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(54) **ASSEMBLY AND METHOD FOR MAKING A LAMP INCORPORATED IN A WALL OR WALL CALDDING**

ANORDNUNG UND VERFAHREN ZUR HERSTELLUNG EINER IN EINE WAND- ODER WANDVERKLEIDUNG INTEGRIERTEN LAMPE

ENSEMBLE ET PROCÉDÉ POUR LA FABRICATION D'UNE LAMPE INCORPORÉE DANS UN MUR OU UN REVÊTEMENT MURAL

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Description

[0001] The present invention concerns an assembly and a method for making a lamp incorporated in a wall or in a wall cladding, in particular in a polystyrene insulation wall cladding, or in a wall made of perforated bricks or blocks of other heat-insulating and/or sound-absorbing materials.

[0002] Recessed lamps are already well known, i.e. those having the housing that houses the light source placed in a seat obtained in a wall or extending inside a cavity made from a plasterboard panel.

[0003] A gap is usually made in the wall and, after positioning the lamp, the wall is restored, taking care to connect the visible surface of the wall to the edge of the lamp that delimits the emission opening of the light beam.

[0004] Even though maximum care is taken in restoring the wall around the lamp, an attentive eye will always note the difference between the original wall and the portion reconstructed around the lamp.

[0005] Sometimes, to hide the connection area between the reconstructed wall and the lamp, large frames are used around the emission opening of the light beam.

[0006] In the case of installation in a masonry wall, in order to overcome such drawbacks, in a previous patent application with publication number WO 2017/081653 A1, in the name of the same applicant, an assembly and a method for making a lamp incorporated in a masonry wall, for example a load-bearing wall made of reinforced concrete, have been proposed. Such an assembly comprises a lamp housing which delimits a lamp seat suitable for housing a lamp body and which is intended to be incorporated within the masonry wall, and a mold suitable to be removably fixed to the lamp housing and having a front opening suitable to be placed in contact with the inner side of a formwork. After casting the cement into the formwork, the mold forms a light emission cavity, which is suitable to rigidly support the lamp housing before and during casting of the cement and is provided with mold fixing means suitable to removably fix the mold to the inner side of the formwork.

[0007] The document CN 2 837 671 Y shows a kind of lamp incorporated in a wall of perforated bricks.

[0008] The object of the present invention is to propose an assembly and a method for obtaining a lamp inside a wall made of perforated bricks, blocks of another material or in an outer coating of the wall, in particular an insulation layer made of polystyrene panels.

[0009] Another object of the invention is to propose an assembly and a method that allow even a non-specialized operator, such as the mason himself, to incorporate a lamp into a wall cladding, such as an insulation layer, quickly, safely and, at the same time, very precisely.

[0010] Said objects are achieved with an assembly according to claim 1 and with a method according to claim 10. The dependent claims describe preferred embodiments of the invention.

[0011] The features and advantages of the assembly of the method according to the invention will, in any case, become evident from the following description of their preferred examples of embodiment, provided by way of indicative and non-limiting examples, with reference to the accompanying figures, wherein:

- figure 1 is a perspective view in separate parts of the assembly according to the invention, in one embodiment;
- figure 2 is a perspective view of the assembled assembly;
- figures 3 and 3a are a front view and a side view of the assembly;
- figure 3b is an axial section of the assembly, assembled and provided with a lamp body;
- figure 4 shows a portion of the wall with a cladding insulation layer and lamp incorporated in the insulation layer by means of an assembly in the preceding figures;
- figure 5 is a perspective view in separate parts of the assembly according to the invention, in a variant embodiment;
- figure 6 is a perspective view of the assembly in figure 5 assembled;
- figures 7 and 7a are a front view and a side view of the assembly in figure 6;
- figure 8 shows a wall portion made of perforated bricks and a lamp incorporated in the wall by means of an assembly in figures 5-7; and
- figure 9 shows a wall portion made of heat-insulating and/or sound-absorbing blocks and a lamp incorporated in the wall by means of an assembly in figures 5-7.

[0012] In the rest of the description, elements common to the different embodiments, or equivalent to each other, will be indicated at the same reference numbers.

[0013] Moreover, unless otherwise specified, features described with reference to one embodiment may also be employed in other embodiments.

[0014] In the description below, the terms 'front' and 'rear' are used to refer to the wall, or a wall cladding thereof, which has a front side, facing outwards, and a rear side, opposite to the front side.

[0015] Figures 1-4 illustrate an assembly 1 to make a lamp incorporated in an insulation layer 2 of a wall cladding 3, consisting of polystyrene panels 4.

[0016] The assembly 1 comprises a front body 10 wherein a light emission cavity 12 is obtained.

[0017] The light emission cavity 12 extends from a rear body opening 14 to a front body opening 16. For example, the light emission cavity 12 is delimited by a substantially flat top wall 12' and a lower wall 12" inclined so that the light is emitted from the cavity 12 illuminating such inclined lower wall 12".

[0018] The front body 10 forms a substantially flat front surface 102 extending around the front body opening 16.

[0019] Moreover, the front body 10 forms two side walls

104 that define the thickness of the front body 10.

[0020] The assembly 1 comprises a lamp housing 18 which forms internally a lamp seat 182 suitable to house a lamp body 8 (figure 3b).

[0021] The lamp housing 18 delimits a rear housing opening 184 for the passage of the power supply cables of the lamp body and a front housing opening 186, for the emission of the light beam generated by the lamp body 8.

[0022] For example, the front housing opening 186 is closed by an optical element 82.

[0023] In one embodiment, the rear housing opening 184 is suitable for the passage of a corrugated tube 19 that carries the power cables.

[0024] The front housing opening 186 is suitable to face or be partially inserted into the rear body opening 14.

[0025] The assembly 1 further comprises a rear body 20 forming a housing seat 22 suitable to receive with shape-coupling the lamp housing 18 protruding from the rear of the front body 10.

[0026] The rear body 20 is suitable to be coupled to the front body 10 so as to form a monobloc panel 30 substantially parallelepiped in shape which completely incorporates the lamp housing 18.

[0027] This monobloc panel 30 is suitable to be inserted and fixed in a corresponding volume formed between panels or blocks that form the cladding of the wall.

[0028] In addition, the front surface 102 is suitable to receive a finishing layer 5 of the wall cladding.

[0029] In the example of figures 1-4, the monobloc panel 30 has at least the same thickness, preferably the same dimensions, as the polystyrene panels 4 and is used to replace one of these panels, as shown in figure 4.

[0030] Preferably, the front 10 and rear 20 bodies are also made of polystyrene, so that the assembly 1, in addition to obtaining the lamp incorporated in the insulation, also performs the function of thermal insulation like the other panels 4.

[0031] In one embodiment, in the front body 10, precut incisions 32 are made, which may be used to resize the front body 10 according to the dimensions of the polystyrene panels between which the monobloc panel 30 is to be inserted.

[0032] In addition, in one embodiment, on the front surface 102 of the front body 10, reference marks 34 are made for the application of bolts 35 for fastening the monobloc panel 30 to the wall 3. The reference marks 34 are positioned in such a way that the bolts pass through the monobloc panel 30 in areas where the optical, electrical and mechanical elements of the assembly 1 are not present.

[0033] In one embodiment, the rear body 20 is equipped with coupling pins 36 that fit into corresponding coupling holes made in a rear wall of the front body 10.

[0034] In one embodiment, the front body 10 forms, in an upper portion thereof, a rear cutout 38 that is filled by the rear body 20.

[0035] In one embodiment, such rear cutout 38 is delimited below by an inclined support wall 40 wherein the light emission cavity 12 leads, forming the rear body opening 14.

