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(54) **SUPPORT FOR WIRE SHELVES FOR POINTS OF SALE, FOR THE SUPPORT OF WIRE FRONTS, WIRE DIVIDERS, AND LED BARS**

(57) Support (9, 59) comprising a recess (15) for the housing and supporting of an optional LED bar (8) **characterized in that** it comprises at least a terminal (20, 19, 21) of elastic fitting and at least a coupling seat (14).

Said support (9, 59) in combination with:

- front walls called fronts (7, 87) provided with at least one foot (12) and/or
- dividing walls called dividers (6, 86) provided with at least one foot (12), and/or
- one shelf (1) made of a set of wires (2) connected to each other by transversal reinforcing stiffeners (3).

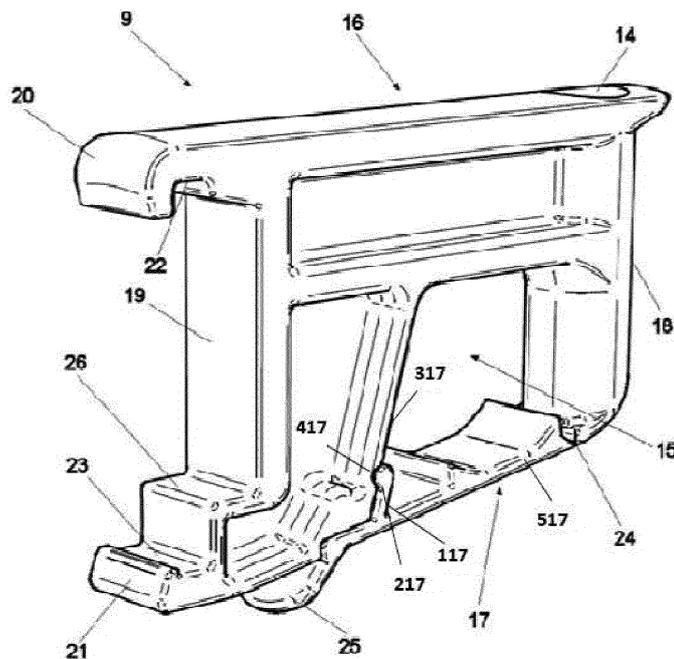


FIG. 4

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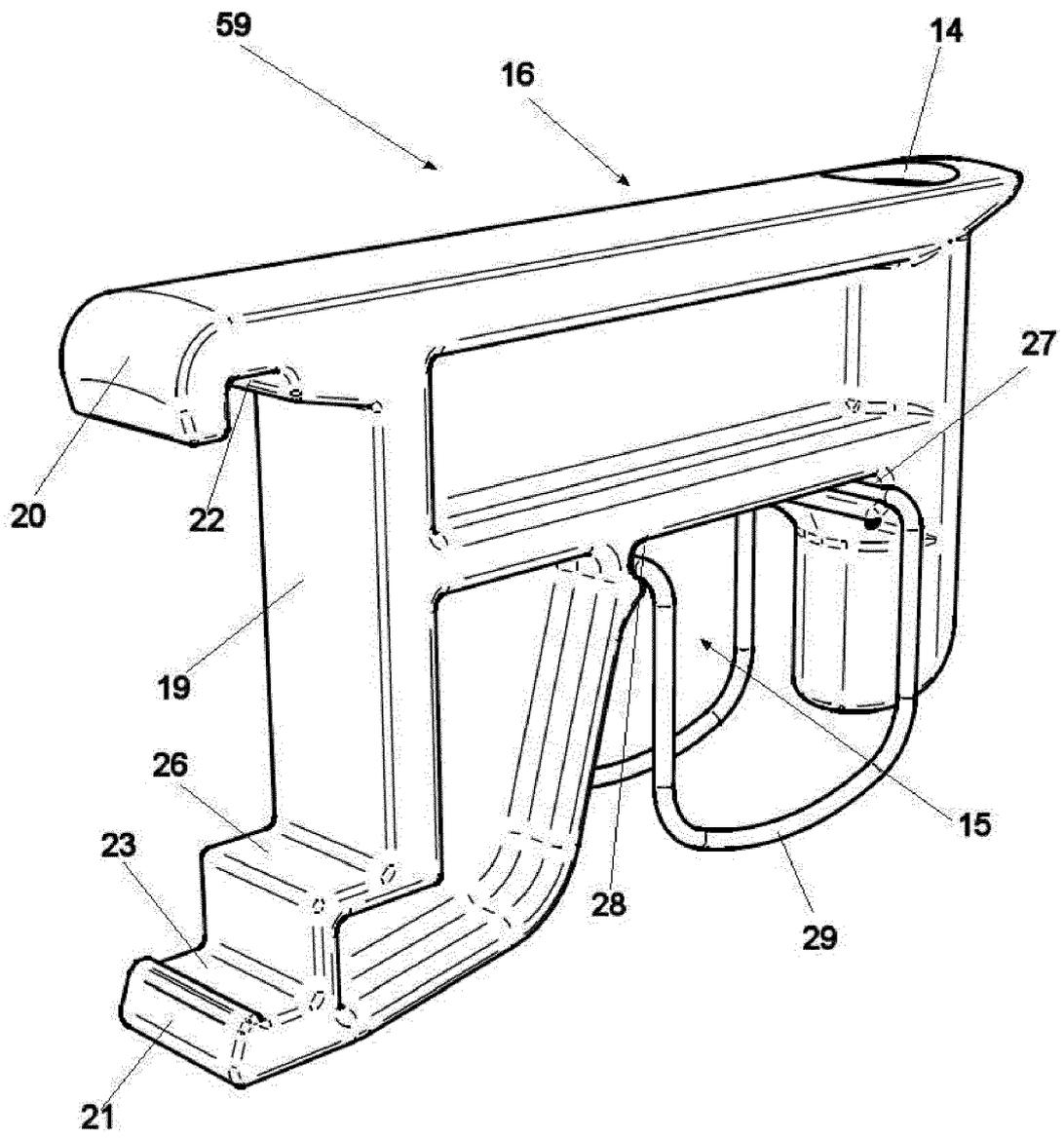


FIG. 5

Description

[0001] The present invention relates to the technical field of shopfitting for large points of sale, and in particular to an accessory for the shelving for displaying goods. More particularly, the invention relates to a support for accessories (fronts, dividers, LED bars) used in connection with wire shelves.

[0002] Such shelving is well-known in the art; essentially two kinds of shelving are in use, a first kind supporting wire shelves and a second kind supporting metal sheet shelves.

[0003] The first kind of shelf is made of metal wires soldered to each other to form a net capable of supporting goods. An example of such shelves is e.g. described in DE102005020253 of Wanzl Metallwarenfabrik KG.

[0004] The second kind of shelf is produced through bending and soldering metal sheets, as described e.g. in US2005593A of LUXE METAL FURNITURE COMPANY.

[0005] Oftentimes, in the same point of sale both kinds of shelves are in use, wire shelves as described in DE102005020253, and metal sheet shelves as described in US2005593A.

[0006] EP2695547A1 in the name of HMY Group describes an assembly for a shelving, comprising at least a shelf for displaying goods, a lighting device and a support element in the form of a clip, configured to support said lighting device and to be mounted under said shelf, wherein said support element comprises at least a guiding member, and said lighting element comprises at least a complementary guiding member configured to be rotatable with respect to said at least one guiding member, so that the tilting of said lighting device can be adjusted between two extreme positions defined by at least a stopping member of said support element. The support element described in this document can be coupled to a metal sheet shelf only, of the kind described in US2005593A.

