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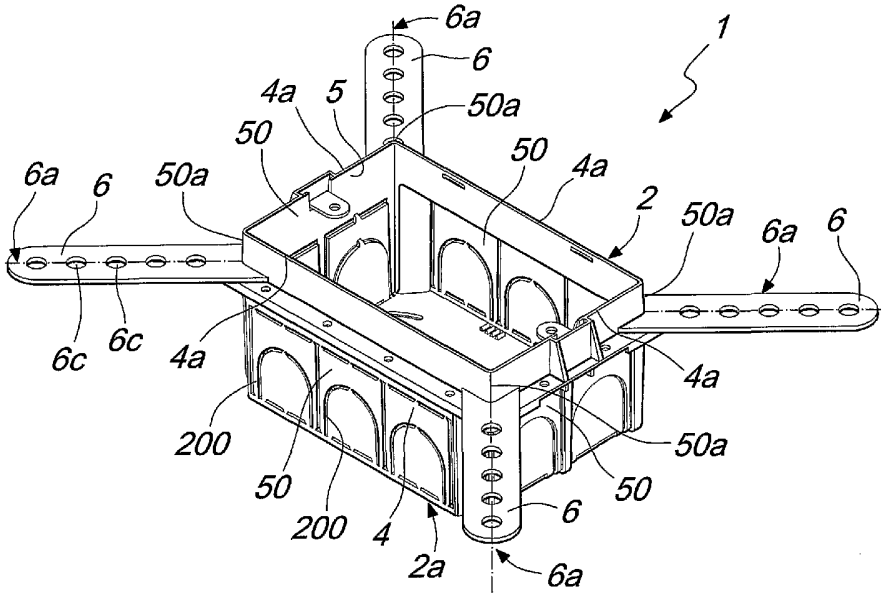
(54) **Title:** BOX FOR TECHNOLOGY NETWORKS



(57) **Abstract:** A box for technology networks comprising a box-like containment body (2), which is closed at one end (2a) by a bottom portion (3) and laterally by a lateral containment element (4) in order to form a containment chamber (5) for components of technology networks and the like, the lateral containment element (4) comprising at least two substantially flat and mutually angled contiguous side walls (50), the box further comprising at least one fixing wing (6), which protrudes outside the box-like body (2) along a respective longitudinal axis (6a), substantially from the corner (50a) where the at least two contiguous side walls (50) intersect, the fixing wing (6) being provided with a portion (6b) for fixing to a respective wall portion that is arranged outside a recess for accommodating the box (1) for technology networks.

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BOX FOR TECHNOLOGY NETWORKS

Technical Field

The present invention relates to a box for technology networks, such as junction boxes or so-called plug-in boxes, generally used to provide for an electrical system but also usable for other types of technology networks.

Background Art

Junction boxes are currently known which are composed of a box-like body having a bottom portion connected to a series of side walls (usually four), which form an open box-like body that has a substantially rectangular cross-section.

At the bottom portion and at the side walls there are one or more weakening portions, which allow to remove parts of the bottom portion and/or of the side walls, so as to obtain through openings in which it is possible to pass cables or similar devices to be accommodated at least partially inside such boxes.

Currently, such boxes for technology networks are accommodated within seats formed in the walls by interposing mortar, or similar bonding agents, between the free edge of the junction box and the internal walls of the seats, so that the boxes can be stably anchored to the wall during subsequent operations, which consist for example of the placement (by electricians or technicians) of the electrical devices or of the technology networks in general.

Although these currently known types of boxes are widely used, they are not free from drawbacks, including first of all the need for technology network installation technicians (and particularly for electricians) to have mortar or similar bonding agents available during the installation and placement of the boxes.

It is in fact evident that this anchoring operation is extremely laborious.

Moreover, it has been found that often it can be useful to fix, on

opposite sides with respect to a same wall, a respective box, for example of the type that supports plug-ins.

However, presently it is possible to anchor one another the bottom portions of boxes only if their perimetric edge perfectly matches up.

It is evident that what has been described above is a severe limitation, since often it would be extremely useful to allow boxes arranged on opposite sides of the same wall to be offset with respect to each other, for example along their major axis.

Disclosure of the Invention

The aim of the present invention is to eliminate or at least reduce drastically the drawbacks noted above in known types of boxes for technology networks.

Within this aim, an object of the present invention is to provide a box for technology networks that allows quick and practical anchoring thereof within a respective seat formed in the wall.

Another object of the invention is to provide a box for technology networks that allows simple and effective wall anchoring without having to use mortars or similar materials.

Another object of the present invention is to provide a box for technology networks that has a very simple structure, is highly durable and has a competitive production cost, so that its use is advantageous also from an economical standpoint.

Another important object is to provide a box for technology networks that allows easy fixing to a second box, at a respective bottom portion, even if the perimetric edge thereof does not match up precisely.

This aim and these and other objects that will become better apparent hereinafter are achieved by a box for technology networks according to the invention, comprising a box-like containment body, which is closed at one end by a bottom portion and laterally by a lateral containment element in order to form a containment chamber for components of technology

networks and the like, the lateral containment element comprising at least two substantially flat and mutually angled contiguous side walls, characterized in that it comprises at least one fixing wing, which protrudes outside the box-like body along a respective longitudinal axis, substantially from the corner where said at least two contiguous side walls intersect, said fixing wing being provided with a portion for fixing to a respective wall portion that is arranged outside a recess for accommodating the box for technology networks.

According to another aspect, a box for technology networks according to the present invention comprises a box-like containment body, which is closed at one end by a bottom portion and laterally by a lateral containment element in order to form a containment chamber for components of technology networks and the like and is characterized in that the bottom portion has, at its outward face, at least two modules for mutual connection to a respective outward face of a second box for technology networks, said two mutual connection modules being spaced along at least one spacing direction that lies along the plane of arrangement of said bottom portion.

Brief description of the drawings

Further characteristics and advantages of the invention will become better apparent from the description of some preferred but not exclusive embodiments of a junction box according to the present invention, illustrated by way of non-limiting example in the accompanying drawings, wherein:

Figure 1 is a perspective view of a box for technology networks, particularly a plug-in supporting box, with the free edges of the lateral containment element in the foreground;

Figure 2, is a view, similar to Figure 1, but with the bottom portion in the foreground;

Figure 3 is a perspective view, similar to Figure 1, of a junction box

according to the invention;

Figure 4 is a view, similar to Figure 2, of the junction box shown in Figure 3;

Figure 5 is an exploded perspective view of a further embodiment of a junction box according to the invention;

Figure 6 is an elevation view of three mutually connected plug-in supporting boxes;

Figure 7 is a perspective view of a spacer wing;

Figure 8 is a perspective view of two plug-in supporting boxes, which are coupled to each other by means of mutual connection modules;

Figure 9 is an elevation view of the two plug-in supporting boxes shown in Figure 8;

Figure 10 is a partially exploded perspective view of a plug-in supporting box associated with a protective cover;

Figure 11 is a perspective view of a kit that can be associated with a box for technology networks; and

Figure 12 is a perspective view of still another embodiment of a box for technology networks.

Ways to carrying out the Invention

In the examples of embodiments that follow, individual characteristics, given in relation to specific examples, may actually be interchanged with other different characteristics that exist in other examples of embodiments.

Moreover, it is noted that anything found to be already known during the patenting process is understood not to be claimed and to be the subject of a proper disclaimer.

With reference to the figures, a box for technology networks, generally designated by the reference numeral 1, comprises a box-like body 2, which is closed, at one of its ends 2a, by a substantially flat bottom portion 3.

Moreover, the box-like body 2 is laterally delimited by a lateral containment element 4 in order to form a containment chamber 5 for components of technology networks and the like: in particular, such boxes for technology networks 1 are often used by electricians and can be constituted by so-called plug-in supporting junction boxes for containing sockets, thermostats, regulators, etc.

As clearly shown by the perspective view of Figure 1, the box for technology networks 1 is open on the opposite side with respect to the bottom portion 3, and in particular the lateral containment element 4 is provided with a free edge 4a that forms the opening through which it is possible to access the inside of the containment chamber 5.

The lateral containment element 4 comprises at least two substantially flat and mutually angled contiguous side walls 50.

As further shown in the embodiments illustrated in the figures described above, the lateral containment element 4 is generally constituted by four substantially flat walls 50, which are contiguous and mutually intersect at respective corner portions 50a, so as to form a respective right angle between them.

