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(54) **CONNECTION AND SUPPORT BRACKET**

(57) Connection and support bracket for false ceilings, defined by two support and holding seatings (16, 17) located on the same support plane (21) and defining a common central area. In each support and holding seating (16, 17) at least one section bar (11) can be installed,

and the support and holding seatings (16, 17) are conformed to laterally constrain the section bar (11) by means of multiple-function bodies (22), which have elastic tongues (23) at their sides able to prevent the section bar (11) from moving vertically.

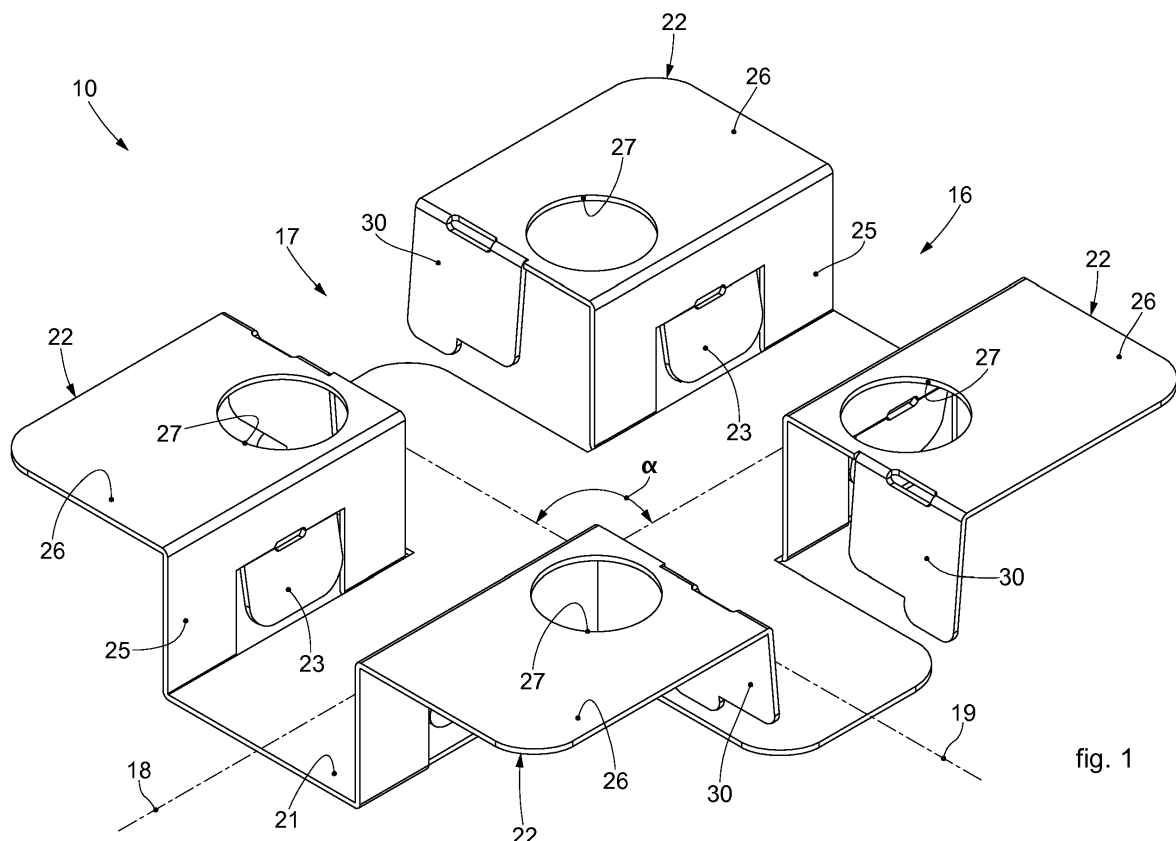


fig. 1

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Description

FIELD OF THE INVENTION

[0001] The present invention concerns a connection and support bracket, which can be applied in reticular structures for false ceilings.

[0002] Embodiments of the present invention also concern a method to install the connection and support bracket.

BACKGROUND OF THE INVENTION

[0003] It is known that in the construction of false ceilings, reticular structures are prepared by connecting together section bars, possibly using appropriate connection joints, obtaining lattices with normally square or rectangular meshes.

[0004] The reticular structures are normally held suspended by tie rods, or by other means, anchored to a stable upper structure, for example a ceiling.

[0005] The section bars generally have an upside-down T-shape, that is, with the base side of the T that is facing the false ceiling that will be made. However, section bars having a different conformation are also known.

[0006] The connection joints that connect two consecutive section bars are normally inserted in correspondence with holes or hollows present in the thickness of the vertical stem of the section bars that engage orthogonally on the axis of the two section bars.

[0007] In the nodes of the lattice formed by the intersection of the section bars, and below them, attachment elements, for example elastic, are normally associated, in order to support the covering and enhancing panels.

[0008] The elastic attachment elements, for example, can have a filiform appearance and are V-shaped, with elastic ends associated with suitable seating means that cooperate with the said lattice in various ways.

[0009] One disadvantage of the state of the art is that the nodes of the lattice are not normally stable, and therefore the section bars can move one with respect to the other, altering the reticular structure and making it unworkable to associate the covering and enhancing panels, or modifying their disposition.

[0010] It is known to apply suitable brackets in correspondence with these nodes or joints, so as to limit the movement between the section bars and at the same time to create means for positioning and connecting the covering and enhancing panels.

[0011] For example, document US-A-3,785,110 describes brackets that can be applied from below, in which the base wings of the bracket function as a connection joint for the section bars, which are cut to a predetermined length. The brackets are associated with the ends of the section bars by inserting the base wings of the bracket by means of reciprocal coupling means.

[0012] Brackets are also known, as described in document WO-A-2008/090579, applicable in correspond-

ence with the intersection of the section bars, inserting them from above, and having a box-like shape which is associated by bayonet coupling with a base structure with a coordinated conformation. The brackets accept the presence of long and parallel section bars connected to each other, at a desired distance, by specific fastening elements to create the nodes of the lattice in which the brackets are applied. However, this type of bracket is costly, complicated and requires a plurality of components, the installation of which is not simple and their bulk in the warehouse is high.