[0036] Correspondingly, the rear body 20 has a lower wall 202 inclined to complement the inclined support wall 40 and suitable to rest on such inclined support wall 40.

[0037] In the rear body 20 there are, moreover, one or more recesses 204, 206, for example in the vertical and/or lateral direction, for passing and guiding the power cables, preferably inserted in the corrugated tube 19.

[0038] In one embodiment, the lamp housing 18 is provided, in a front portion thereof, with a perimeter flange 188 adapted to abut against the inclined support wall 40 of the front body 10, which delimits the rear body opening 14.

[0039] In one embodiment, between the perimeter flange 188 and the inclined support wall 40 there is interposed an annular plate 42 made of metallic material, for example steel. Especially in the case of a polystyrene front body 10, the annular plate 42 serves as a reference and protection for supporting the lamp housing 18. While assembling the assembly 1, in effect, if the lamp housing 18 is pressed too hard against the inclined support wall 40, the latter could yield, compromising the perfect alignment between the lamp body 8 and the light emission cavity 12.

[0040] In one embodiment, illustrated in figures 5-7 but also applicable to the assembly 1 described above, the front body opening 16 is delimited by an opening edge 44 protruding relative to the front surface 102 which receives the finishing layer 5. The height of this opening edge 44 is substantially equal to the thickness of the finishing layer 5 so that the front opening 16 lies in an opening plane coplanar to the outer surface of the finishing layer 5.

[0041] This contrivance allows the desired effect of perfect coplanarity to be obtained between the outer surface of the finishing layer 5 and the edge that delimits the front body opening 16, highlighted on the left side of figures 4, 8 and 9, even in the case of a finishing layer of a certain thickness, such as for example in the case of plaster.

[0042] In one embodiment, the opening edge 44 is connected to the front surface 102 by means of an inclined joining surface 46 wherein it is also possible to obtain a Greek key corrugated pattern 48 for adhering to the finishing layer 5.

[0043] Figures 5, 6 and 7 show an assembly 100 that is particularly suitable for use in a perforated brick wall 104 (figure 8) or in blocks 106 made of a heat-insulating and/or sound-absorbing material, for example the cement-based material marketed under the name of Leca®.

[0044] The assembly 100 differs from the assembly 1 described above in that, in the side parts 104 of the front body 10, grooves 108 are made suitable to facilitate the connection with the adjacent bricks or blocks by means of cement.

[0045] Also object of the invention is a method for in-

corporating a lamp into a wall, or wall cladding, with panels 4, perforated bricks 104 or blocks 106, using an assembly 1, 100 as described above.

[0046] The method provides for laying the cladding panels on the wall or making the wall out of perforated bricks or blocks.

[0047] A space is made in the cladding or wall for the assembly to be inserted.

[0048] The assembly, equipped with a lamp body, is inserted in said space.

[0049] At this point, the assembly may be anchored to the wall or to adjacent panels, bricks or blocks.

[0050] Finally, an outer finishing layer may be applied on the panels, bricks or blocks and on the front surface of the assembly.

[0051] In one embodiment, before the application of the outer finishing layer, a protective cap is inserted into the light emission cavity 12, preferably slightly recessed with respect to the edge that delimits the front opening of the cavity. The protective cap protects the inside of cavity 12, and in particular the lower inclined wall 12", from dirt caused during the application of the finishing layer 5, especially in the case of plaster. After the application of the finishing layer, the protective cap may be removed.

[0052] If it is a question of incorporating the lamp into an insulation layer made of polystyrene panels, the assembly has at least the same depth as the polystyrene panels and the assembly is used in place of a polystyrene panel.

[0053] The assembly is then anchored to the wall using bolts.

[0054] If, on the other hand, a lamp is to be incorporated into a wall made of perforated bricks or thermo-insulating and/or sound-absorbing blocks, a recess is made in the wall having a volume substantially equal to that of the assembly.

[0055] The assembly is then positioned in the recess and fixed to the adjacent bricks or blocks by means of cement.

[0056] In all cases, the lamp is fully incorporated in the cladding or in the wall and the only visible part of it is the light emission cavity, with the outlet opening perfectly aligned with the outer surface of the finishing layer. The wall is perfectly continuous even at the monobloc panel and there is no trace of any joint.

[0057] The assembly is pre-assembled, transported to the construction site and inserted as a single block in the recess made in the wall.

[0058] In the case of an insulation layer made of polystyrene panels, the assembly is made in such a way as to form a polystyrene panel that is usable instead of a traditional panel.

[0059] To the embodiments of the assembly and the method according to the invention, one skilled in the art may, to satisfy contingent needs, make modifications, adaptations and substitutions of some elements with others that are functionally equivalent, without departing from the scope of the following claims. Each of the features described as belonging to a possible embodiment may be implemented independently from the other described embodiments.

Claims

1. Assembly for making a lamp incorporated in a wall of perforated bricks or blocks, or in a panel cladding of a wall, comprising:

   - a front body (10) wherein a light emission cavity (12) is obtained extending from a rear body opening (14) to a front body opening (16);
   - a lamp housing (18) forming a lamp seat (182) suitable to house a lamp body (8) and defining a rear housing opening (184) for the passage of the power supply cables of the lamp body and a front housing opening (186) suitable to face or be partially inserted into the rear body opening (14); and
   - a rear body (20) forming a housing seat (22) suitable to receive with shape-coupling the lamp housing protruding from the rear of the front body (10),

   wherein said rear body (20) is suitable to be coupled to the front body (10) so as to form a monobloc panel (30) substantially parallelepiped in shape which completely incorporates the lamp housing, which is suitable to be inserted and fixed between the bricks, blocks or panels forming the wall or a cladding of the wall, and having a front surface (102) suitable to receive a finishing layer (5) of the wall or cladding of the wall.

2. Assembly according to the preceding claim, wherein the front body (10) and the rear body (20) are made of polystyrene, the monobloc panel (30) having the same depth as polystyrene panels (4) for constructing insulation layers in a manner to be used in place of one of said polystyrene panels.

3. Assembly according to the preceding claim, wherein in the front body (10) pre-cut incisions (32) are made which may be used to resize the front body (10) according to the dimensions of the polystyrene panels between which the monobloc panel is to be inserted.

4. Assembly according to claim 2 or 3, wherein reference marks (34) are made in the front surface of the front body (10) for the application of bolts (35) for fastening the monobloc panel (30) to the wall.

5. Assembly according claim 1 or 2, wherein grooves (108) are made in the side walls (104) of the front body (10) to facilitate fastening the monobloc panel

(30) to adjacent perforated bricks or blocks using cement.

6. Assembly according to any one of the preceding claims, wherein the front body opening (16) is delimited by an opening edge (44) protruding with respect to the front surface receiving the finishing layer, the height of said opening edge being substantially equal to the thickness of the finishing layer in such a way that the front opening lies in an opening plane coplanar to the outer surface of the finishing layer.

7. Assembly according to claim 6, wherein the opening edge (44) is joined to the front surface (102) by means of an inclined joining surface (46) wherein is made a Greek key corrugated pattern (48) for adhering to the finishing layer.

8. Assembly according to any one of the preceding claims, wherein the lamp housing (18) is provided, in a front portion thereof, with a perimeter flange (188) adapted to abut against an inclined support wall (40) of the front body, which delimits the rear body opening (14) .

9. Assembly according to the preceding claim, comprising an annular plate (42) made of a metallic material suitable to be interposed between said perimeter flange and said inclined support wall of the front body.

