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(54) **SYSTEM FOR PARTITIONING A SPACE**

(57) A system installable in a space (E) at a ceiling (C), comprising at least one longitudinal profile or beam (10) couplable with the ceiling (C), at least one longitudinal conductive guide rail (41') fixable to the profile or beam (10) and that can be power-supplied with electric power supply means and at least one lighting device (40) removably coupled with the longitudinal beam or profile (10) and electrically connected with the longitudinal conductive guide rail (41'). The profile or beam (10) comprises a pair of lateral walls (11, 12) mutually facing each other and an upper wall (13) designated to be faced towards the ceiling (C) mutually cooperating to internally define a compartment (14) open at the bottom to removably receive the lighting device (40); The system further comprises first means (60) for the magnetic coupling of the lighting device (40) and the longitudinal conductive guide rail (41') and second means (70) for the removable mechanical coupling of the lighting device (40) and of the profile or beam (10), said second coupling means (70) cooperating with the first magnetic coupling means (60).

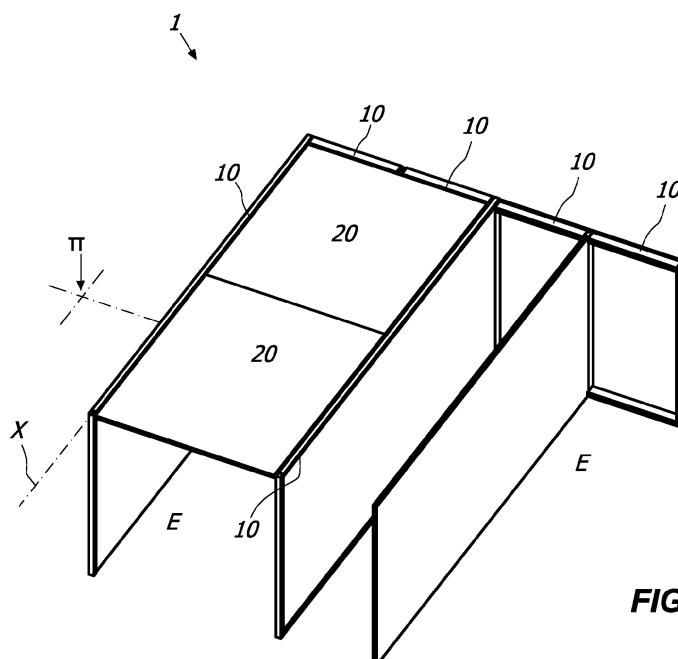


FIG. 1A

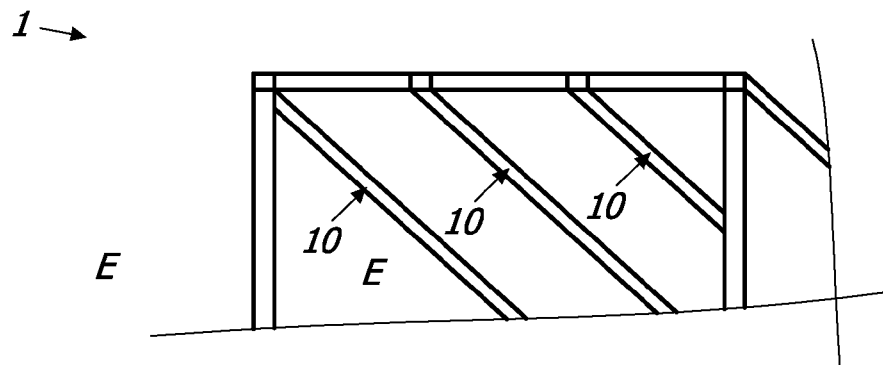


FIG. 1B

Description

[0001] The present invention generally applies to the field of interior furnishing and it regards a system installable in a space at a ceiling, in particular for offices, museums, shops and the like.

State of the Art

[0002] Systems for obtaining false ceilings in a space, for example the so-called "open space" office, a shop, a museum or the like, are known. Such systems generally included a plurality of beams or longitudinal profiles connected to a ceiling. In case there is a false ceiling, a plurality of panels are coupled to the beams.

[0003] The bearing beams are suitable to concealingly house a plurality of accessories such as alarms, illumination lights, electric cables, data cables, ducts for air conditioning, partitioning walls or the like.

[0004] Possibly, the beams can be of the multifunction type, i.e. such accessories can be removably inserted into the bearing beam so as to enable a user to change the configuration of the space whenever required.

[0005] Such known systems can be improved in various aspects, in particular as regards safety.

[0006] Furthermore, beams suitable to house lighting devices are known. Such systems comprise magnets for coupling the lighting device to the beam. However, such lighting devices have limited dimensions in that they are particularly light, generally less than 1 kg.

Summary of the invention

[0007] An object of the present invention is to at least partly overcome the drawbacks illustrated above, by providing a multifunctional system installable in a space at a ceiling, that is highly functional and inexpensive.

[0008] An object of the invention is to provide a system installable in a space that is particularly safe.

[0009] An object of the invention is to provide a system installable in a space that allows the use of heavy accessories.

[0010] An object of the invention is to provide a system installable in a space that allows to mount a particularly versatile lighting device.

[0011] An object of the invention is to provide a system installable in a space that minimises the installation times.

[0012] An object of the invention is to provide a system installable in a space that has high aesthetic appeal.

[0013] An object of the invention is to provide a system installable in a multifunctional space.

[0014] These objects, just like others that will be more apparent hereinafter, are attained by a system installable in a space as described, illustrated and/or claimed herein.

[0015] In a first aspect, there may be provided a system installable in a space at a ceiling, comprising:

- at least one longitudinal profile or beam couplable with the ceiling;
- at least one longitudinal conductive guide rail that can be fixed to said at least one profile or beam and that can be power-supplied with electric power supply means;
- at least one lighting device removably coupled with said at least one longitudinal beam or profile and electrically connected with said at least one longitudinal conductive guide rail;

wherein said at least one profile or beam comprises a pair of lateral walls mutually facing each other and an upper wall designated to be faced towards the ceiling mutually cooperating to internally define a compartment open at the bottom to removably receive said at least one lighting device;

wherein said system further comprises:

- first means for the magnetic coupling of said at least one lighting device and of said at least one longitudinal conductive guide rail;
- second means for the removable mechanical coupling of said at least one lighting device and of said at least one profile or beam, said second coupling means cooperating with said first magnetic coupling means.