[0013] Brackets are also known, from document US-A-2006/0218871, defined by a plate configured to support section bars in respective housing seatings, having a single cross-shaped base plane.

[0014] The base plane has at the external ends of the housing seatings of the section bars, small protruding ridges at the upper part, with the function of containing the section bars laterally.

[0015] Tongues are also present, one for each arm of the cross, and between the ridges and the center of the cross; the tongues rise as an L above the base plane and position the section bar laterally and at the same time limit its movement vertically.

[0016] The installation of the bracket provides that a T-shaped section bar is positioned obliquely on the bracket and then made it to slide under the tongue and along the arm of the cross dedicated to it, as well as positioned between the protruding ridges, thus conditioning, if somewhat insufficiently, the section bar on the horizontal plane, besides giving it some freedom on the vertical plane.

[0017] This system does not make the co-operation between the section bars and bracket stable and secure, because both during installation and during use conditions of reciprocal lateral and/or vertical displacement can be created, with dangerous conditions for the grip and structure of the lattice.

[0018] Another disadvantage is that it does not even allow also an insertion of the section bar in a direction parallel to the base plane.

[0019] Another disadvantage is that there is no possibility of using V-shaped elastic forks to fasten the covering and enhancing panel below.

[0020] Another disadvantage is that the insertion of the section bar along the axis of the support plane is not guided.

[0021] Furthermore, this kind of bracket requires the use of specific covering and enhancing panels.

[0022] In addition, the installation of the bracket by rotation entails high installation difficulties, for example due to an imprecise positioning of the section bars inside the housing seatings.

[0023] There is therefore the need to obtain a perfected bracket that can overcome at least one of the disadvantages of the state of the art.

[0024] Further support and connection brackets are described in documents US-A-3,119,475 and US-A-

3,334,309.

[0025] The brackets described in US-A-3,119,475 and US-A-3,334,309 are defined by the cutting and subsequent bending of a metal sheet. The metal sheet has a flat portion with a cross-shaped conformation. Each of the lateral edges of the segments of the cross is provided with flaps protruding vertically with respect to the flat development of the cross conformation and defining intersecting seatings to position the section bars.

[0026] The lateral edges of the segments of the cross define a lateral containment of the section bars.

[0027] Furthermore, the lateral edges of the segments of the cross are provided with tongues that can be bent toward the base of the T-shaped section bars, in order to constrain the connection bracket to the section bars.

[0028] These solutions described in US-A-3,119,475 and US-A-3,343,309, however, make the operations to install the false ceilings extremely difficult and complex since every time they require the deformation of the tongues in order to define the coupling of the bracket and section bars.

[0029] Furthermore, this conformation of the bracket only contributes to make rigid the connection between section bars that are coupled and intersected each other, and does not contribute in any way to the connection of the panels of false ceilings.

[0030] One purpose of the present invention is to obtain a connection and support bracket, applicable from below, or by inserting the section bar from above, or even by axial sliding in the respective seating, and which obtains a correct, secure and stable positioning of the section bars with each other and with respect to the bracket.

[0031] Another purpose is to achieve a precise and desired reciprocal positioning of the section bars.

[0032] Another purpose of the present invention is to obtain a connection and support bracket that can be installed quickly, easily and safely.

[0033] Another purpose is to obtain a bracket that clamps the section bar on the base plane, at the same time preventing its lateral and vertical displacement.

[0034] Another purpose is to obtain a bracket that allows to apply the covering and enhancing panels using the V-shaped elastic forks.

[0035] Another purpose is to obtain a bracket that allows to use any type of covering and enhancing panel.

[0036] Another purpose is to obtain a bracket that constitutes an easy connection mean for the covering and enhancing panels.

[0037] Another purpose is to obtain the bracket with simple operations in a fast and definitive manner.

[0038] Another purpose is to obtain the brackets using a mold starting from a metal sheet.

[0039] The Applicant has devised, tested and embodied the present invention to overcome the shortcomings of the state of the art and to obtain these and other purposes and advantages.

SUMMARY OF THE INVENTION

[0040] The present invention is set forth and characterized in the independent claims, while the dependent claims describe other characteristics of the invention or variants to the main inventive idea.

[0041] In accordance with the above purposes, a connection and support bracket can be obtained by molding, starting from a metal sheet subsequently finished by means of simple bending, possibly also obtainable by sequential molding.

[0042] In accordance with the above purposes, a connection and support bracket which is finished and ready for use, in accordance with the present invention, is provided with two support and holding seatings intersected with respect to each other, advantageously crosswise, and in which section bars can be installed.

[0043] The support and holding seatings define a common support plane, configured to support and correctly position the section bars with respect to each other, and the section bars with respect to the bracket.

[0044] There are also multiple-function bodies, located in the corners of the cross defined by the support seatings and rising above them, configured to prevent lateral and vertical movements of the section bars.

[0045] In other words, the support and holding seatings are defined by the multiple-function bodies.

[0046] The multiple-function bodies comprise, or are defined by, a lateral wall, an elastic positioning wall and a lateral extension to which the lateral wall and the elastic positioning wall are connected.

[0047] The lateral wall extends transversely to the support plane to exert a lateral containing action on the section bars that are inserted into the support and holding seating.

[0048] The lateral wall is also provided with at least an elastic tongue configured to prevent the section bar inserted in the support and holding seating from moving vertically.

[0049] The lateral extension is provided with a fastening mean to which an attachment element can be fastened to attach covering and enhancing panels of the false ceilings.

[0050] This configuration allows the multiple-function bodies to incorporate in the same component both a holding and containing function of the section bars used to make the reticular structures for false ceilings, and to supply the fastening means suitable to allow the connection of the covering and enhancing panels in correspondence with the bracket itself.

[0051] Indeed, according to one aspect of the invention, the bracket prevents the vertical movements by means of the elastic tongues, that are positioned snap-in, in a removable manner, on the wings at the base of the section bar, positioned in the respective support and holding seating, clamping them vertically, correctly and stably holding the section bar on and in the respective support and holding seatings.