10. Method for incorporating a lamp according to claims 1-9 into a wall made of perforated bricks or blocks, or in a paneling of a wall, by means of an assembly according to any one of the preceding claims, comprising the steps of:

a) laying the panels on the wall or constructing the wall of perforated bricks or blocks;
b) obtaining, between said panels, perforated bricks or blocks, a space for inserting the assembly;
c) positioning the assembly provided with a lamp body in said space;
d) fixing the assembly to the wall, or to the panels, or to the adjacent bricks or blocks;
e) applying an outer finishing layer on the panels, bricks or blocks and on the front surface of the assembly.

11. Method according to the preceding claim, wherein the covering is an insulation layer formed of polystyrene panels, the assembly having at least the same depth as said polystyrene panels, and wherein:

- steps b) and c) consist of using the assembly in place of a polystyrene panel;
- step d) comprises fastening the assembly to the wall by means of fastening bolts.

12. Method according to claim 10, wherein

- step b) comprises making a recess in a wall made of perforated bricks or blocks, the recess having a volume substantially equal to that of the assembly;
- step d) comprises anchoring the assembly to the adjacent bricks or blocks by using cement.

Patentansprüche

1. Anordnung zur Herstellung einer Lampe, die in einer Wand aus Lochziegeln oder -steinen oder in einer Plattenverkleidung einer Wand integriert ist, umfassend:

- einen Vorderkörper (10), wobei ein Lichtausstrahlungshohlraum (12) erhalten wird, der sich von einer Rückkörperöffnung (14) zu einer Vorderkörperöffnung (16) erstreckt;
- ein Lampengehäuse (18), das einen Lampensitz (182) bildet, der geeignet ist, einen Lampenkörper (8) zu beherbergen, und eine Rückgehäuseöffnung (184) für den Durchgang der Stromversorgungskabel des Lampenkörpers und eine Vordergehäuseöffnung (186) bestimmt, die geeignet ist, der Rückkörperöffnung (14) zugewandt oder teilweise in diese eingesetzt zu sein; und
- einen Rückkörper (20), der einen Gehäusesitz (22) bildet, der geeignet ist, das von der Rückseite des Vorderkörpers (10) hervorstehende Lampengehäuse mit formschlüssiger Kopplung aufzunehmen,

wobei der Rückkörper (20) geeignet ist, an den Vorderkörper (10) gekoppelt zu werden, sodass eine Monoblockplatte (30) im Wesentlichen in ihrer Form parallelflach gebildet wird, die das Lampengehäuse vollständig integriert, das geeignet ist, zwischen die die Wand bildenden Ziegel, Steine oder Platten oder in einer Verkleidung der Wand eingesetzt und fixiert zu sein, und eine Vorderfläche (102) aufweist, die geeignet ist, eine Deckschicht (5) der Wand oder eine Verkleidung der Wand aufzunehmen.

2. Anordnung nach dem vorhergehenden Anspruch, wobei der Vorderkörper (10) und der Rückkörper (20) aus Polystyrol sind, wobei die Monoblockplatte (30) die gleiche Tiefe aufweist wie die Polystyrolplatten (4), um die Dämmschichten derart zu errichten, dass sie anstelle einer der Polystyrolplatten zu verwenden sind.

3. Anordnung nach dem vorhergehenden Anspruch,

wobei in dem Vorderkörper (10) vorgeschnittene Einschnitte (32) ausgebildet sind, die verwendet werden können, um die Größe des Vorderkörpers (10) gemäß den Abmessungen der Polystyrolplatten, zwischen denen die Monoblockplatte einzusetzen ist, zu verändern.

4. Anordnung nach Anspruch 2 oder 3, wobei Bezugsmarkierungen (34) in der Vorderfläche des Vorderkörpers (10) zur Anwendung von Bolzen (35) ausgebildet sind, um die Monoblockplatte (30) an der Wand zu befestigen.

5. Anordnung nach Anspruch 1 oder 2, wobei Nuten (108) in den Seitenwänden (104) des Vorderkörpers (10) ausgebildet sind, um die Befestigung der Monoblockplatte (30) an benachbarten Lochziegeln oder -steinen unter Verwendung von Zement zu vereinfachen.

6. Anordnung nach einem beliebigen der vorhergehenden Ansprüche, wobei die Vorderkörperöffnung (16) von einer Öffnungskante (44) begrenzt ist, die in Bezug auf die Vorderfläche, die die Deckschicht aufnimmt, hervorsteht, wobei die Höhe der Öffnungskante im Wesentlichen derart gleich der Dicke der Deckschicht ist, dass die Vorderöffnung in einer Öffnungsebene koplanar zu der Außenfläche der Deckschicht liegt.

7. Anordnung nach Anspruch 6, wobei die Öffnungskante (44) mittels einer geneigten Verbindungsfläche (46) mit der Vorderfläche (102) verbunden ist, in der ein wellenförmiges Greek-Key-Muster (48) zum Haften an der Deckschicht ausgebildet ist.

8. Anordnung nach einem beliebigen der vorhergehenden Ansprüche, wobei das Lampengehäuse (18) in einem Vorderabschnitt davon mit einem Umfangsflansch (188) vorgesehen ist, der angepasst ist, gegen eine geneigte Stützwand (40) des Vorderkörpers anzuliegen, die die Rückkörperöffnung (14) begrenzt.

9. Anordnung nach dem vorhergehenden Anspruch umfassend eine ringförmige Platte (42) aus einem metallischen Material, die geeignet ist, zwischen dem Umfangsflansch und der geneigten Stützwand des Vorderkörpers eingesetzt zu werden.

10. Verfahren zum Integrieren einer Lampe nach Ansprüchen 1 bis 9 in eine Wand aus Lochziegeln oder -steinen oder in eine Verkleidung einer Wand mittels einer Anordnung nach einem beliebigen der vorhergehenden Ansprüche umfassend die folgenden Schritte:

a) Verlegen der Platten auf der Wand oder Errichten der Wand aus Lochziegeln oder -steinen;
b) Erhalten eines Raums zum Einsetzen der Anordnung zwischen den Platten, Lochziegeln oder -steinen;
c) Positionieren der Anordnung, die mit einem Lampenkörper in dem Raum vorgesehen ist;
d) Fixieren der Anordnung an der Wand oder an den Platten oder den benachbarten Ziegeln oder Steinen;
e) Anwenden einer äußeren Deckschicht auf den Platten, Ziegeln oder Steinen und auf der Vorderfläche der Anordnung.

11. Verfahren nach dem vorhergehenden Anspruch, wobei die Abdeckung eine Dämmschicht ist, die aus Polystyrolplatten gebildet ist, wobei die Anordnung mindestens die gleiche Tiefe wie die Polystyrolplatten aufweist, und wobei:

- Schritte b) und c) aus der Verwendung der Anordnung anstelle einer Polystyrolplatte bestehen;
- Schritt d) Befestigen der Anordnung mittels Befestigungsbolzen an der Wand umfasst.

12. Verfahren nach Anspruch 10, wobei

- Schritt b) Ausbilden einer Aussparung in einer Wand aus Lochziegeln oder -steinen umfasst, wobei die Aussparung ein Volumen im Wesentlichen gleich dem der Anordnung aufweist;
- Schritt d) Verankern der Anordnung an den benachbarten Ziegeln oder Steinen unter Verwendung von Zement umfasst.