According to the present invention, the box 1 is provided with at least one fixing wing 6, which lies outside the box-like body 2 along a respective longitudinal axis 6a starting from the respective corner portion 50a formed between two contiguous side walls 50.

Also according to the invention, each fixing wing 6 is arranged obliquely with respect to the directions of extension of the free edges 4a of the respective two side walls 50.

A portion 6b for fixing to a respective wall portion, not shown in the figures, is formed on each fixing wing 6 and during use is arranged outside a recess for accommodating the box for technology networks 1.

In greater detail, the fixing wing or wings 6 lies or lie on a plane of arrangement that is substantially perpendicular to the planes of arrangement

of the respective two contiguous side walls 50.

More particularly, as also mentioned earlier, the lateral containment element 4 can be constituted advantageously by four side walls 50, which are substantially perpendicular to the plane of arrangement of the bottom portion 3; conveniently, between each pair of contiguous side walls 50 there is a right angle and there is a respective corner portion 50a.

According to a preferred embodiment, the longitudinal axis 6a of the fixing wing 6 may substantially match the direction of arrangement of the bisecting line of the angle formed by the longitudinal directions of the free edges 4a of the respective two contiguous side walls 50, from the corner portion 50a whereof said fixing wing 6 protrudes.

Advantageously, the fixing portion 6b comprises a plurality of engagement openings 6c for screws or similar devices, which are spaced along the longitudinal axis 6a of the respective fixing wing 6.

In a fully equivalent manner, the box 1 can be fixed to the wall by using an adhesive or bonding agent to be interposed between the face of the fixing wing 6 that is directed toward the wall and the wall itself, so as to allow quick and effective anchoring.

With reference now in particular to the embodiment shown in Figure 12, it is possible to provide, on at least one fixing wing 6, at least one spacer 300, which can engage a respective engagement seat 301 formed on at least one fixing wing 6 supported by another or similar box for technology networks 1. According to a preferred embodiment, as clearly shown by the perspective view of Figure 12, it is convenient to provide a plurality of spacers 300, constituted for example by pins that protrude at right angles to the plane of arrangement of a respective fixing wing 6 and are mutually spaced along the longitudinal axis 6a. Advantageously, in this case, on a second fixing wing 6 there are complementarily shaped openings, which provide said engagement seats. Said seats, in particular, can also be spaced along the longitudinal axis 6a.

According to a further aspect, the present invention provides a box for technology networks 1 that comprises a box-like body 2, which is closed at one end by a bottom portion 3 and laterally by a lateral containment element 4 in order to form a containment chamber 5 for components of technology networks and the like.

According to this additional aspect, the bottom portion 3 has, at its face 3a that is directed toward the outside of the containment chamber 5, at least two modules 10 for mutual connection to a respective outward face 3a of a second box 1 (for example, as shown, a plug-in supporting box).

According to an important aspect, the two, or more, mutual connection modules 10 are spaced along at least one spacing direction 100, which lies on the plane of arrangement of the bottom portion 3.

Conveniently, the spacing direction 100 may coincide substantially with the longitudinal direction of the bottom portion 3, but it is also possible to provide, at the face 3a of the bottom portion 3, a plurality of mutual connection modules 10 arranged in a checkerboard pattern and mutually spaced along the longitudinal direction and along the transverse direction of the bottom portion 3.

Advantageously, with particular reference to the embodiment shown in the figures, each mutual connection module 10 comprises at least one protrusion 10a and a respective recess 10b, which are shaped complementarily and are arranged symmetrically with respect to at least one plane of symmetry that is substantially perpendicular to the plane of arrangement of said bottom portion and, in the illustrated examples, to the longitudinal axis.

It is evident that in this manner it is possible to mutually anchor identical junction boxes 1, since by arranging the faces 3a of the bottom portions 3 so that they face each other, the protrusion 10a of a module supported by a box 1 matches the recess 10b of the corresponding mutual connection module 10 formed in the other box 1.

In a fully equivalent manner, in order to allow complete symmetry of the boxes 1 (and therefore a saving in terms of costs and easier anchoring), each one of the mutual connection modules 10 can be constituted by at least one pair of protrusions 10a and one pair of respective complementarily shaped recesses 10b, which as clearly shown in Figure 2 are arranged symmetrically with respect to each other both relative to a first plane of symmetry, which is substantially perpendicular to the plane of arrangement of the bottom portion 3 and to the longitudinal axis, and to a second plane of symmetry, which is substantially perpendicular to the plane of arrangement of the bottom portion and to the transverse axis.

In this manner, regardless of the orientation of the boxes for technology networks 1, it is possible to proceed by arranging the faces 3a of the bottom portions 3 so that they are mutually adjacent and face each other, and mutually anchor said boxes for technology networks 1.

According to another aspect, the invention provides a junction box 1 that has at the same time fixing wings 6 and mutual connection modules 10 as described separately above.

Operation of a junction box according to the present invention is clearly evident from what has been described above.

In particular, if a junction box 1 is to be anchored inside a seat formed at an outer or inner wall, after placing the box-like body 2 inside said seat one proceeds for example by driving screws (or equivalently by inserting nails) in one of the engagement openings 6c. Naturally, if it is possible to engage the screw or screws within the engagement openings 6c arranged proximate to the corner portion 5a, the free end part of the fixing wing 6 can be cropped by using for example scissors.

In a fully equivalent manner, as already explained above, it is possible to interpose a per se known suitable bonding agent between the fixing wing or wings 6 and the wall.

Once the junction box has been anchored to the wall, it is possible to

provide simply and effectively through openings at the bottom portion and/or at the lateral walls by applying pressure at the regions formed by weakening portions 200.

It should be stressed that since the fixing wings 6 are arranged obliquely with respect to the side walls, their presence causes no hindrance during subsequent operations, such as for example the insertion of cables or the like within the containment chamber by means of the through openings provided at the side walls.

If the bottom portions 3 of boxes are to be mutually locked, for example plug-in supporting boxes, which are to be fixed on opposite sides of the same outer or inner wall, one proceeds, as already mentioned above, by arranging the respective faces 3a so that they are mutually adjacent, so as to mutually engage the mutual connection modules 10, making the recesses supported by the outer face 3a cooperate with the protrusions supported by the outer face 3a of the other plug-in supporting box, and vice versa.

All the characteristics of the invention described above as advantageous, convenient or the like may also be omitted or be replaced with equivalents.

The invention thus conceived is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

Thus, for example, the fixing wing or wings can be monolithic with the box-like body, as described and illustrated earlier, but can also be fixed (by way of known removable or permanent fixing means) directly in place at the corner portions formed between two contiguous side walls.

According to another aspect of the present invention, it is possible to provide spacer means, constituted for example by a spacer wing 20, which are designed to engage detachably proximate to the free edge of the side walls.

For example, with particular reference to Figure 7, the spacer wing 20

can be constituted by a substantially rectangular flat lamina 21, which has, at its corner ends, pairs of engagement pins 22, which protrude at right angles to the plane of arrangement of the flat lamina 21.

It is evident, as also shown in the elevation view of Figure 6, that said engagement pins are designed to be associated with respective holes supported by the free edge of the side walls.

Another possible solution provides, and associates with the junction box 1, a protective cover 30, which can be associated with the opening that forms the free edge, so as to prevent, during placement of plaster, part of the plaster from entering the containment chamber 5.

The protective cover 30 can be provided with protrusions 31 that protrude from its perimetric edge and are designed to engage within respective engagement recesses 32 supported by the side walls 50.

In the case of protective covers 30 that are designed to be used with junction boxes (generally larger than plug-in supporting boxes), it is possible to provide on said cover two or more holes 33, which are meant to be engaged by the fingers of the user so as to facilitate the flexing (along its longitudinal axis) of said cover 30, so as to facilitate the engagement and disengagement of the protrusions 31 within the respective engagement recesses 32.

Conveniently, the protective cover 30 has blocking and centering pins 31 at its corner portions and on the face that is meant to be directed toward the inside of the box 1.

Moreover, it is possible to provide, on the surface of the bottom portion 3 of the box 1 that is directed inwardly, ridges 60, on which there are engagement openings 61 that lie transversely to the longitudinal direction of the ridges 60.

In particular, said engagement openings 61 can be obtained by providing holes in the bottom portion 3 at the region affected by said ridges 60.

Said engagement openings 61 can be used to lock simply and effectively electrical cables or other kinds of cables to the bottom portion 3 of the box 1.