[0052] The elastic tongue is enabled to cooperate in a stable manner with the upper part of the wing of the head of the section bar.

[0053] The lateral walls continue with the lateral extensions that are located above and advantageously, but not necessarily, parallel to the support plane.

[0054] Embodiments of the present invention also concern a false ceiling comprising a plurality of section bars connected to each other in correspondence with connection nodes to define a reticular structure, and wherein in at least one connection node a bracket is associated as described above.

[0055] The present invention also concerns a method to make a false ceiling that provides to connect a plurality of section bars with respect to each other in correspondence with at least one connection node to define a reticular structure. The method also provides to associate with the section bars at least one bracket, and to connect a covering and enhancing panel to the bracket by means of a connection element.

[0056] The method also provides to insert the bracket in the connection node positioning the section bars in support and holding seatings. The support and holding seatings are intersected with respect to each other in correspondence with a common central area, and define a common support plane on which the section bars are supported and positioned. The section bars are held laterally by lateral walls of multiple-function bodies of the bracket, and held vertically by elastic tongues provided in the lateral walls. Lateral extensions of the multiple-function bodies are provided with a fastening mean to which the attachment element is fastened.

[0057] In accordance with another aspect, the insertion of the bracket in the connection node takes place with a movement from the bottom toward the top, disposing the support and holding seatings with the aperture facing upward. This considerably facilitates and simplifies the operations to install the false ceilings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0058] These and other characteristics of the present invention will become apparent from the following description of some embodiments, given as a non-restrictive example with reference to the attached drawings wherein:

- fig. 1 is a perspective view from above of a connection and support bracket, object of the invention;
- fig. 2 is a partial perspective view from above, of a node of a reticular structure with which a bracket according to the invention is associated, with an enhancing panel in its application phase;
- fig. 3 is a lateral view of the node in fig. 2 in a first direction;
- fig. 4 is a lateral view of the node in fig. 2 in a second direction;
- fig. 5 is a view of the plan development of the bracket

in fig. 1.

[0059] To facilitate comprehension, the same reference numbers have been used, where possible, to identify identical common elements in the drawings. It is understood that elements and characteristics of one embodiment can conveniently be incorporated into other embodiments without further clarifications.

10 DETAILED DESCRIPTION OF ONE EMBODIMENT

[0060] A reticular structure, generally used in the manufacture of false ceilings, is formed by a plurality of linear and/or curved section bars 11.

[0061] The section bars 11 in the case shown here have a cross-section shape like an upside down T, that is, they are provided with a vertical stem 12 of the T, the free end of which faces upward during use, and with base wings 13 located substantially parallel to the ceiling or false ceiling that is made.

[0062] The present invention can, however, also be used with one or more section bars 11 having conformations or shapes with a different cross-section, for example U-shaped, L-shaped, etc.

[0063] In a reticular structure, at least two consequent section bars 11 can be connected to each other by a connection joint 14.

[0064] In particular, it can be provided that the section bars 11 are connected to one another in correspondence with reciprocal intersection zones to define connection nodes 20 of the section bars 11.

[0065] As shown in fig. 2, for example, the connection joint 14 connects, in a known manner, the ends of two section bars 11 (of which only one of the two is shown in fig. 2) through a hole 15 present in the vertical stem 12 of another section bar 11.

[0066] In particular, it can be provided that each connection joint 14 is connected to one end of a respective section bar 11, and that an appropriately shaped hole 15 is made in another section bar 11 along its longitudinal extension. The connection joints 14 of two consecutive section bars 11 are inserted into the same hole 15, defining the reciprocal connection between them and with the section bar 11 provided with the hole 15.

[0067] Fig. 2 also shows the covering and enhancing panels 29 and the attachment elements 28 used to connect the covering and enhancing panels 29 to the bracket 10 according to the present invention.

[0068] According to one aspect of the present invention, the connection and support bracket 10 can be obtained by bending a flat shaped body 33, for example a metal sheet.

[0069] However, it is not excluded that the connection and support bracket 10 according to the present invention can be made of materials other than metal, for example polymer material.

[0070] With reference to fig. 5, it can be provided that the bracket 10 according to the invention can be obtained

by shearing a sheet of suitable thickness. The sheet can then be bent and shaped to define the final shape of the bracket 10 according to the present invention.

[0071] According to possible solutions, the bracket 10 can have a specular conformation with respect to a first axis 18 and a second axis 19 lying on a common lying plane and intersecting each other.

[0072] It goes without saying that this specularity is chosen to simplify the bending actions, but also by renouncing the specularity, the same connection and support bracket 10 can be obtained.

[0073] In fig. 5, the shearing action is indicated by continuous lines, while the bending actions are indicated by lines of dashes.

[0074] Two close lines of dashes identify a bend that can be joined thanks to the characteristics of the base of the section bar 11.

[0075] The bending action can be carried out according to different sequences, for example by means of a step mold, that is, with a bending press and abutments.

[0076] By way of example, a bending sequence can be as follows:

- execution of bends A and D;
- execution of bend B;
- execution of bend C

[0077] Fig. 1 shows the finished connection and support bracket 10, ready for use, according to the present invention.

[0078] The connection and support bracket 10 is provided with a first and second support and holding seating 16, 17, located on the same support plane 21.

[0079] The first and second support and holding seatings 16, 17 are both open on the same side of the support plane 21.

[0080] In particular, it is provided that the first support and holding seating 16 and the second support and holding seating 17 define the support plane 21 on which the section bars 11 are positioned, for example with their base wings 13, during use.

[0081] The support plane 21 therefore defines the bottom wall of the first support and holding seating 16 and the second support and holding seating 17.

[0082] The support and holding seatings 16 and 17 intersect each other in correspondence with a common central area in which the connection node 20 is positioned between the section bars 11 during use.

[0083] The common central area can have a rectangular shape, in the case shown, square.

[0084] The first support and holding seating 16 and the second support and holding seating 17 intersect with each other, in this case in the form of a cross.

[0085] This positioning of the support and holding seatings 16 and 17 allows to define a corresponding cross shape of the support plane 21.

