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(54) **SUPPORT FOR E.G. ROAD AND TRAFFIC SIGNS**

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SUPPORT POUR, PAR EXEMPLE, DES PANNEAUX DE CIRCULATION ROUTIÈRE

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Description

Field of the Invention

[0001] The present invention relates to a support for e.g. road and traffic signs, where the support comprises at least a first upper surface and a second lower surface, where the support further is divided into at least two individual parts, a first part and a second part with an assembly surface, where the first part and the second parts are complementary to each other, where the first part makes up most of the second lower surface and the second part makes up most of the first upper surface and, where the first part and the second part comprise interlocking means, configured for locking the first part and the second part in relation to each other in a first direction X and a second direction Y.

Background of the Invention

[0002] Before the development of the present invention, it was known to use supports for different objects which may be used as temporary signage or markings, e.g. during roadwork. Likewise it was known to use supports for separation fences, e.g. at construction sites and events.

[0003] Known supports made in one piece typically hold a weight of 25 to 30 kg. Due to the weight and form of the support it then constitutes a stable base.

[0004] US 2007/241255 A discloses an example of a known support. The sign post support, e.g. for road and traffic signs, comprises at least two-parts, a first lower part having a plate shape and a holding member for the sign post. One or more second upper stackable plates are arranged on top of the first lower part. The lowermost of the upper parts is screwed together with the lower part and the holding member extends through a hole in the upper plate member(s) to allow insertion of the sign post.

[0005] One of the disadvantages of the known supports is that they create problems when they need to be handled during setup and relocation. Due to the weight of the support it is simply not ergonomically suitable for one person to lift or transport the supports.

[0006] Another disadvantage of the known supports is the physical size which makes the support unwieldy. Additional aids to handle and transport the supports are thus necessary.

[0007] From AU 200810899 A4 a support is known, which comprises a first part and a second part complementary to each other, and where a pin fits in a hole, holding the support in a first direction X and a second direction Y. The support, which is intended for fences, is assembled just by putting one part on top of another, where holding means in terms of pins and holes will keep the parts together. The support does not comprise interlocking means so if it is hit by a car and tips over it will disassemble.

Object of the Invention

[0008] The object of this invention is therefore to provide a support of the type mentioned in the introduction which does not create problems when it needs to be handled during setup and relocation and, hence, where the supports are better than prior-art technology.

[0009] It is a further object of the invention to provide a support which is more handy and manageable by dividing the required weight of the support into at least two parts. By doing so there is no longer a need for cumbersome and time-consuming lifting aids and transport solutions which previously had to be put into service.

[0010] Further objects of the invention are to provide a support which is shatterproof even if hit by a vehicle, and even though the support is handy it cannot be separated by accident, thus avoiding any further shatterproof risk.

[0011] It is also an object of the invention to be able to lock and secure the support in at least two directions X, Y or even in three directions X, Y, Z.

Description of the Invention

[0012] According to a first aspect of the invention, the above object is achieved with a support of the type mentioned in the introduction, for e.g. road and traffic signs, where the support comprises at least a first upper surface and a second lower surface, where the support further is divided into at least two individual parts, a first part and a second part with an assembly surface, where the first part and the second parts are complementary to each other, where the first part makes up most of the second lower surface and the second part makes up most of the first upper surface and, where the first part and the second part comprise interlocking means, configured for locking the first part and the second part in relation to each other in a first direction X and a second direction Y, where each of the first and second parts comprise first interlocking means which first interlocking means comprise at least a male element and at least a corresponding female element, which male and female parts extend substantially parallel with the first upper and the second lower surfaces, configured for locking the support parts relative to each other in the first direction X, and, where the interlocking means also comprise second interlocking means which constitute hook elements along the assembly surface, where the free end of the first part's hook element is complementary to an intermediate part of the hook element on the second part and where the free end of the second part's hook element is complementary to an intermediate part of the first part's hook element, where the hook element is made by means of the free ends being thicker than the intermediate parts of the hook elements and whereby the hook elements are configured for locking the first part and the second part relative to each other in the second direction Y and that third interlocking means comprises a dowel arranged in each of

the female parts of the second support part and an aperture arranged in each of the corresponding male parts of the first support part, and that said dowels and apertures are configured for locking the support parts relative to each other in a third direction Z.

[0013] This makes it possible, with at least two parts, to make a functional support which is suitable to act as a solid and robust support for objects which may be used for temporary signage or markings.

[0014] It is further possible to construct a first part and a second part, where the two parts are designed to fit together. Being at least two-parted the support is also easier to handle than a one-parted support with the same weight, as the two-parted support can be handled one part at a time. Handling the parts one after the other therefore makes the support more user-friendly to handle, as the personnel who have to move and handle the supports are now able to handle a lower weight at a time, and still comply with known rules and regulations concerning traffic regulations.

[0015] In a preferred embodiment the support is rectangular or a parallelogram in shape, having at least a first surface and a second surface, a first side and a second side, a first end and a second end. In another embodiment the support is circular or oval in shape having at least a first surface and a second surface. In a third embodiment the support is square, rhombus or trapezium in shape having at least a first surface and a second surface, a first side, a second side, a third side and a fourth side.

[0016] This also makes it possible, with the interlocking means, to lock and hold the two parts together when they are in mesh. When the first part and the second part are locked together the support is thus locked in a first direction X and a second direction Y and a third direction Z.

[0017] When at least one of the two parts comprise at least one male element or female element which is able to mesh with a corresponding female element or male element at the other part, it is possible to lock the support in the first direction X. The female elements could be e.g. holes, apertures, missing parts or openings in the support with concave shape, whereas the male elements could be e.g. pins, sticks or other devices with convex shape.

[0018] When at least one of the two parts comprise at least one hook element, which is able to mesh with a corresponding or even equivalent hook element at the other part, the support is thus locked in a second direction Y.

[0019] When at least one male element or female element, which is able to mesh with a corresponding female element or male element at the other part, thus lock the support in the first direction X at the free end of one part and when at least one male element or female element, which is able to mesh with a corresponding female element or male element at the other part, thus lock the support in the first direction X at the free end of the one part in between comprise at least one hook element which is able to mesh with a corresponding or even equivalent hook element at the other part, the support which is thus locked in a second direction Y, then the support is locked and secured in the directions X and Y.

[0020] This also makes it possible to have a slanted assembly surface between the two parts. The parts are designed to fit together, so that the two parts easily and freely slide together when one part is placed interacting with the other part.

[0021] The support is in fact locked and secured in all the directions X, Y and Z, when the support is moved in a straight line, being a linear movement. When the support is placed on a surface and the second part of the support is moved as part of a rotation around the X-axis, the support is able to be opened and the parts thus separated.

[0022] In a simpler embodiment of the support, the interlocking means also comprise hook elements along the assembly surface where the free end of the first part is complementary to an intermediate part of the second part and where the free end of the second part is complementary with an intermediate part of the first part, where there is no difference in the thickness between the free ends and the intermediate parts of the first part and second part, respectively. The first part and the second part do not have to have the same thickness.

[0023] In a second aspect, the present invention also relates to a support for e.g. road and traffic signs, where the first part and the second part of the support each further comprise first carry- and handling means.

[0024] This makes it possible to carry the support more easily for the personnel who handle the supports. Furthermore, the weight of the first part and the second part is less than the weight of the total support. That means that the personnel are exposed to a lower load by using the carry- and handling means of the individual part.

[0025] In a preferred embodiment the carry- and handling means are at the first part and/or the second part in the form of a handlebar. Preferably the handlebar is placed at a side of at least one of the parts. In order to facilitate the handling of each part they both have an ergonomic handle, which is to facilitate the transportation of the part in vertical position.