[0016] In a further aspect, irrespective of the above, there may be provided a multifunctional system installable in a space at a ceiling, comprising:

- at least one longitudinal profile or beam couplable with the ceiling;
- at least one first and one second accessory that perform one or more functions in the space, said at least one first and one second accessory being alternatively and selectively removably couplable with said at least one profile or beam;

wherein said at least one profile or beam comprises a pair of lateral walls mutually facing each other and an upper wall designated to be faced towards the ceiling mutually cooperating to internally define a compartment open at the bottom to removably receive said at least one first or at least one second accessory;

wherein the system further comprises:

- means for snap coupling said at least one first and one second accessory with said at least one profile or beam;
- safety means removably coupleable with said at least one profile or beam in at least one operative position to prevent the decoupling of said at least one first and one second accessory and said at least one longitudinal beam or profile.

[0017] The dependent claims describe advantageous

embodiments of the invention.

Brief description of the drawings

[0018] Further characteristics and advantages of the invention will be more apparent in light of the detailed description of a preferred but non-exclusive embodiment of a system 1, illustrated by way of non-limiting example with reference to the attached drawings, wherein:

FIGS. 1A and 1B are schematic views of embodiments of a system 1;

FIG. 2 is a schematic view of the electric power supply of a lighting device 40;

FIGS. 3 and 4 are axonometric views of some details of the system 1, in particular FIG. 3 illustrates a beam 10 and FIG. 4 illustrates a lighting device 40;

FIG. 6A is a sectional schematic view of an embodiment of some details of the partitioning system 1, with FIG. 6B showing some enlarged details of FIG. 6A;

FIG. 7 is a sectional exploded schematic view of another embodiment of some details of the partitioning system 1.

Detailed description of some preferred embodiments

[0019] With reference to the mentioned figures, herein described is a system 1 installable in a space E, generally an open space, at a ceiling C or a false ceiling.

[0020] Essentially, the system 1 may include one or more longitudinal profiles or beam 10 that can be connected in a per se known manner to the ceiling C. The longitudinal profiles 10 may thus be structural or non-structural. For example, they may be sections, beams or small beams 10.

[0021] A plurality of panels 20 of the false ceiling and a plurality of elements 26 for the mutual connection of the panels 20 and the beams 10 may be possibly present.

[0022] Once the panels 20 and the beam 10 are connected, the latter may cooperate to define a main extension plane of the false ceiling π .

[0023] The beam 10 may have a substantially longitudinal extension defining an axis X and it may comprise a pair of lateral walls 11, 12 facing each other and an upper wall 13 designated to be faced towards the ceiling C.

[0024] The lateral walls 11, 12 may extend in respective planes substantially perpendicular to the false ceiling, i.e. they may be substantially perpendicular to the upper wall 13 so as to cooperate in a manner such that the beam 10 is substantially C-shaped section.

[0025] It is clear that the lateral walls 11, 12 may be divided into two or more portions, without departing from the scope of protection of the attached claims.

[0026] The lateral walls 11, 12 and the upper wall 13 may thus cooperate mutually to define a compartment 14 open at the bottom part to removably receive one or

more accessories 30, 40 that perform one or more functions in the space E.

[0027] The accessories may be of different types, for example, they may be service accessories such as lighting devices, lights, emergency lights, fire safety alarms, cable ducts, smoke and/or presence detection sensor, speakers and/or the like. Data cables, telephone cables or the like may be possibly inserted into the cable ducts.

[0028] Possibly, one or more accessories protection elements operatively coupled with the accessories 30, 40 and/or the beam 10 may be provided for.

[0029] Each of the lateral walls 11, 12 of the beam 10 may include an upper edge 1100', 1200' facing towards the ceiling C and a lower edge 1100'', 1200'' opposite thereto and faced downwards.

[0030] The lateral walls 11, 12 may have inner surfaces 110', 120' and outer surfaces 110'', 120'', the latter being designated to remain facing the panels 20.

[0031] Elements 16 for connection with corresponding connection elements 26 of the panels 20 may be arranged externally to the beam 10. For example, the connection elements 16 may be seats or female elements 16' arranged at the outer surfaces 110'', 120'', while the connection elements 26 may be male elements 26'.

[0032] The connection elements 16 and the connection elements 26 may possibly be snap-coupled to each other.

[0033] It is clear that the aforementioned male and female elements may also be inverted without departing from the scope of protection of the attached claims. For example, the connection elements 26 may include the female element and the connection elements 16 may include the male element.

[0034] It is clear that such connection elements 16, 26 may be of any type without departing from the scope of protection of the present invention.

[0035] The beam 10 and the panel 20 may be coupled so as to allow the mutual sliding along a direction substantially parallel to the axis X and prevent the mutual sliding thereof along a direction substantially perpendicular with respect to the axis X, i.e. they may prevent the decoupling of the beam 10 and of the panel 20.

[0036] Thus, the panels 20 and the beam 10 may be connected in a simple and quick manner, without using screws, bolts or similar fixing elements. Furthermore, thanks to such characteristic, the positioning of the panel 20 may be varied slightly even when it is already connected with the beam 10.

[0037] The beam 10 may suitably comprise one or more portions 19 to be coupled with the ceiling C. Such types of coupling may be of the per se known type.

[0038] The beam 10 may comprise at least one portion to allow the coupling of the accessory 30, 40 with the beam 10. Such coupling may preferably be of the removable type.

[0039] Suitably, the inner surfaces 110', 120', 130' of the walls 11, 12, 13 may thus define the inner surface of the compartment 14.

[0040] In any case, the system **1** may house only one accessory **40**, a plurality of such accessories **40**, or a plurality of accessories **30, 40** different from each other as described above. For example, the compartment **14** may house a plurality of lighting devices **40** and emergency lights. On the other hand, according to another embodiment the compartment **14** may house a plurality of different accessories **30**, such as for example emergency lights, alarm signals and/or smoke sensors, and/or speakers for example as illustrated in Fig. 7.