Revendications

1. Ensemble pour fabriquer une lampe incorporée dans un mur de briques ou de blocs perforés, ou dans un revêtement en panneaux d'un mur, comprenant :

- un corps avant (10) dans lequel une cavité d'émission de lumière (12) est obtenue s'étendant d'une ouverture de corps arrière (14) à une ouverture de corps avant (16) ;
- un boîtier de lampe (18) formant un siège de lampe (182) approprié pour loger un corps de lampe (8) et définissant une ouverture de boîtier arrière (184) pour le passage des câbles d'alimentation électrique du corps de lampe et une ouverture de boîtier avant (186) appropriée pour faire face à ou être partiellement insérée dans l'ouverture de corps arrière (14) ; et
- un corps arrière (20) formant un siège de boîtier (22) approprié pour recevoir, par couplage de formes, le boîtier de lampe faisant saillie depuis

l'arrière du corps avant (10),

dans lequel ledit corps arrière (20) est approprié pour être couplé au corps avant (10) de manière à former un panneau monobloc (30) de forme sensiblement parallélépipédique qui incorpore complètement le boîtier de lampe, qui est approprié pour être inséré et fixé entre les briques, blocs ou panneaux formant le mur ou un revêtement du mur, et ayant une surface avant (102) appropriée pour recevoir une couche de finition (5) du mur ou revêtement du mur.

2. Ensemble selon la revendication précédente, dans lequel le corps avant (10) et le corps arrière (20) sont faits de polystyrène, le panneau monobloc (30) ayant la même profondeur que des panneaux en polystyrène (4) pour construire des couches d'isolation afin d'être utilisé à la place de l'un desdits panneaux en polystyrène.

3. Ensemble selon la revendication précédente, dans lequel dans le corps avant (10) des incisions prédécoupées (32) sont réalisées, qui peuvent être utilisées pour redimensionner le corps avant (10) en fonction des dimensions des panneaux en polystyrène entre lesquels le panneau monobloc est à insérer.

4. Ensemble selon la revendication 2 ou 3, dans lequel des marques de référence (34) sont réalisées dans la surface avant du corps avant (10) pour l'application de boulons (35) pour fixer le panneau monobloc (30) au mur.

5. Ensemble selon la revendication 1 ou 2, dans lequel des rainures (108) sont réalisées dans les murs latéraux (104) du corps avant (10) pour faciliter la fixation du panneau monobloc (30) aux briques ou blocs perforés adjacents en utilisant du ciment.

6. Ensemble selon l'une quelconque des revendications précédentes, dans lequel l'ouverture de corps avant (16) est délimitée par un bord d'ouverture (44) faisant saillie par rapport à la surface avant recevant la couche de finition, la hauteur dudit bord d'ouverture étant sensiblement égale à l'épaisseur de la couche de finition de sorte que l'ouverture avant repose dans un plan d'ouverture coplanaire à la surface externe de la couche de finition.

7. Ensemble selon la revendication 6, dans lequel le bord d'ouverture (44) est assemblé à la surface avant (102) au moyen d'une surface d'assemblage inclinée (46) dans laquelle est réalisé un motif ondulé en motifs grecs (48) destiné à être collé sur la couche de finition.

8. Ensemble selon l'une quelconque des revendications précédentes, dans lequel le boîtier de lampe (18) est doté, dans une partie avant de celui-ci, d'un rebord périphérique (188) adapté pour venir en butée contre un mur porteur incliné (40) du corps avant, qui délimite l'ouverture de corps arrière (14).

9. Ensemble selon la revendication précédente, comprenant une plaque annulaire (42) faite d'un matériau métallique appropriée pour être intercalée entre ledit rebord périphérique et ledit mur porteur incliné du corps avant.

10. Procédé pour incorporer une lampe selon les revendications 1 à 9 dans un mur fait de briques ou blocs perforés, ou dans un habillage d'un mur, au moyen d'un ensemble selon l'une quelconque des revendications précédentes, comprenant les étapes de :

a) pose des panneaux sur le mur ou construction du mur de briques ou blocs perforés ;
b) obtention, entre lesdits panneaux, briques ou blocs perforés, d'un espace pour insérer l'ensemble ;
c) positionnement de l'ensemble doté d'un corps de lampe dans ledit espace ;
d) fixation de l'ensemble au mur, ou aux panneaux, ou aux briques ou blocs adjacents ;
e) application d'une couche de finition externe sur les panneaux, briques ou blocs et sur la surface avant de l'ensemble.

11. Procédé selon la revendication précédente, dans lequel le revêtement est une couche d'isolation formée de panneaux en polystyrène, l'ensemble ayant au moins la même profondeur que lesdits panneaux en polystyrène, et dans lequel :

- les étapes b) et c) consistent à utiliser l'ensemble à la place d'un panneau en polystyrène ;
- l'étape d) comprend la fixation de l'ensemble au mur au moyen de boulons de fixation.

12. Procédé selon la revendication 10, dans lequel

- l'étape b) comprend la réalisation d'un évidement dans un mur fait de briques ou blocs perforés, l'évidement ayant un volume sensiblement égal à celui de l'ensemble ;
- l'étape d) comprend l'ancrage de l'ensemble aux briques ou blocs adjacents en utilisant du ciment.