[0026] In another preferred embodiment the carry- and handling means are recess formed underneath at least one of the two parts. The recess makes it possible to facilitate the handling of the part when the part is in a horizontal position.

[0027] In yet another preferred embodiment the support further comprises carry- and handling means accessible from the third side and the second surface as well as from the fourth side and the second surface. The carry- and handling means, for example in the form of apertures, further makes it possible to facilitate the handling of the part or the whole support, when the part is in a horizontal position. The carry- and handling means could be used for manual handling as well as handling by means of a tool, a special carriage, special vehicle, etc.

[0028] In a third aspect, the present invention also re-

lates to a support for e.g. road and traffic signs, where the support comprises stackable means.

[0029] This makes it possible to stack two, three or several supports on top of other supports.

[0030] In a preferred embodiment the support is provided with stackable portions provided at the first surface and stackable portions provided at the second surface. It is thus possible, with enough stackable means and in a size suitable to the size and weight of the support, to have a stable solution which enables less space when stored or transported.

[0031] In a fourth aspect, the present invention also relates to a support for e.g. road and traffic signs, where the stackable means are arranged at the first upper surface and the second lower surface and that the stackable means comprise male portions and female portions , respectively.

[0032] This makes it possible to stack several supports on top of each other. In a preferred embodiment the support is provided with raised portions, male portions, at the first surface. The male portions fit the lowered portions, the female portions, provided at the second surface. In another preferred embodiment the support is provided with raised portions, male portions, at the second surface. The male portions fit the lowered portions, the female portions, provided at the first surface. In yet another preferred embodiment the support is provided with male portions and female portions at the second surface. The male portions then fit the female portions and the female portions then fit the male portions provided at the first surface.

[0033] It is also possible to have two or several supports stacked on top of each other, thus raising a signpost from the ground or keeping a larger and heavier signpost stable due to the larger weight of the supports used.

[0034] In a fifth aspect, the present invention also relates to a support for e.g. road and traffic signs, where the second surface further comprises a number of male contact portions.

[0035] This makes it possible to have a stable positioning of the support as the support is more steadily placed at the ground with male contact portions at the second surface. These male contact portions allow for placement on uneven or irregular ground without impact on the stability of the support.

[0036] In a sixth aspect, the present invention also relates to a support for e.g. road and traffic signs, where the support comprises at least one aperture configured for receipt of posts for e.g. road and traffic signs, where the at least one aperture extends from the first surface towards the second surface.

[0037] This makes it possible to hold e.g. a signpost fixed and stable in a given position. In a preferred embodiment the support is provided with a variety of apertures with different dimensions. Different dimensions of apertures are thus supplementing each other and making the use of the support more flexible.

[0038] It further makes it possible, when e.g. a post is inserted into at least one aperture, to lock and secure the support in all three directions, the first direction X, the second direction Y and the third direction Z. When e.g. a post is inserted into an aperture, the support is locked and secured in all directions X, Y and Z, not only when the support is moved in a straight line, being a linear movement, but also when the second part of the support is moved as part of a rotation around the X-axis. With this option it is enough to have interlocking means incorporated in the support configured for locking the support in a first direction X and a second direction Y, since the post makes up the locking in the third direction Z.

[0039] In a preferred embodiment the apertures are acting as drain holes, which makes it possible to drain water from the support and hence to avoid damages of the support which may occur due to frost, when the support is used in cold environments. In a further embodiment the drain apertures are configured to drain water away from the assembly surface between the two parts, thereby also minimizing the risk of them sticking together at temperatures below 0 degree Celsius.

[0040] In a seventh aspect, the present invention also relates to a support for e.g. road and traffic signs, where at least one aperture is substantially perpendicular to the second surface.

[0041] This makes it possible, when the second surface is substantially horizontal, to keep the signpost substantially vertical. With more apertures with various sizes and geometries, the use of the support becomes very flexible. It will even be possible to use the support as a support for more than one signpost at a time if that is needed.

[0042] In an eighth aspect, the present invention also relates to a support for e.g. road and traffic signs, where the at least one aperture extends through the support.

[0043] This makes it possible to drain rain and/or snow from the support apertures and thereby avoid damages to the support which may occur due to frost, when the support is used in cold environments.

[0044] In a ninth aspect, the present invention also relates to a support for e.g. road and traffic signs, where the support at least further comprises a first end side, where the first side is at least partly slanted from an outer position at the second surface and in the direction towards an inner position of the first surface.

[0045] This makes it possible, with the slanting that makes the first surface smaller than the second surface, to minimize the impact from vehicles hitting the support. The main part of the force from a possible collision is then led into the ground where it increases the horizontal reaction force (friction force between the support and the ground). This force maintains the support in its position instead of the support being moved horizontally. In a preferred embodiment and for securing the support, a number of holes are prepared for mounting e.g. by screws.

[0046] In one embodiment the support has at least a first surface and a second surface, a first side or a first

end and a second side or a second end, a third side and a fourth side.

[0047] In a tenth aspect, the present invention also relates to a support for e.g. road and traffic signs, where at least one aperture in the first part is aligned with an aperture in the second part when the first and second parts are assembled into the support.

[0048] This makes it possible to further secure the interlocking of the two parts. In a preferred embodiment with more apertures with various sizes and geometries, at least some of the apertures are penetrating both parts of the support, thus further ensuring that the two parts are not being separated.

[0049] In an eleventh aspect, the present invention also relates to a support for e.g. road and traffic signs, where the support further comprises at least a hole prepared for mounting and securing the support.

[0050] This makes it possible to further secure the support to the surface e.g. road, pavement, etc. by means of nails, screws, pins, etc., so that the support does not move if slightly pushed or if the surface is ice.

[0051] In a twelfth aspect, the present invention also relates to a support for e.g. road and traffic signs, where the support is shatterproof.

[0052] Many materials are thus available e.g. polymers and composites. On the other hand, ordinary concrete is not an option, as it can shatter and break when hit by a vehicle.

[0053] In a preferred embodiment the assembly surface is divided into zones in order to minimize the assembly surface, which is done for the same reason as the drain aperture in general, this could be holes of any form, shape and dimension.

[0054] In a thirteenth aspect, the present invention also relates to a support for e.g. road and traffic signs, where the first support part further comprises second carry- and handling means arranged between the second lower surface and the third side as well as between the second lower surface and the fourth side.

[0055] This makes it possible to carry and handle the support in one piece e.g. by means of a tool or machine. It also makes it possible and easier to handle and to get a grip at the first part when it is on the ground, etc.

Description of the Drawing

[0056] The invention will be described in further detail below by means of non-limiting embodiments with reference to the drawings, in which:

Fig. 1 shows a perspective view of a support with a traffic sign
Fig. 2 shows a perspective view of a support in one embodiment
Fig. 3 shows a perspective view of a support during assembly in one embodiment
Fig. 4 shows a perspective view of the first part of a support in one embodiment
Fig. 5 shows a perspective view of the first part of a support in one embodiment
Fig. 6 shows a perspective view of the second part of a support in one embodiment
Fig. 7 shows a perspective view of the second part of a support in one embodiment
Fig. 8 shows a perspective view of the first part of a support in one embodiment
Fig. 9 shows a perspective view of the first part of a support in one embodiment

[0057] In the description of the figures, identical or corresponding elements will be designated by the same reference numerals in the various figures. Thus, there will not be given an explanation of all details in connection with each figure / embodiment.