[0041] Generally, the accessories **30, 40** may be simultaneously and/or alternately couplable with the beam **10**. In particular, the beams **10** may comprise several accessories **30, 40** simultaneously or the accessories **30, 40** may be selectively alternately mountable on a beam **10**.

[0042] Should the need to vary the configuration of the system **1** arise, the appropriate accessory **30, 40** may be suitably mounted upon removing the accessory **30, 40** present, if present, from one or more of the beams **10**.

[0043] The system **1** may thus be multifunctional, i.e. it may be suitable to house one or more accessories in a removable manner so as to guarantee to the user the possibility of changing the configuration of the space **E** whenever required.

[0044] It is clear that the system **1** may comprise a plurality of beams **10** having the characteristics described above, each one of which may comprise one or more accessories **30, 40**.

[0045] According to a particular aspect of the invention, the system **1** may comprise means **60** and means **70** for coupling the accessories **30, 40** and the beam **10** as better described hereinafter.

[0046] The accessories **30, 40** may be coupled with the beam **10** using the means **60**, while the means **70** may act as safety means for preventing the decoupling of the accessories **30, 40** and the beam **10**. On the other hand, according to another aspect of the invention, the means **60** and the means **70** may cooperate to couple the accessories **30, 40** and the beam **10**.

[0047] Such characteristics will allow to prevent the inadvertent decoupling between the beam **10** and the accessories **30, 40** with the risk of the latter falling off, for example due to wear, overheating, impacts, earthquakes or the like.

[0048] In other words, in this manner the system **1** may have anti-seismic characteristics.

[0049] Furthermore, this could allow the coupling of the beam **10** with heavy accessories **30, 40**. For example, the accessories **30, 40** may weigh up to 7 kg, preferably up to 10 kg per linear metre.

[0050] In other words, the means **70** may act as safety elements and/or support elements for the coupling of the accessories **30, 40** with the beam **10**.

[0051] For example, should the accessory **30, 40** be light, i.e. substantially lighter than 1 kg, the means **70** may be safety elements, while should the accessory **30, 40** be heavy, i.e. weigh about 10 kg, the means **70** may

serve as coupling means.

[0052] It is clear that such examples are not exclusive in that the function of the means **70**, i.e. the safety and/or support function, may depend on the weight of the accessories **30, 40**, on the configuration of the means **60** and, more generally, on the mutual configuration of the means **60** and of the means **70**.

[0053] More in detail, the means **60** may be snap-coupling means, magnets, male-female means, bayonet-coupling means or the like of the per se known type. For example, the means **60** may be of the magnetic type as shown in the attached figures. However, such example shall not be deemed as exclusive.

[0054] On the other hand, the means **70** may include one or more laminar elements **70'**. In particular, the laminar element **70'** may comprise a pair of opposite end portions **71, 72**, and a central portion **73** interposed between the latter.

[0055] Suitably, the central portion **73** may interact with the accessory **30, 40** while the end portions **71, 72** may interact with the lateral walls **11, 12** of the beam **10**.

[0056] In particular, the lateral walls **11, 12** may comprise a respective longitudinal appendage **111, 121** extending towards the compartment **14**. Preferably, the longitudinal appendages **111, 121** may have a substantially continuous extension along the entire beam **10**.

[0057] Suitably, the longitudinal appendages **111, 121** and the end portions **71, 72** may be configured so as to promote the insertion of the element **70'** into the compartment **14** and so as to prevent the release thereof.

[0058] For example, as illustrated in the attached figures, the appendages **111, 121** may be substantially arc-shaped and they may have a concave portion **113, 123** for receiving the end portions **71, 72** of the element **70'**. Suitably, the end portions **71, 72** may also be substantially arc-shaped in an opposite manner with respect to the concave portions **113, 123**.

[0059] In this manner, the mutual configuration of the appendages **111, 121** and the end portions **71, 72** may allow to facilitate the insertion of the element **70'** and it may allow to prevent the inadvertent removal of thereof from the compartment **14**.

[0060] More in detail, the concave portions **113, 123** of the longitudinal appendages **111, 121** may have a respective upper operative surface **112, 122** susceptible to come into contact with a corresponding operative surface **74, 75** of the end portions **71, 72**.

[0061] Preferably, the element **70'** may be removably inserted into the compartment **14**.

[0062] For example, the end portions **71, 72** may be rotatably movable with respect to the central portion **73** so as to allow the user to act thereon to move the operative surfaces **74, 75** and **112, 122** away and thus remove the element **70'** from the compartment **14**.

[0063] The element **70'** may be made of metal or of polymeric material. Furthermore, the element **70'** may be elastically deformable or it may comprise at least one elastically deformable portion **76**. In other words, may

slightly deform the element **70'** or the portion **76** thereof to rotate the end portions **71**, **72** so as to allow the removal of the element **70'** from the compartment **14**.

[0064] Thanks to the longitudinal appendages **111**, **121**, the element **70'** may be coupled with the beam **10** in any operative position of the latter so as to adapt to the different positions and/or lengths of the accessories **30**, **40**. Possibly, both the element **70'** and the accessories **30**, **40** may be coupled with the beam **10** in any position of the latter.

[0065] The expression operative position is used to indicate when the element **70'** is coupled with the beam **10** and interacts with the accessory **30**, **40** to perform a support and/or safety function.

[0066] According to a particular aspect of the invention, the elements **70'** may slide along the beam **10** still remaining coupled therewith. In particular, the end portions **71**, **72** may slide along the appendages **111**, **121** while the respective operative surfaces **74**, **75** and **112**, **122** may remain at mutual contact.

[0067] In this manner, the elements **70'**, and possibly also the accessories **30**, **40**, may be positioned in any position of the beam **10** and/or they can be repositioned thereon.

[0068] Furthermore, advantageously, the accessories **30**, **40** can be removed or replaced without having to decouple the elements **70'** and the beams **10**.

[0069] According to a particular embodiment, the accessory may be a lighting device **40** comprising at least one light source **40'** or a speaker **30**.

[0070] Suitably, at least one longitudinal conductive guide rail **41'** that can be powered by means of electric power supply means may be provided for. In particular, an electric power supply line, for example the domestic power mains, electrically connected with the conductive guide rail **41'** may be provided for so that the latter power-supplies the light source **40'**.