Moreover, as shown in Figure 5, the side walls can be associated with guides 40, which are arranged at right angles to the bottom portion 3 and are meant to be engaged by a separation lamina 41.

Said guides can also be obtained by providing slots directly on one or more side walls.

The invention therefore relates to a kit that comprises a junction box with which it is possible to associate, for example, according to the requirements, a series of guides with corresponding separation laminas and/or a protective cover.

In practice it has been found that the invention has achieved the intended aim and objects in all of its embodiments.

In particular, it has been found that the seating of the boxes for technology networks is extremely simple and quick and does not require components, such as mortar, which usually are not used by installers of technology networks such as electricians.

Moreover, the possibility to provide mutual connection modules at the bottom allows to anchor two boxes, for example of the plug-in supporting type, practically and straightforwardly even if they are offset.

In practice, the materials used, so long as they are compatible with the contingent use, as well as the shapes and dimensions, may be any according to requirements.

All the details may further be replaced with other technically equivalent elements.

The term "substantially" herein has the meaning that the designated features have the indicated characteristics but within the usual tollerances allowed in the pertinent technical field.

The disclosures in Italian Patent Application No. VR2004A000076

from which this application claims priority are incorporated herein by reference.

Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

CLAIMS

1. A box for technology networks, comprising a box-like containment body (2), which is closed at one end (2a) by a bottom portion (3) and delimited laterally by a lateral containment element (4) in order to form a containment chamber (5) that is open on the opposite side with respect to said bottom portion (3), said lateral containment element (4) comprising at least two substantially flat and mutually angled contiguous side walls (50), characterized in that it comprises at least one fixing wing (6), which protrudes outside said box-like body (2) along a respective longitudinal axis (6a), substantially from the corner portion (50a) of said at least two contiguous side walls (50), said at least one fixing wing (6) comprising a portion (6b) for fixing to a respective wall portion that is arranged outside a recess for accommodating the box (1).

2. The box according to claim 1, characterized in that said at least one fixing wing (6) is arranged obliquely with respect to the longitudinal directions of the free edges (4a) of said two side walls (50).

3. The box according to one or more of the preceding claims, characterized in that said fixing wing (6) has a plane of arrangement that is substantially perpendicular to the planes of arrangement of said at least two contiguous side walls (50).

4. The box according to one or more of the preceding claims, characterized in that said lateral containment element (4) comprises four side walls (50), a right angle being formed between each pair of contiguous side walls (50).

5. The box according to one or more of the preceding claims, characterized in that said longitudinal axis (6a) of said at least one fixing wing (6) substantially corresponds to the direction of arrangement of the bisecting line of the corner formed by the longitudinal directions of the free edges (4a) of two respective contiguous side walls (50), which are substantially flat and mutually angled.

6. The box according to one or more of the preceding claims, characterized in that said fixing portion comprises a plurality of engagement openings (6c) for screws or the like, which are spaced along said longitudinal axis (6a) of said fixing wing (6).

7. The box according to one or more of the preceding claims, characterized in that it comprises a bonding agent, which is interposed between the face of said at least one fixing wing (6) that is arranged toward said wall and the wall itself.

8. Boxes according to one or more of the preceding claims, characterized in that at least one of said fixing wings (6) comprises at least one spacer (300), which is supported by at least one of said fixing wings (6) and can engage at least one respective engagement seat (301) provided on at least one engagement wing (6) of a further box (1).

9. The box according to one or more of the preceding claims, characterized in that at least one fixing wing (6) is provided with a plurality of spacers (300), which are mutually spaced along the longitudinal axis (6a) of said fixing wing (6).

10. The box according to one or more of the preceding claims, characterized in that it comprises at least one fixing wing (6), provided with a plurality of engagement seats (301) which are mutually spaced along the longitudinal axis of said engagement wing (6).

11. A box comprising a box-like containment body which is closed at one end by a bottom portion (3) and laterally by a lateral containment element (4) in order to form a containment chamber (5), characterized in that said bottom portion (3) has, at its face directed toward the outside of said containment chamber (5), at least two modules (10) for mutual connection to a respective outward face (3a) of a second box (1), said two mutual connection modules (10) being spaced along at least one spacing direction (100) that lies on the plane of arrangement of said bottom portion (3).

12. The box according to claim 11, characterized in that said spacing direction (100) comprises the longitudinal direction of said bottom portion (3).

13. The box according to claim 11, characterized in that it comprises a plurality of mutual connection modules (10), which are arranged in a checkerboard pattern and are mutually spaced along the longitudinal direction and along the transverse direction of said bottom portion (3).

14. The box according to any of claims 11 to 13, characterized in that said mutual connection modules (10) comprise at least one protrusion (10a) and one respective recess (10b), which are shaped complementarily and are arranged symmetrically with respect to at least one plane of symmetry that is substantially perpendicular to the plane of arrangement of said bottom portion (3) and to said longitudinal axis.

15. The box according to any one of claims 11 to 14, characterized in that said mutual connection modules (10) comprise at least one pair of protrusions (10a) and one pair of respective complementarily shaped recesses (10b), which are arranged in mutually symmetrical positions with respect to a first plane of symmetry, which is substantially perpendicular to the plane of arrangement of said bottom portion (3) and to said longitudinal axis, and with respect to a second plane of symmetry, which is substantially perpendicular to the plane of arrangement of said bottom portion (3) and to said transverse axis.

16. The box according to one or more of claims 1 to 7, characterized in that said bottom portion (3) has, at its face directed toward the outside of said containment chamber, at least two modules (10) for mutual connection with a respective face directed toward the outside of a further junction box (1), said two mutual connection modules being spaced along at least one spacing direction that lies along the plane of arrangement of said bottom portion (3).

17. The box according to claim 13, characterized in that said spacing

direction (100) comprises the longitudinal direction of said bottom portion (3).

18. The box according to claim 13, characterized in that it comprises a plurality of mutual connection modules (10), which are arranged in a checkerboard pattern and are mutually spaced along the longitudinal direction and along the transverse direction of said bottom portion (3).

19. The box according to any one of claims 13 to 15, characterized in that said mutual connection modules (10) comprise at least one protrusion (10a) and a respective recess (10b), which are shaped complementarily and are arranged symmetrically with respect to at least one plane of symmetry that is substantially perpendicular to the plane of arrangement of said bottom portion (3) and to said longitudinal axis.

20. The box according to any one of claims 13 to 16, characterized in that said mutual connection modules (10) comprise at least one pair of protrusions (10a) and one pair of respective complementarily shaped recesses (10b), which are mutually arranged in symmetrical positions with respect to a first plane of symmetry, which is substantially perpendicular to the plane of arrangement of said bottom portion (3) and to said longitudinal axis, and to a second plane of symmetry, which is substantially perpendicular to the plane of arrangement of said bottom portion (3) and to said transverse axis.

21. A kit comprising a box according to one or more of the preceding claims, at least one guide (40) with a respective separation lamina (41), and/or a protective cover (30).