[0007] US2016091177 of Pascal-Simon Houle describes a device to support lighting devices for shelves that are part of shelving for displaying goods. Nonetheless, such devices are not in the form of clips, but are shaped as rails that are fixed to the anterior edge of a shelf for its entire length, and on their lower edge are provided with a recess for inserting a LED lighting device.

[0008] EP3017724 di Pos Tuning Udo Vosshenrich GMBH & CO KG describes a different lighting system, wherein at least a luminous means is placed in front of a goods package, and lights at least the goods lower portion. Differently from the previous two documents, the light it directed upwards.

[0009] Moreover, partitioning such wire or metal sheet shelves through wire dividers is also known in the art. Such dividers occupy the whole short side of said shelves, so as to facilitate the filling of the shelf, especially when goods are of small dimensions with respect to the dimensions of the shelf itself.

[0010] A device for partitioning a shelf is e.g. described in US9326604 of LogiQuip LLC.

[0011] Another accessory, typical for both wire and metal sheet shelves, is a front to prevent packages from falling from the shelf to the ground; such fronts are used especially when packages are particularly small or light, or when the shelf is tilted toward consumers.

[0012] Typically, dividers and fronts that can be applied on the two different kind of shelves (wire and metal sheet) are different, which is a problem both for the manufacturer of shelves/accessories and for the point of sale itself, in that both are obliged to produce and stock dividers and fronts for the two different kinds of shelf.

[0013] A second drawback comes from the fact that today point of sale shelving is frequently electrified in order to provide shelves with LED bars for lighting. Such bars are typically fixed to shelves and are a further encumbrance. Up to today the presence of LED bars and dividers/fronts was mutually exclusive.

[0014] Aim of the present invention is providing an accessory allowing to use the same dividers and fronts on both kinds of metal sheet and wire shelves, practical to fix and remove, even in the presence of LED bars for lighting said shelves.

[0015] This object is achieved by an apparatus and a method having the features of the independent claims. Advantageous embodiments and refinements are specified in claims dependent thereon.

[0016] The solution lies in a support, preferably made of plastics, which is fixed to wire shelves, allowing to use the same wire dividers and fronts used on metal sheet shelves.

[0017] The first advantage of the present invention is the removal of an item code both for the manufacturer and the point of sale, which allows on one hand to reduce the number of stocked item codes, and on the other hand not to be deprived of the specific kind of divider/front needed at that very moment.

[0018] The second advantage of the present invention is the possibility to use the same support both when the shelves are lighted by a LED bar and when they are free from LED bars, in this case, too, reducing the number of stocked components.

[0019] A third advantage is that, using the support according to the present invention, when other dividers/fronts or even LED bars must be added to a shelf, the shelf itself need not be dismantled.

[0020] A fourth advantage of the present invention is the limited aesthetical impact of the support according to the present invention, in particular when it is made of transparent plastics.

[0021] Further advantages and properties of the present invention are disclosed in the following description, in which exemplary embodiments of the present invention are explained in detail based on the drawings:

Figure 1 Axonometric view of a typical wire shelf;
Figure 2 Axonometric top view of a metal sheet shelf

- with dividers and front;
- Figure 2A Lateral section of an end of a metal sheet shelf, with the foot of a divider;
- Figure 3A Axonometric view, from below, of a wire shelf with dividers and front according to a first embodiment of the support;
- Figure 3B Axonometric view, from below, of a wire shelf with dividers and front according to a second embodiment of the support;
- Figure 4 Axonometric view of a first embodiment of the support according to the present invention;
- Figure 5 Axonometric view of a second embodiment of the support according to the present invention;
- Figure 6 Side view of the second embodiment according to the present invention;
- Figure 7 Axonometric view of different kinds of dividers and fronts for metal sheet shelves;
- Figure 8 Axonometric view of different kinds of dividers and fronts for wire shelves.

[0022] Figure 1 shows a typical wire shelf. Said shelf comprises a plurality of generally equidistant metal wires 2, soldered to at least one stiffener 3 perpendicular to said wires. Said stiffeners 3 are flat metal sheet portions, some centimetres high. Normally, in order to get an aesthetical shelf, two further metal wires 4 and 5 are soldered to the two anterior and posterior ends. These two wires 4, 5 do not contribute to shelf load-carrying capacity, but improve its safety of use, protecting the protruding ends of metal wires.

[0023] Figure 2 shows a metal sheet shelf 10 provided with a plurality of dividers 6 and a front 7.

[0024] As can be appreciated by comparing Figures 2 and 3, said dividers 6 and front 7 are identical, and are made of soldered metal wires.

[0025] In the case of metal sheet shelf 10 shown in Figure 2, dividers 6 and fronts 7 are provided with feet 12 (not visible in Figure 2) at least at their ends, and optionally with a central foot, which are inserted into suitable holes 11 provided in the shelf itself.

[0026] In particular, the metal sheet at the ends of shelf 10 is C-bended, as visible in the detail shown in Figure 2A. Said hole 11 is placed above a corresponding hole 11A provided in the lower portion of the C-fold. Said foot 12 of the divider 6 is inserted in both holes 11 and 11A so as to confer stability to the assembly. It is worthwhile noting that the C-fold in the metal sheet is provided both on the anterior and the posterior side of shelf 10.

[0027] In a preferred embodiment, the divider 6 is provided with a long and a short foot; the long foot having a length suitable for insertion into both holes 11, 11A, while the short foot being of a length suitable for insertion into the hole 11 only. In this way, a sufficient stability is obtained at the same time with an easier assembling.

[0028] Figures 3A and 3B show a wire shelf provided with dividers 6, fronts 7, a LED bar 8 and a plurality of

supports 9 (Figure 3A) and supports 59 (Figure 3B) according to the present invention, which are meant to support the dividers 6, the front 7 and an optional LED bar 8.

[0029] Supports 9, 59 according to the present invention are mounted on stiffeners 3 through a snapping elastic coupling end, by exerting a light pressure of said support against said stiffener. Indicatively, the distance between stiffener 3 and the anterior 4 or posterior wire 5 is slightly shorter than the length of the support 9 (side 16 of the support).

[0030] In an embodiment, supports 9, 59 are inserted in the interspace between two adjacent wires 2 forming the supporting surface of the shelf, while they are snap-coupled to the transversal stiffener 3, to which wires 2 are soldered. Thanks to the fact that the distance between the stiffener 3 and the anterior and posterior finishing wire 4 and 5 parallel to said stiffener is shorter than the length of said support 9, 59 in the direction of said distance, when fitted in on the stiffener 3, supports 9, 59 are efficiently held in place against an accidental removal. In fact, the anterior wire 4 or the posterior wire 5 hinders the translation of the supports 9, 59 in the direction of removal from stiffener 3, so forming a limiter of disengagement of said supports.

[0031] From Figures 3A and 3B one can appreciate that the foot 12 of dividers and fronts is inserted in a specific hole 14 of the support 9, 59 itself. The depth of this hole is sufficient to confer mechanical stability to the assembly.

[0032] Again from Figures 3A and 3B one can appreciate that support 9, 59 is provided with a recess 15 allowing to house a LED bar 8, preferably in the form of a window closed on all peripheral sides, and through which said LED bar passes in the direction of its longitudinal axis.

[0033] Figure 4 shows a first embodiment of the support 9 according to the present invention. Said support is preferably made of plastics, preferably transparent plastics, so as to have a minimal aesthetical impact, even when the metal wire of the shelf is coloured.

[0034] Said support 9 has essentially a rectangular shape, with two sides, top side 16 and bottom side 17, parallel to shelf 1; and two lateral sides 18 and 19, perpendicular to shelf 1.

