible for different support beam profiles 4 to be nestable, so that they are received into each other when stacked and thereby take up less space. It will be apparent that side wall 44b can also take an inclining form for this purpose.

[0047] Although figures 9, 10A and 10B describe the properties of a support body on the basis of a cross-section of the one support profile beam 4, such a construction and such variations are also applicable to support brackets 3 according to the invention.

[0048] Figure 11 shows another embodiment of a wall system according to the invention. In this variant support brackets 3 are not used, and support profile beam 4 is placed directly on floor 101, although it can also be possible to place support profile beam 4 on an adjusting profile 2. Guide profile 7 is here placed against support profile beam 4 and can be clamped against profile beam 4 in the manner shown in figures 8A and 8B. Also clearly shown are the corresponding openings 48, 78 for accessing cables 5 received in support profile beam 4.

[0049] It is also possible to erect wall system 1 without making use of a support profile beam 4, as is shown in figure 12. For this purpose supporting surface 33 of support brackets 3 is provided with upright edges 35, as also shown for support profile beam 4 in figure 9. Uprights 6 of the wall system are here placed on top of support brackets 3, wherein the distance between upright edges 35 corresponds with the width of the uprights 6 to be received. Cables 5 received in the cable duct formed by support brackets 3 can be accessed through openings 78.

[0050] Guide profile 7 according to the invention can also be used to guide cables on the underside of a wall 102 of a space 100, as shown in figure 13. For this purpose wall 102 is provided on its underside with a recess 103 in which guide profile 7 is arranged. The top side 71 here lies against wall 103 and bottom side 72 here lies on floor 101. In this embodiment the bottom side 72 is provided with an upright edge 72A, to which a skirting 11 can be connected by means of a saw cut 11b. It is however also possible to use the connection as shown in figures 8A and 8B for mounting a skirting adapter. During placing of a skirting 11 with a skirting adapter 9 the top and/or bottom sides 71 and 72 can then be clamped firmly against respectively wall 103 and ground 101.

[0051] A variant hereof is shown in figure 14, wherein a guide profile 7 according to the invention is arranged at a height 105 in a recess 103 of a wall 102. Guide profile 7 is connected for this purpose to wall 102 by means of for instance screws 77. Placing of guide profile 7 at a height 105 results in the option of separate guiding of cables 5 and 8. Recess 103 can then be closed with a skirting 11 according to the above described procedure. Also shown in broken lines is a channel 104 which ex-

tends vertically in wall 102 and runs out into recess 103. Wall 102 is provided with channels 104 at regular distances, so that connection points or light switches can for instance be placed at these locations. Channel 104 extends deeper into wall 102 than recess 103, so that cables 5, which for instance lie on floor 101, can be guided as according to arrow 51 to for instance a wall socket 106. The cables 8 received in guide profile 7 can be guided as according to arrow 81 to wall socket 106. Guide profile 7 is provided for this purpose with openings at the position of channels 104, for instance the openings 78 of figure 11. It can also be possible to provide top side 71 with openings.

[0052] It is noted that the invention is not limited to the shown embodiments, but also extends to other preferred variants falling within the scope of the appended claims.

Claims

1. Wall system for supporting a wall, comprising a support body, wherein the support body is provided with a supporting surface for supporting a wall on the top side of the support body, and wherein the support body comprises a cable duct for guiding conduits, **characterized in that** the cable duct can be accessed through an opening in the supporting surface extending in longitudinal direction.

2. Wall system as claimed in claim 1, wherein the cable duct comprises an at least substantially U-shaped cross-section.

3. Wall system as claimed in claim 1 or 2, wherein the bottom of the cable duct is provided with at least one passage for throughfeed of conduits.

4. Wall system as claimed in claim 1, 2 or 3, wherein the support body comprises a support profile beam extending in longitudinal direction of the wall.

5. Wall system as claimed in any of the foregoing claims 1-4, wherein the support body comprises at least one support bracket.

6. Wall system as claimed in claim 5, wherein the support bracket is adapted to support an upright of the wall.

7. Wall system as claimed in claim 5 or 6, wherein the support bracket is adapted to receive a support profile beam in the cable duct.

8. Wall system as claimed in any of the foregoing claims 1-7, wherein at least one guide profile beam is provided, wherein the guide profile beam is also adapted to guide conduits.

9. Wall system as claimed in claim 8, wherein the guide profile beam extends adjacently of a side wall of the cable duct and under the supporting surface of the support body.

10. Wall system as claimed in claim 8 or 9, wherein the guide profile beam is provided with at least one opening, wherein the opening coincides with an opening arranged in the support profile beam.

11. Wall system as claimed in any of the foregoing claims 8-10, wherein the guide profile beam comprises an at least substantially C-shaped cross-section.

12. Wall system as claimed in any of the foregoing claims 8-11, wherein the guide profile beam is provided with connecting means for a skirting.

13. Wall system as claimed in claim 12, wherein the connecting means for a skirting and the guide profile are adapted to connect the guide profile clampingly to the support body during connection.