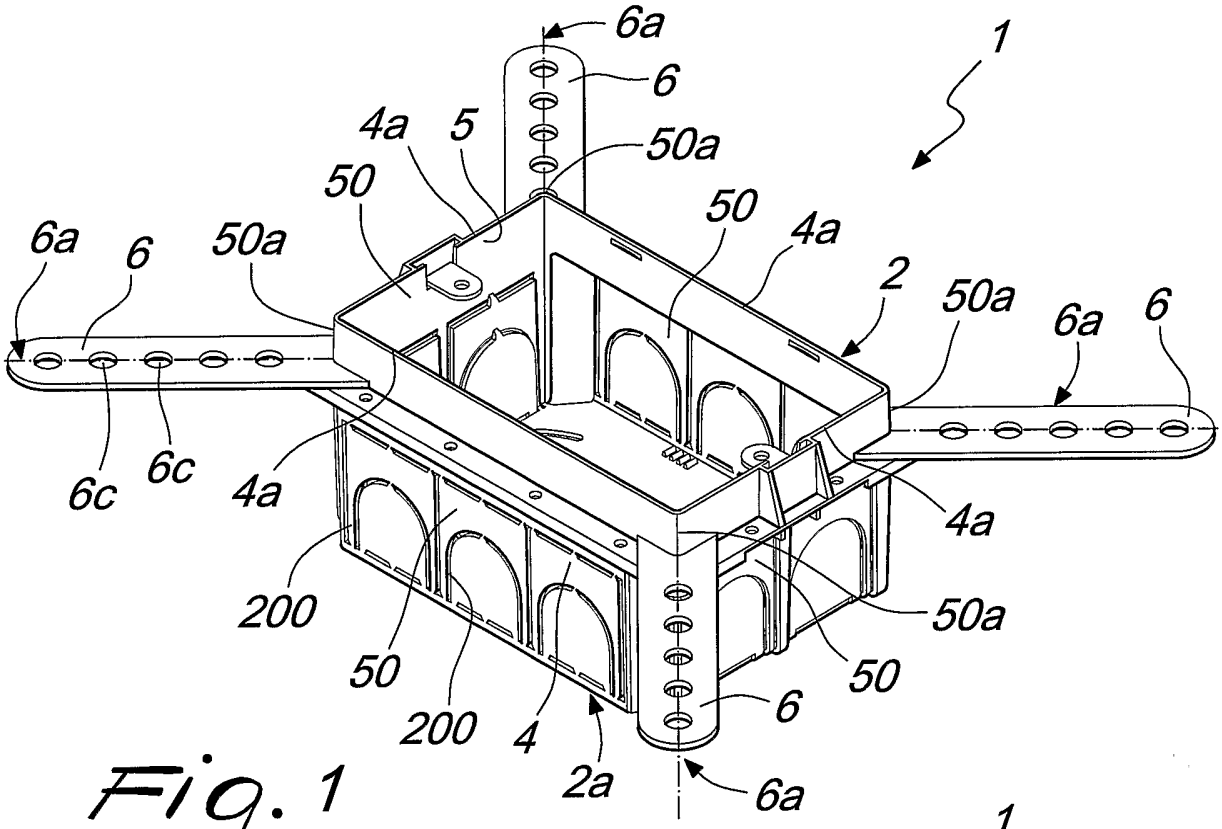
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Fig. 1

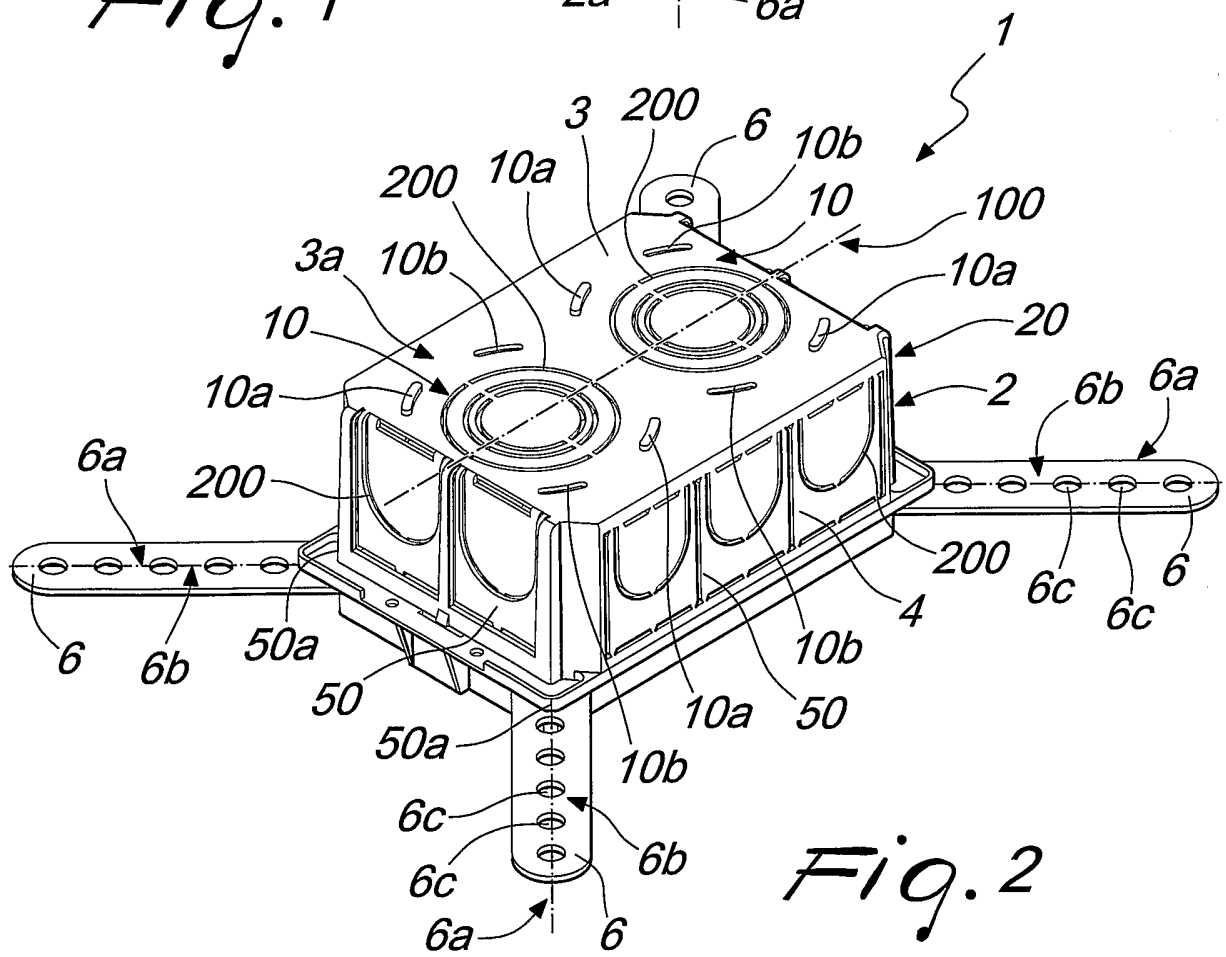
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Fig. 2

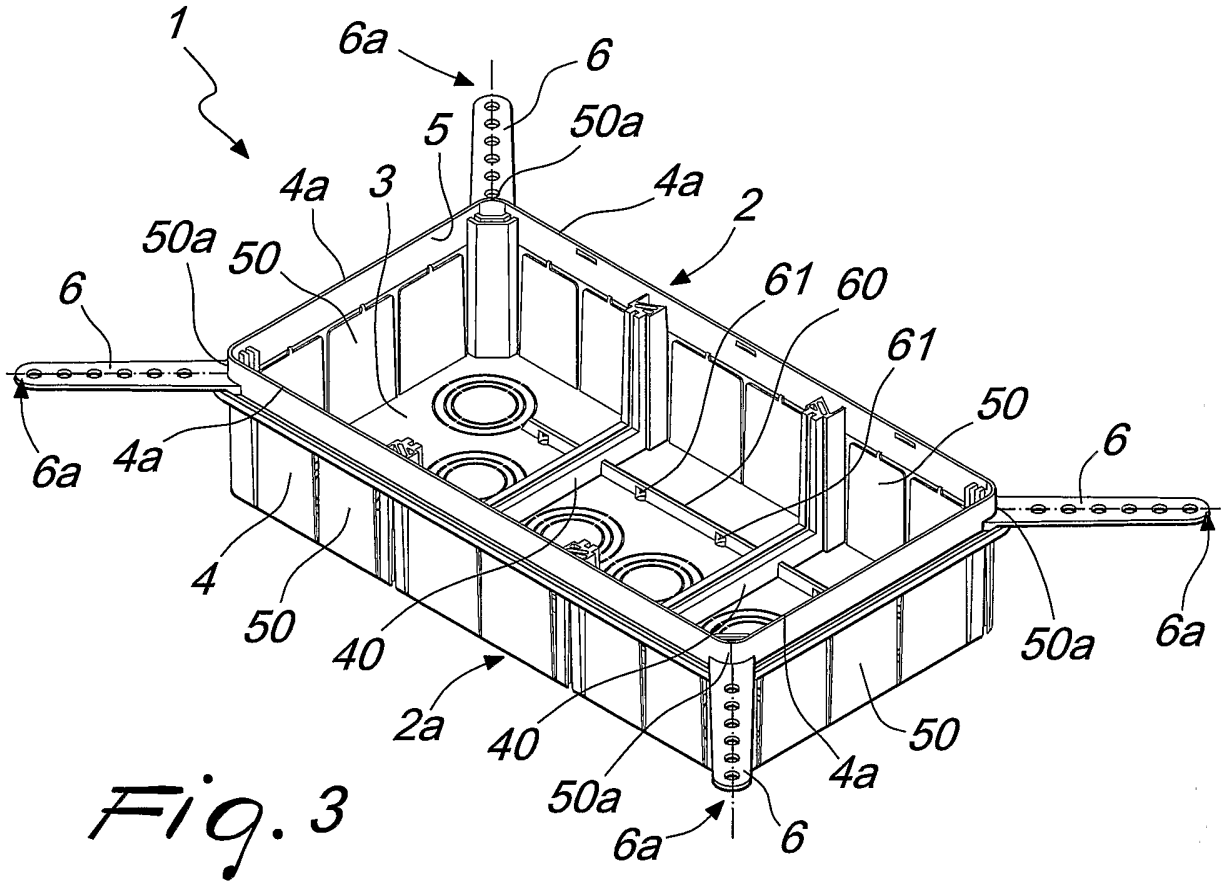
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Fig. 3