[0035] In the top side 16 of support 9 there is provided said hole 14 adjacent and perpendicular to the side 18 of the support itself, which houses the feet 12 of dividers 6 and fronts 7. Said hole 14 must have a diameter suitable for housing feet 12; as the diameter of their metal wire is about 5.5 mm, the hole 14 has a corresponding dimension, with the minimal play required for easily fixing said feet 12. Indicatively, the diameter of the hole 14 is about 6.2 mm.

[0036] On the other hand, the width of support 9 must be overall such that said support 9 can be placed between two adjacent metal wires 2, which together with other wires 2 form a supporting shelf 1. Indicatively, the light between two consecutive metal wires 2 is 10 mm. Pref-

erably, the width of said support 9 is about 9 mm.

[0037] One side 19 of support 9 is meant to mechanically snap-fit on a stiffener 3, and therefore is provided with two extensions 20, 21 protruding beyond said side 19; said extensions being a top extension 20 and a lower extension 21. Together, said two extensions 20 and 21 and the side 19 overall have a C-shape, and the distance of said extensions in the longitudinal direction of side 19 is commensurate to the length of the metal sheet forming said stiffener 3, to which said support must be coupled. When assembled, the support 9 is fixed through said two extensions 20 and 21 to the top and bottom ends of the stiffener 3, thanks to the presence of two grooves, a top groove 22 and a bottom groove 23 provided in said extensions, respectively. The side 19 is placed rearward with respect to the position of the two grooves 20 and 21, in order to ensure to the support 9 the sufficient elasticity to snap-fit it on the stiffener 3.

[0038] When fixed, the support 9 is rigidly fitted in against stiffener 3 thanks to the fitting in of said two grooves 22 and 23, respectively, on the top and bottom ends of the stiffener itself, and to the leaning of the impact step 26 provided in the connecting zone of the lower extension 21 to the side 19 against the vertical wall of the stiffener 3 itself.

[0039] In this condition, said two extension 20 and 21 cling to the metal sheet constituting said stiffener, which prevents the translation of the support 9 itself thank to the grooves 22 and 23.

[0040] According to an embodiment, the top extension 20 is provided in the form of a hook which delimits a groove having a given depth, while the lower extension 21 ends with a tooth having a transversal triangular section, so as to form a tilted taper surface which, when thrusting the support 9 against stiffener 3, cooperates with its lower longitudinal edge, contributing to the deformation in the direction of temporary stretching of the two extensions, and of overcoming said lower longitudinal edge of the stiffener 3 by said tooth, and therefore allowing the snap-fitting of said lower longitudinal edge into the groove 23. This is provided with a shorter depth with respect to the groove 22 on the opposed extension, and the tooth is provided with a tilted taper surface meant to cooperate in the same way with the lower edge of the stiffener 3, when a traction is exerted in the disengaging direction.

[0041] Moreover, said support 9 is provided with a recess 15 meant to house a LED bar 8. The dimensions of said recess 15 are such that different kinds of LED bars 8 can be comfortably housed. Nonetheless, at the same time, the structure of the support must remain suitably rigid to maintain its mechanical features supporting dividers 6 and fronts 7.

[0042] In particular, said recess is provided in the form of a window closed or closable on all its sides, so as to hold a LED bar, surrounding it completely.

[0043] It is worthwhile noting that the presence of said LED bars is optional, and potentially LED bars can be

added at a later stage.

[0044] According to an embodiment, in order to allow the easy coupling of said LED bars 8, the recess or window of supports 9 is openable, thanks to a locking mechanism 17, in particular in correspondence of the bottom side of supports. When the locking mechanism 17 is closed, its mechanical resistance is sufficient to support the weight of a LED bar 8. Nonetheless, a closed support 9 can be used while its recess 15 is empty.

[0045] According to the first embodiment shown in Figure 4, the locking mechanism 17 is composed by a segment of the lower side of the support, coinciding with said recess or window housing a LED bar. Said lower side segment is connected at an end of support 9 through a hinge 24 allowing the oscillation in the direction of opening and closing in the form of a compass of said side of the recess, without breakage issues due to an action of elastic bending of the material, based on the intrinsic elasticity only of the material, which on the long run might lead to mechanical stress and breakage. The opposed end of the oscillating side segment forming part of the locking mechanism 17 is provided in its turn a with a coupling snap-fit end, which end comprises a tooth mounted on an elastically flexible wing 117, which wing 117 overlaps through strain on a coupling wall or rib 217 of support 9, which is substantially parallel to said wing 117, said wing and said rib being overall provided with a coupling tooth 317 and a coupling seat 417 of said coupling tooth. In the closed condition, said tooth 317 and said seat 417 are strained in engagement by the elastic force of said wing 117. In an easily accessible position, the end of the oscillating side segment is provided with a stopping tab 25 to exert a disengaging force of the oscillating segment from the body of the support. According to an embodiment, the hinge 24 is made of one piece and of the same material of the support, and is a so-called film hinge, obtained from a thinning of the material between the oscillating lower segment and the remaining portion of said lower side of the support.

[0046] As it is apparent, in order to ensure a better stability of the coupling of the oscillating segment to the support in correspondence of the locking mechanism, the end of the oscillating segment bearing the elastic wing 117 protrudes beyond said elastic wing, and in the bottom and laterally overlaps on both sides on the body of the support, i.e. to the lower side of the coupling rib 217 with which wing 117 cooperates.

[0047] In this way, possible thrusts exerted in the direction of the axis of the recess or window, which might lead to a lateral flexion of the lower side oscillating segment, are discharged on the walls that laterally overlap the support body, which hold said oscillating side segment against a lateral flexion in the direction of the axis of said recess.

[0048] According to a further feature, the oscillating lower side segment is provided with a cradle shape 517 on its side toward the inside of said recess, e.g. made of three angulated walls and positioned so as to be tangent

to a circumference or a curved line.

[0049] It is worthwhile noting that the closed locking mechanism 17 confers further mechanical rigidity to the support 9.

[0050] It is worthwhile specifying that in the first embodiment, said support 9 is a single piece with a resealable closing system.

[0051] In an alternative embodiment shown in Figure 5, instead said support 59 comprises two distinct portions made of two different materials. Substantially said support 59 is identical to said support 9, even dimensionally: the difference lies in the configuration of the recess or window housing the LED bar. In this case, said recess or window is provided with a distinct removable portion in the shape of a cradle, which is fixable through snapping to a lower side of support 59.

[0052] In this embodiment, said cradle is made of a metal wire having a pre-set elasticity, and the locking mechanism 29 is made of the ends of said cradle. Substantially said locking mechanism 29 is provided with a double U shape

[0053] In particular, the wire of the locking mechanism 29 is suitably bent to form two parallel U-shaped segments, wherein the ends of the corresponding arms of U are connected to each other, so forming two coupling crosspieces, housed in two coupling seats 27 and 28, respectively. The two U-shaped segments are meant to house a LED bar 8. Exerting a light pressure, said connecting crosspieces of said two U-shaped segments hook to said support 59 through seats 27, 28, thanks to the controlled deformation of the wire 29 itself, which must be elastically compressed to draw near the terminal ends of the two U-shaped segments, so as to pass beyond the delimiting walls of seats 27, 28, and to go back to its initial dimension once inserted into its seats. Therefore, to separate the cradle 29 from the support 59, a new elastic compression must be exerted, drawing near the two top ends of the two U-shaped segments, so as to emerge from the seats and extract said cradle.

[0054] On a wire shelf a support 59 can be mounted without the locking mechanism 29 in order to support dividers 6 and fronts 7, while said locking mechanism 29 can be added at a later stage, only when a LED bar 8 must be added.