[0086] The first support and holding seating 16 extends along the first axis 18 and the second support and holding

seating 17 extends along the second axis 19 which intersects the first axis 18.

[0087] The angle α between the first axis 18 and the second axis 19 can be 90° .

[0088] The first support and holding seating 16 and the second support and holding seating 17 are configured to support and correctly position the section bars 11 with respect to the bracket 10.

[0089] The bracket 10 is also provided with multiple-function bodies 22 configured to prevent lateral and vertical displacements of the section bars 11 and provided with elastic tongues 23.

[0090] The multiple-function bodies 22 at least partly define the two support and holding seatings 16 and 17, or at least the lateral walls thereof.

[0091] The multiple-function bodies 22 can be associated with the support plane 21.

[0092] According to possible solutions, the bracket 10 according to the present invention comprises four multiple-function bodies 22 each of which is disposed in correspondence with one of the concave zones, that is, the corners, defined by the cross shape of the support plane 21.

[0093] Advantageously, the multiple-function bodies 22 have a height that varies from 40% to 80% of the width of the support and holding seatings 16, 17 and hence of the base of the section bar 11, advantageously between 50% and 70%.

[0094] According to one aspect of the invention, the bracket 10 prevents the vertical movements of the section bars 11 by means of the elastic tongues 23, which are positioned in snap-in mode and removably on the base wings 13 of the section bar 11, clamping them vertically, holding the section bar 11 correctly and stably in the respective support and holding seatings 16, 17.

[0095] Advantageously, the elastic tongues 23 do not reach the support plane 21 and are enabled to cooperate stably on the upper part of a base wing 13 of the section bar 11.

[0096] According to possible solutions, the multiple-function bodies 22 comprise lateral walls 25 that extend substantially vertically with respect to the support plane 21.

[0097] According to possible solutions, each lateral wall 25 is connected and extends transversely to the support plane 21, in this case orthogonally.

[0098] According to possible solutions, the lateral walls 25 of the plurality of multiple-function bodies 22 define the sides, that is, walls of the first support and holding seating 16.

[0099] The lateral walls 25 also have the function of containing the lateral movements of the section bar or bars 11 which are inserted into the first housing seating 16.

[0100] According to a possible solution, the lateral walls 25 of at least one pair of multiple-function bodies 22 are facing each other with respect to the first support and holding seating 16.

[0101] According to possible solutions, the lateral wall 25 is obtained by bending a portion of sheet along a bending line that extends substantially parallel to the first axis 18.

[0102] The lateral walls 25, or at least some of them, are provided with elastic tongues 23 configured to prevent the section bar 11 from moving vertically in the respective support and holding seating 16, 17.

[0103] In other words, the elastic tongues 23 perform a holding action on the section bars 11 in the support and holding seatings 16, for example maintaining the base wings 13 resting against the support plane 21.

[0104] According to a possible solution, the elastic tongues 23 are made by shearing a portion of the respective lateral wall 25, and are provided with a contact end that faces toward the support plane 21. The contact ends of the elastic tongues 23, during use, exert the holding action on the base wings 13 of the section bar 11.

[0105] The contact ends of the elastic tongues 23 are distanced from the support plane 21 by a distance substantially equal to or greater than the thickness of the base wings 13 of the section bars 11. This allows to position and hold the base wings 13 of the section bars 11 in the interspace comprised between the contact end and the support plane 21.

[0106] The elastic tongues 23 are bent toward the inside of the respective support and holding seating 16 by an angle of inclination β (fig. 3) comprised between 1° and 10° , with respect to the respective lateral wall 25 in which it is made.

[0107] During the insertion of the at least one section bar 11, the elastic tongues 23 elastically deform to allow the subsequent clamping and holding of the section bars themselves.

[0108] Each multiple-function body 22 also comprises an elastic positioning wall 30 and a lateral extension 26 to which the lateral wall 25 and the elastic positioning wall 30 are connected.

[0109] The lateral walls 25, in fact, continue with lateral extensions 26 located above the lateral walls 25 and advantageously, but not necessarily, parallel to the support plane 21.

[0110] According to a possible solution, it can be provided that the lateral extensions 26 of the multiple-function bodies 22 all lie on a common lying plane.

[0111] The lateral extensions 26 can be connected to the lateral walls 25 in correspondence with a bending line which, in this specific case, is substantially parallel to the first axis 18.

[0112] According to some embodiments, the lateral extensions 26 extend toward the outside with respect to the support and holding seatings 16 and 17.

[0113] The lateral extensions 26 are configured to allow the operator a better grip on the bracket 10, simplifying the step of installing the bracket 10.

[0114] According to a variant embodiment, the lateral extensions 26 are provided with at least one fastening mean 27 to fasten an attachment element 28 for a cov-

ering and enhancing panel 29.

[0115] The fastening mean 27 is located outside the support and holding seatings 16 and 17.

[0116] According to possible embodiments, the fastening mean comprises a hole 27 made through in the lateral extension 26.

[0117] According to a possible solution, the hole 27 has an axis orthogonal to a plane parallel to the support plane 21.

[0118] According to a variant embodiment, the fastening mean can comprise one or more hooks.

[0119] According to the solution shown in fig. 2, the attachment element 28 is defined by a pair of segments reciprocally and elastically connected to each other to define a V shape. The attachment element 28 can comprise a fastening portion, provided in correspondence with the apex of the V-shape, which allows connection to the covering and enhancing panel 29.

[0120] The segments of the attachment element 28 are divergent and, by means of their elastic deformation, can be inserted into the hole 27.

[0121] The elastic positioning walls 30 are also made in continuity with the lateral extensions 26 and, during use, are located substantially vertical with respect to the support plane 21.

[0122] The elastic positioning walls 30 extend transversely to the flat development of the lateral extensions 26 and the support plane 21, and each of them extends from the respective lateral extension 26 toward the support plane 21.

[0123] According to possible solutions, the elastic positioning walls 30 are connected to the lateral extensions 26 in correspondence with respective bending lines located substantially parallel to the second axis 19.