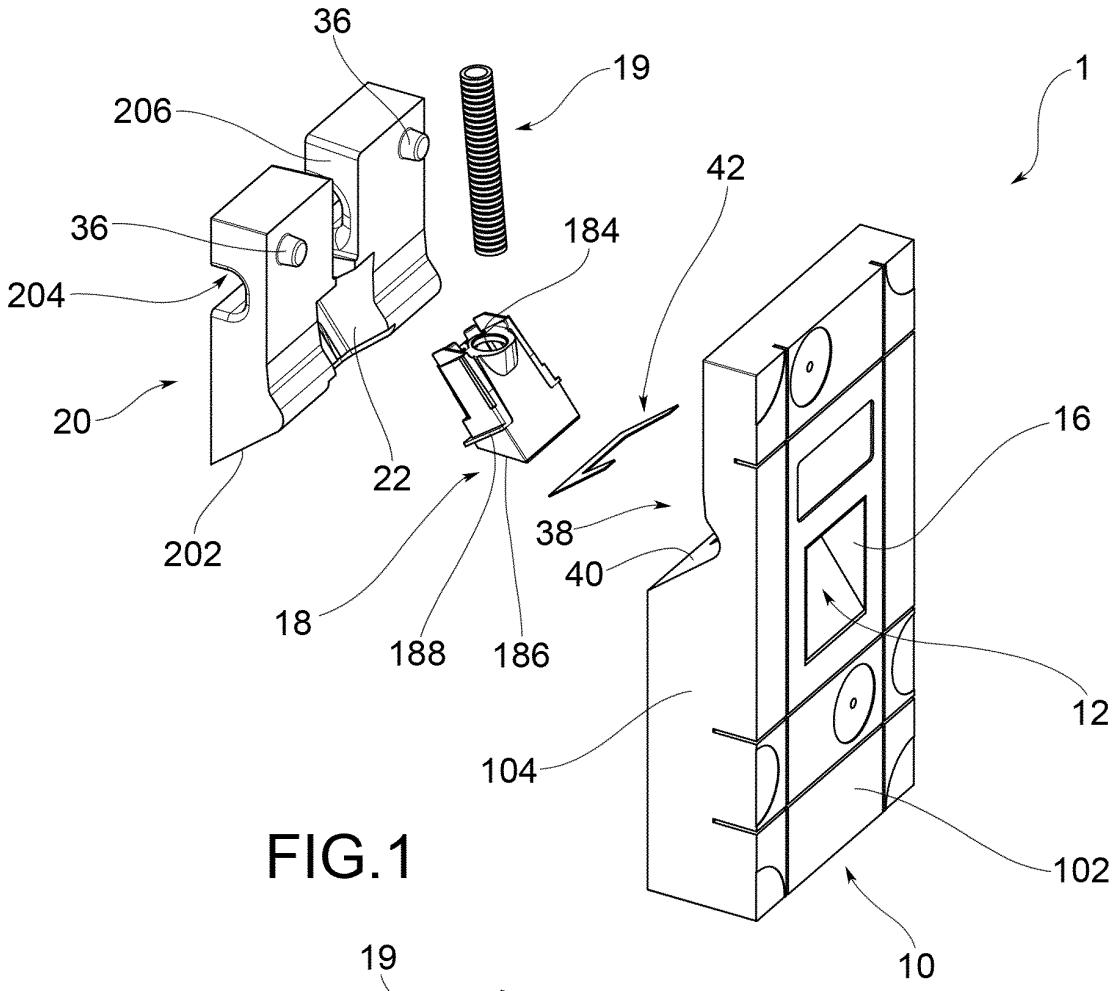
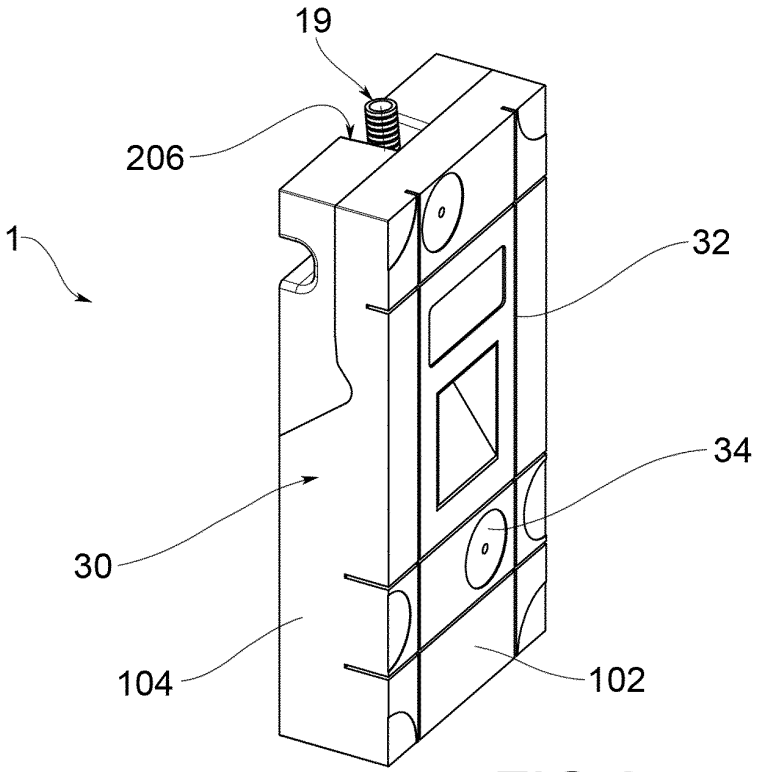

36
19
1
206
42
36
184
204
20
22
16
38
202
40
18
188
186
12
104
102
10

FIG.1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206
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32
34
30
104
102