[0055] Figure 6 shows a lateral view of the support 59 hooked to a stiffener 3 of a metal shelf 1. In this view, the C-shape of the hooking mechanism can be appreciated, said C comprising the top extension 20, the vertical side 19 and the bottom extension 21. In the extension 20 there is provided a groove 22, while in the extension 21 there are provided a groove 23 and an impact step 26. Figure 6 shows that said stiffener 3 sits into place against said impact step 26, but keeps a distance from the side 19 of the support, so that the support 59 is provided with the elasticity needed to allow to easily snap/remove said support 59 on the stiffener 3. It is apparent that the support 9 works in the same way, too, the difference between support 9 and support 59 lying only in the way in which

said LED bar 8 is housed and supported by two different supports.

[0056] Finally, Figures 7 and 8 show a plurality of dividers 6, 86 and fronts 7, 87, normally produced by manufacturers and commonly used in points of sale. Comparing these two Figures, the variety of kinds and dimensions of dividers and fronts can be appreciated. All the kinds of dividers and fronts shown in the Figures 7 and 8 are mountable on wire shelves thanks to the use of supports 5, 59 according to the present invention, suitably positioned with respect to the shelf consisting of wires 2 and correspondingly to the coupling lower extensions of the front and dividers.

[0057] Figures 7 and 8 also show a metal sheet shelf 80 and a wire shelf 88 having a semi-circular shape, which are generally used for the end portions of sale shelving.

[0058] It is worthwhile specifying that even semi-circular fronts 87, corresponding to one fourth of a circle, can be mounted using the supports 9, 59 according to the present invention. As a matter of fact, the stiffener 83 of the semi-circular shelf is provided with the same dimensions (height and thickness) of the stiffener 3 of rectangular shelves, while the width of supports 9, 59 is sufficiently small, with respect to the radius of the circumference of the semi-circular shelf 88, to allow the hooking mechanism to work in the same way as it works on the rectangular shelf having a linear stiffener.

[0059] The assembling method according to the present invention comprises the following steps:

- a. Installing a wire shelf 1 at the desired height on a shelving backbone;
- b. Inserting at least a pair of supports 9 or 59; the fitting in of support 9 or 59 occurs through a snap mechanism by pressing the two extension 20, 21 against the top and bottom ends of a stiffener 3, and sitting the impact step 26 into place against the stiffener 3 itself;
- c. Optionally, inserting the feet 12 of a divider 6 or of a front 7 inside said hole 14 of each support 9 or 59;
- d. Optionally, inserting a LED bar 8 inside the recess 15, and fix it through the locking mechanism 17 or 29.

[0060] It is worthwhile noting that the step d can be performed at a later stage, after months or even years, when the shelving must be lighted through the installation of new LED bars 8.

[0061] It will be noted that supports 5, 59 can support dividers 6/fronfs 7 and LED bars 8 in a totally independent way: that is, each support 9, 59 can support a divider 6/front 7 only, a LED bar 8 only, a divider 6/front 7 and a LED bar 8 at the same time. Consequently, the steps c and d of the assembling method can be performed in a way totally independent from each other, in the order c d or in the order d c in subsequent times, even very distant from each other.

[0062] It is worthwhile noting that, in case of the use

of two-piece support 59, said support 59 can be initially mounted without its removable locking mechanism 29, which can be mounted at a later stage only, when it is decided to add at least one LED bar 8 to wire shelf 1.

[0063] Said LED bar 8 can be removed by the support 9, 59 at any moment, e.g. when the shelf does not need lighting or because it is out of order. This advantageously does not require the dismantling of the shelf itself.

1	wire shelf	10
2	metal wires	
3	stiffener	
4	anterior metal wire	
5	posterior metal wire	5
6	divider	
7	front	
8	LED bar	
9	support	
10	metal sheet shelf	
11,11A	hole	20
12	foot	
13	metal sheet C-fold	
14	hole	
15	recess	
16	top side	25
17	locking mechanism	
18	side	
19	side	
20	top extension	
21	lower extension	30
22	groove	
23	groove	
24	hinge	
25	tab	
26	impact step	35
27	seat	
28	seat	
29	removable locking system	
59	support	
80	metal sheet semi-circular shelf	40
83	semi-circular stiffener	
86	semi-circular divider	
87	semi-circular front	
88	semi-circular wire shelf	
117	wing	45
217	coupling rib	
317	coupling tooth	
417	coupling seat	
517	cradle	50

Claims

1. Support (9, 59) comprising a recess (15) for the housing and supporting of an optional LED bar (8) **characterized in that** it comprises at least a terminal (20, 19, 21) of elastic fitting and at least a coupling seat (14). 55
2. Support (9, 59) according to claim 1 in combination with:
 - front walls called fronts (7, 87) provided with at least one foot (12) and/or
 - dividing walls called dividers (6, 86) provided with at least one foot (12), and/or
 - one shelf (1) made of a set of wires (2) connected to each other by transversal reinforcing stiffeners (3). 10
3. Support (9, 59) according to claim 1 or 2, wherein said fitting terminal coupling it to the transversal stiffener (3) comprises:
 - A snap-fitting C-mechanism (20, 19, 21) with opposed and elastically stretchable arms, which arms, in their engaging condition are strainable on a stiffener, wherein said arms surround the opposed edges of said transversal stiffener (3);
 - A coupling seat in the form of a hole (14) opened towards a top side of said support for housing the corresponding feet (12) of said dividers (6, 86) and fronts (7, 87). 15
4. Support (9, 59) according to claim 3, wherein the snap-fitting terminal to the shelf stiffener (3) is provided with a top extension (20), and a lower extension (21) connected at a pre-set distance by a vertical side (19) of the support itself; said extension (20) being provided with a groove (22), while said extension (21) being provided with a groove (23) and an impact step (26) to distance said stiffener (3) from said vertical side (19). 20
5. Support (9) according to one or more of the preceding claims, produced in one piece, provided with a locking mechanism (17) for opening and closing a recess or window (15) housing a LED bar, which mechanism comprises a segment of a perimeter side delimiting said recess or window (15), which segment is oscillating thanks to a hinge (24) provided at an end and is provided with a snap-fitting terminal (117, 317) in a matching part (217, 417) of support (9). 25
6. Support (59) according to one of more of claims 1 to 4, produced in two distinct pieces, the first piece comprising the coupling terminal (19, 20, 21) to the stiffeners (3) of shelf (1) and the coupling seat (14) of fronts (7, 87) and dividers (6, 86), while the second piece is a removable cradle (29) which can be coupled through a locking mechanism to coupling seats (27, 28) provided on said support (59). 30
7. Support (59) according to claim 6, wherein said cradle (29) is made of a wire shaped so as to form a double U and is elastically snap-fitted in two seats 35

(27, 28) provided on said support (59).

bar (8) between said cradle and its coupling seats (27, 28) to the support (59).