[0071] The latter may for example comprise one or more LED lights, possibly a spot of LED lights, i.e. a plurality of LEDs **40'** mounted on a special support structure of the known type. In particular, the LED lights **40'** may be electrically connected with the conductive guide rail **41'** so as to be power-supplied by the latter. The LED lights **40'** may be all identical to each other or not.

[0072] Each device **40** may be substantially modular, i.e. it may consist of two or more LED spots **40'**. For example, the device **40** may have a length of 600 mm (one spot), 1200 mm (two spots) 1800 mm (three spots) or 2400 mm (four spots).

[0073] Each spot may comprise a high number of LEDs. For example, a spot measuring 600 mm long may comprise 294 LEDs **40'** arranged in 7 rows.

[0074] According to a particular aspect of the invention, the guide rail **41'** may be power-supplied at low voltage. Thus, the LED lights **40'** may too be power-supplied at low voltage.

[0075] The electronic devices are divided into electrical insulation classes as defined by the IEC (*International*

Electrotechnical Commission). In particular, the device **40** may meet the insulation class III requirements according to the IEC.

[0076] Thus, the device **40** may be particularly safe, it may not be hazardous in case of contact with the human body, and thus does not require the earthing of the device.

[0077] For example, the voltage of the guide rail **41'** may be about 48 volts in direct current.

[0078] The electric power supply line may suitably be at low voltage (electricity generated by a low voltage battery) or there may be provided for at least one low voltage transformer **42** connected to the electric power supply line and arranged upstream of the of the guide rail **41'** so that the latter is power-supplied in low voltage (FIG. 2).

[0079] There may be provided for a transformer **42** at each beam **10** so that it is connected with a guide rail **41'**, or the transformer **42** may be simultaneously electrically connected with a plurality of guide rails **41'**.

[0080] Possibly, a plurality of consecutive guide rails **41'** coupled to the same beam **10** with the same transformer **42** may be possibly connected.

[0081] It is clear that the dimensioning and configuration of the transformer **42** may vary depending on the need, the materials, the length of the guide rail, or the current of the power mains that supply it with power.

[0082] In other words, the domestic mains (220 Vac, alternating current) may define the electric power supply line, while - due to the presence of the transformer - the guide rail **41'** and thus the LED lights **40'** may be power-supplied at low voltage (48 Vdc, direct current).

[0083] This may allow avoiding the high number of cables and transformers which can generally be observed in such devices. Furthermore, the use of low voltage electric current makes the device particularly safe, with low risks for the users and operators and without requiring earthing.

[0084] Thus, the installation thereof will also be particularly simple, safe and quick.

[0085] Suitably, the guide rail **41'** may be integrally coupled with the upper wall **13** of the beam **10** in a per se known manner, for example by means of self-tapping screws or screw-bolt systems.

[0086] As known, should the lighting device **40** be under class III, there is no need for particular solutions for the safety or isolation of one or more parts thereof.

[0087] Thus, the lighting device **40** may comprise a longitudinal profile **44** and an adapter element **43** susceptible to be coupled with the guide rail **41'** so as to mutually couple the lighting device **40** and the beam **10**. Each device **40** may preferably comprise an adapter **43** in proximity of an end **44'** and an adapter **43** in proximity of the opposite end **44'** of the longitudinal profile **44**.

[0088] Preferably, the adapter element **43** may comprise electrically conductive means to allow the flow of current between the guide rail **41'** and the LEDs **40'**. It is clear that the electrical connections between each LED **40'** and the guide rail **41'** may be of the per se known

type, for example by means of suitable cables passing through the adapter **43**.

[0089] According to a particular aspect of the invention, the guide rail **41'** and/or the adapter **43** may comprise mutually couplable magnetic elements defining the coupling means **60**.

[0090] For example, the guide rail **41'** may comprise at least one magnet, preferably a magnetic longitudinal bar, while the adapter **43** may be configured to be attracted by the magnet so as to couple the latter to the guide rail **41'**.

[0091] The magnetic coupling may for example be obtained so that the guide rail **41'** can sustain a weight of in the order of a few Kg per linear metre, i.e. the configuration and characteristics of the magnetic bar and of the adapter **43** may be such that the mutual attraction is substantially equal to or greater than such force.

[0092] The adapter element **43** may suitably be coupled to the guide rail **41'** in any position of the latter so that the lighting device **40** and thus the system **1** adapts to the various lighting needs of the space **E**.

[0093] Furthermore, the adapter element **43** may be removably coupled with the guide rail **41'** so as to enable to easily reconfigure the arrangement of the lighting device **40**.

[0094] The profile **44** and the adapter **43** may be integrally coupled in a per se known manner, for example, as shown in FIG. 6A, by means of a screw-bolt system.

[0095] In other words, the adapter **43** may be coupled at the upper part with the guide rail **41'** by means of the mutual magnetic attraction action, i.e. by means of the means **60**, and - at the lower part - with the longitudinal profile **44** by means of the screw-bolt system.

[0096] The device **40** may suitably comprise at least one seat **170** for the laminar element **70'**, and in particular for the central portion **73** thereof.

[0097] More in particular, the laminar element **70'** may be interposed between the adapter **43** and the profile **44** so as to prevent the detachment of the adapter **43** from the guide rail **41'** and thus the lighting device **40** from the beam **10**.

[0098] The adapter **43** and the longitudinal profile **44** may thus respectively have at least one first portion **45** and at least one second portion **46** mutually faced and spaced apart to define the seat **170**.

[0099] At least one spacer **80** interposed between the portions **45**, **46** so as to keep the latter mutually spaced apart by a predetermined distance may be suitably provided for. For example, such spacer **80** may be a washer or the like.

[0100] Suitably, the central portion **73** of the laminar element **70'** may also have a thickness substantially equal to or slightly smaller than the predetermined distance.

[0101] For example, such distance may be about 1.5 mm, while the central portion **73** may have a slightly smaller thickness, for example of about 1.2 - 1.4 mm.

[0102] According to a particular aspect of the invention,

the entire laminar element **70'** may have such thickness.

[0103] In this manner, upon inserting the central portion **73** into the seat **170**, the former may remain interposed between the adapter **43** and the profile **44**.