FIG.2

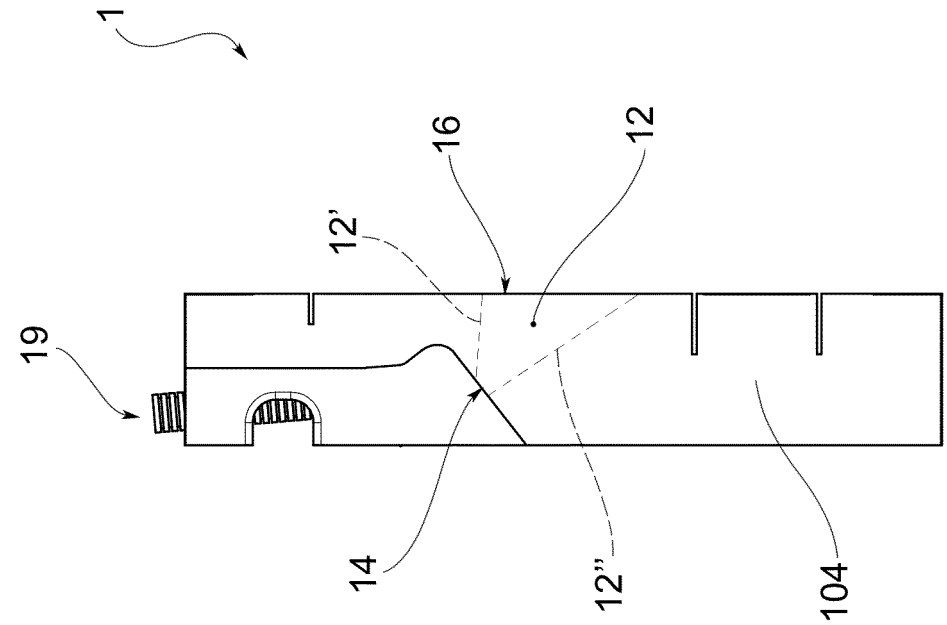


FIG.3a

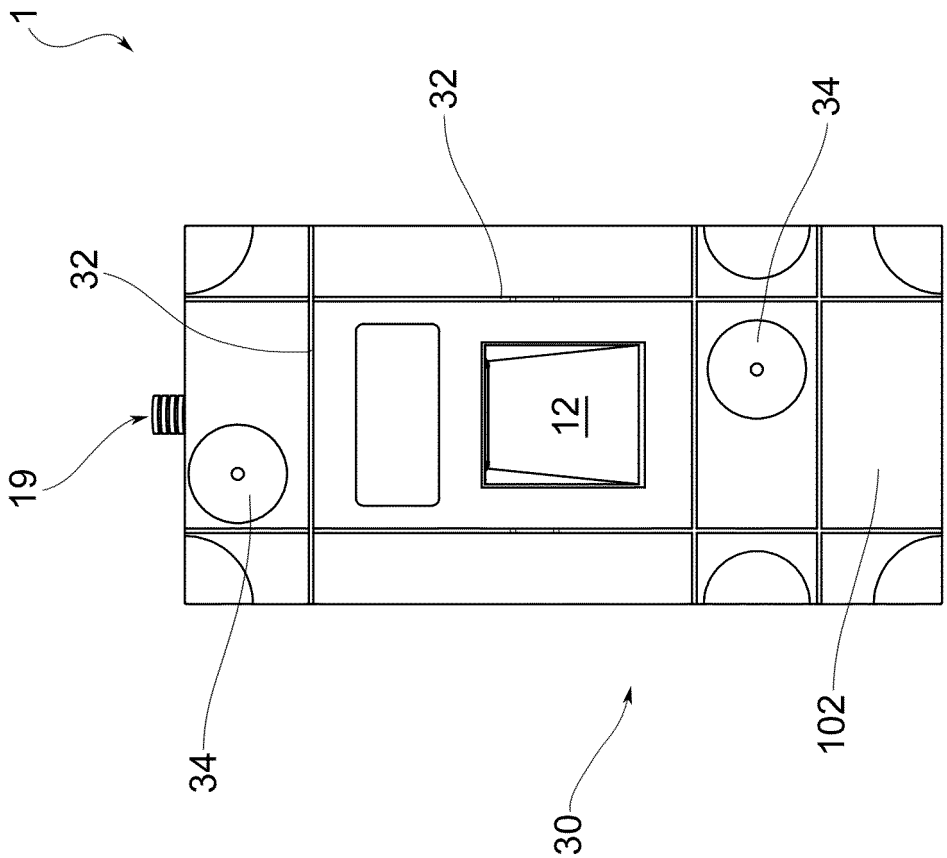


FIG.3

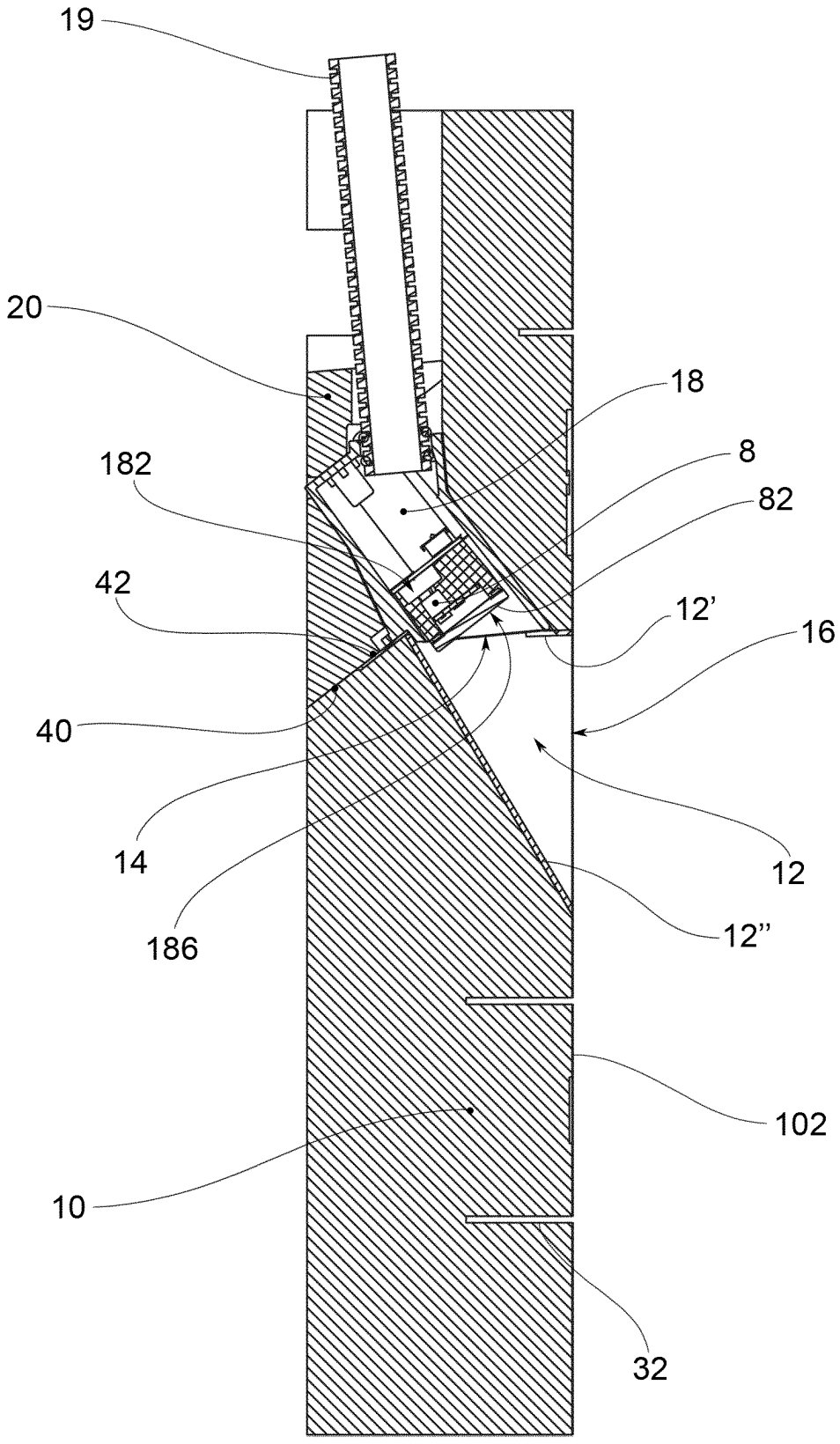


FIG.3b

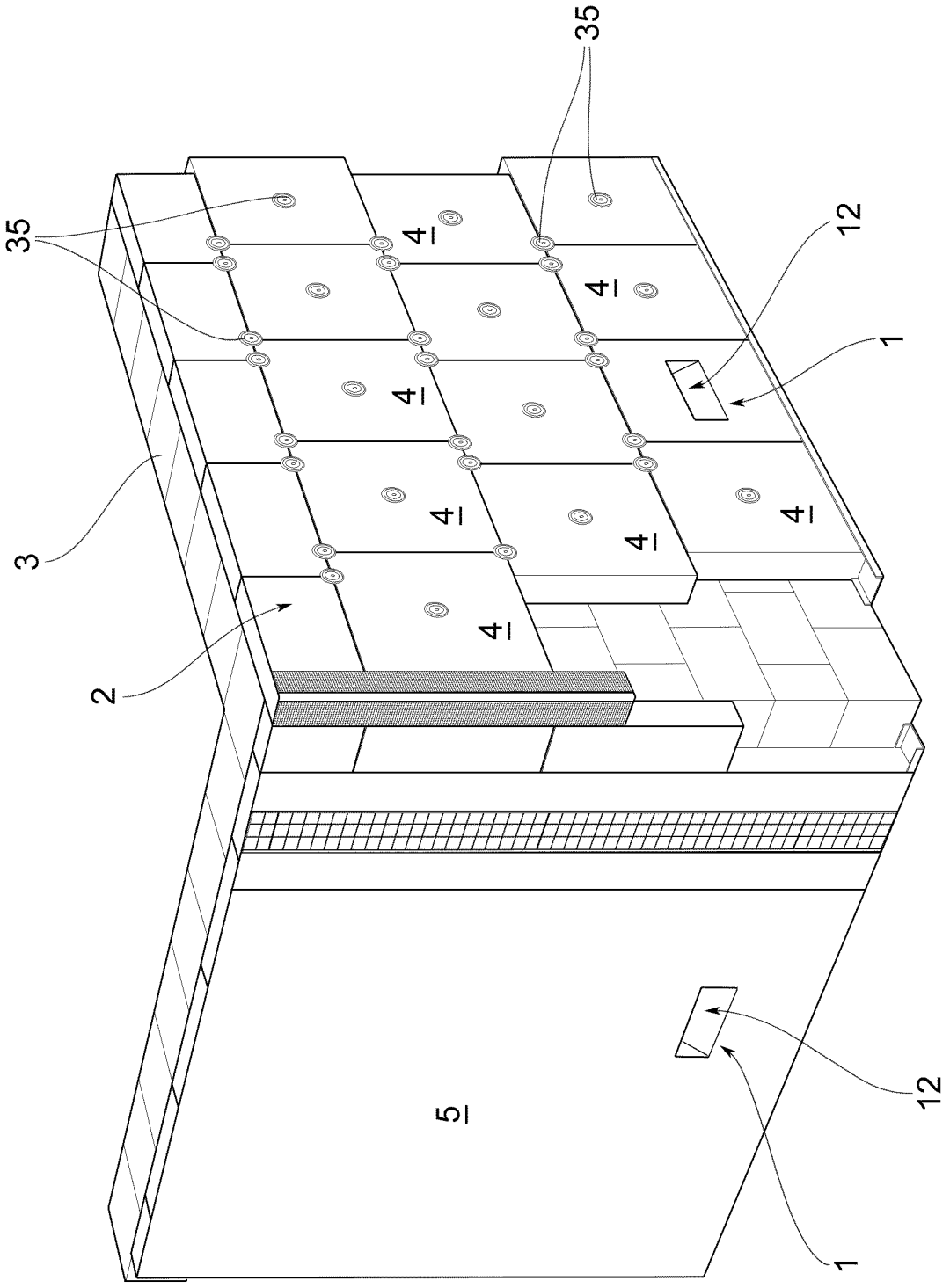
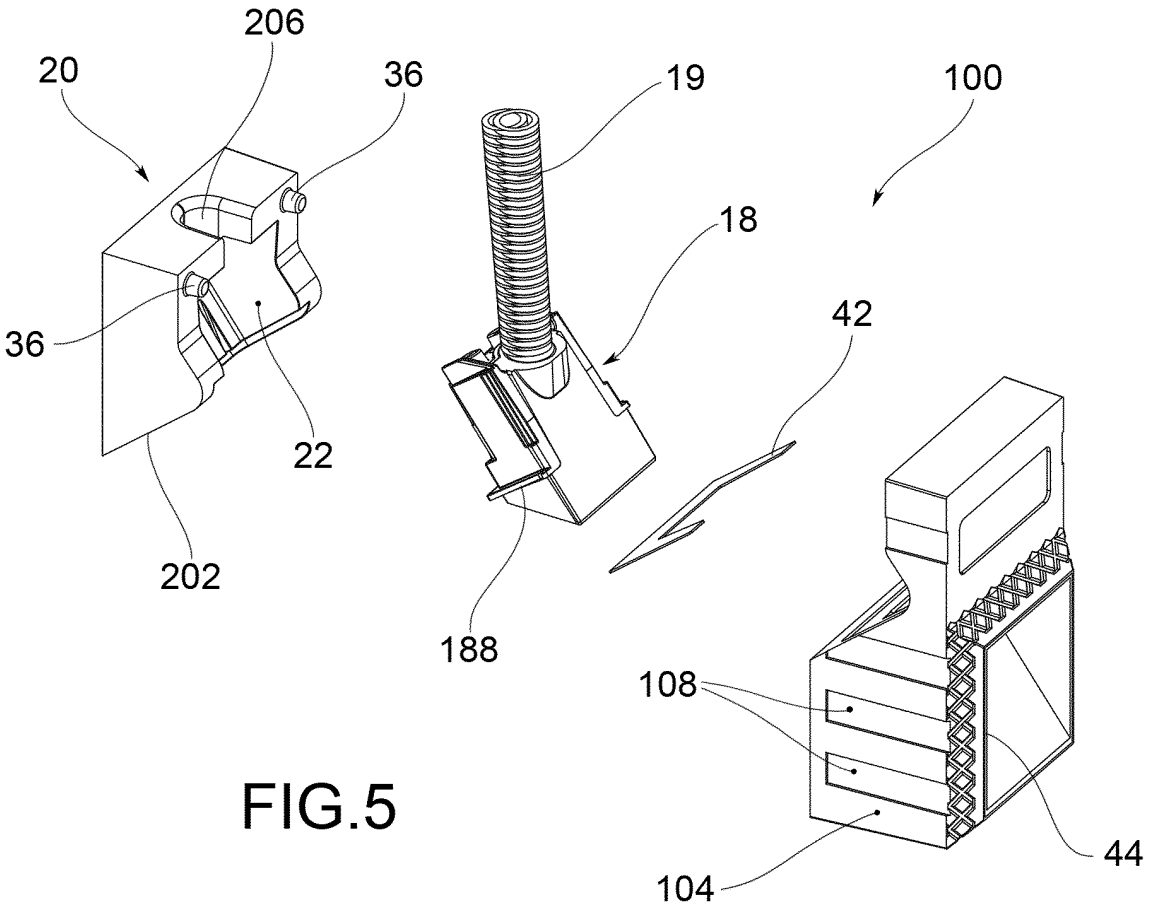