[0124] The elastic positioning walls 30 can be elastically deformable around the bending lines to allow, for example, the operations of connecting the bracket 10 to the section bars 11.

[0125] In particular, in each multiple-function body 22, the bending line provided between the lateral wall 25 and the lateral extension 26 is orthogonal to the bending line provided between the lateral extension 26 and the elastic positioning wall 30.

[0126] According to possible embodiments of the present invention, the elastic positioning walls 30 are not directly connected to the support plane 21 but are connected through the respective lateral walls 25 and the lateral extensions 26.

[0127] According to some embodiments of the present invention, the elastic positioning walls 30 of the plurality of bodies 22 define part, that is, the sides, of the second support and holding seating 17.

[0128] According to another solution, the elastic positioning walls 30 are facing each other with respect to the same second support and holding seating 17.

[0129] According to some solutions, the elastic positioning walls 30 are located transverse to both the support plane 21 and the lateral walls 25.

[0130] According to possible solutions, the elastic positioning walls 30 are provided with a contact end facing during use toward the support plane 21 which, during use, cooperates with the at least one section bar 11.

[0131] The contact ends of the elastic positioning walls 30 are distanced from the support plane 21 by a distance substantially equal to or greater than the thickness of the base wings 13 of the section bars 11.

[0132] This allows the elastic positioning walls 30 to exert the holding action on the section bars 11.

[0133] According to possible solutions, the elastic positioning walls 30 are inclined toward an internal zone of the second support and holding seating 17 so that their contact ends are overlapping over the support plane 21.

[0134] The elastic positioning walls 30 are inclined toward an internal zone of the second support and holding seating 17 by an angle of inclination γ (fig. 4) with respect to an axis orthogonal to the support plane 21, which is comprised between 1° and 10° .

[0135] The present invention also concerns a method to install a bracket 10 that provides to associate the section bars 11 with the respective base wings 13 to the support and holding seatings 16, 17.

[0136] The support and holding seatings 16, 17 are orthogonal to each other and lie on the same supporting plane 21 of a connection and support bracket 10. The base wings 13 are laterally constrained by multiple-function bodies 22 which are also able to act vertically on the base wings 13 of the section bar 11 by means of elastic tongues 23, clamping the vertical movement of the base wings 13.

[0137] The installation method, according to the present invention, is also extremely rapid, safe and simple.

[0138] It is clear that modifications and/or additions of parts may be made to the connection and support bracket 10 and corresponding installation method as described heretofore, without departing from the field and scope of the present invention.

[0139] It is also clear that, although the present invention has been described with reference to some specific examples, a person of skill in the art shall certainly be able to achieve many other equivalent forms of connection and support bracket 10 and corresponding installation method, having the characteristics as set forth in the claims and hence all coming within the field of protection defined thereby.

Claims

1. Connection and support bracket for false ceilings, comprising two support and holding seatings (16, 17) intersected with respect to each other in correspondence with a common central area, defining a common support plane (21) to support and position section bars (11), **characterized in that** said support and holding seatings (16, 17) are at least partly de-

fined by multiple-function bodies (22), each of said multiple-function bodies (22) comprising a lateral wall (25), an elastic positioning wall (30) and a lateral extension (26) to which said lateral wall (25) and said elastic positioning wall (30) are connected, said lateral wall (25) extending transversely to said support plane (21) and being provided with at least an elastic tongue (23) configured to prevent said section bar (11) from moving vertically in the respective support and holding seating (16, 17), and said lateral extension (26) being provided with a fastening mean (27) to which an attachment element (28) to attach covering and enhancing panels (29) of said false ceiling can be fastened.

2. Bracket as in claim 1, **characterized in that** said fastening mean comprises at least one hole (27) made in said lateral extension (26).

3. Bracket as in claim 1 or 2, **characterized in that** said lateral extensions (26) extend toward the outside with respect to said support and holding seatings (16, 17).

4. Bracket as in any claim hereinbefore, **characterized in that** said lateral extensions (26) are substantially parallel to said support plane (21).

5. Bracket as in any claim hereinbefore, **characterized in that** said lateral walls (25) of said multiple-function bodies (22) define sides of a first of said two support and holding seatings (16).

6. Bracket as in any claim hereinbefore, **characterized in that** said elastic positioning walls (30) of said multiple-function bodies (22) define sides of a second of said two support and holding seatings (17).

7. Bracket as in any claim hereinbefore, **characterized in that** said elastic positioning walls (30) extend transversely to the plane development of said lateral extensions (26) and of said support plane (21), and each of said elastic positioning walls (30) extends from the respective lateral extension (26) toward said support plane (21).

8. Bracket as in any claim hereinbefore, **characterized in that** said elastic positioning walls (30) are provided with a contact end facing toward said support plane (21) and which during use cooperates with the at least one section bar (11), **and in that** said elastic positioning walls (30) are inclined toward an internal zone of said second support and holding seating (17).