[0058] In the drawings, the following reference numerals have been used for the designations used in the detailed part of the description:

1	Support
2	Traffic sign
3	First surface
4	Second surface
5	First part
6	Second part
7	Carry- and handling means
8	Aperture
9	Stackable means
10	Male portions
11	First side, first end
12	Second side, second end
13	Interlocking means
13a	Aperture
13b	Dowel
14	Female portions
15	Male contact portions
16	Holes
17	Projection
18	Assembly surface
19	Third side
20	Fourth side
21	Carry- and handling means
22	Hook element
23	Free end, first part
24	Intermediate part, second part
25	Free end, second part
26	Intermediate part, first part

Detailed Description of the Invention

[0059] Figure 1 shows a perspective view of a support 1 with a traffic sign 2, where the support 1 acts as a foot for the sign 2 concerned.

[0060] The figure shows the three directions, a first direction X, a second direction Y and a third direction Z.

[0061] Figure 2 shows a perspective view of a support 1 in one embodiment, where the support 1 comprises a

first surface 3 and a second surface 4, and where the support 1 comprises two-parts, a first part 5 and a second part 6, where the first part 5 and the second part 6 are complementary to each other. The figures show that the first part 5 makes up most of the second surface 4 and the second part 6 makes up most of the first surface 3.

[0062] Figure 2 further shows that the first part 5 and the second part 6 each further have carry- and handling means 7. The support 1 shows four apertures 8 configured for receipt of posts for e.g. road and traffic signs, where at least one aperture 8, extends from the first surface 3 towards the second surface 4 and where at least one aperture 8 is substantially perpendicular to the second surface 4 and that the at least one aperture 8 in the first part 5 extends through an aperture 8 in the second part 6 and thus the aperture 8 extends through the support 1.

[0063] When the apertures 8 extend through the support 1 the apertures 8 also become drain apertures 8.

[0064] Figure 2 also shows that the support 1 comprises stackable means 9 and that the stackable means 9 are arranged at the first surface 3 as male portions 10.

[0065] Figure 2 also shows that the support 1 further comprises a first side or first end 11 and a second side or second end 12, where the first side 11 is at least partly slanted from an outer position at the second surface 4 and in the direction towards an inner position of the first surface 3.

[0066] Figure 2 also shows a support with a first side 11 and a second side 12, a third side 19 and a fourth side 20.

[0067] The figure also shows the three directions, a first direction X, a second direction Y and a third direction Z.

[0068] The figures 2-9 also show interlocking means as hook elements 22 along the assembly surface 18, where the free end 23 of the first part 5 is complementary to an intermediate part 24 of the second part 6 and where the free end 25 of the second part is complementary to an intermediate part 26 of the first part 5, where the free ends are thicker than the intermediate parts and where the hook elements 22 are configured for locking the support in the second direction Y. The interlocking means 13, in terms of the apertures 13a and the dowels 13b are configured for locking the support in the third direction Z.

[0069] Figure 3 shows a perspective view of a support 1 during assembly where the first part 5 makes up most of the second surface 4 and the second part 6 makes up most of the first surface 3.

[0070] Figure 4 shows a view from the first surface 3 of the first part 5 of a support 1 in one embodiment, where interlocking means 13 as well as apertures 13a are also shown.

[0071] Figure 4 also shows a number of projections 17 which minimizes the risk of the first part 5 and the second part 6 sticking together at temperatures below 0 degree Celsius. A further function of the projections 17 is that they allow space for sand, small stones, etc. at the assembly surface 18 between the first part 5 and the second part 6 without influencing the interlocking means 13.

[0072] The assembly surface 18 between the free end of the first part 5 is complementary to an intermediate part of the second part 6 and the free end of the second part 6 is complementary to an intermediate part of the first part 5. The assembly surface 18 is thus at various levels and with various steps, configured for locking the support in the second direction Y.

[0073] The shown apertures 8 configured for receipt of posts for e.g. road and traffic signs, are coaxial with the apertures 8 in the second part 6.

[0074] Figure 5 further shows the second surface 4 with stackable means 9 comprising female portions 14 complementary to the male portions 10 at the first surface 3 of the support 1. The figure also shows that the second surface 4 further comprises a number of male contact portions 15.

[0075] Figure 6 shows a perspective view seen from the first surface 3 of the second part 6 of a support 1 in one embodiment, and figure 7 shows a perspective view seen from the second surface 4 of the second part 6 of a support 1 in one embodiment.

[0076] Figures 6 and 7 also show interlocking means 13 as well as dowels 13b. The dowels 13b are intended for insertion at the apertures 13a shown e.g. at figure 4, whereby the support 1 is then locked and secured in all the directions X, Y and Z, when the support 1 is moved in a straight line, being a linear movement. When the support 1 is placed on a surface and the second part 6 of the support 1 is moved as part of a rotation around the X-axis, the support 1 is able to be opened and the first part 5 and the second part 6 are then able to be separated.

[0077] On all figures are a number of holes 16 prepared for mounting and securing the support 1, e.g. by screws.

[0078] Figure 8 and figure 9 shows a perspective view of the first part 5 of a support 1 in one embodiment as previously shown in figure 4 and figure 5, respectively, where the first part 5 further comprises carry- and handling means 21. The carry- and handling means 21 are accessible from the third side 19 and the second surface 4 as well as from the fourth side 20 and the second surface 4.

[0079] The shown variants are not limiting to the scope of the invention but are only examples of how the invention can be practised, as a skilled person in the art will be able to apply the invention in many other ways and in several other variants after reading the present description.

Claims

1. Support (1) for e.g. road and traffic signs, where the support comprises at least a first upper surface (3) and a second lower surface (4), where the support further is divided into at least two individual parts, a

first part (5) and a second part (6) with an assembly surface, where the first part (5) and the second parts (6) are complementary to each other, where the first part (5) makes up most of the second lower surface (4) and the second part (6) makes up most of the first upper surface (3) and, where the first part (5) and the second part (6) comprise interlocking means, configured for locking the first part (5) and the second part (6) in relation to each other in a first direction X and a second direction Y, **characterised in that** each of the first and second parts (5,6) comprise first interlocking means (13) which first interlocking means comprise at least a male element (13') and at least a corresponding female element (13"), which male and female parts (13', 13") extend substantially parallel with the first upper (3) and the second lower (4) surfaces, configured for locking the support parts (5,6) relative to each other in the first direction X, and, where the interlocking means also comprise second interlocking means which constitute hook elements (22) along the assembly surface, where the free end (23) of the first part's (5) hook element (22) is complementary to an intermediate part (24) of the hook element (22) on the second part (6) and where the free end (25) of the second part's (6) hook element (22) is complementary to an intermediate part (26) of the first part's hook element (22), where the hook element (22) is made by means of the free ends (23, 25) being thicker than the intermediate parts (24, 26) of the hook elements (22) and whereby the hook elements (22) are configured for locking the first part (5) and the second part (6) relative to each other in the second direction Y and that third interlocking means comprises a dowel (13b) arranged in each of the female parts (13c) of the second support part (6) and an aperture (13a) arranged in each of the corresponding male parts (13'd) of the first support part (5), and that said dowels and apertures are configured for locking the support parts (5,6) relative to each other in a third direction Z.

2. Support according to claim 1, **characterised in that** the first part (5) and the second part (6) of the support (1) each further comprises first carry- and handling means (7).

3. Support according to any of the claims 1 to 2, **characterised in that** the support (1) comprises stackable means (9).

4. Support according to claim 3, **characterised in that** the stackable means (9) are arranged at the first upper surface (3) and the second lower surface (4) and that the stackable means (9) comprise male portions (10) and female portions (14), respectively.

5. Support according to any of the claims 1 to 4, **characterised in that** the second surface (4) further comprises a number of male contact portions (15).