[0104] Should the profile **44** not be present or should the latter not have the portion **46** facing the portion **45**, the central portion **73** of the laminar element **70'** may come into contact with the portion **45** of the adapter **43** to support the latter.

[0105] It is clear that the description above does not exclusively refer to the lighting device **40** only. As a matter of fact, the speaker **30** may also have the seat **170** for the laminar element **70'** and it may have the adapter **43** couplable with the beam **10** using the means **60**.

[0106] Thus, the beam **10**, or a plurality of beams **10**, may be operatively provided. Furthermore, a plurality of lighting devices **40** which may be coupled with the beam **10** in any position of the latter by means of coupling means **60** may be provided. The laminar element **70'** may be subsequently coupled with the beam **10** by inserting the former into the compartment **14** and then sliding the laminar element **70'** so as to insert it into the seat **170**.

[0107] Preferably, each lighting device **40** may have a pair of adapters **43** and a pair of seats **170** for receiving the laminar elements **70'**.

[0108] It is clear that the laminar elements **70'** may be coupled with the beam **10** before or after inserting the lighting device **40** and possibly irrespectively of the presence of the lighting device **40**.

[0109] In other words, upon removing the laminar elements **70'** from the seat **170**, the lighting device **40** may be removed and/or repositioned. The laminar elements **70'** may suitably slide along the beam **10** and/or they may be removed therefrom, for example by acting on the portions **76**.

[0110] The invention is susceptible to numerous modifications and variants, all falling within the scope of protection of the attached claims. All details can be replaced by other technically equivalent elements, and the materials can be different depending on the technical needs, without departing from the scope of protection defined by the attached claims.

Claims

1. A system installable in a space (**E**) at a ceiling (**C**), comprising:

- at least one longitudinal profile or beam (**10**) couplable with the ceiling (**C**);
- at least one longitudinal conductive guide rail (**41'**) that can be fixed to said at least one profile or beam (**10**) and that can be power-supplied with electric power supply means;
- at least one lighting device (**40**) removably coupled with said at least one longitudinal beam or

profile (10) and electrically connected with said at least one longitudinal conductive guide rail (41');;

wherein said at least one profile or beam (10) comprises a pair of lateral walls (11, 12) mutually facing each other and an upper wall (13) designated to be faced towards the ceiling (C) mutually cooperating to internally define a compartment (14) open at the bottom to removably receive said at least one lighting device (40);

wherein said system further comprises:

- first means (60) for the magnetic coupling of said at least one lighting device (40) and of said at least one longitudinal conductive guide rail (41');
- second means (70) for the removable mechanical coupling of said at least one lighting device (40) and of said at least one profile or beam (10), said second coupling means (70) cooperating with said first magnetic coupling means (60).

2. System according to the preceding claim, wherein said at least one lighting device (40) comprises at least one adapter element (43), said first magnetic coupling means (60) being configured to magnetically couple said at least one adapter element (43) and said at least one conductive longitudinal guide rail (41').
3. System according to claim 2, wherein said at least one lighting device (40) comprises at least one seat (170) for said second mechanical coupling means (70), said at least one seat (170) and said second mechanical coupling means (70) being mutually configured so that when the latter are coupled with said at least one profile or beam (10), said second mechanical coupling means (70) prevent the decoupling of said at least one adapter element (43) and said at least one conductive longitudinal guide rail (41').
4. System according to claim 3, wherein said at least one lighting device (40) comprises at least one longitudinal profile (44), said at least one adapter element (43) and said at least one longitudinal profile (44) respectively having at least one first portion (45) and at least one second portion (46) mutually facing each other and spaced to define said at least one seat (170).
5. System according to claim 4, comprising at least one spacer (80) interposed between said at least one first and at least one second portion (45, 46) of said at least one adapter element (43) and of said at least one longitudinal profile (44) to keep the same portions mutually spaced by a predetermined distance.

6. System according to claim 3, 4 or 5, wherein said second mechanical coupling means (70) include at least one element (70') having a substantially laminar extension, said at least one laminar element (70') comprising a central portion (73) designated to be inserted into said at least one seat (170) and a pair of opposite end portions (71, 72) designated to interact with said at least one profile or beam (10).

7. System according to the preceding claim, wherein said central portion (73) of said at least one laminar element (70') can be removably inserted into said seat (170).

8. System according to any one of the preceding claims, wherein said second coupling means (70) - once coupled with said at least one profile or beam (10) - are slidable with respect to the latter.

9. System according to any one of claims 6, 7 and 8, wherein said pair of lateral walls (11, 12) comprises a respective longitudinal appendage (111, 121) extending towards said compartment (14), said pair of opposite end portions (71, 72) of said at least one laminar element (70') being susceptible to interact with said longitudinal appendage (111, 121) of respectively said pair of lateral walls (11, 12) of said at least one profile or beam (10) for coupling the latter and said at least one laminar element (70') in any position.

10. System according to the preceding claim, wherein said longitudinal appendage (111, 121) of said pair of lateral walls (11, 12) has a respective first upper operative surface (112, 122), said pair of opposite end portions (71, 72) of said at least one laminar element (70') having a respective second operative surface (74, 75), said first and second operative surfaces (112, 122 and 74, 75) being mutually at contact upon coupling said at least one laminar element (70') with said at least one profile or beam (10).

11. A multifunctional system installable in a space (E) at a ceiling (C), comprising:

- at least one longitudinal profile or beam (10) couplable with the ceiling (C);
- at least one first and one second accessory (30, 40) that perform one or more functions in the space (E), said at least one first and one second accessory (30, 40) being alternately selectively removably coupled with said at least one profile or beam (10);

wherein said at least one profile or beam (10) comprises a pair of lateral walls (11, 12) mutually facing each other and an upper wall (13) designated to be faced towards the ceiling (C) mutually cooperating

to internally define a compartment (14) open at the bottom to removably receive said at least one first (30) or at least one second accessory (40); wherein the system further comprises:

- means (60) for snap coupling said at least one first and one second accessory (30, 40) with said at least one profile or beam (10);
- safety means (70) removably coupleable with said at least one profile or beam (10) in at least one operative position to prevent the decoupling of said at least one first and one second accessory (30, 40) and said at least one longitudinal beam or profile (10).