14. Wall system as claimed in any of the foregoing claims 8-13, wherein adjusting means are provided for adjustable arrangement of the guide profile beam on the support body.

15. Wall system as claimed in any of the foregoing claims 1-14, wherein the support body is arranged on an adjusting profile.

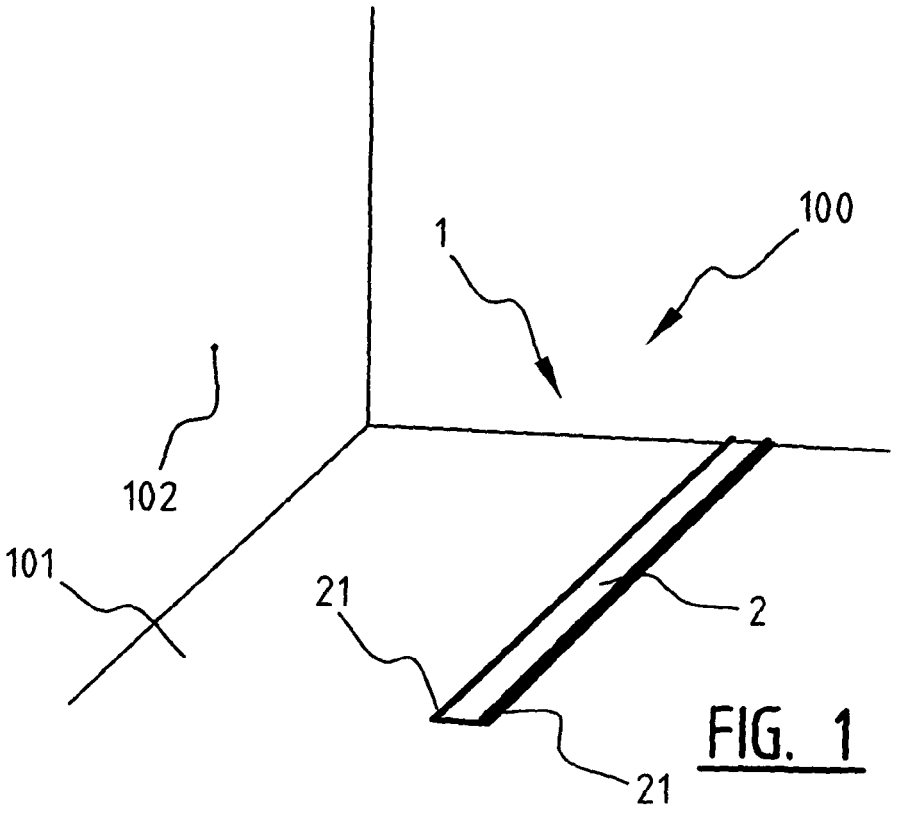


FIG. 1

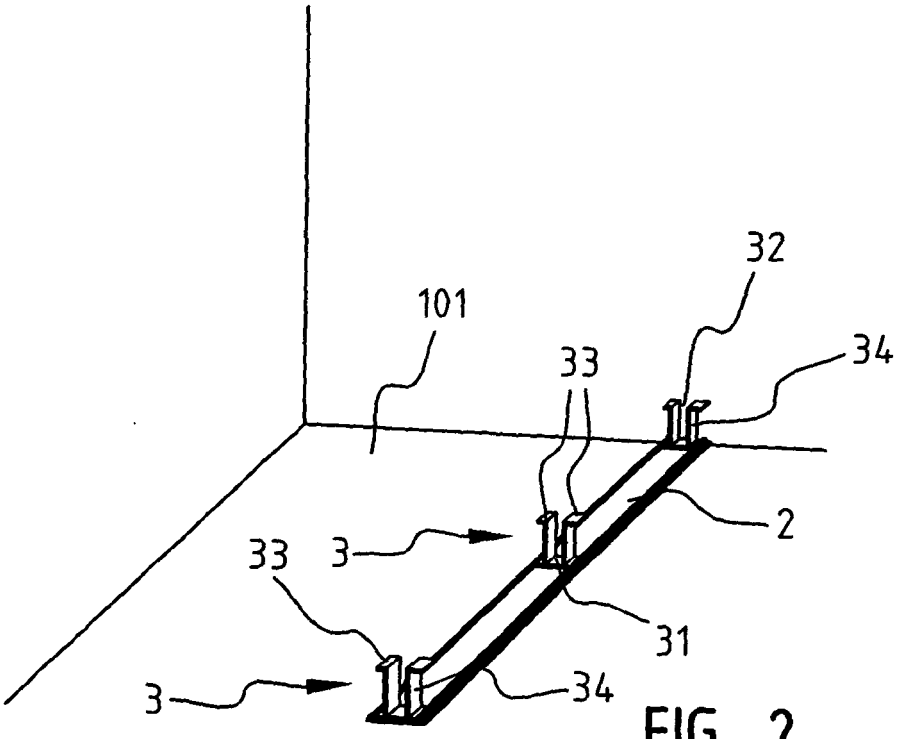


FIG. 2

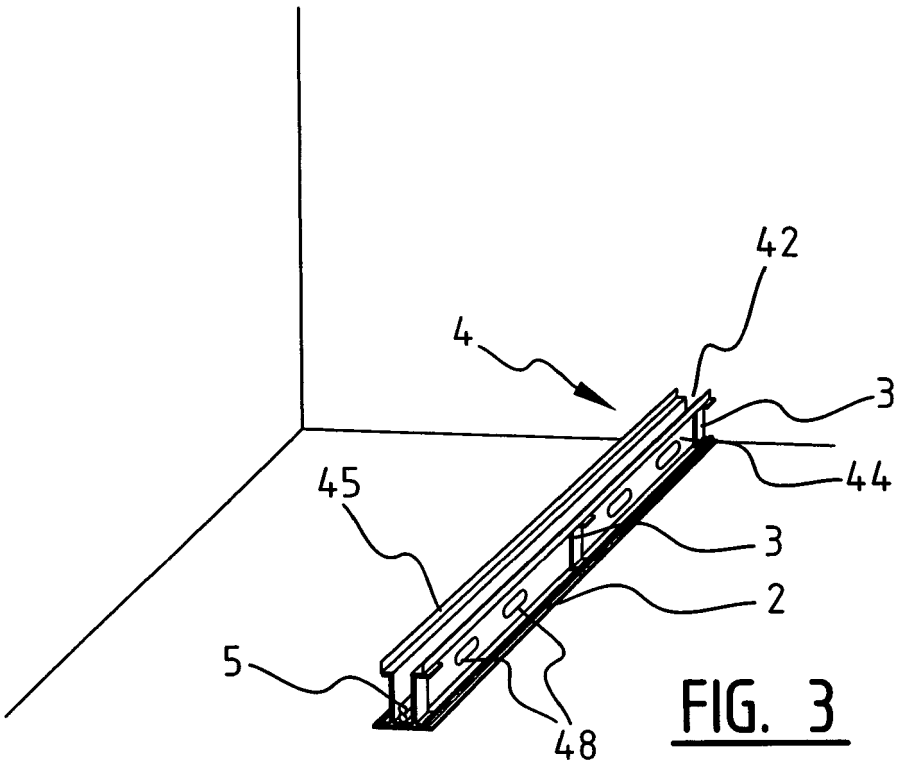