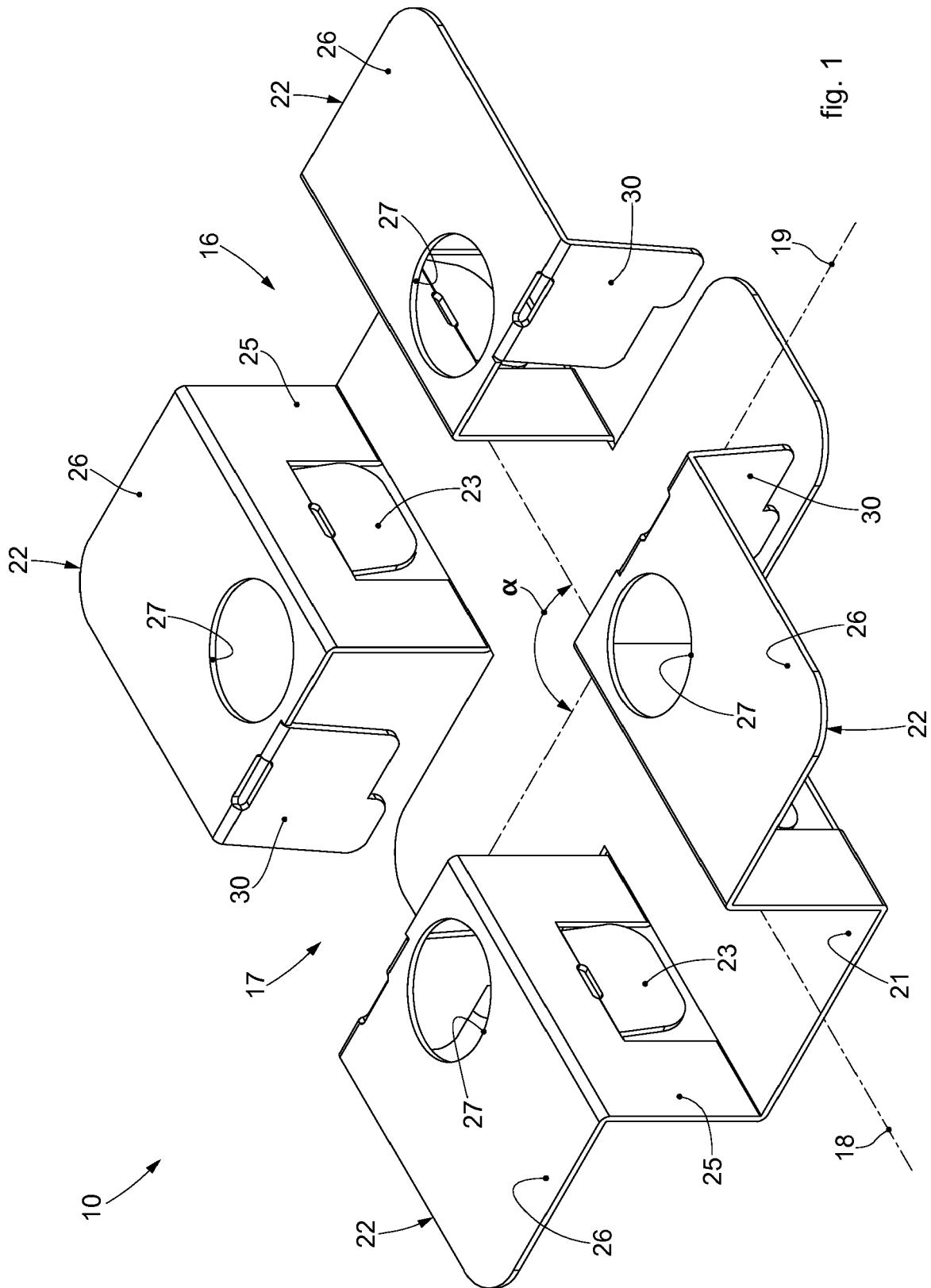
9. Bracket as in any claim hereinbefore, **characterized in that** it is defined by a single metal sheet, cut and bent.

10. False ceiling comprising a plurality of section bars (11) connected to each other in correspondence with connection nodes (20) to define a reticular structure, and wherein in at least one connection node (20) a bracket (10) is associated as in any claim hereinbefore. 5
11. False ceiling as in claim 10, **characterized in that** it comprises at least one connection element (28) connected to said attachment mean (28) of said bracket (10) and to said covering and enhancing panel (29). 10
12. Method to make a false ceiling that provides to connect a plurality of section bars (11) with respect to each other in correspondence with at least one connection node (20) to define a reticular structure, to associate to said section bars (11) at least one bracket (10), and to connect a covering and enhancing panel (29) to said bracket (10) by means of a connection element (28), **characterized in that** it provides to insert said bracket (10) in said connection node (20) positioning said section bars (11) in support and holding seatings (16, 17) of said bracket (10), said support and holding seatings (16, 17) being intersected with respect to each other in correspondence with a common central area, and defining a common support plane (21) on which said section bars (11) are supported and positioned, said section bars (11) being held laterally by lateral walls (25) of multiple-function bodies (22) of said bracket (10), and held vertically by elastic tongues (23) provided in said lateral walls (25), **and in that** lateral extensions (26) of said multiple-function bodies (22) are provided with a fastening mean (27) to which said attachment element (28) is fastened by means of elastic tongues (23), clamping them vertically. 15
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13. Method as in claim 12, **characterized in that** the insertion of said bracket (10) in said connection node (20) takes place with a movement from the bottom toward the top. 40