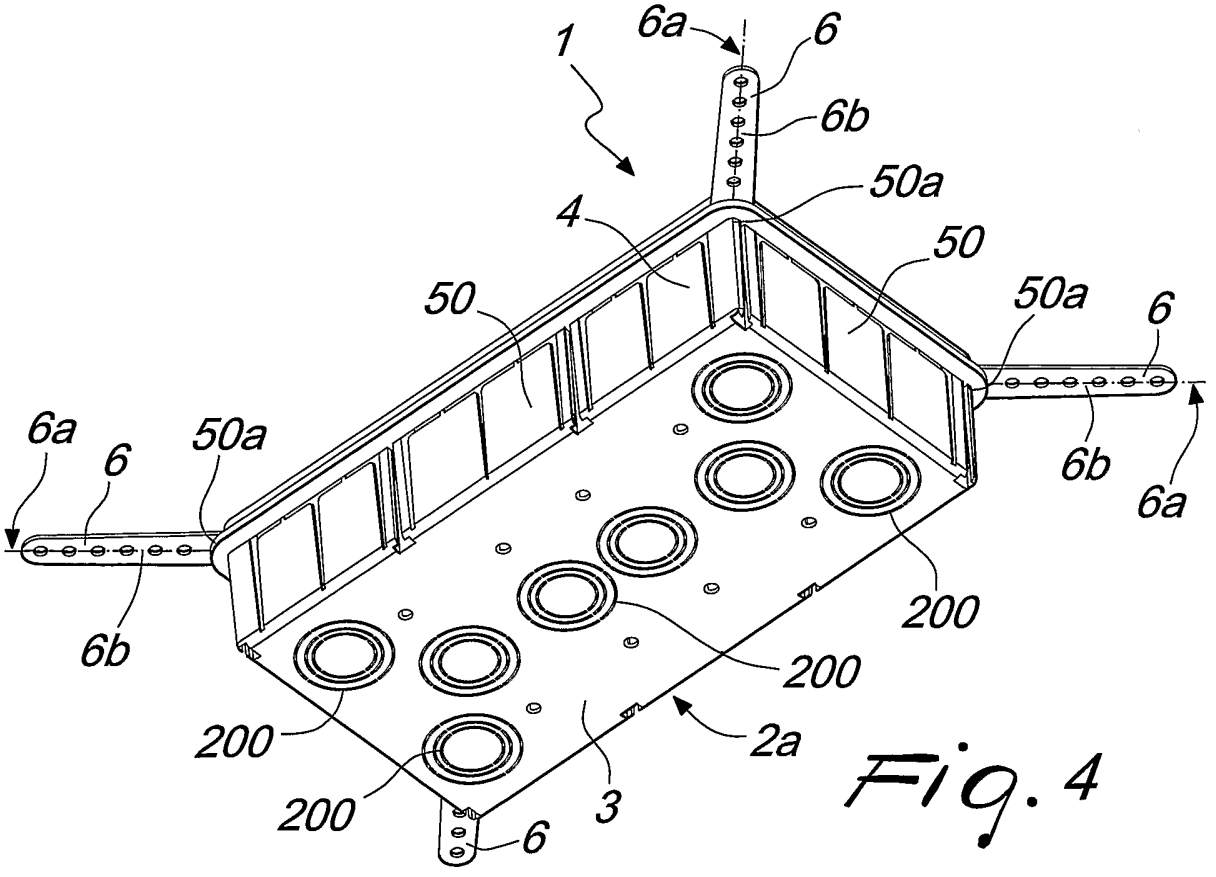
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Fig. 4

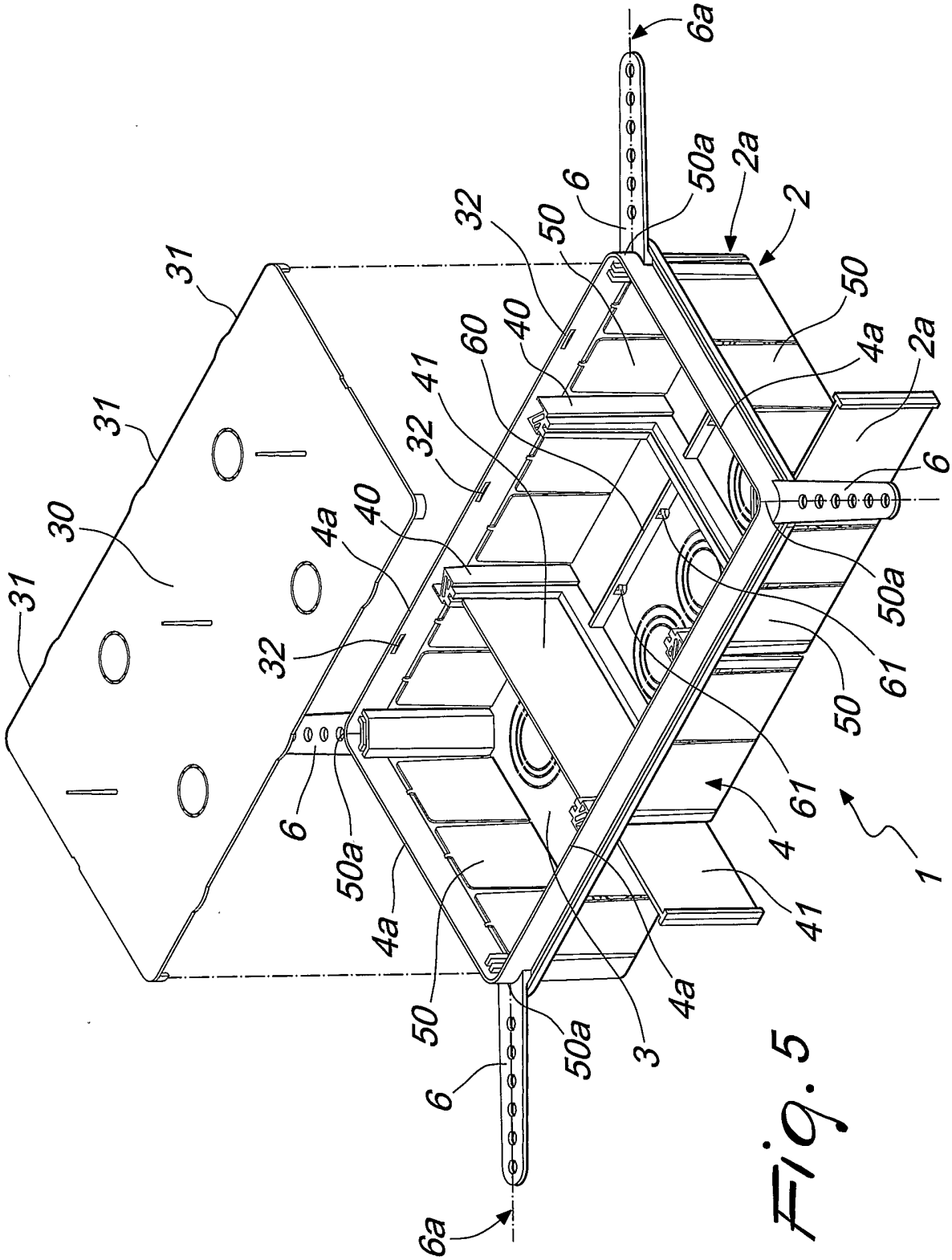
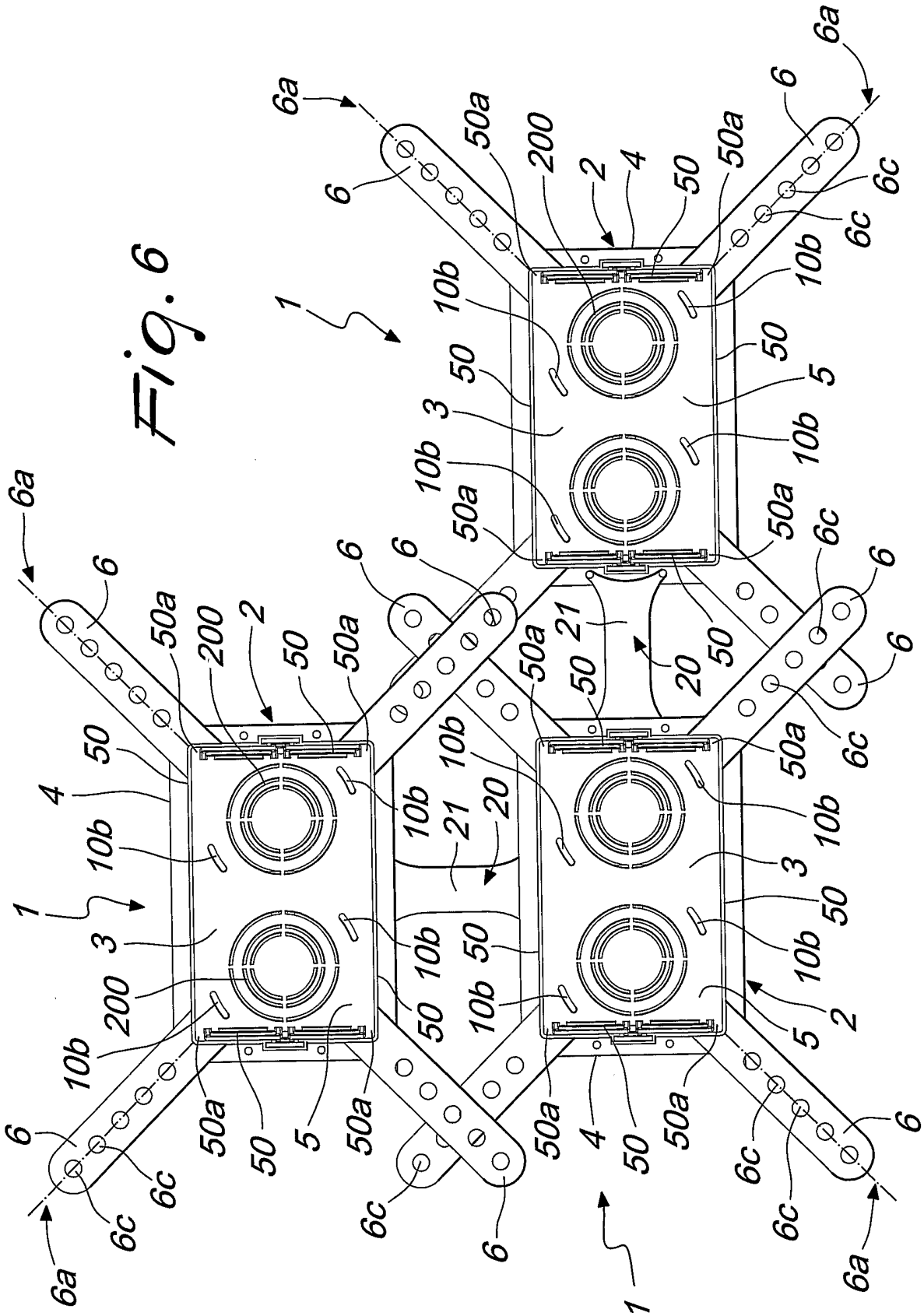