12. System according to claim 11, wherein said safety means (70) comprise at least one laminar element (70'), the latter being coupleable with said at least one longitudinal profile or beam (10) in any operative position thereof.

13. System according to claim 11 or 12, wherein said at least one laminar element (70') is snap insertable into said compartment (14) to be coupled with said at least one profile or beam (10).

14. System according to any one of claims 11 to 13, wherein said at least one laminar element (70') comprises a pair of opposite end portions (71, 72), said pair of lateral walls (11, 12) comprising a respective longitudinal appendage (111, 121) extending towards said compartment (14), said pair of opposite end portions (71, 72) being susceptible to interact with a respective longitudinal appendage (111, 121) of said pair of lateral walls (11, 12) of said at least one profile or beam (10).

15. System according to the preceding claim, wherein said pair of opposite end portions (71, 72) and said longitudinal appendages (111, 121) of said pair of lateral walls (11, 12) are mutually configured so as to promote the insertion of said at least one laminar element (70') into said compartment (14) and in order to prevent the release thereof.

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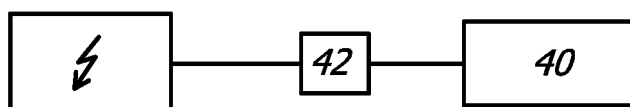
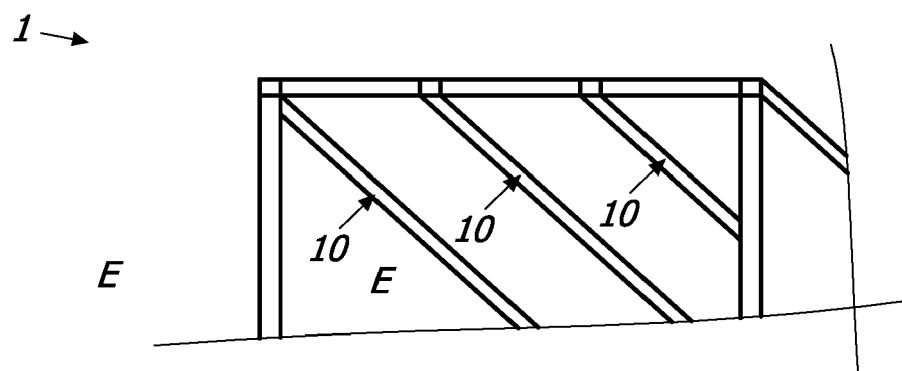
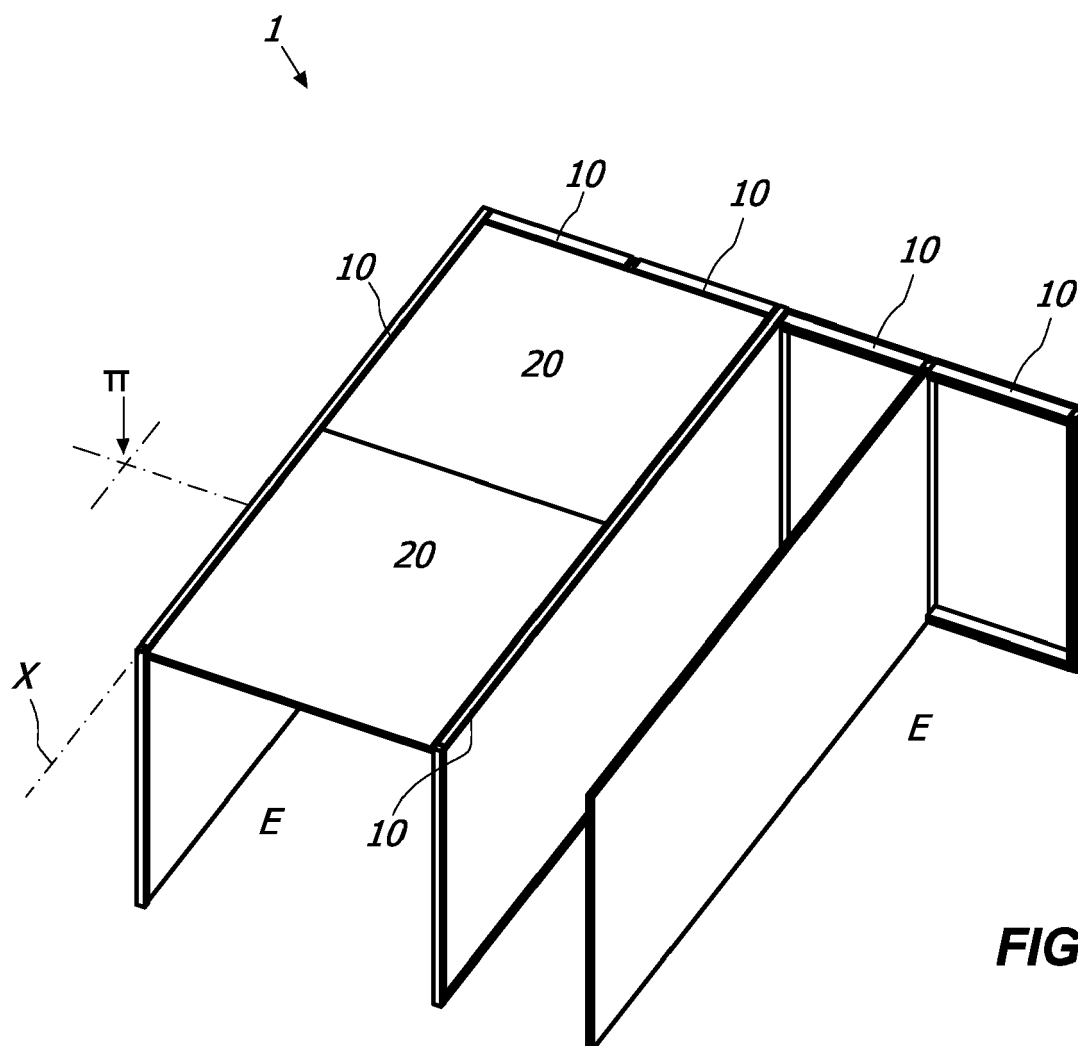
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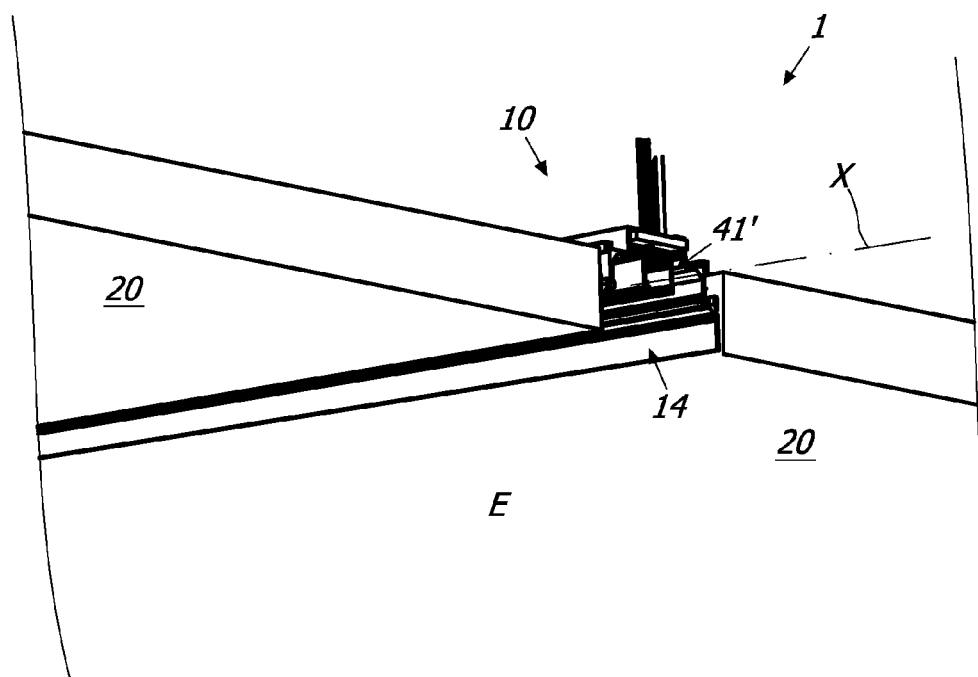