FIG. 3

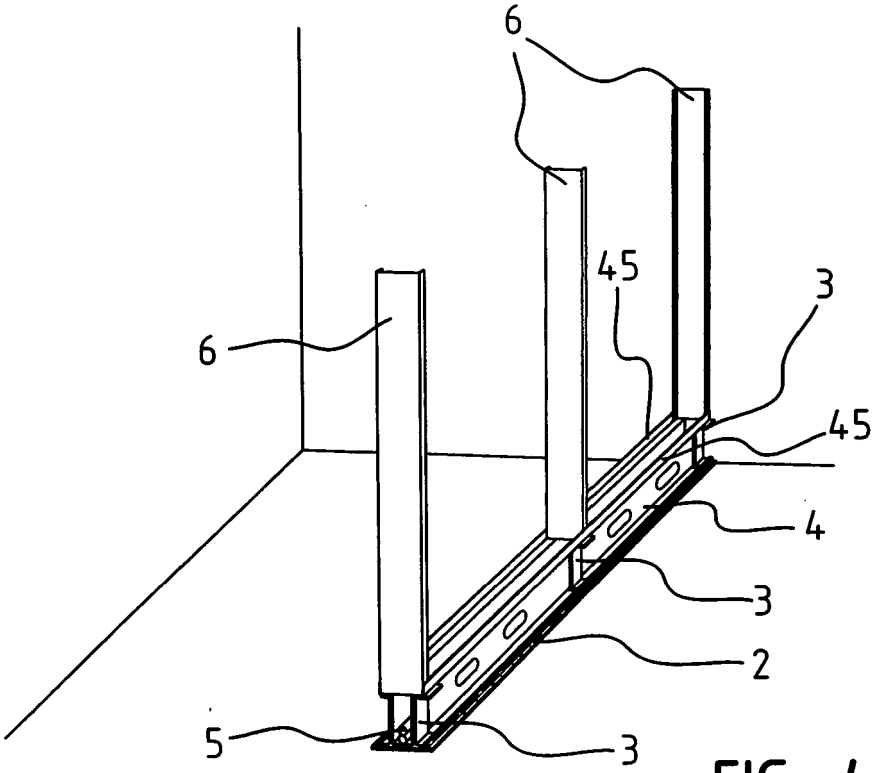


FIG. 4

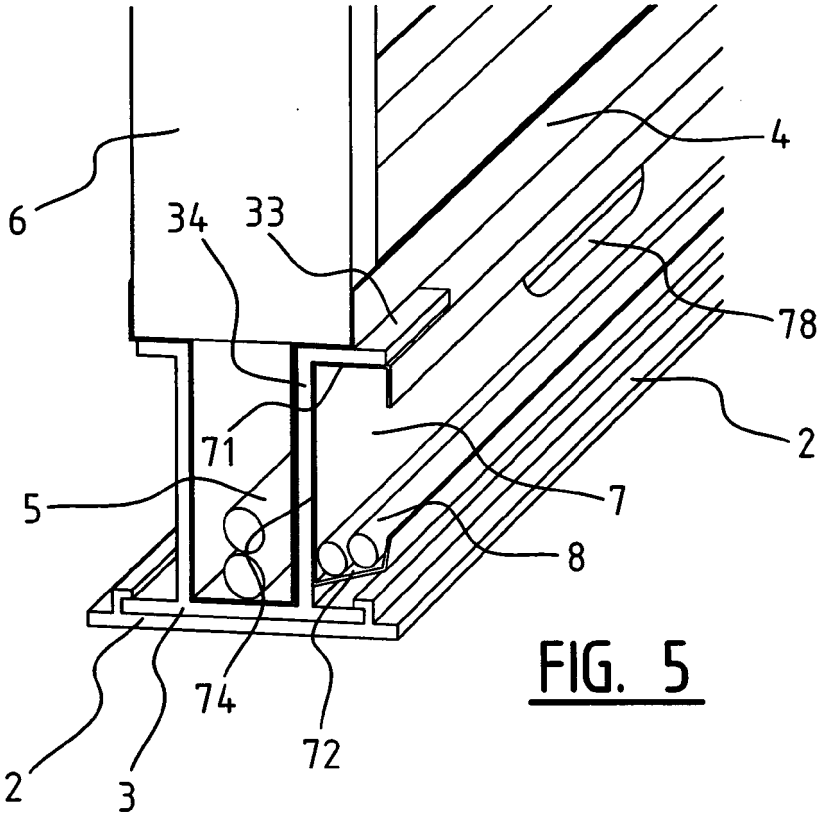


FIG. 5

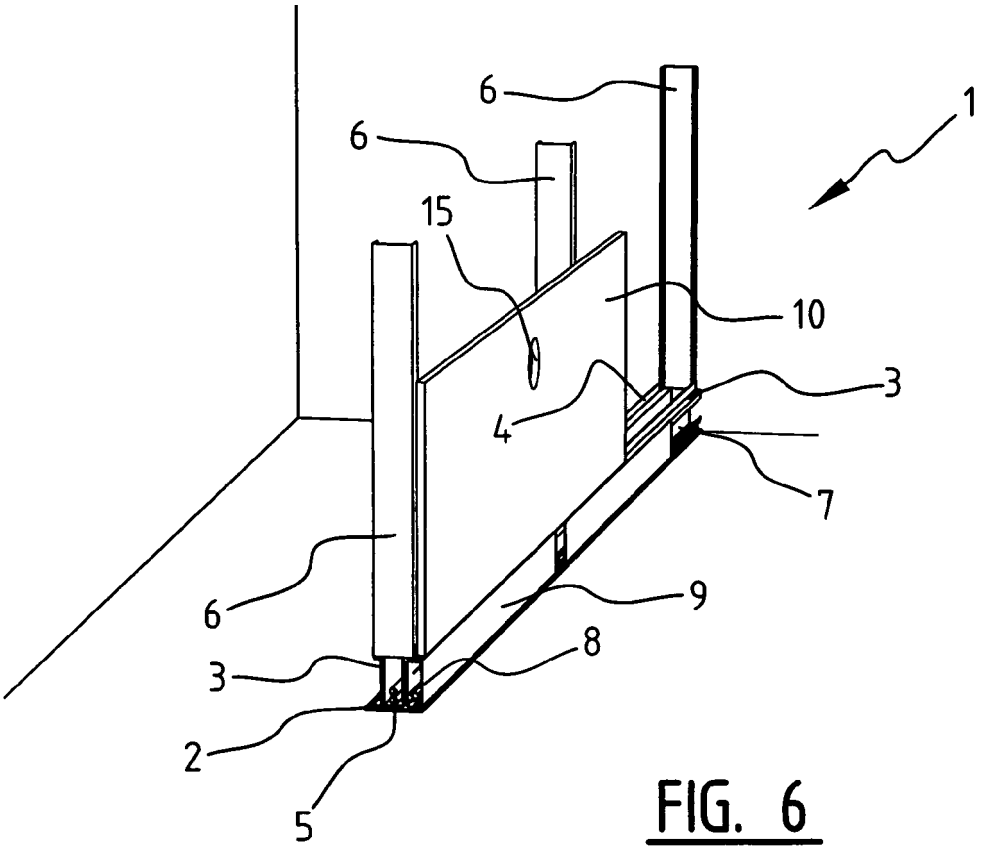
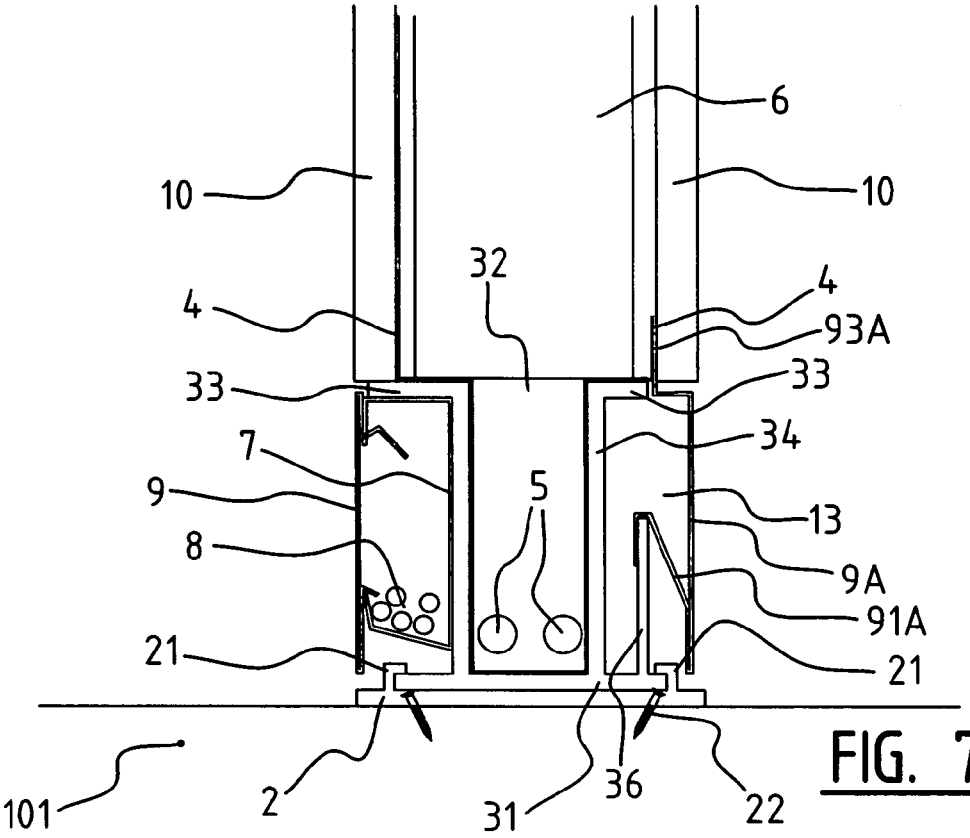