6. Support according to any of the claims 1 to 5, **characterised in that** the support comprises at least one aperture (8) configured for receipt of posts for e.g. road and traffic signs (2), where the at least one aperture (8) extends from the first surface (3) towards the second surface (4).

7. Support according to claim 6, **characterised in that** at least one aperture (8) is substantially perpendicular to the second surface (4).

8. Support according to any of the claims 6 to 7, **characterised in that** the at least one aperture (8) extends through the support (1).

9. Support according to any of the claims 1 to 8, **characterised in that** the support at least further comprises a first end side (11), where the first side is at least partly slanted from an outer position at the second surface (4) and in the direction towards an inner position of the first surface (3).

10. Support according to claim 8, **characterised in that** at least one aperture (8) in the first part (5) is aligned with an aperture (8) in the second part (6) when the first (5) and second (6) parts are assembled into the support (1).

11. Support according to any of the claims 1 to 10, **characterised in that** the support further comprises at least a hole (16) prepared for mounting and securing the support.

12. Support according to any of the claims 1 to 11, **characterised in that** the support is shatterproof.

13. Support according to any of the claims 1 to 12, **characterised in that** the first support part (5) further comprises second carry- and handling means (21) arranged between the second lower surface and the third side (19) as well as between the second lower surface and the fourth side (20).

Patentansprüche

1. Träger (1), z. B. für Straßen- und Verkehrsschilder, wobei der Träger zumindest eine erste obere Fläche (3) und eine zweite untere Fläche (4) umfasst, wobei der Träger ferner in zumindest zwei einzelne Teile geteilt ist, einen ersten Teil (5) und einen zweiten Teil (6) mit einer Montagefläche, wobei der erste Teil (5) und der zweite Teil (6) komplementär zueinander sind, wobei der erste Teil (5) den Großteil der zweiten unteren Fläche (4) bildet und der zweite Teil (6) den

Großteil der ersten oberen Fläche (3) bildet und wobei der erste Teil (5) und der zweite Teil (6) Verriegelungsmittel umfassen, die konfiguriert sind, um den ersten Teil (5) und den zweiten Teil (6) in Bezug aufeinander in einer ersten Richtung X und einer zweiten Richtung Y zu verriegeln, **dadurch gekennzeichnet, dass** jeder von dem ersten und zweiten Teil (5,6) erste Verriegelungsmittel (13) umfasst, wobei die ersten Verriegelungsmittel zumindest ein männliches Element (13') und zumindest ein entsprechendes weibliches Element (13") umfassen, wobei sich die männlichen und weiblichen Teile (13', 13") im Wesentlichen parallel zu der ersten oberen (3) und der zweiten unteren (4) Fläche erstrecken, konfiguriert, um die Trägerteile (5,6) relativ zueinander in der ersten Richtung X zu verriegeln, und wobei die Verriegelungsmittel auch zweite Verriegelungsmittel umfassen, die Hakenelemente (22) entlang der Montagefläche darstellen, wobei das freie Ende (23) des Hakenelements (22) des ersten Teils (5) komplementär zu einem Zwischenteil (24) des Hakenelements (22) an dem zweiten Teil (6) ist und wobei das freie Ende (25) des Hakenelements (22) des zweiten Teils (6) komplementär zu einem Zwischenteil (26) des Hakenelements (22) des ersten Teils ist, wobei das Hakenelement (22) durch die freien Enden (23, 25) hergestellt ist, die dicker als die Zwischenteile (24, 26) der Hakenelemente (22) sind und wobei die Hakenelemente (22) konfiguriert sind, um den ersten Teil (5) und den zweiten Teil (6) relativ zueinander in der zweiten Richtung Y zu verriegeln, und dass dritte Verriegelungselemente einen Dübel (13b), der in jedem der weiblichen Teile (13c) des zweiten Trägerteils (6) angeordnet ist, und eine Öffnung (13a) umfassen, die in jedem der entsprechenden männlichen Teile (13'd) des ersten Trägerteils (5) angeordnet ist, und dass die Dübel und Öffnungen konfiguriert sind, um die Trägerteile (5,6) relativ zueinander in einer dritten Richtung Z zu verriegeln.

2. Träger nach Anspruch 1, **dadurch gekennzeichnet, dass** der erste Teil (5) und der zweite Teil (6) des Trägers (1) jeweils ferner erste Trage- und Handhabungsmittel (7) umfassen.

3. Träger nach einem der Ansprüche 1 bis 2, **dadurch gekennzeichnet, dass** der Träger (1) stapelbare Mittel (9) umfasst.

4. Träger nach Anspruch 3, **dadurch gekennzeichnet, dass** die stapelbaren Mittel (9) an der ersten oberen Fläche (3) und der zweiten unteren Fläche (4) angeordnet sind und dass die stapelbaren Mittel (9) jeweils männliche Abschnitte (10) und weibliche Abschnitte (14) umfassen.

5. Träger nach einem der Ansprüche 1 bis 4, **dadurch gekennzeichnet, dass** die zweite Fläche (4) ferner eine Anzahl an männlichen Kontaktabschnitten (15) umfasst.

6. Träger nach einem der Ansprüche 1 bis 5, **dadurch gekennzeichnet, dass** der Träger zumindest eine Öffnung (8) umfasst, die zur Aufnahme von Pfosten konfiguriert ist, z. B. für Straßen- und Verkehrsschilder (2), wobei sich die zumindest eine Öffnung (8) von der ersten Fläche (3) zu der zweiten Fläche (4) erstreckt.

7. Träger nach Anspruch 6, **dadurch gekennzeichnet, dass** zumindest eine Öffnung (8) im Wesentlichen senkrecht zu der zweiten Fläche (4) ist.

8. Träger nach einem der Ansprüche 6 bis 7, **dadurch gekennzeichnet, dass** sich die zumindest eine Öffnung (8) durch den Träger (1) erstreckt.

9. Träger nach einem der Ansprüche 1 bis 8, **dadurch gekennzeichnet, dass** der Träger zumindest ferner eine erste Endseite (11) umfasst, wobei die erste Seite von einer äußeren Position an der zweiten Fläche (4) und in der Richtung zu einer inneren Position der ersten Fläche (3) zumindest teilweise geneigt ist.

10. Träger nach Anspruch 8, **dadurch gekennzeichnet, dass** zumindest eine Öffnung (8) in dem ersten Teil (5) auf eine Öffnung (8) in dem zweiten Teil (6) ausgerichtet ist, wenn der erste (5) und zweite (6) Teil zu dem Träger (1) zusammengebaut sind.

11. Träger nach einem der Ansprüche 1 bis 10, **dadurch gekennzeichnet, dass** der Träger ferner zumindest ein Loch (16) umfasst, das zum Montieren und Befestigen des Trägers vorbereitet ist.

12. Träger nach einem der Ansprüche 1 bis 11, **dadurch gekennzeichnet, dass** der Träger bruchsicher ist.

13. Träger nach einem der Ansprüche 1 bis 12, **dadurch gekennzeichnet, dass** der erste Trägerteil (5) ferner zweite Trage- und Handhabungsmittel (21) umfasst, die zwischen der zweiten unteren Fläche und der dritten Seite (19) sowie zwischen der zweiten unteren Fläche und der vierten Seite (20) angeordnet sind.