Fig. 5

Fig. 6



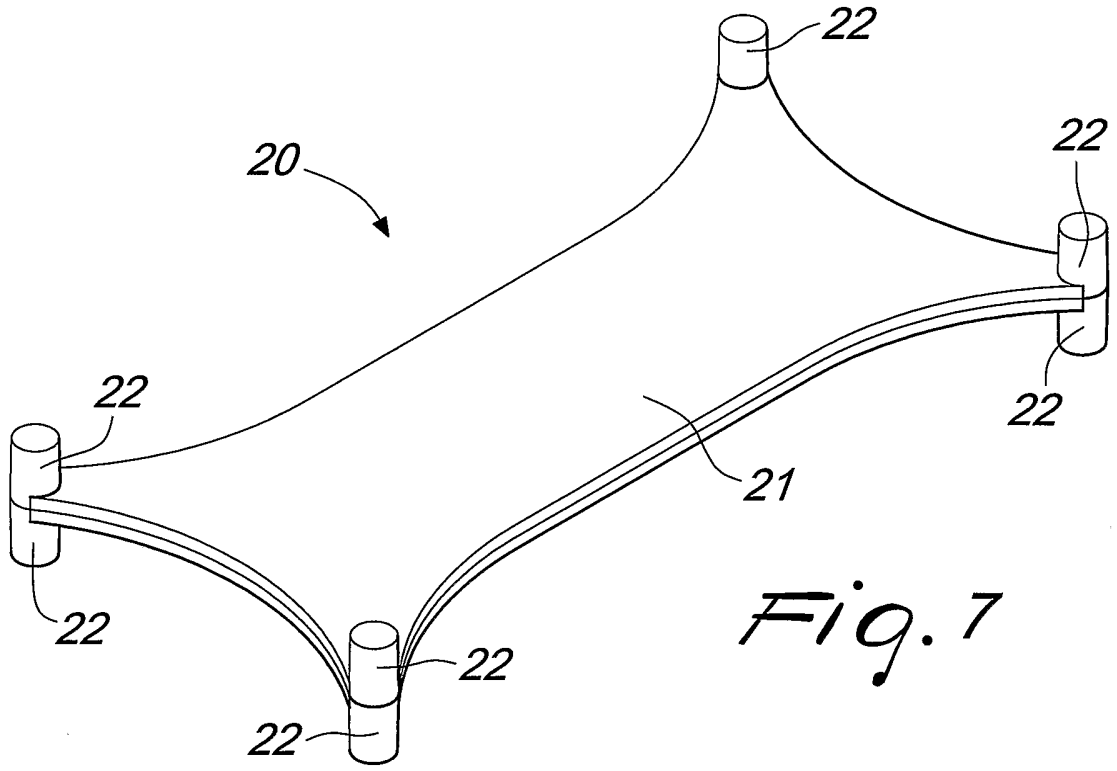


Fig. 7

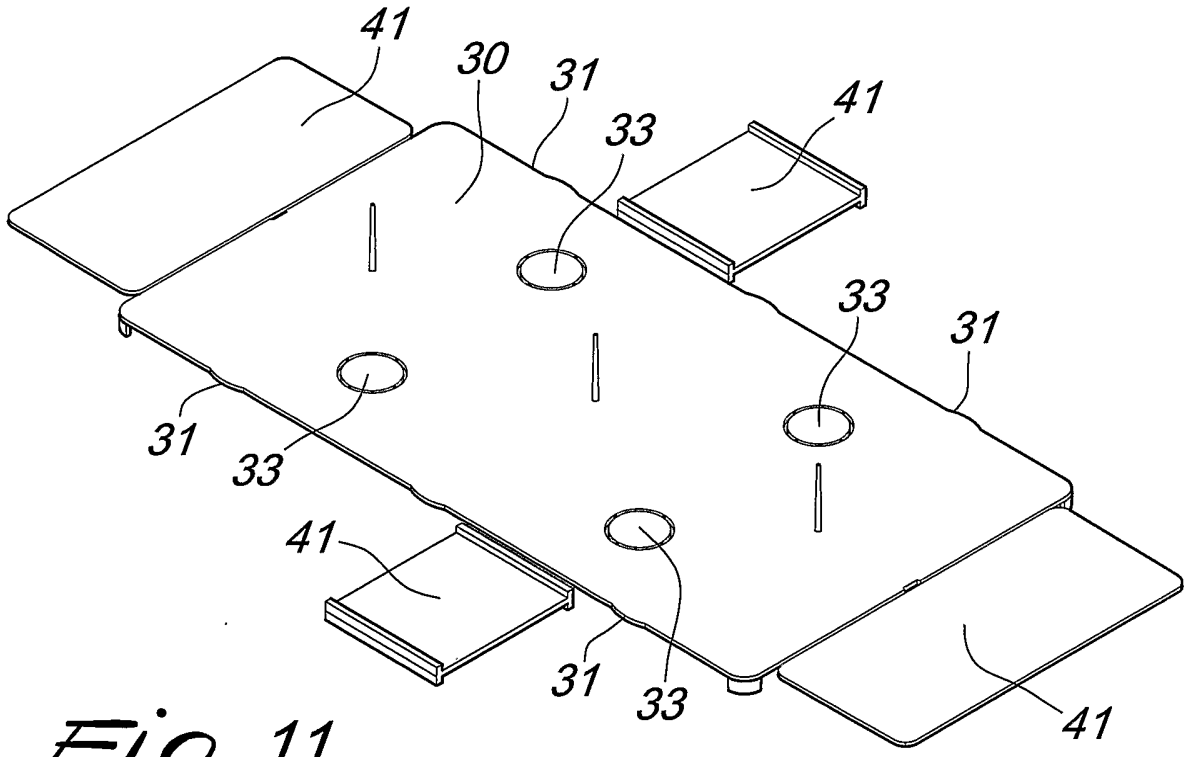
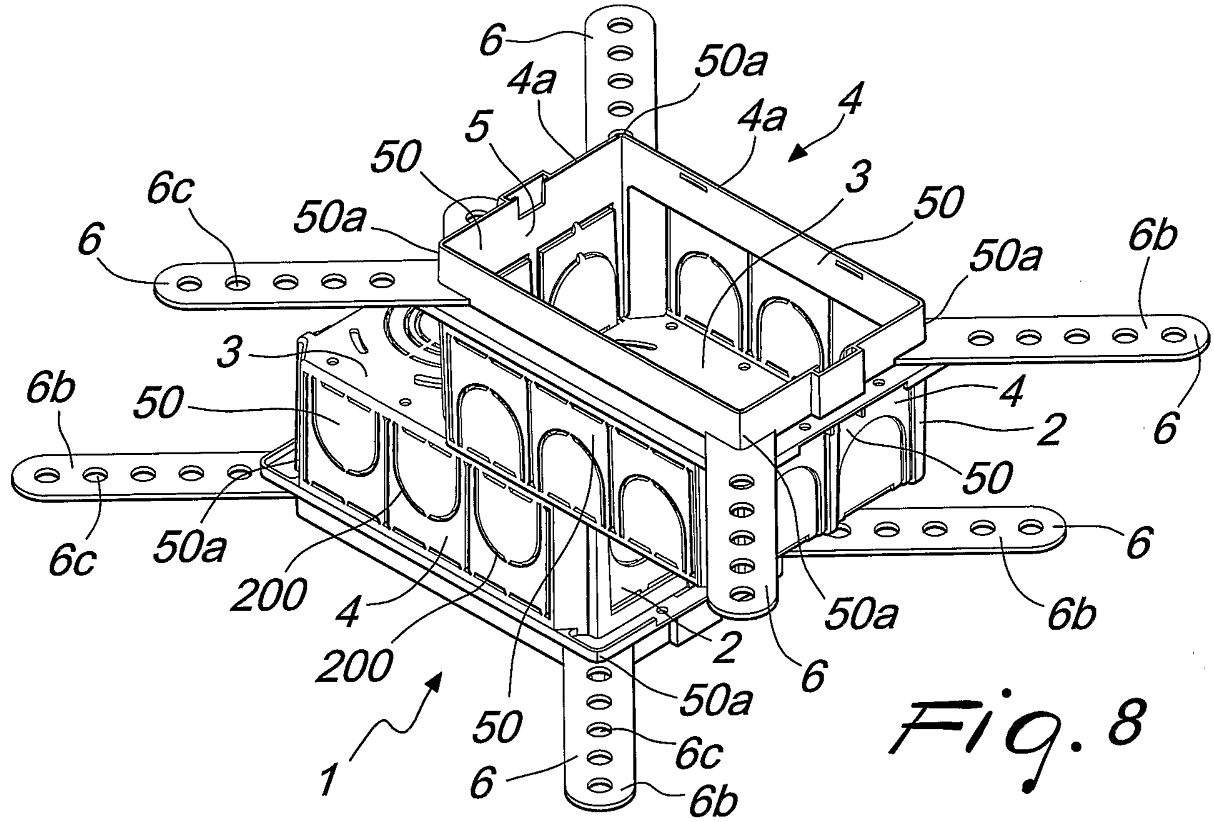


Fig. 11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6b
6
50
50a
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4
6c
6b