FIG. 6


6
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10
32
4
4
93A
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33
34
7
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5
13
8
9A
91A
21
21
101
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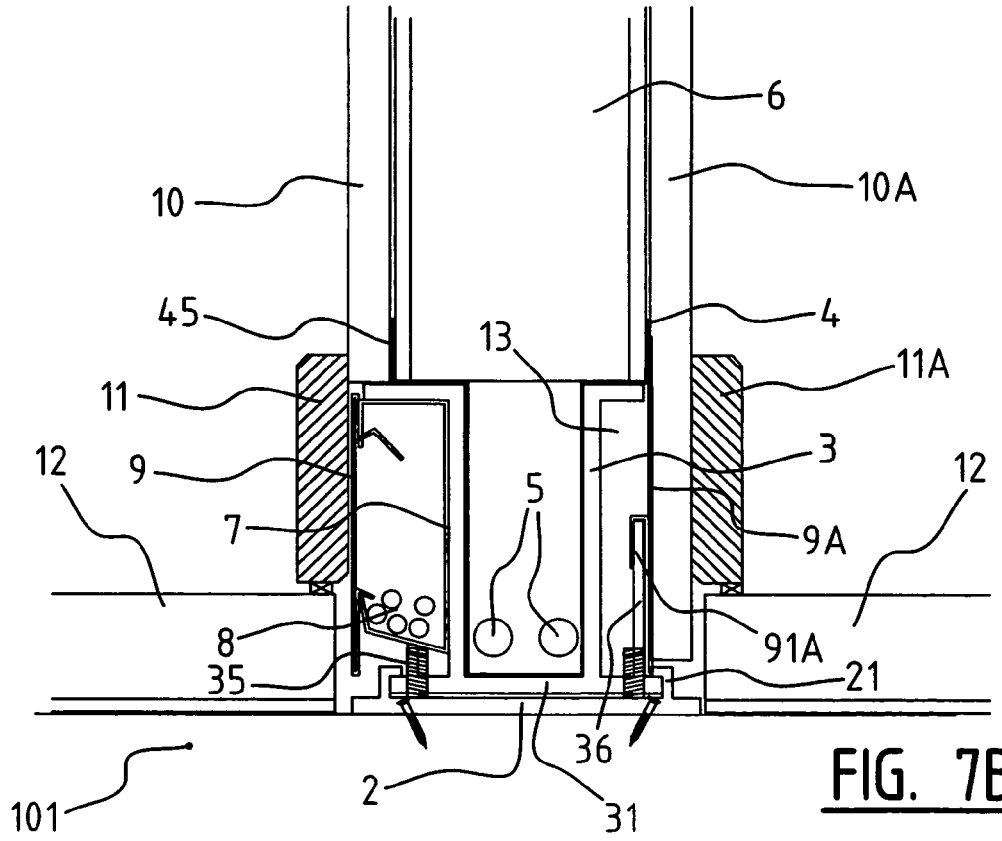
FIG. 7A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11A
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12
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9A
8
91A
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21
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101
2
31