8. Support (9, 59) according to one or more of the preceding claims, wherein: 5
- The width of said support is shorter than the light two adjacent wires (2) of the set of parallel wires forming a supporting shelf (1);
 - The length of said support is shorter than the light between said stiffener (3) and the anterior (4) or posterior wire (5) of a shelf (1); 10
9. Support (9, 59) according to one or more of the preceding claims, wherein said support is made of plastic material, preferably a transparent plastic material. 15
10. Method for assembling a support (9, 59) according to claims 1 to 9, comprising the following steps:
- a. Installing a wire shelf (1) at the desired shelf on a shelving scaffold; 20
 - b. By exerting a pressure, insert at least a pair of supports (9 or 59) on a shelf (1 or 88).
11. Method for assembling a support (9, 59) according to claim 10, further comprising the following step: 25
- c. Said pair of supports (9 or 59) having been positioned at a reciprocal distance corresponding to the distance of at least two feet (12) of a divider (6, 86) or of a front (7, 87), optionally inserting the feet (12) of a divider (6, 86) or of a front (7, 87) inside the hole (14) of each support (9 or 59). 30
12. Method for assembling a support (9, 59) according to claim 10 or 11, further comprising the following step: 35
- d. Optionally opening the recess (15) housing a LED bar (8) of at least said two supports (9, 59), inserting a LED bar (8) inside said recess (15) and fixing it closing said recess (15) through said locking mechanism (17 or 29). 40
13. Method for assembling a support (9, 59) according to claim 10, wherein the fitting of said support (9 or 59) occurs through a snap mechanism by pressing said two extensions (20, 21) against the top and lower ends of a stiffener (3), and bringing said impact step (26) into contact against said stiffener (3). 45
14. Method for assembling a support (59) according to claim 12, wherein said support (59) is assembled without its cradle (29) supporting said LED bar (8) to support only dividers (6, 86) or fronts (7, 87), while said cradle is mounted at a later stage only, thanks to the locking mechanism allowing to fix said LED 55