200
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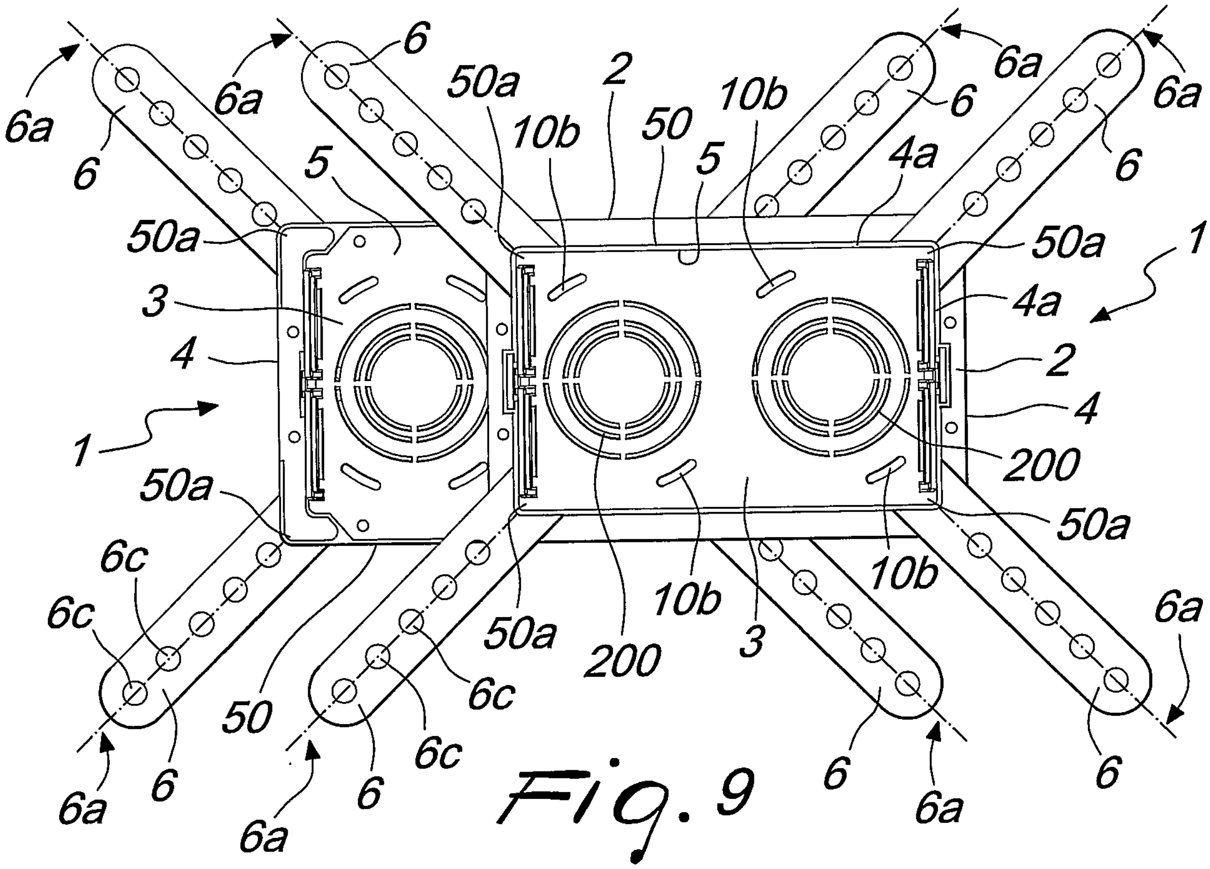
6
1
50a
50
6c
6
6b

Fig. 8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50a
3
4
1
4a
1
2
4
200
50a
50a
6c
6c
50a
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6a
6
6a
6
6a