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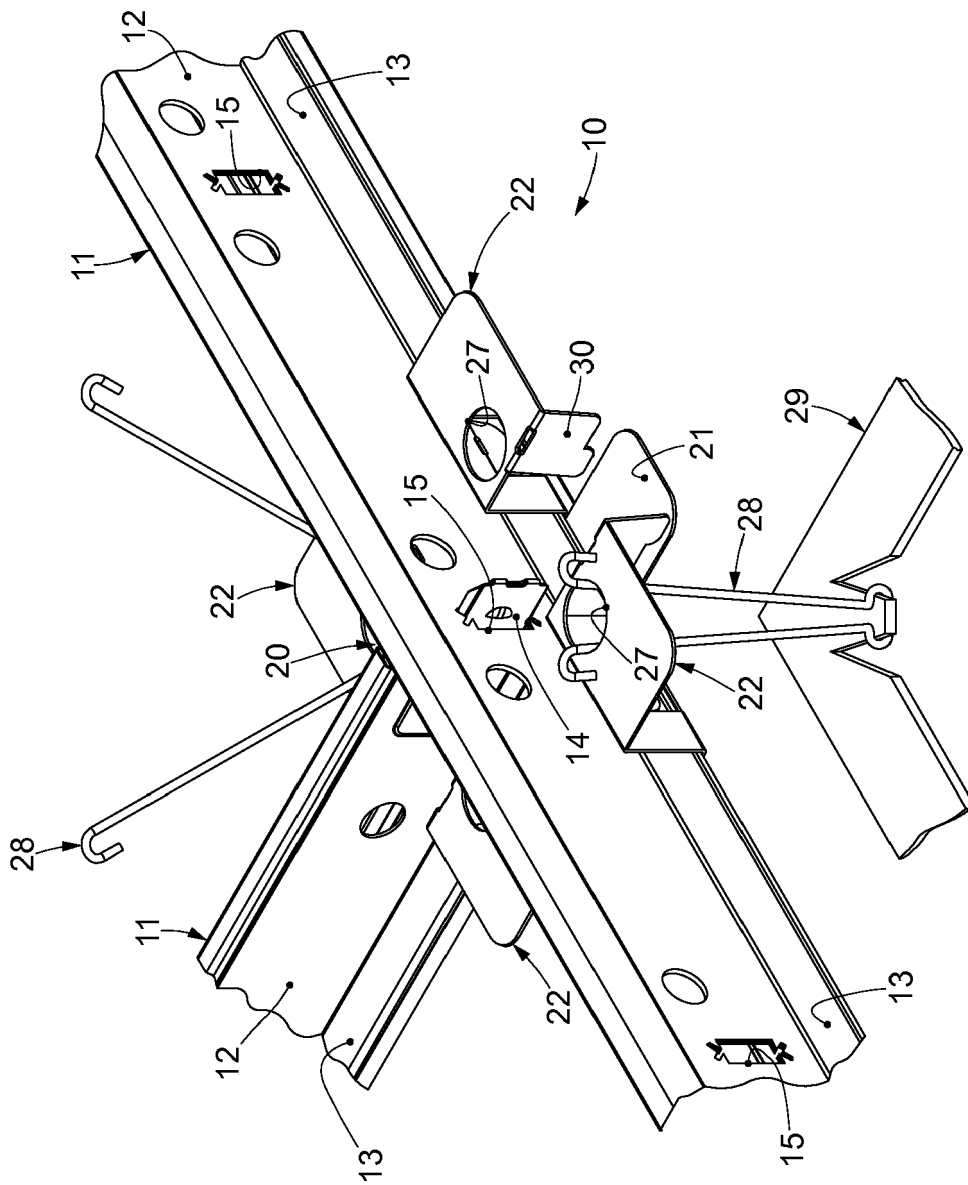
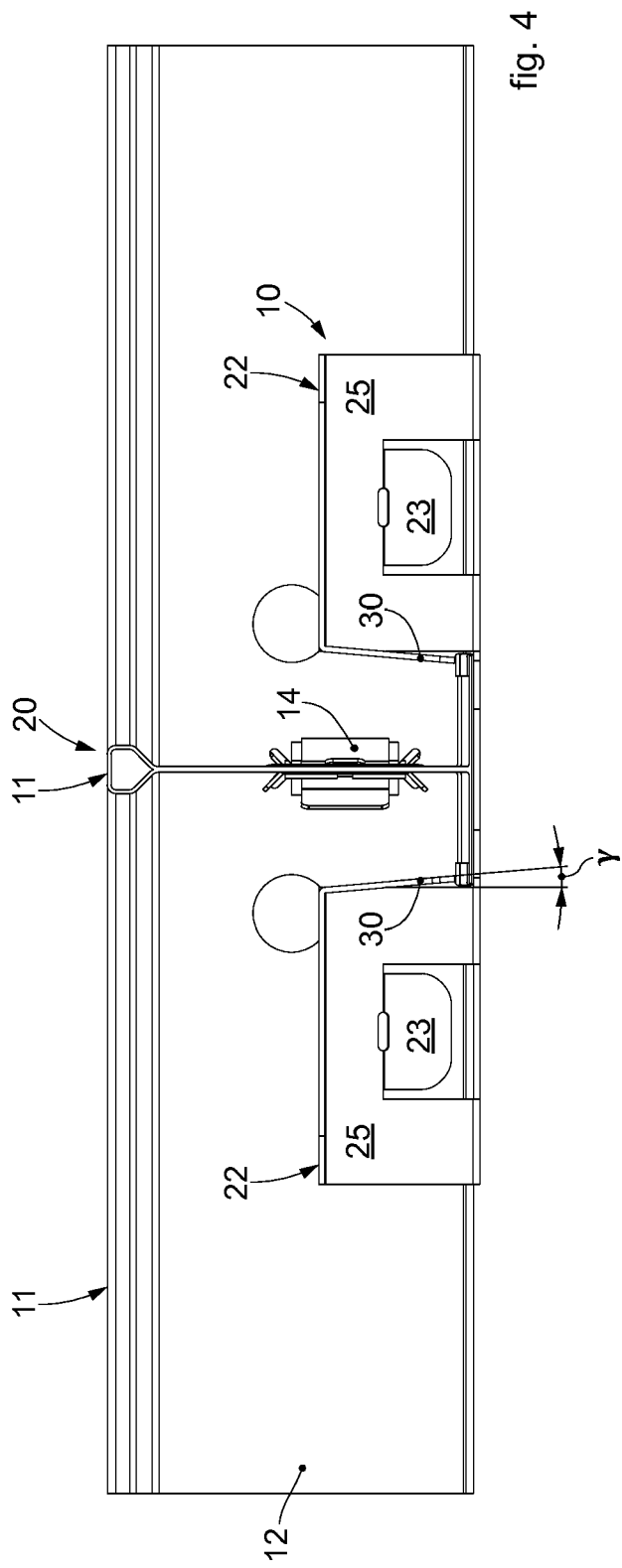
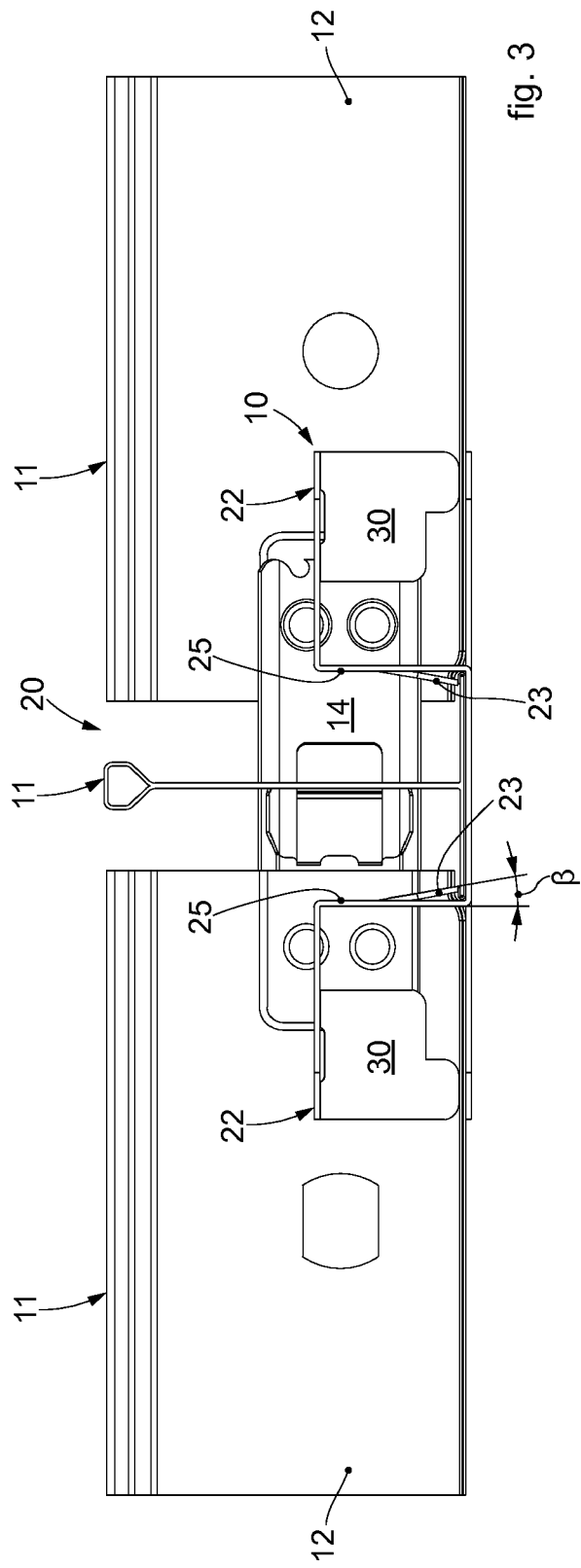
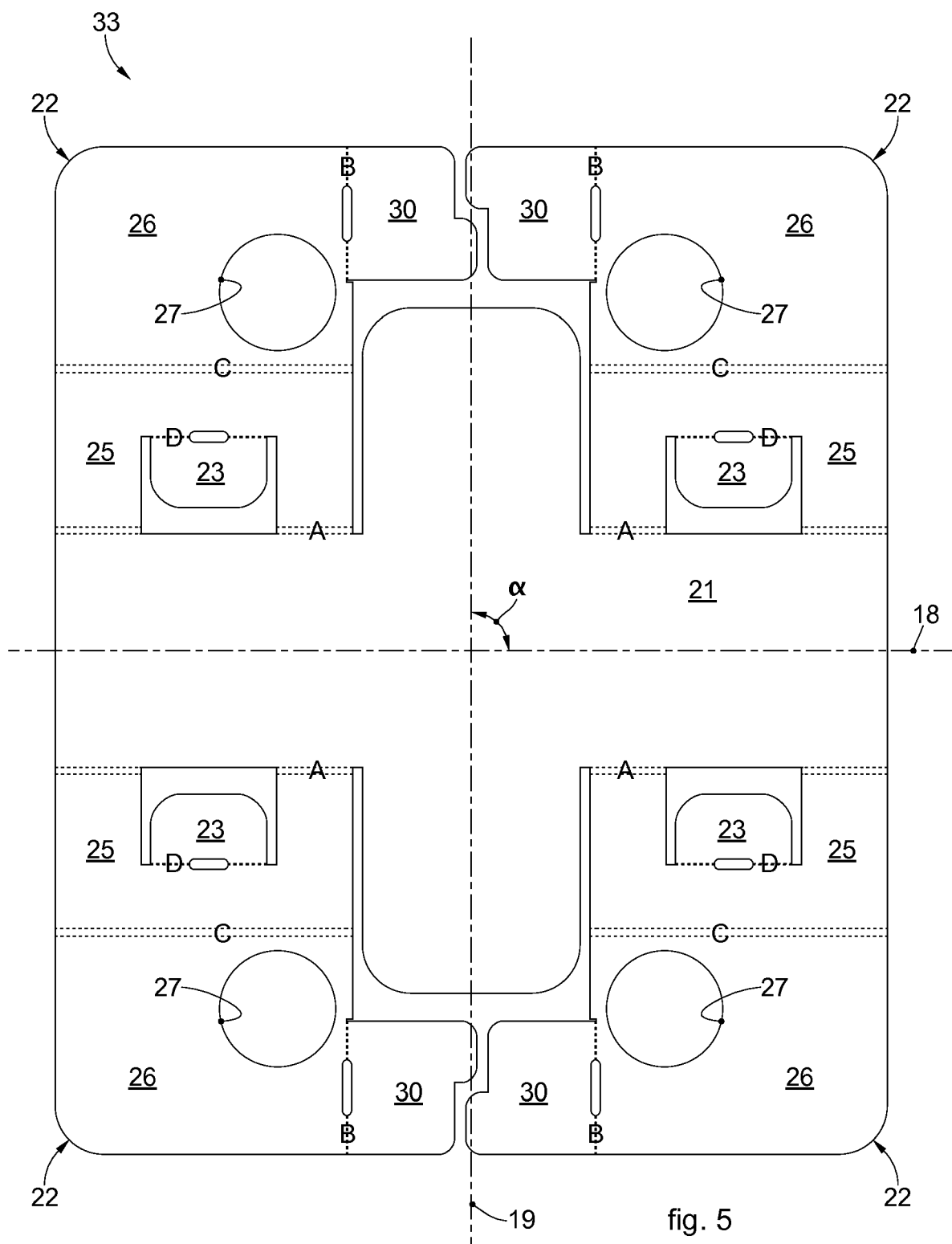


fig. 2







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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 27 February 2018	Examiner Lopes, Claudia
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