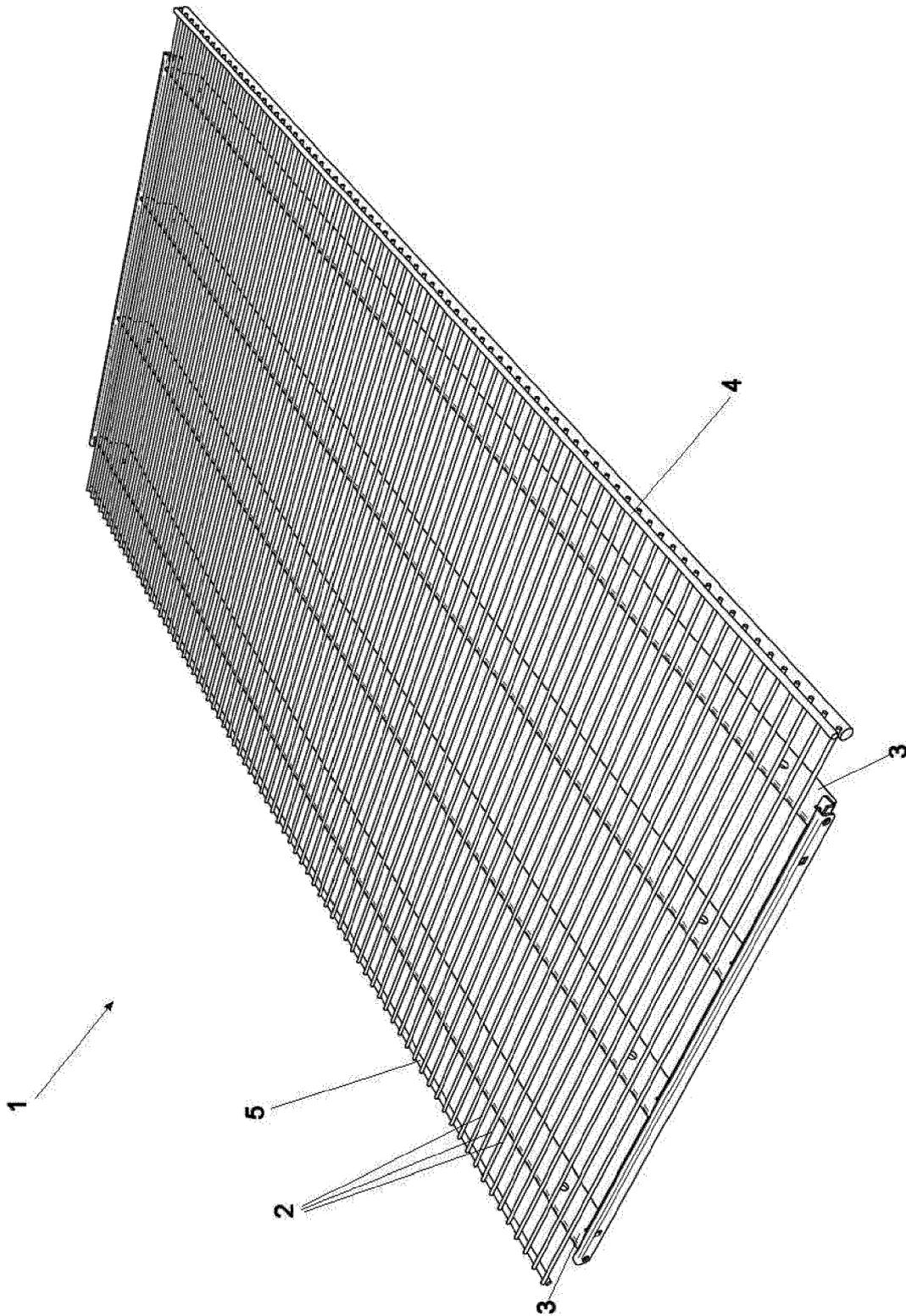


FIG. 1

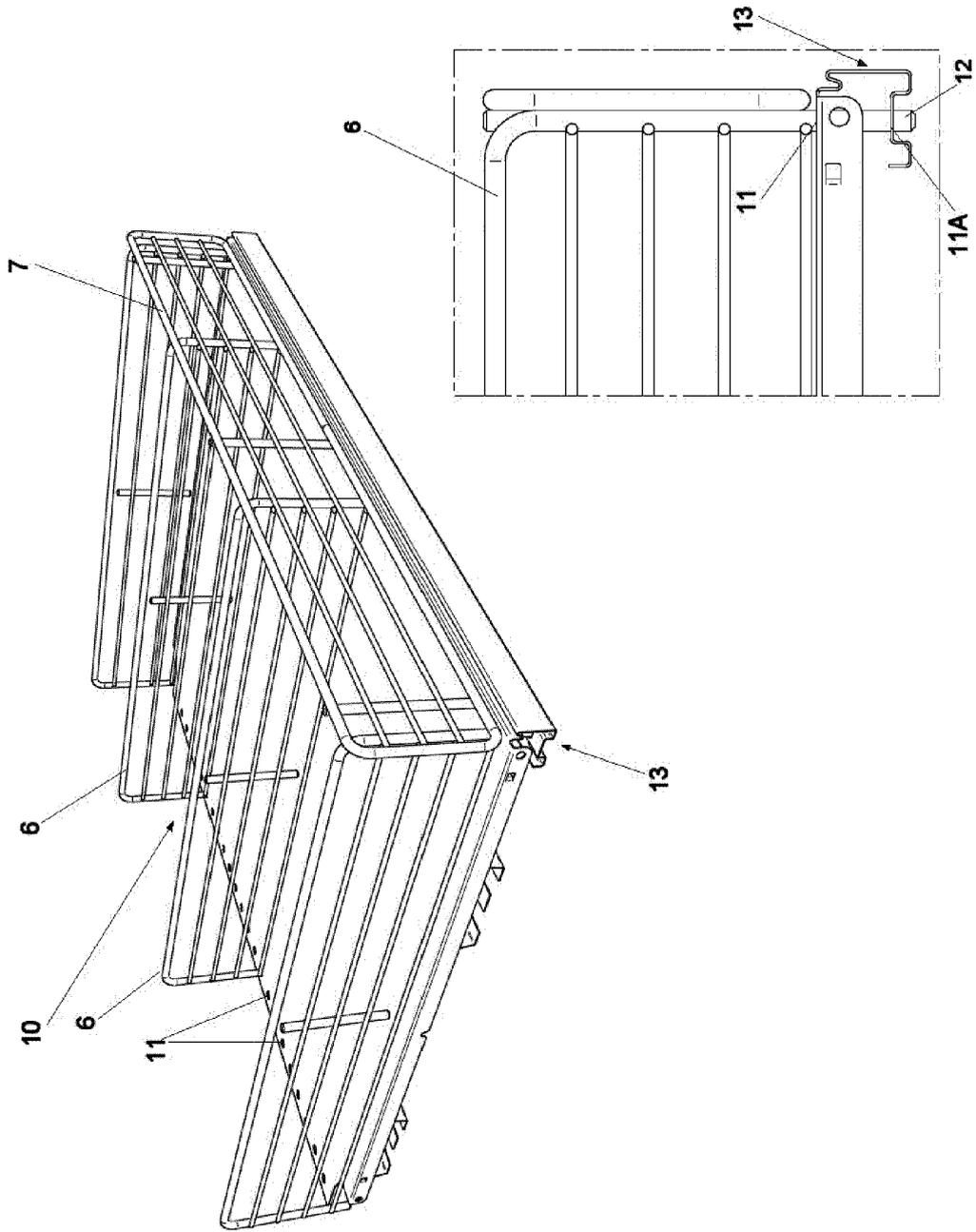


FIG. 2A

FIG. 2

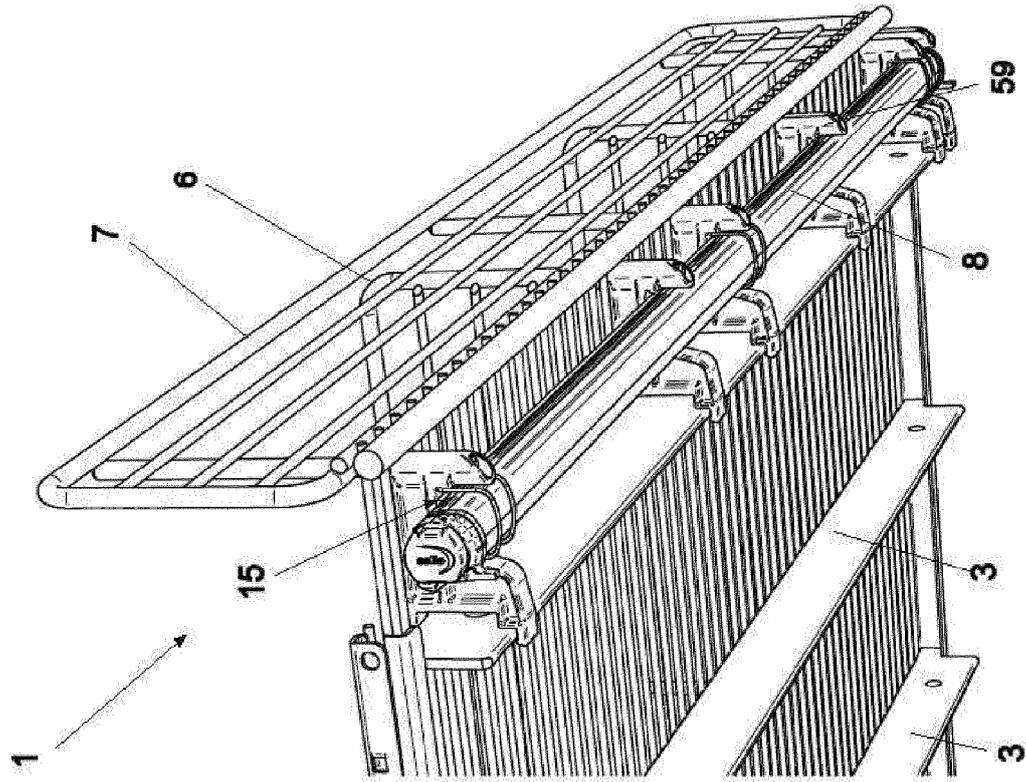


FIG. 3B

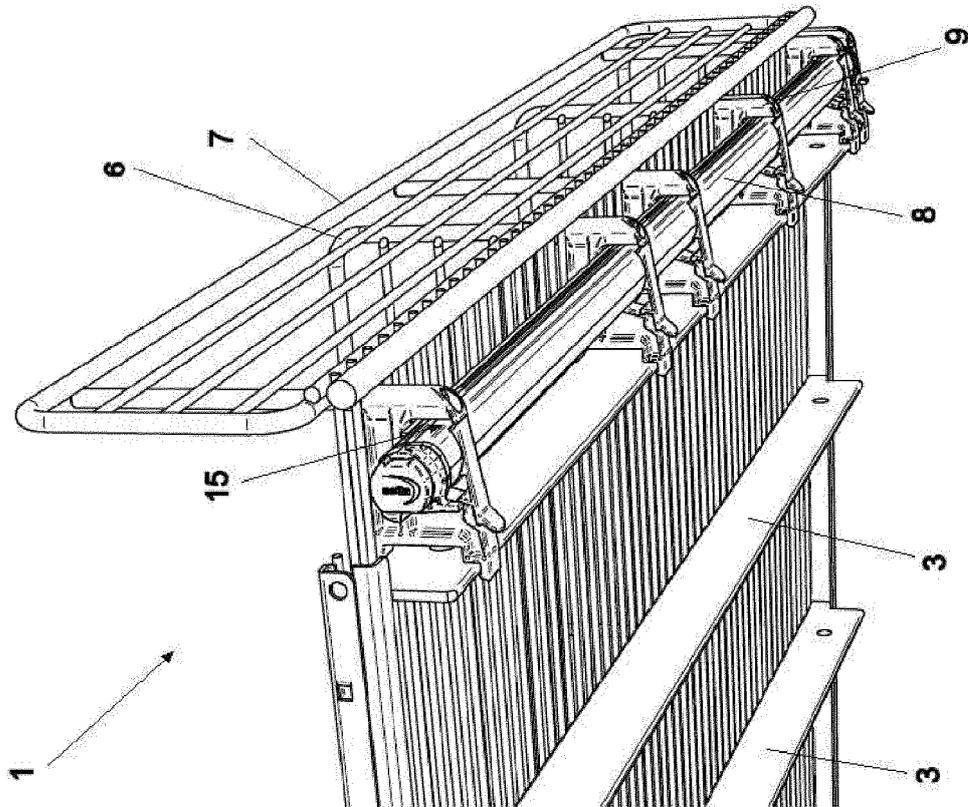


FIG. 3A