Fig. 9

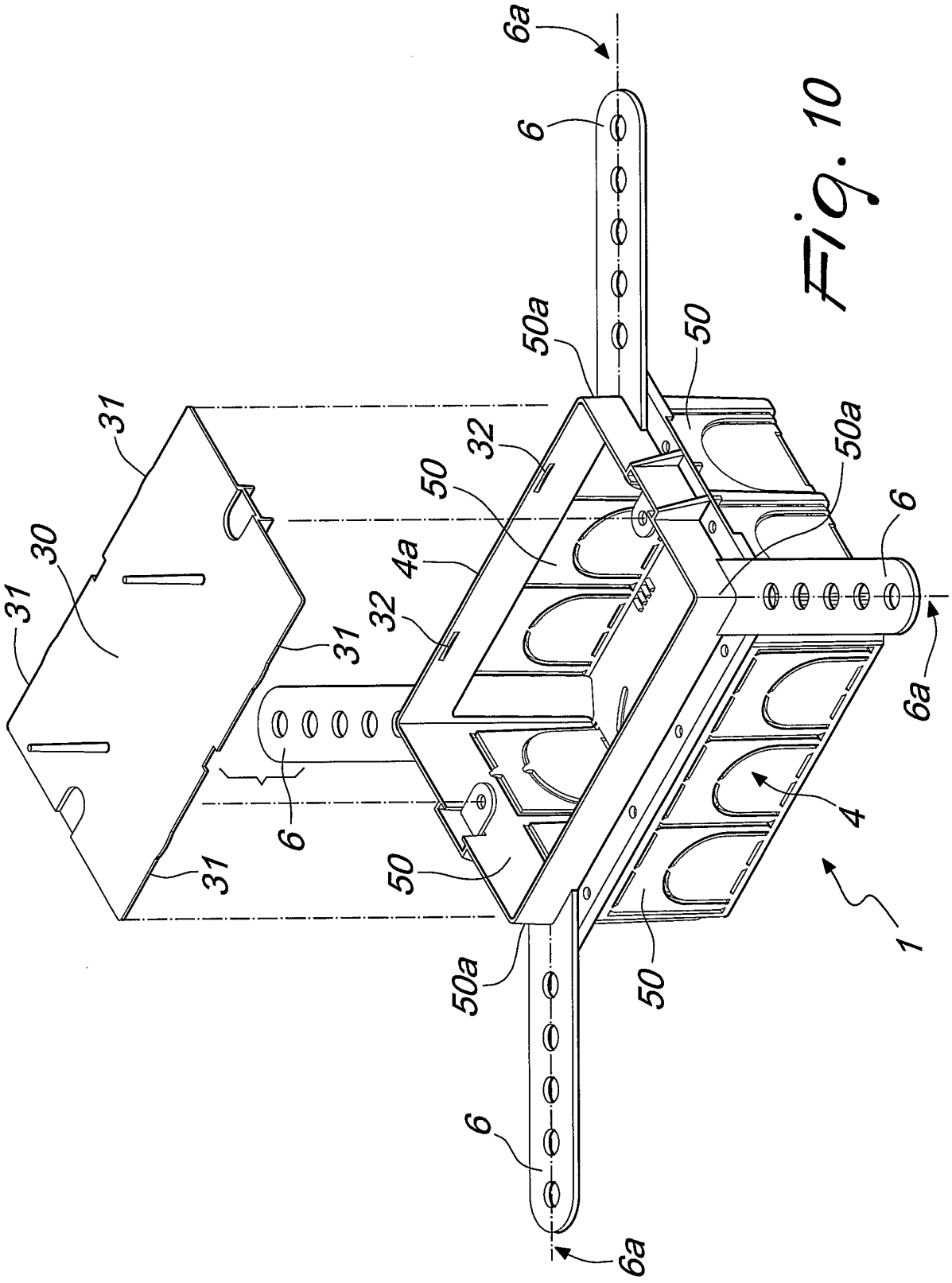
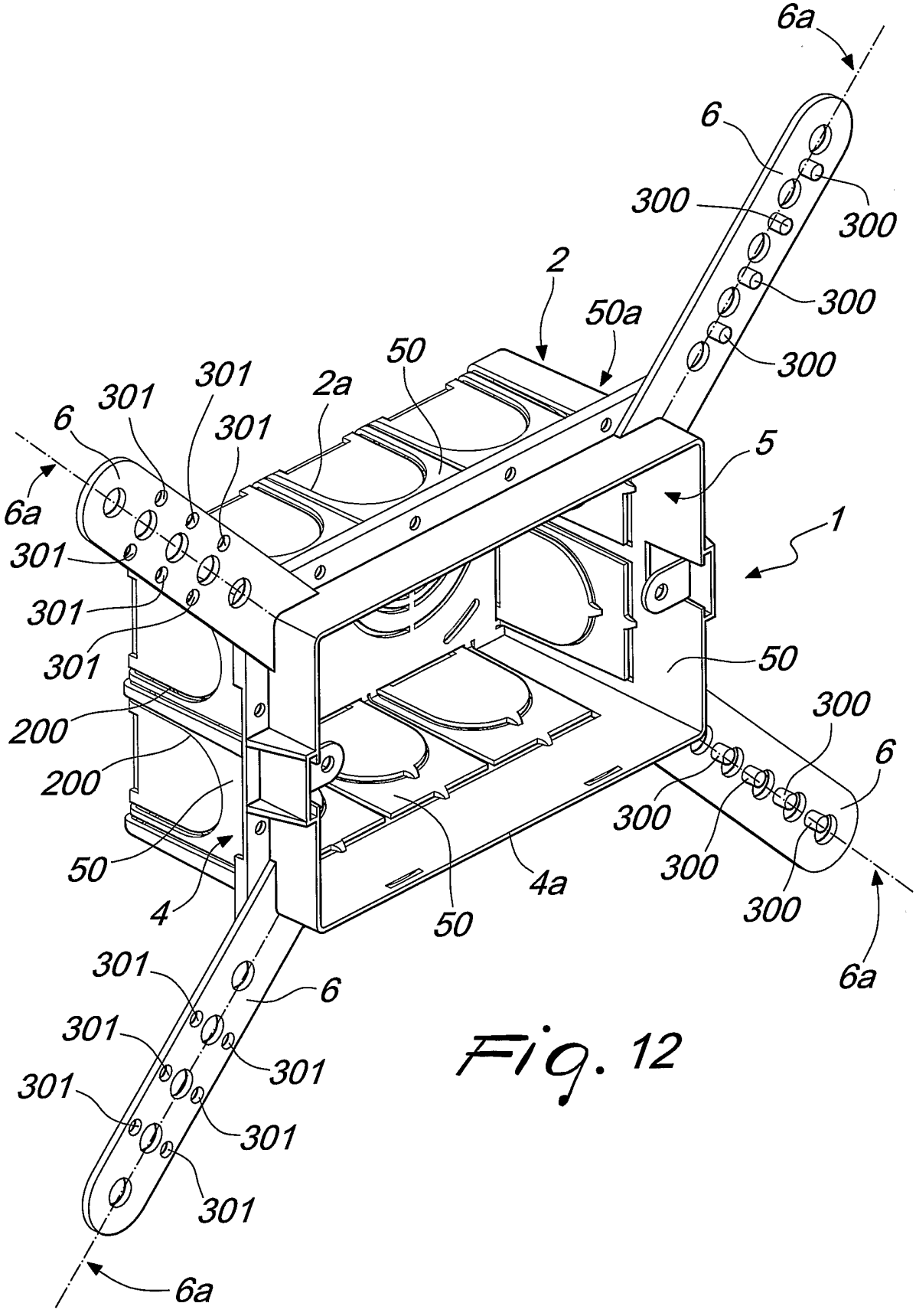


Fig. 10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301
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200
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4
50
4a
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300
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301
301
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301
6a

Fig. 12

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/004840

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H02G3/12 H02G3/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H02G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/079894 A1 (WEISE GARY K ET AL) 1 May 2003 (2003-05-01) paragraphs '0055! - '0057!, '0077!, '0078!, '0101!, '0103!; figure 8	1-7
A		11,21
A	DE 71 21 846 U (SANDER W KG) 23 December 1971 (1971-12-23) figures 1,2	1
A	DE 18 44 054 U (KAISER & SPELSBERG) 28 December 1961 (1961-12-28) the whole document	11,21
A	US 6 369 322 B1 (GRETZ THOMAS J) 9 April 2002 (2002-04-09)	
A	US 1 857 787 A (MEEKS HENRY K ET AL) 10 May 1932 (1932-05-10)	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
10 June 2005	17/06/2005

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Lommel, A

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/004840

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