FIG. 3

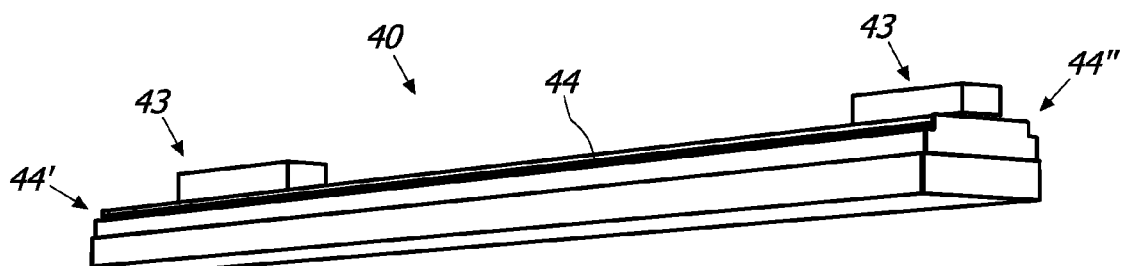


FIG. 4

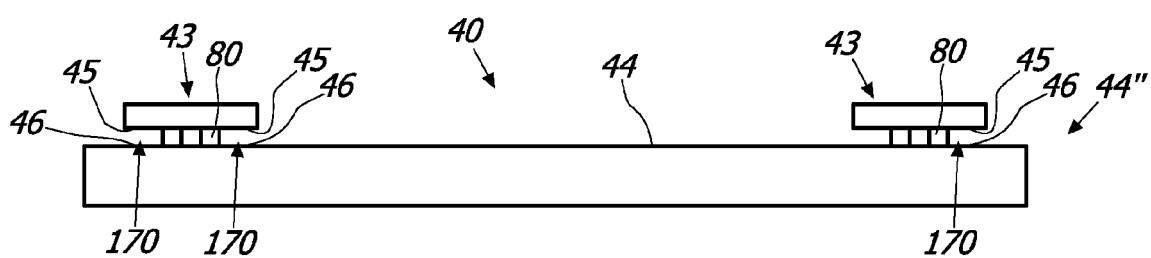


FIG. 5

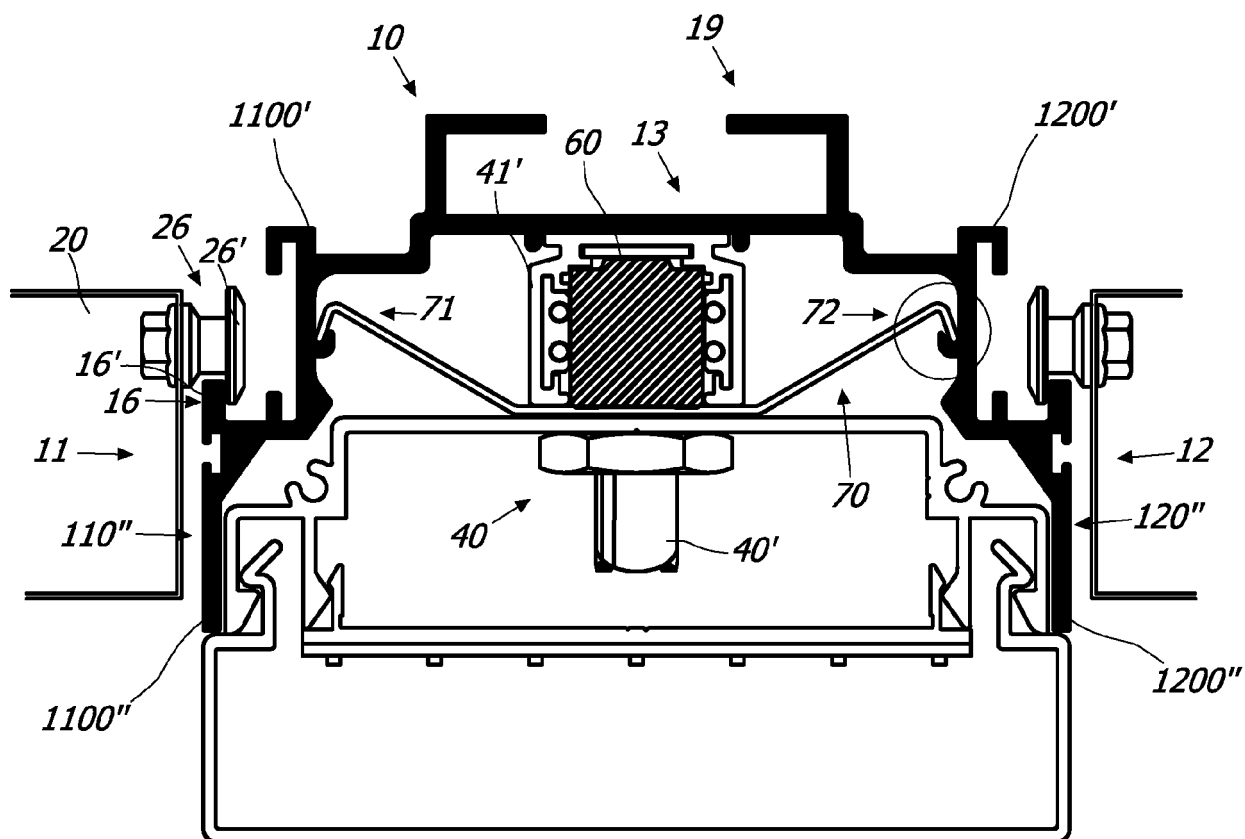