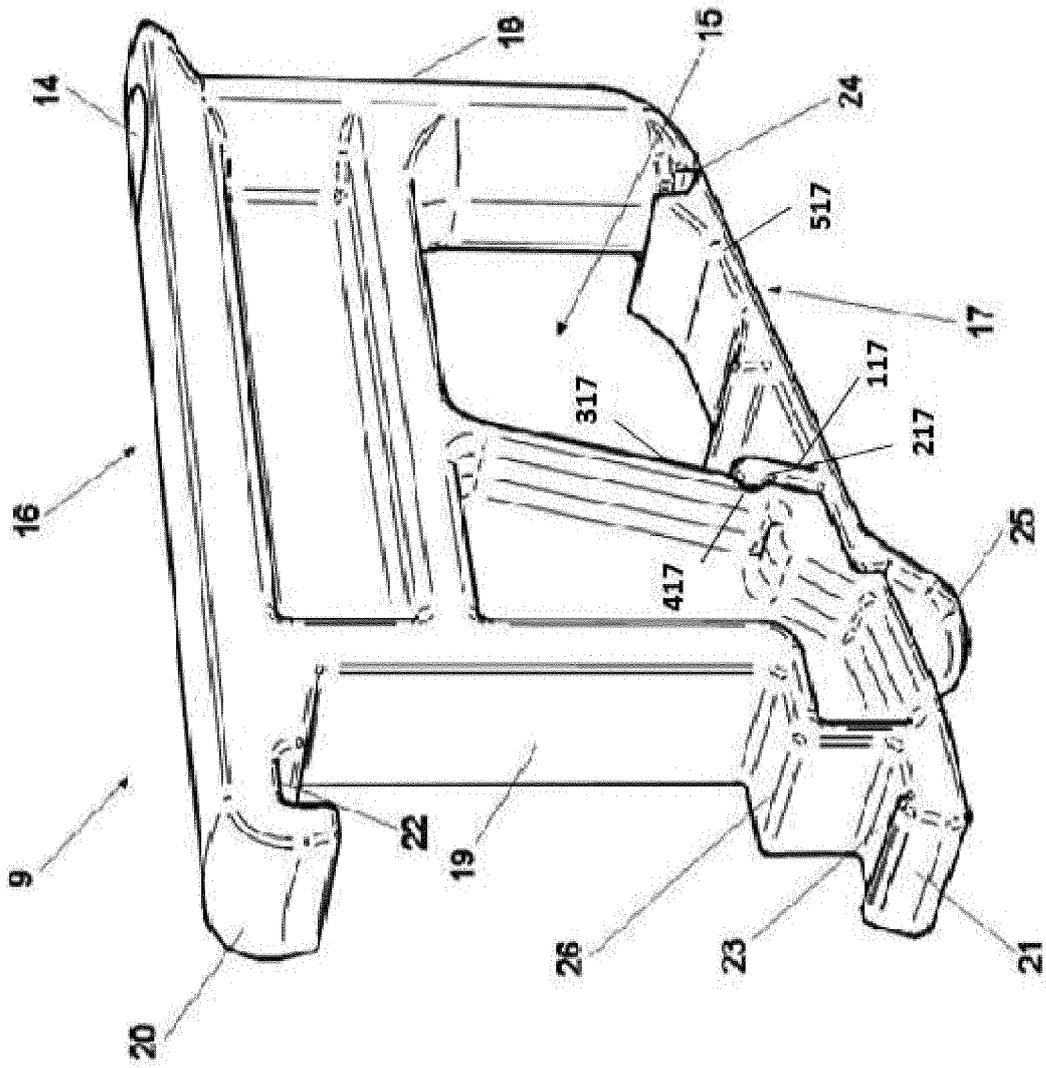


FIG. 4

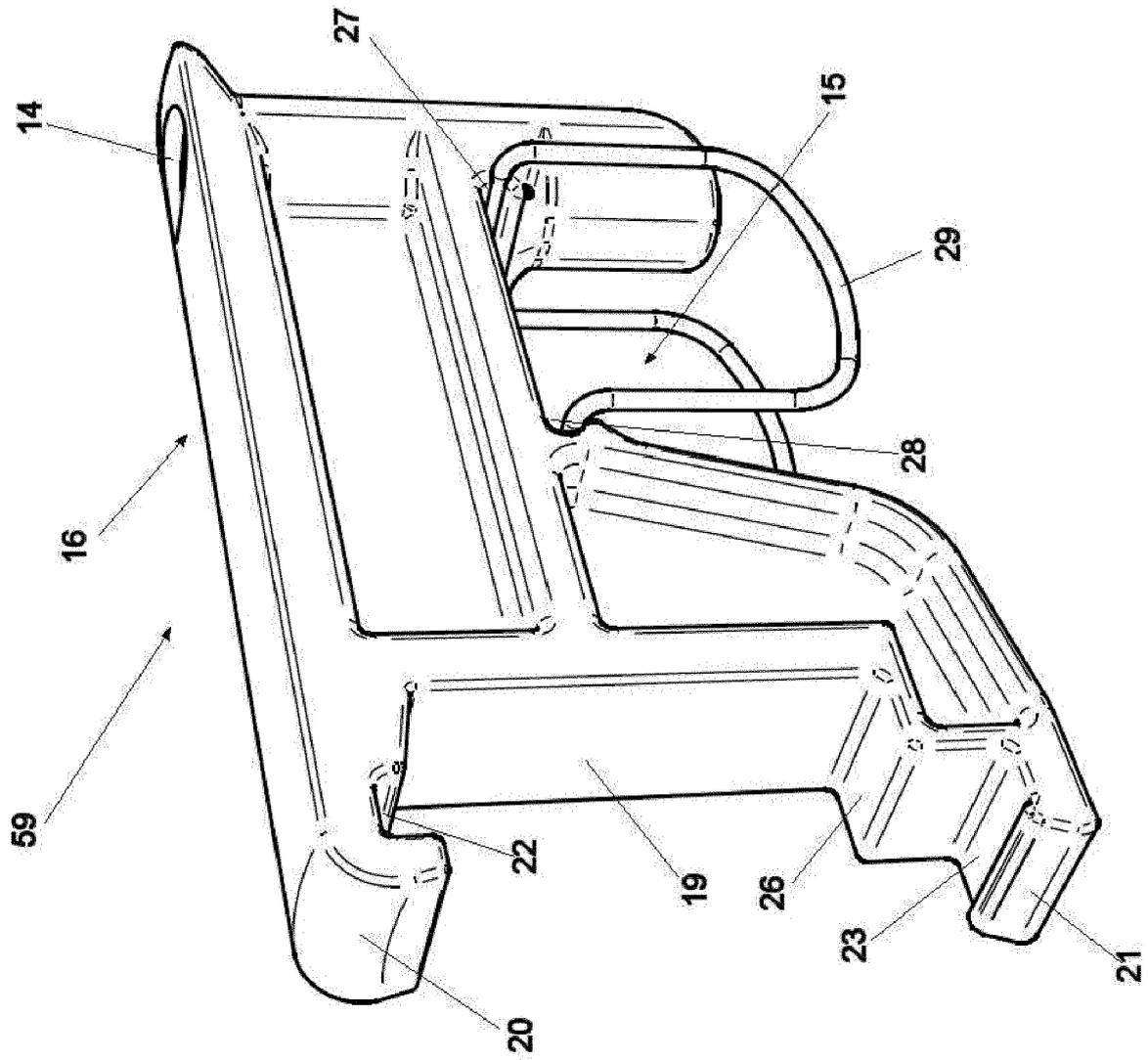


FIG. 5

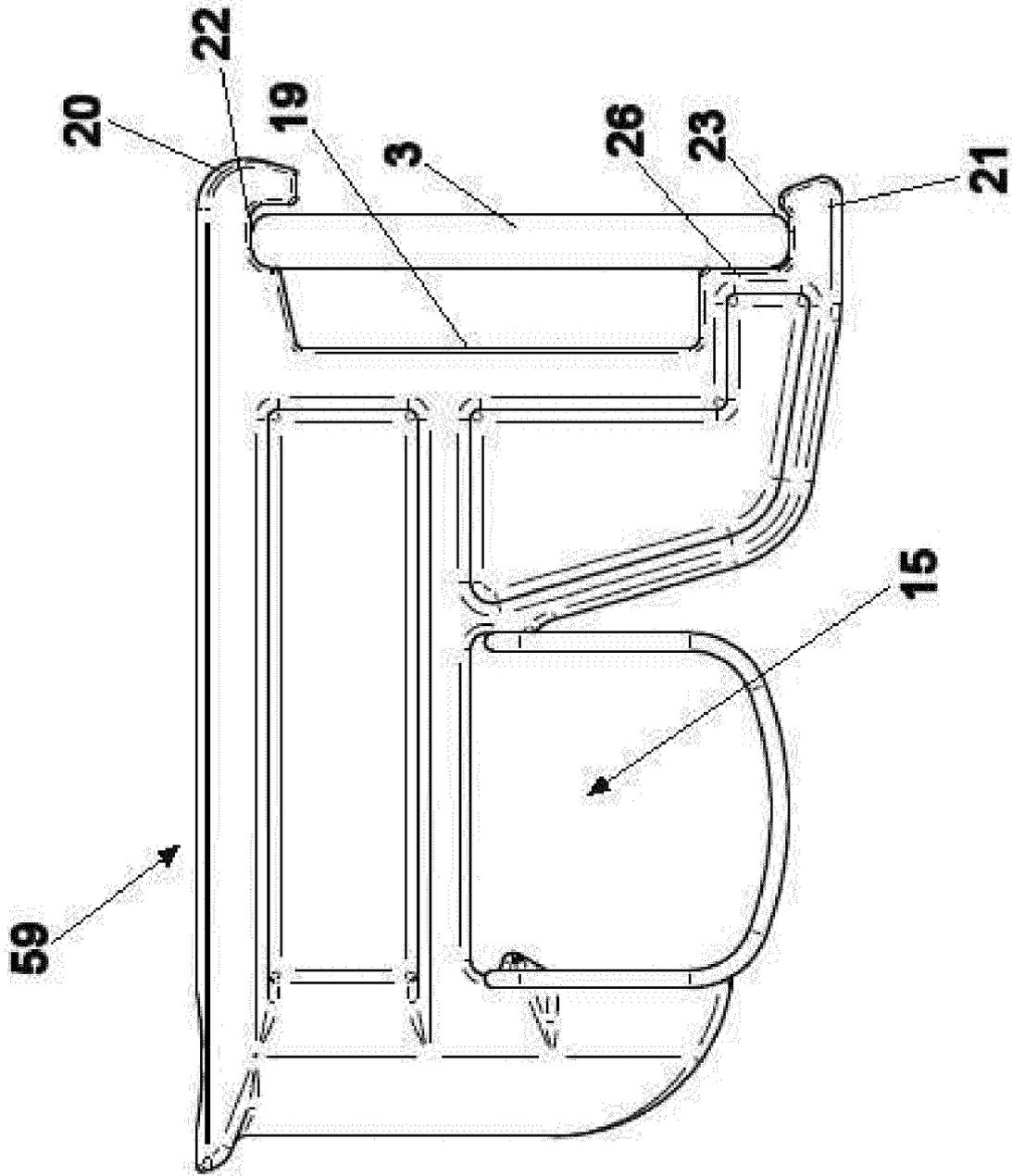


FIG. 6

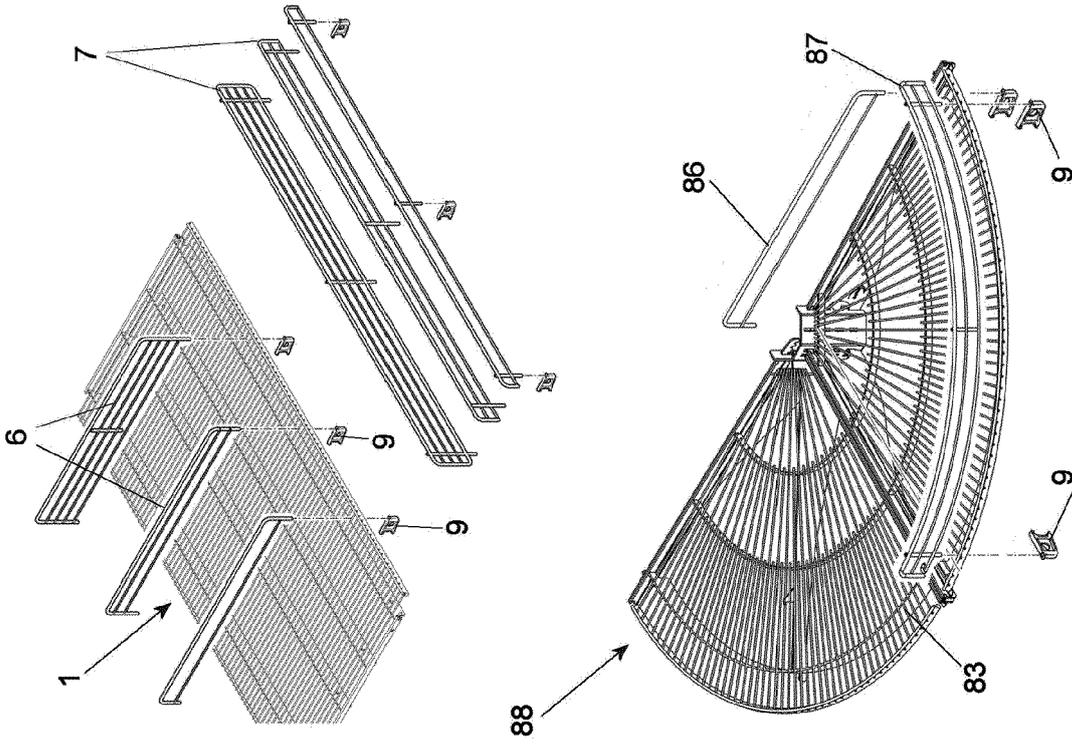


FIG. 8

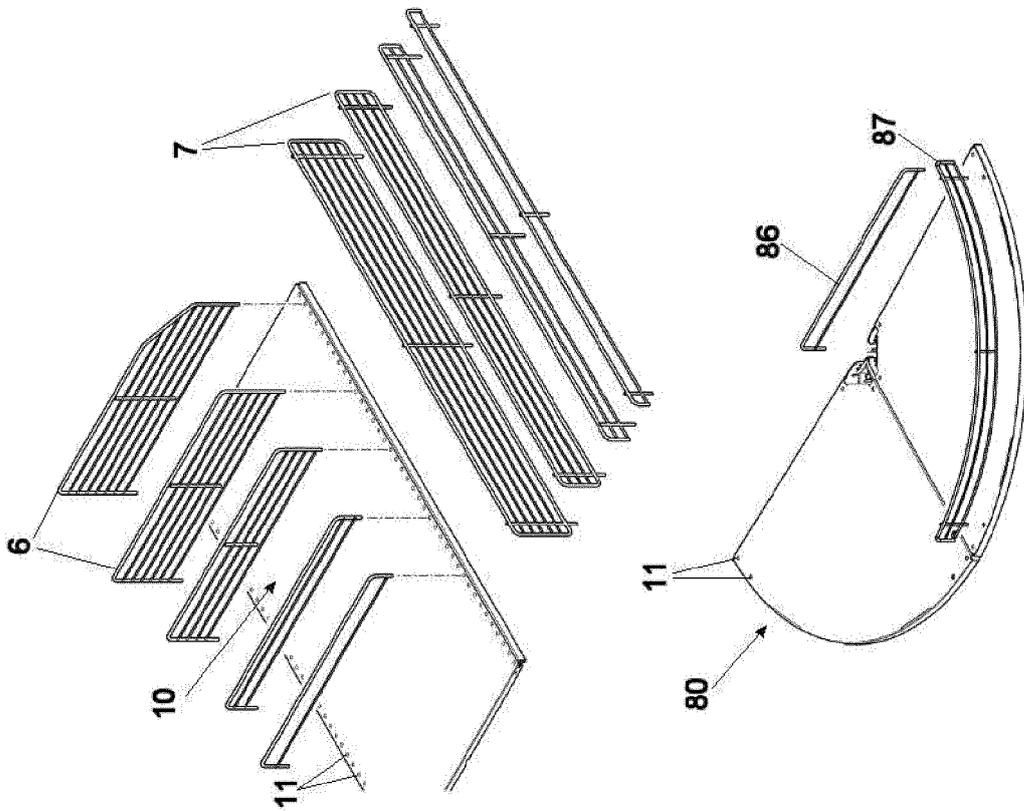


FIG. 7



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Place of search The Hague		Date of completion of the search 13 March 2019	Examiner Ottesen, Rune
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