Revendications

1. Support (1) pour, par exemple, des panneaux de circulation routière et de signalisation, dans lequel le support comprend au moins une première surface supérieure (3) et une seconde surface inférieure (4), dans lequel le support est en outre divisé en au moins deux parties individuelles, une première partie (5) et

une seconde partie (6) ayant une surface d'assemblage, dans lequel la première partie (5) et la seconde partie (6) sont complémentaires l'une à l'autre, dans lequel la première partie (5) constitue principalement la seconde surface inférieure (4) et la seconde partie (6) constitue principalement la première surface supérieure (3) et, dans lequel la première partie (5) et la seconde partie (6) comprennent des moyens de verrouillage, conçus pour verrouiller la première partie (5) et la seconde partie (6) l'une par rapport à l'autre dans une première direction X et une deuxième direction Y, **caractérisé en ce que** chacune des première et seconde parties (5, 6) comprend des premiers moyens de verrouillage (13) lesquels premiers moyens de verrouillage comprennent au moins un élément mâle (13') et au moins un élément femelle correspondant (13"), lesquelles parties mâle et femelle (13', 13") s'étendent sensiblement parallèlement à la première surface supérieure (3) et à la seconde surface inférieure (4), configurés pour verrouiller les parties de support (5, 6) l'une par rapport à l'autre dans la première direction X, et, dans lequel les moyens de verrouillage comprennent également des deuxièmes moyens de verrouillage qui constituent des éléments de crochet (22) le long de la surface d'assemblage, dans lequel l'extrémité libre (23) de l'élément de crochet (22) de la première partie (5) est complémentaire à une partie intermédiaire (24) de l'élément de crochet (22) sur la seconde partie (6) et dans lequel l'extrémité libre (25) de l'élément de crochet (22) de la seconde partie (6) est complémentaire à une partie intermédiaire (26) de l'élément de crochet (22) de la première partie, dans lequel l'élément de crochet (22) est fabriqué au moyen des extrémités libres (23, 25) qui sont plus épaisses que les parties intermédiaires (24, 26) des éléments de crochet (22) et moyennant quoi les éléments de crochet (22) sont configurés pour verrouiller la première partie (5) et la seconde partie (6) l'une par rapport à l'autre dans la deuxième direction Y et **en ce que** des troisièmes moyens de verrouillage comprennent un goujon (13b) agencé dans chacune des parties femelles (13c) de la seconde partie de support (6) et une ouverture (13a) agencée dans chacune des parties mâles correspondantes (13'd) de la première partie de support (5), et **en ce que** lesdits goujons et ouvertures sont configurés pour verrouiller les parties de support (5, 6) l'une par rapport à l'autre dans une troisième direction Z.

2. Support selon la revendication 1, **caractérisé en ce que** la première partie (5) et la seconde partie (6) du support (1) comprennent chacune en outre des premiers moyens de transport et de manipulation (7).

3. Support selon l'une quelconque des revendications 1 à 2, **caractérisé en ce que** le support (1) comprend des moyens empilables (9).

4. Support selon la revendication 3, **caractérisé en ce que** les moyens empilables (9) sont agencés au niveau de la première surface supérieure (3) et de la seconde surface inférieure (4) et **en ce que** les moyens empilables (9) comprennent des parties mâles (10) et des parties femelles (14), respectivement.

5. Support selon l'une quelconque des revendications 1 à 4, **caractérisé en ce que** la seconde surface (4) comprend en outre un certain nombre de parties de contact mâles (15).

6. Support selon l'une quelconque des revendications 1 à 5, **caractérisé en ce que** le support comprend au moins une ouverture (8) configurée pour la réception de poteaux pour, par exemple, des panneaux de circulation routière et de signalisation (2), dans lequel l'au moins une ouverture (8) s'étend de la première surface (3) à la seconde surface (4).

7. Support selon la revendication 6, **caractérisé en ce que** l'au moins une ouverture (8) est sensiblement perpendiculaire à la seconde surface (4).

8. Support selon l'une quelconque des revendications 6 à 7, **caractérisé en ce que** l'au moins une ouverture (8) s'étend à travers le support (1).

9. Support selon l'une quelconque des revendications 1 à 8, **caractérisé en ce que** le support comprend au moins en outre un premier côté d'extrémité (11), dans lequel le premier côté est au moins partiellement incliné par rapport à une position externe au niveau de la seconde surface (4) et dans la direction orientée vers une position interne de la première surface (3).

10. Support selon la revendication 8, **caractérisé en ce qu'**au moins une ouverture (8) dans la première partie (5) est alignée avec une ouverture (8) dans la seconde partie (6) lorsque les première (5) et seconde (6) parties sont assemblés dans le support (1).

11. Support selon l'une quelconque des revendications 1 à 10, **caractérisé en ce que** le support comprend en outre au moins un trou (16) préparé pour monter et fixer le support.

12. Support selon l'une quelconque des revendications 1 à 11, **caractérisé en ce que** le support est incassable.

13. Support selon l'une quelconque des revendications 1 à 12, **caractérisé en ce que** la première partie de support (5) comprend en outre des seconds moyens de transport et de manipulation (21) agencés entre

la seconde surface inférieure et le troisième côté (19) ainsi qu'entre la seconde surface inférieure et le quatrième côté (20).