FIG. 7B

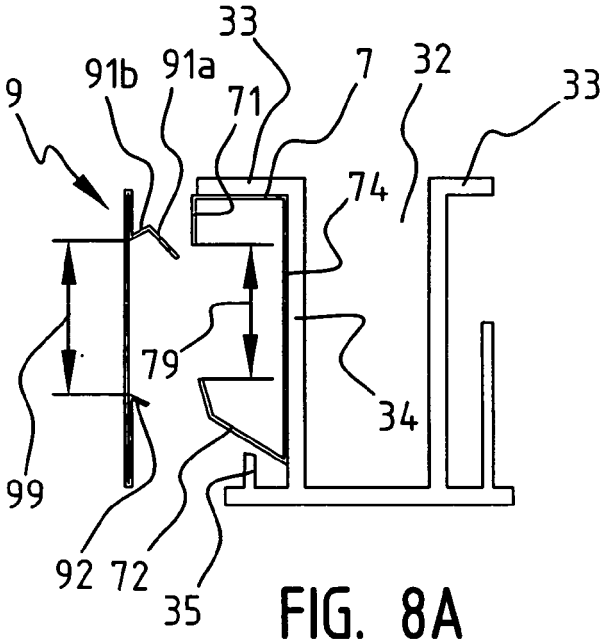


FIG. 8A

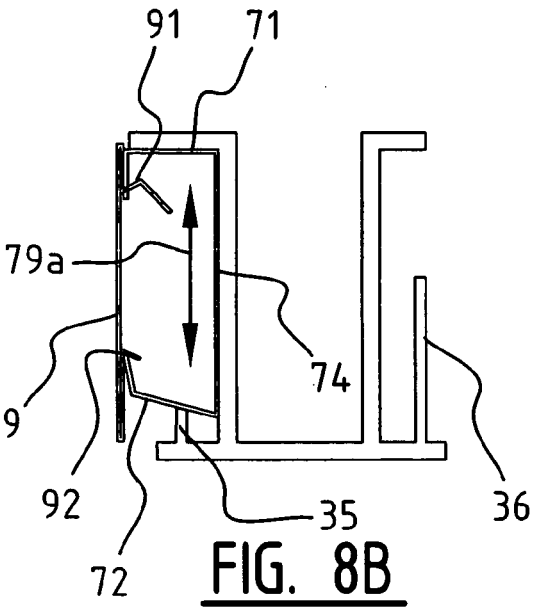


FIG. 8B

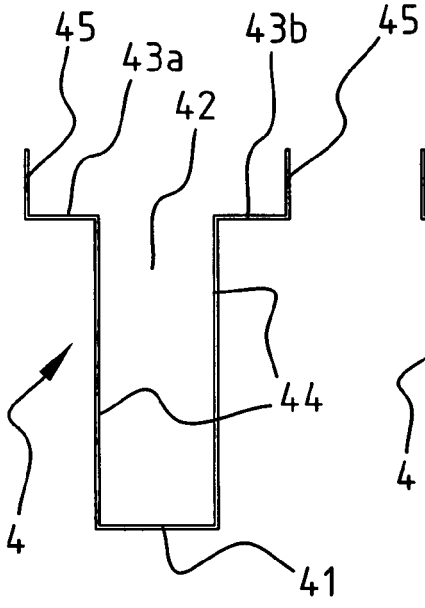


FIG. 9

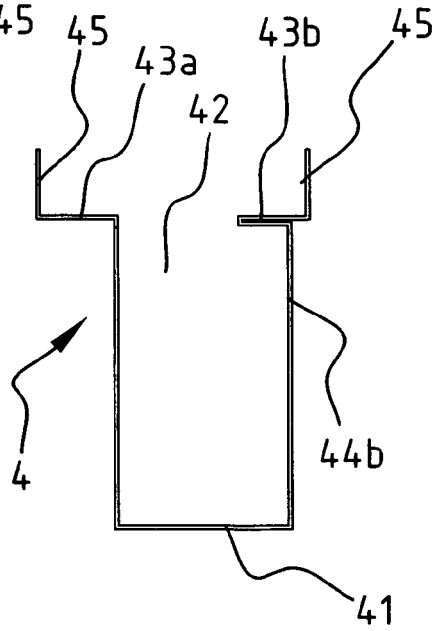


FIG. 10A

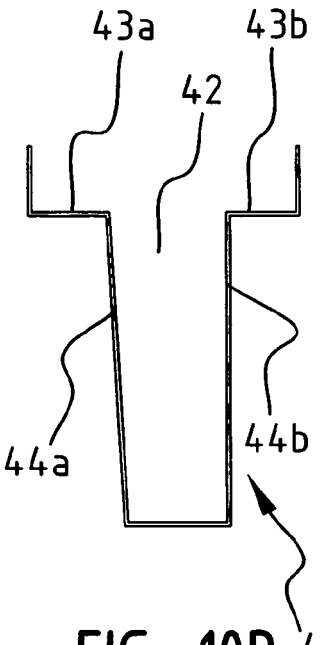


FIG. 10B

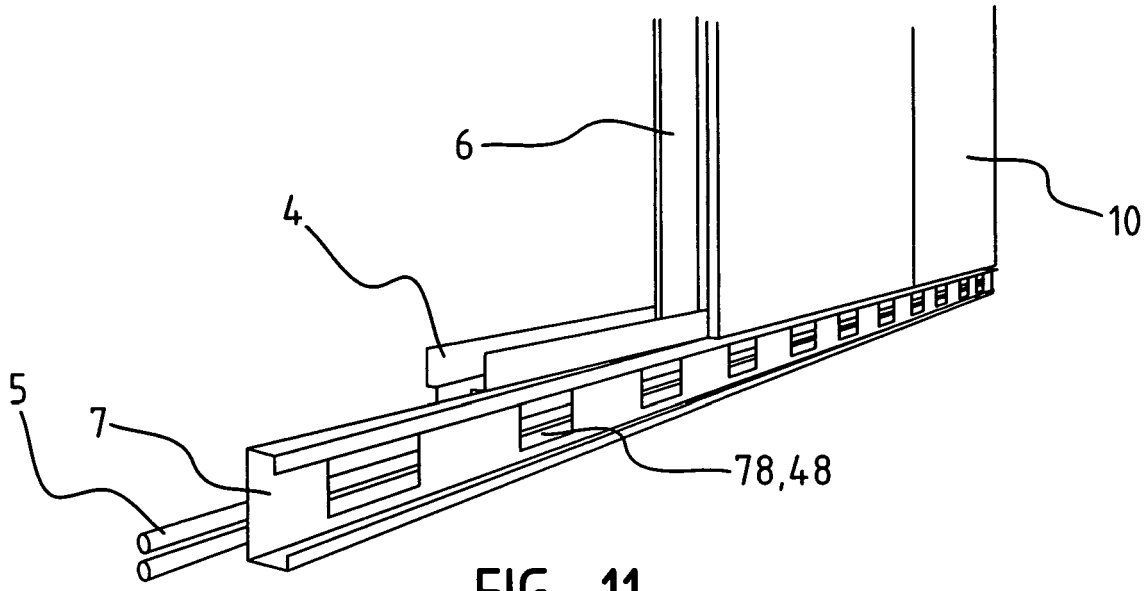


FIG. 11

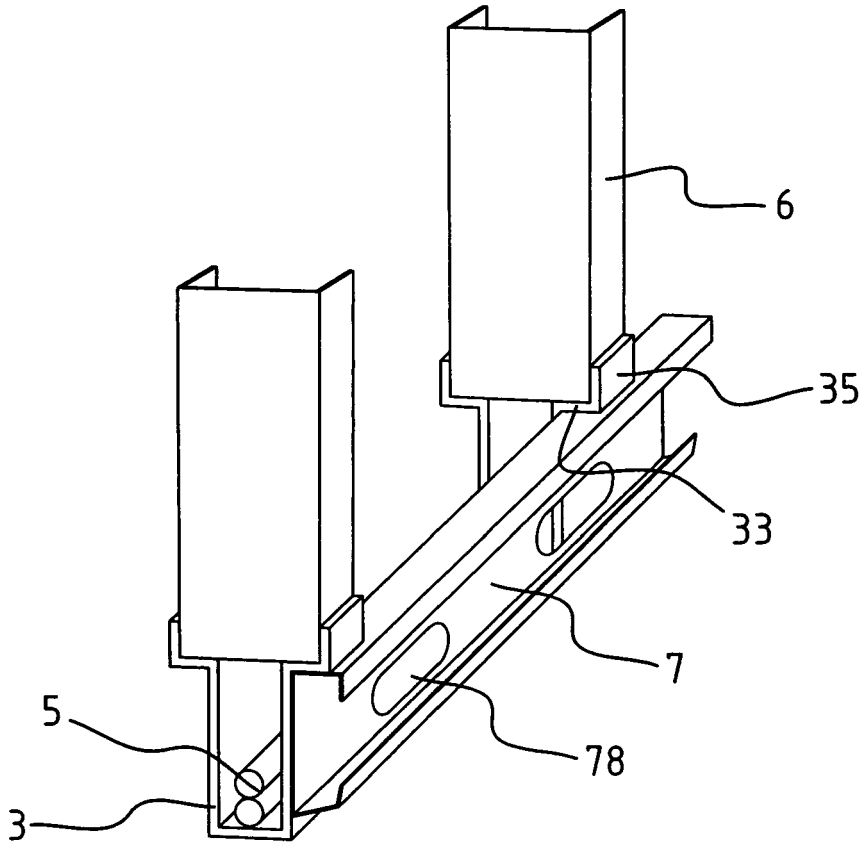