FIG.4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36
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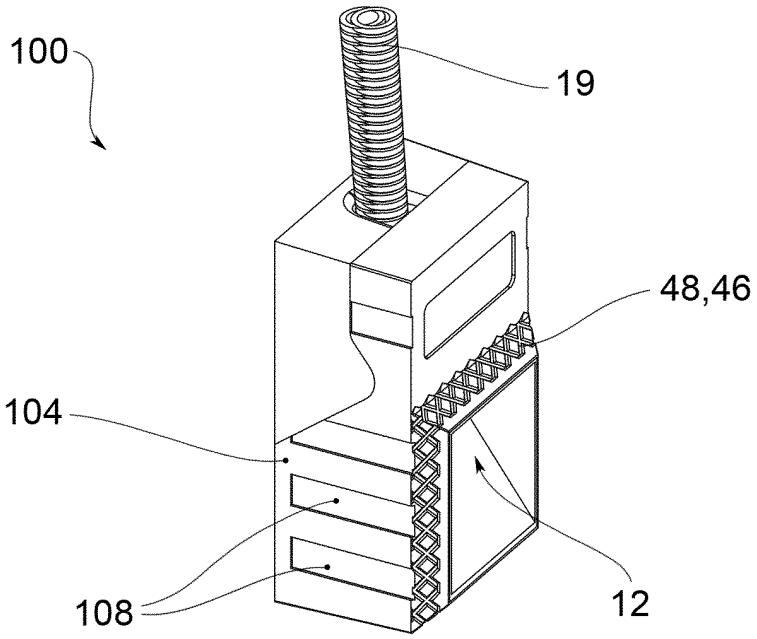
22
202
188
108
104
44