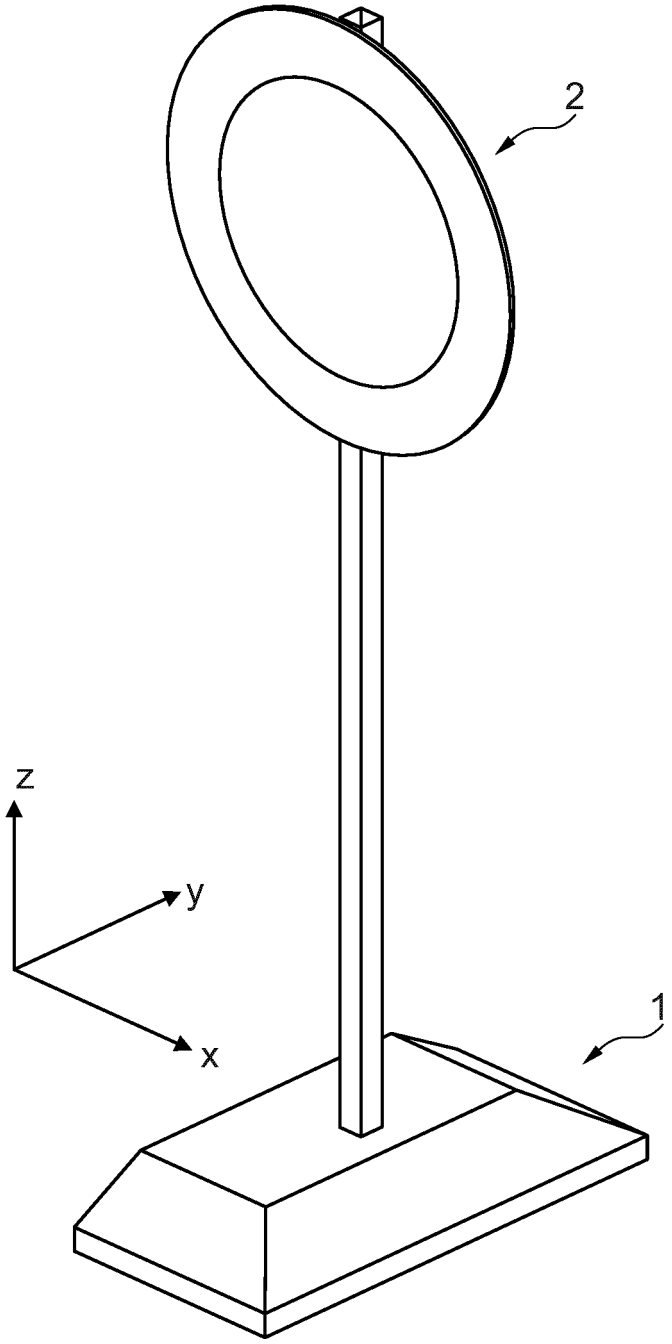
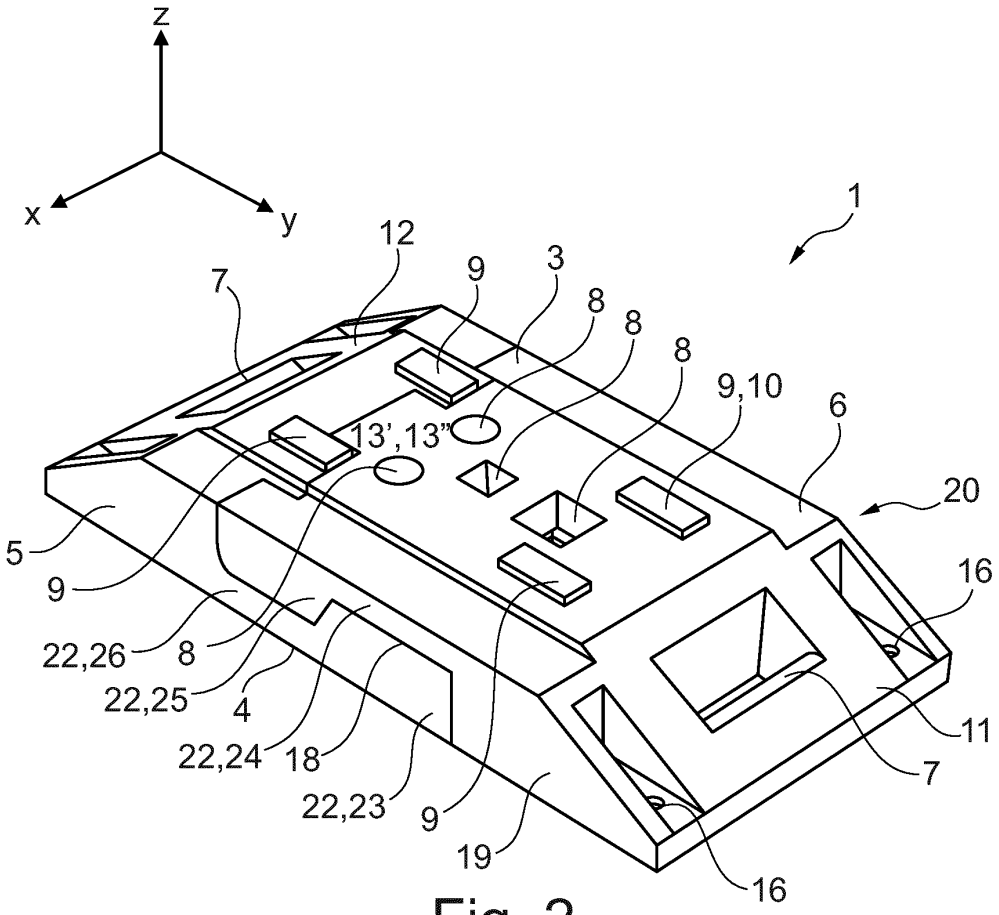


Fig. 1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x
y
1
12
9
3
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13',13"
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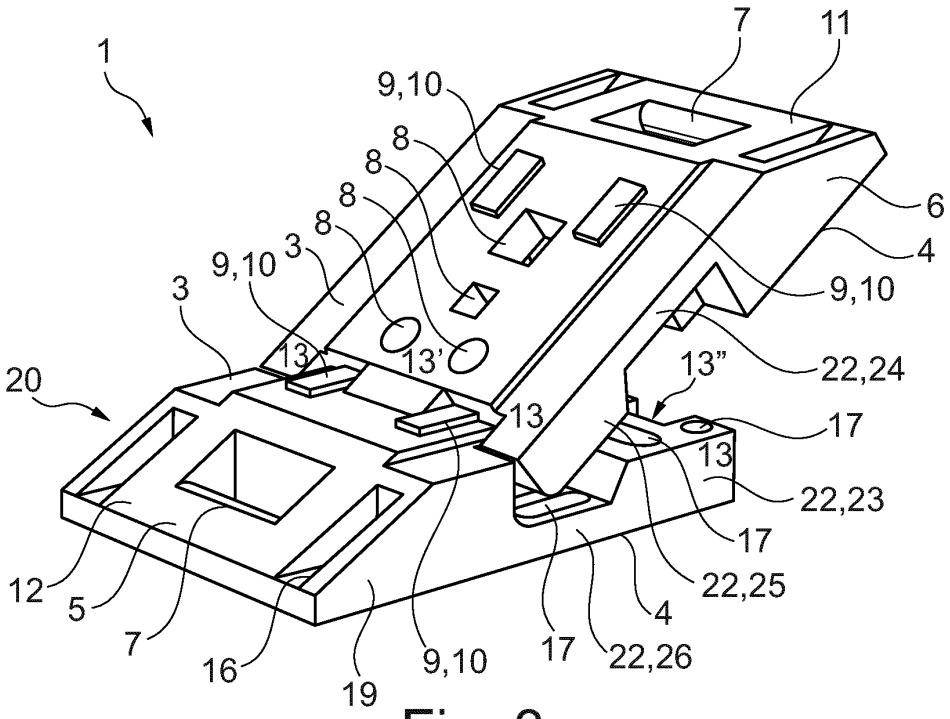
Fig. 2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13"
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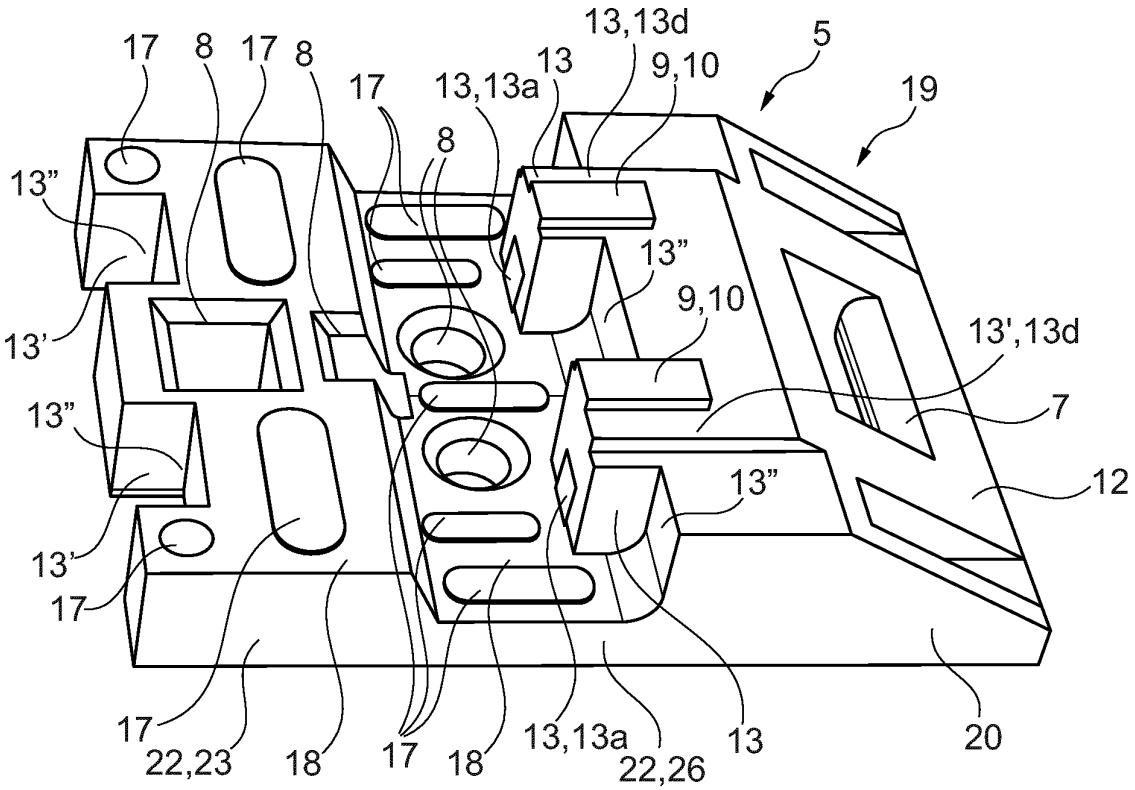
Fig. 3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13',13d
13"
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13"
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13,13a
22,26
13
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Fig. 4