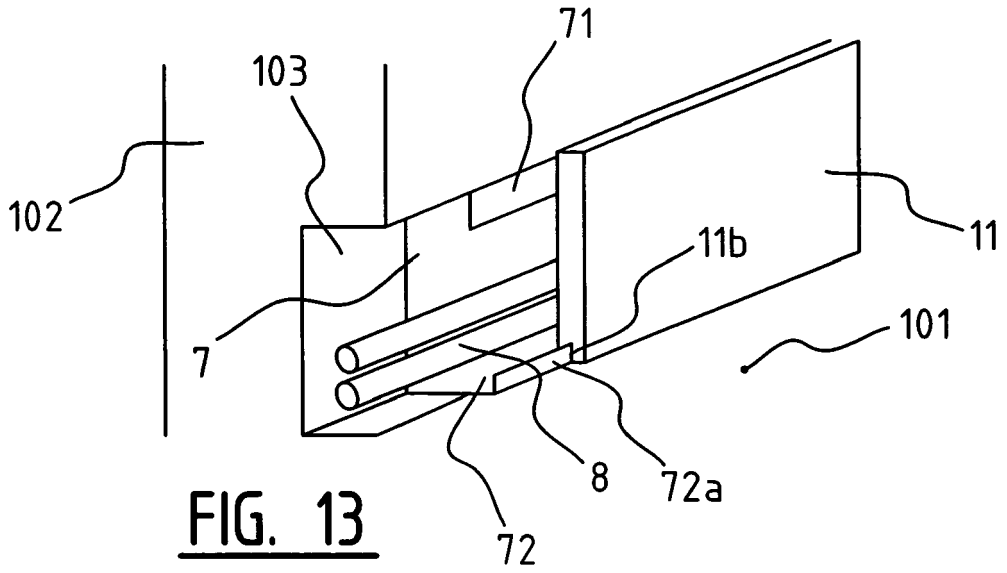


FIG. 12


71
103
102
11
11b
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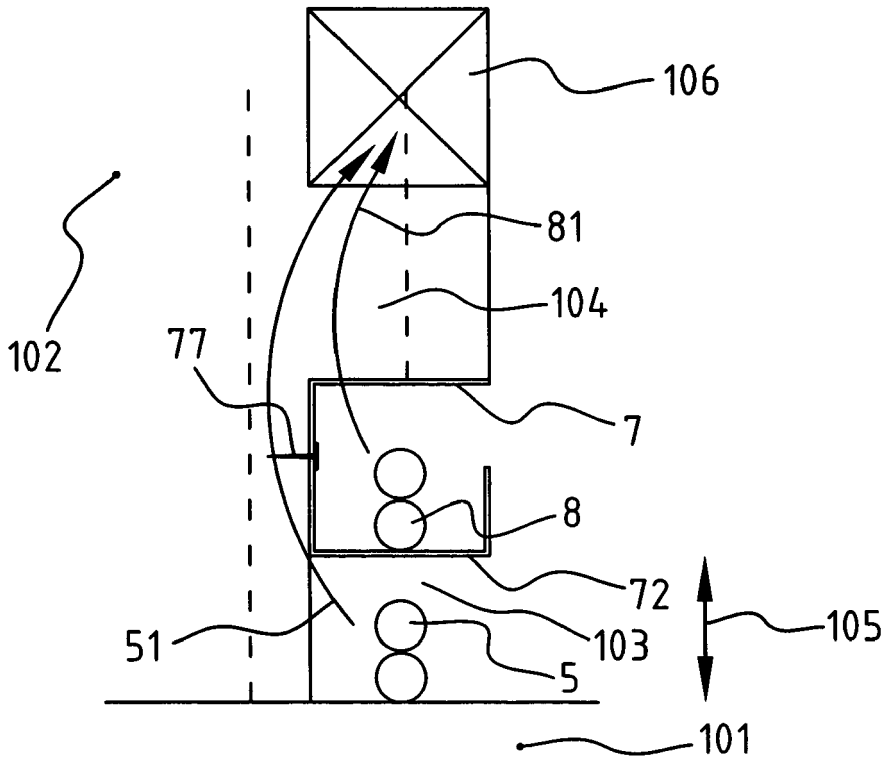
72a
72

FIG. 13


106
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77
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101

FIG. 14

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EUROPEAN SEARCH REPORT

Application Number
EP 09 07 5062

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Y A	WO 2007/106933 A (BECK ROWAN PHILLIP [AU]; SCOTT ANTHONY WILLIAM [AU]) 27 September 2007 (2007-09-27) * figure 5 * -----	14 1,15	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	20 May 2009	Fordham, Alan

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