FIG. 6A

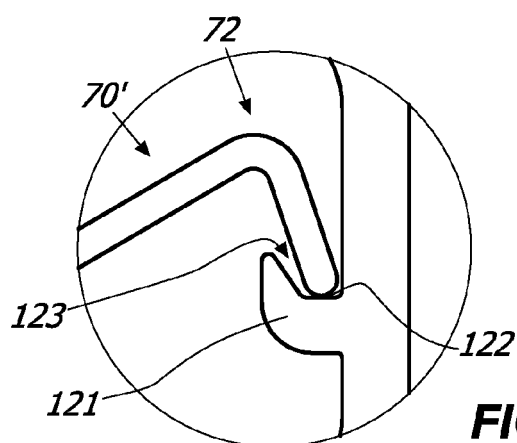


FIG. 6B

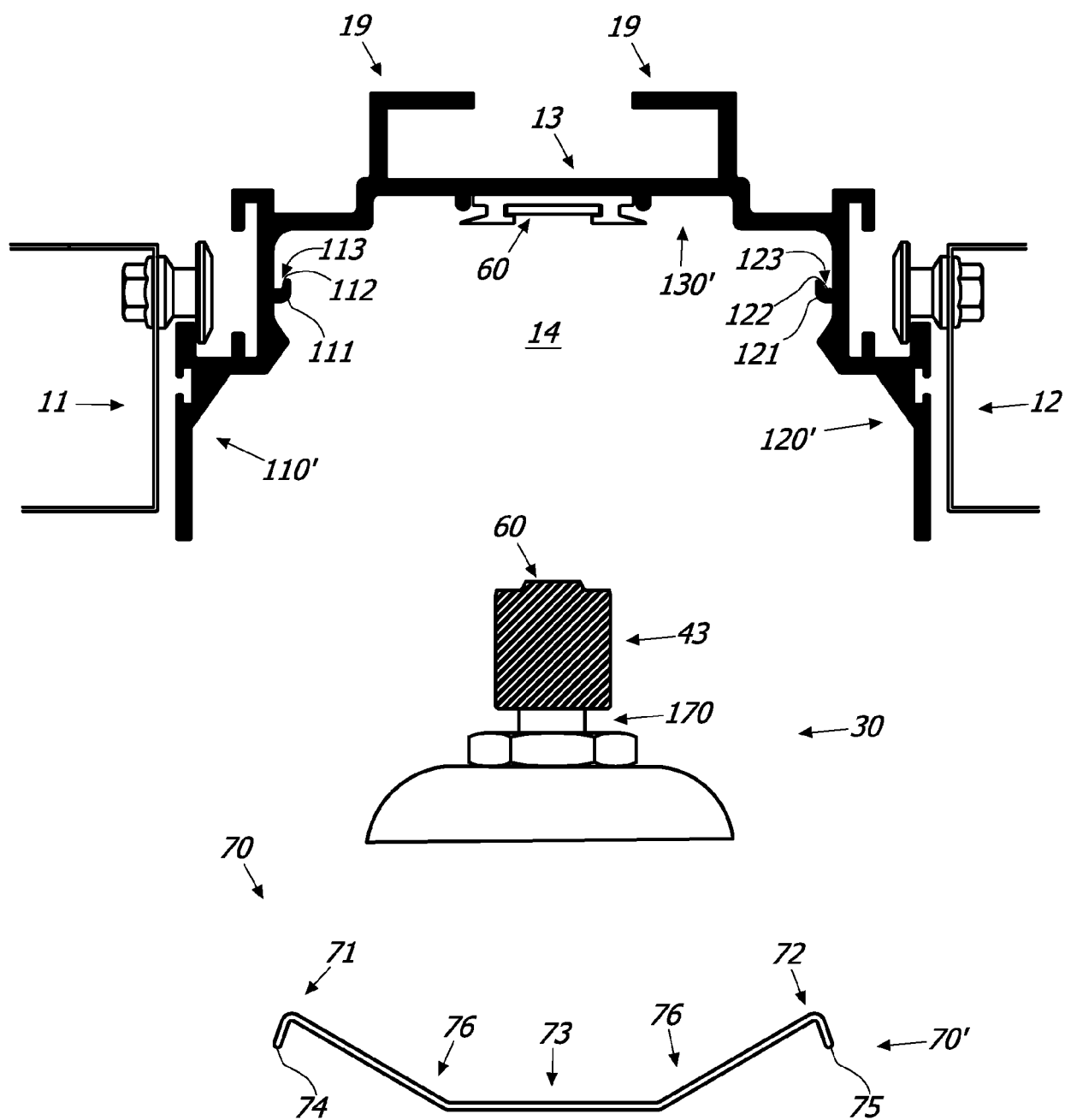


FIG. 7