FIG.5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48,46
104
108
12

FIG.6

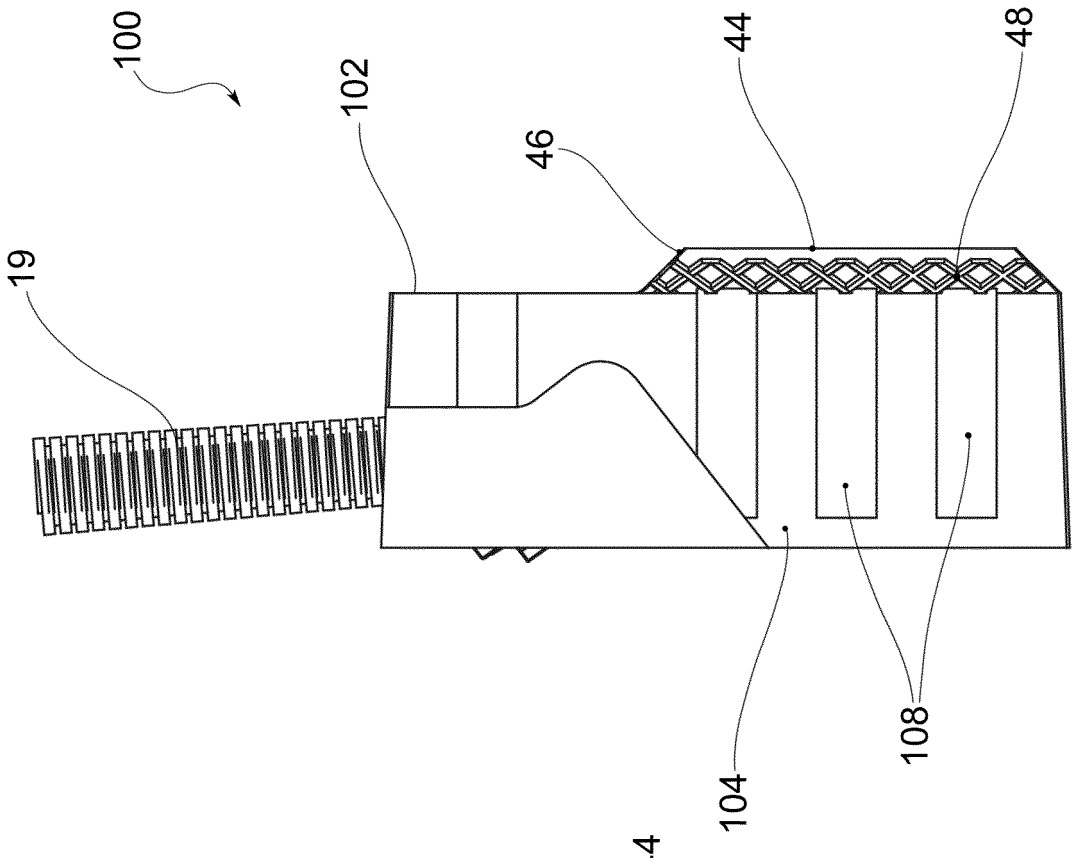

FIG.7a

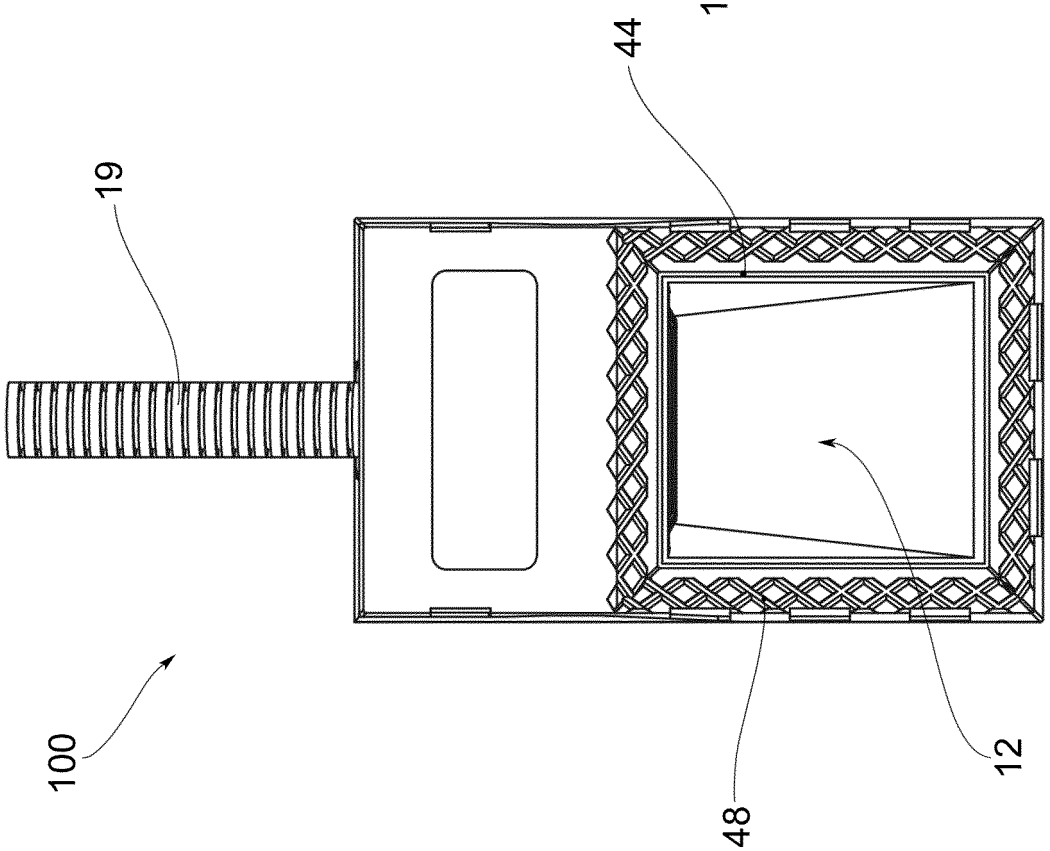

FIG.7

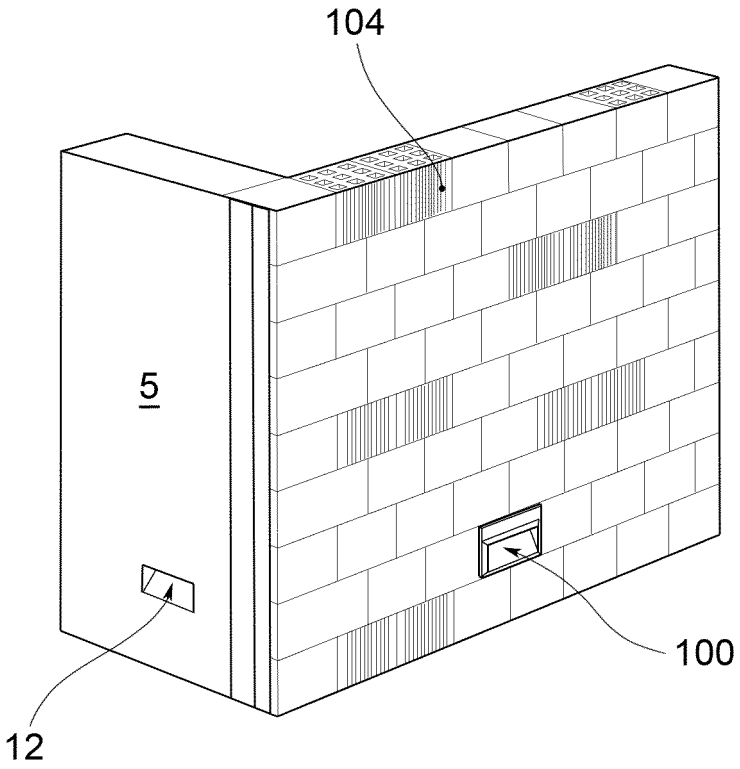

FIG.8

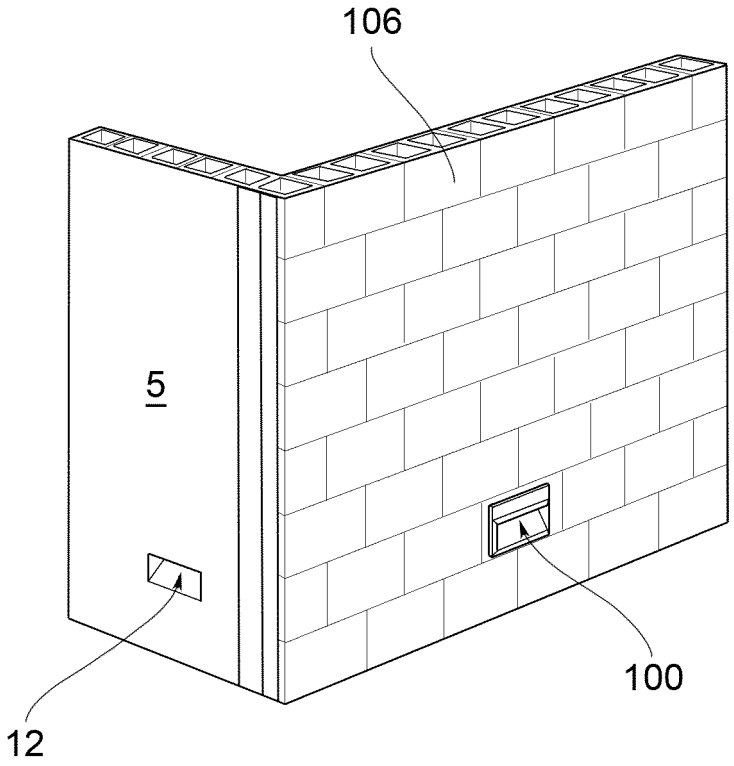

FIG.9

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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- CN 2837671 Y **[0007]**