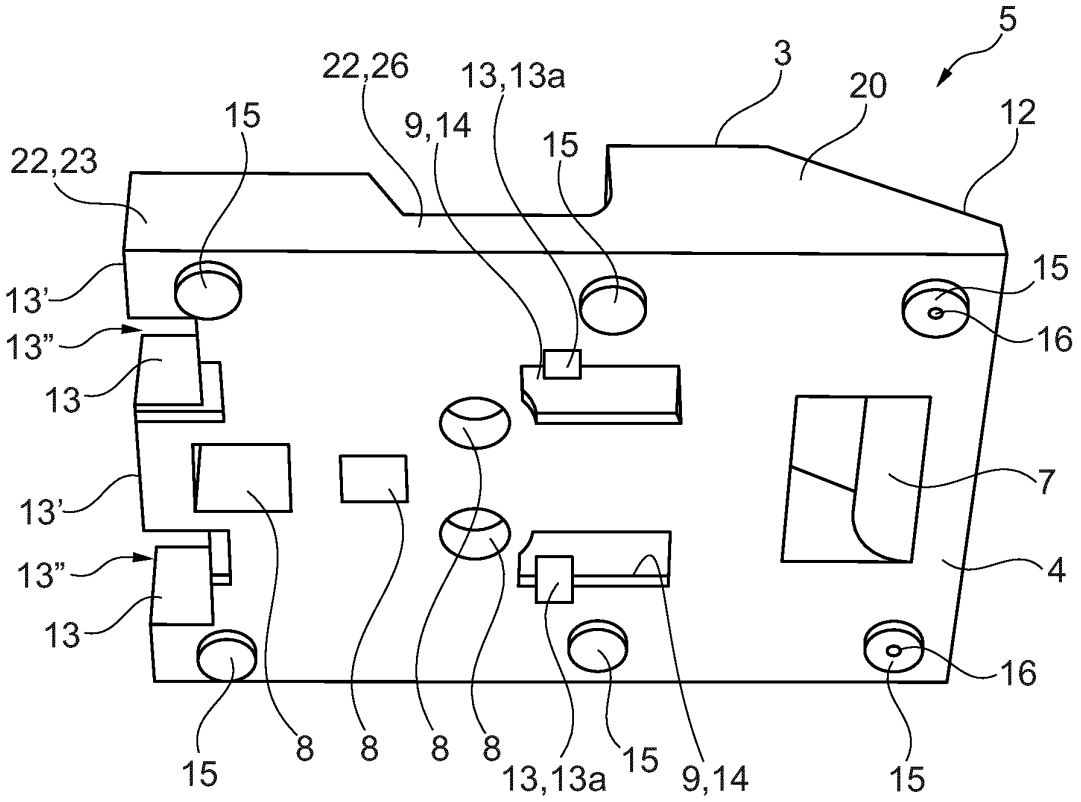
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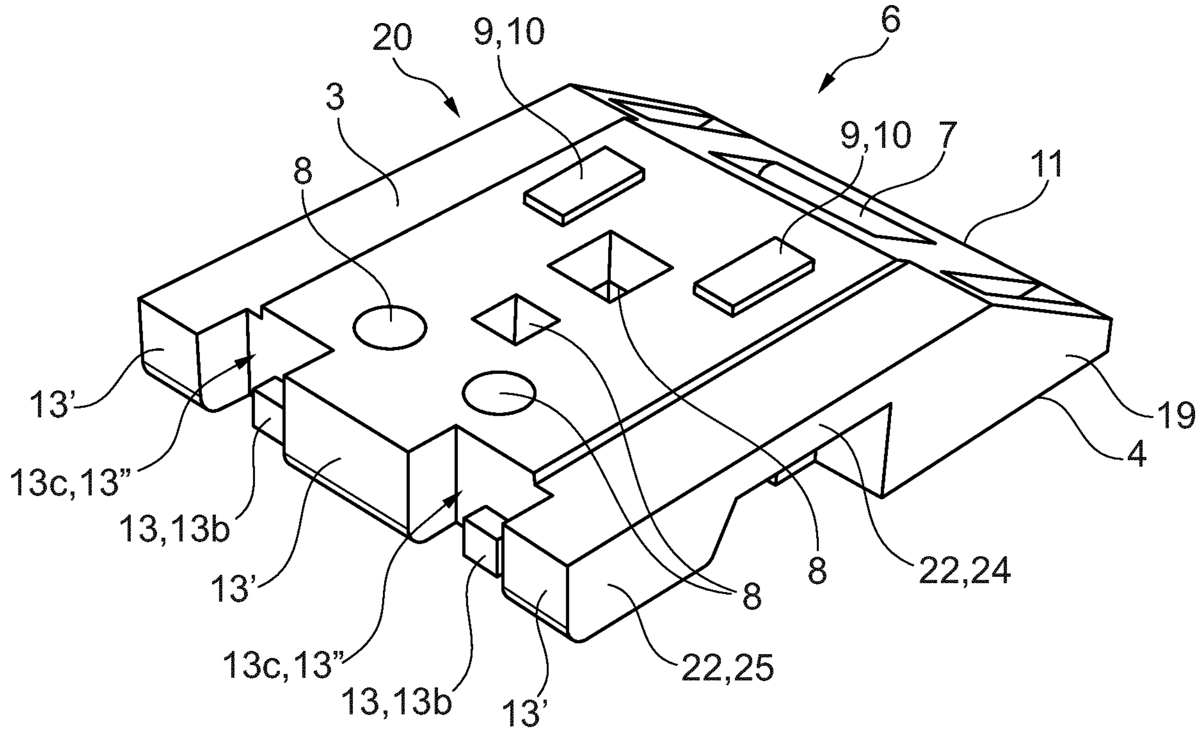
Fig. 5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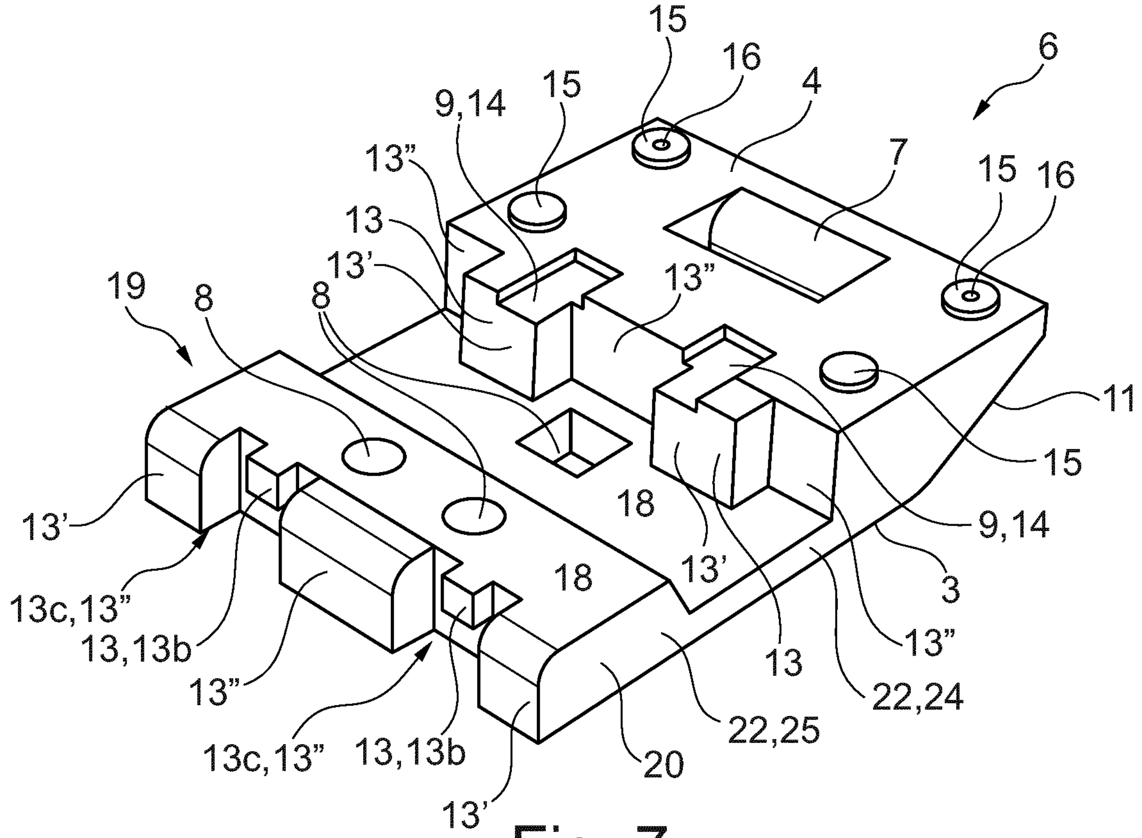
13,13b
13'

Fig. 6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9,14
18
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22,24
13"
13c,13"
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22,25
20
13'

Fig. 7

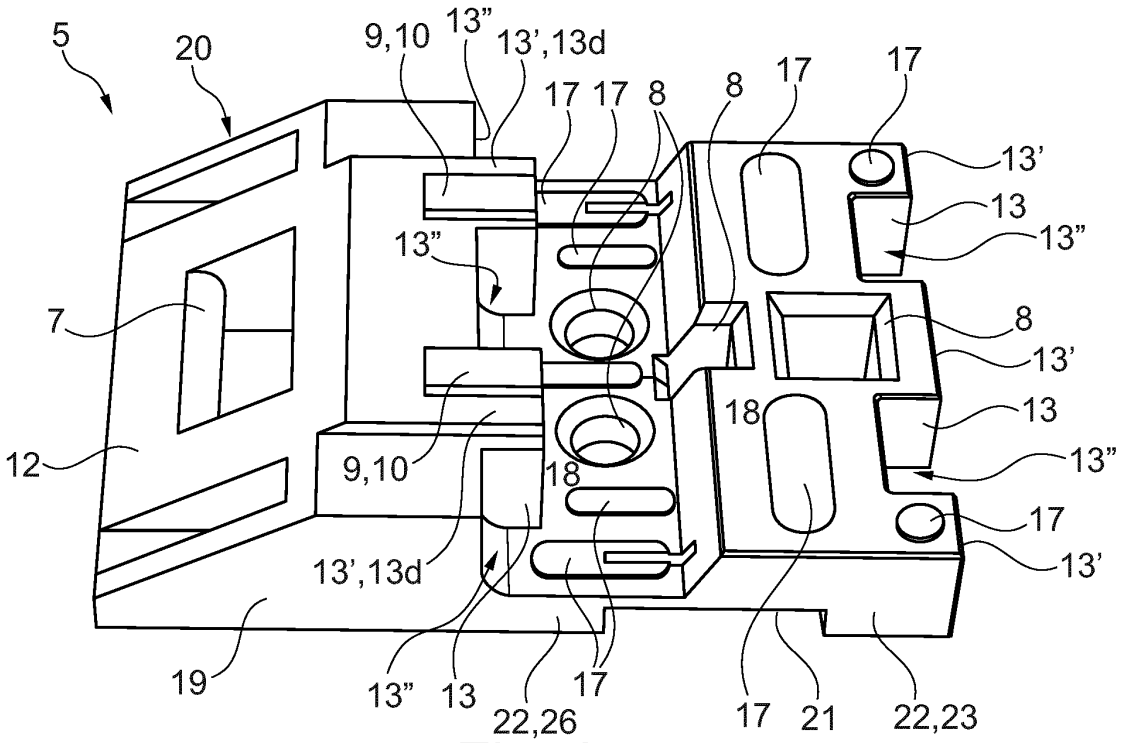
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Fig. 8

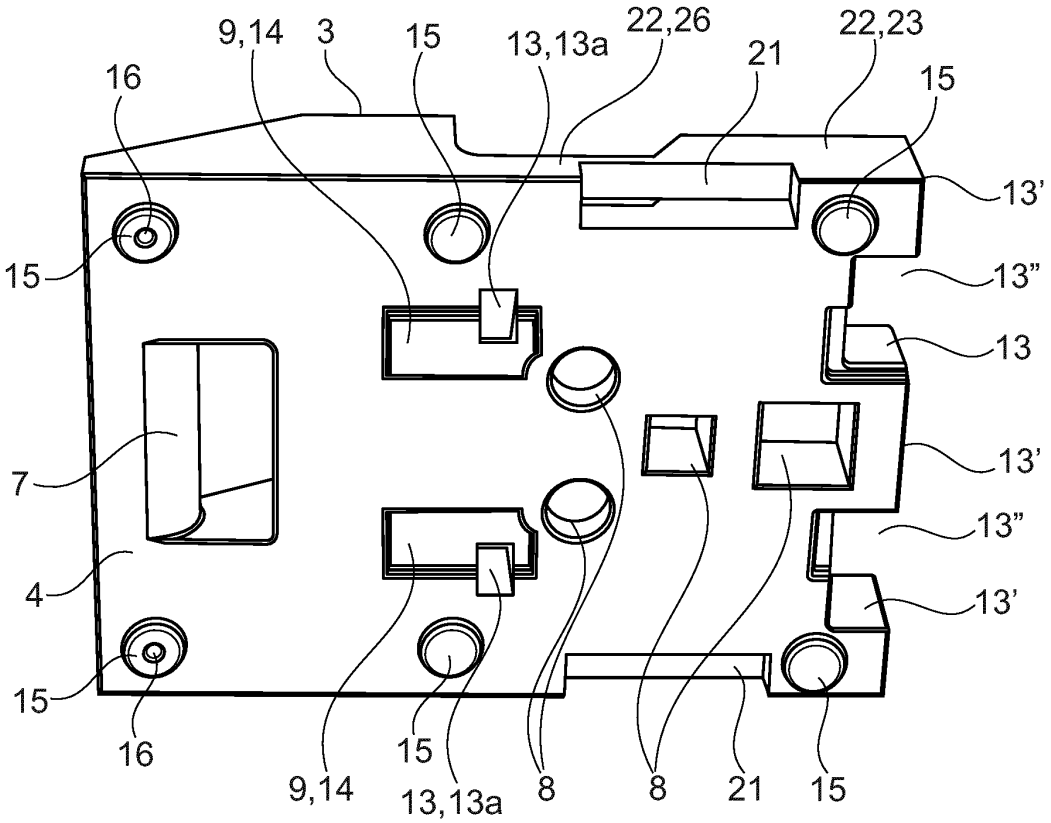
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Fig. 9

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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