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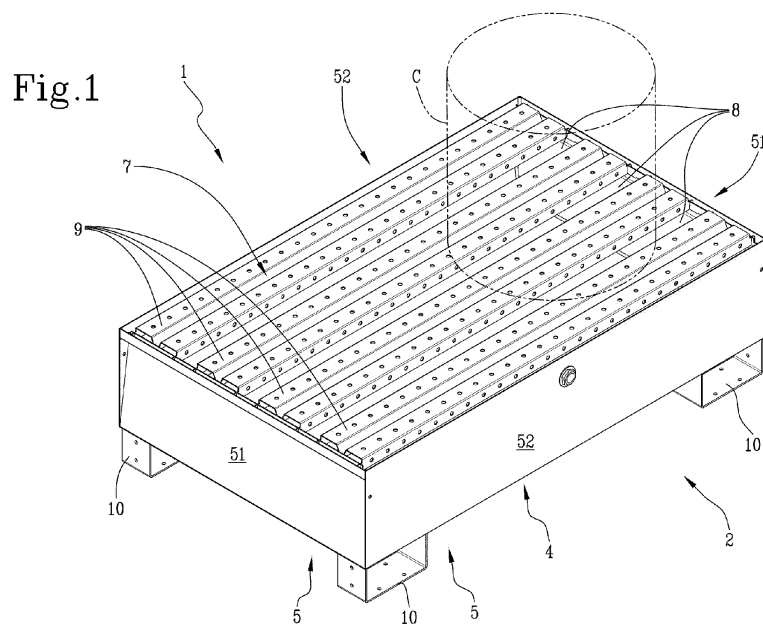
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(54)

A TANK FOR STORING CONTAINERS

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Tank 1 for storing containers C comprising a box-like body 2, defining a compartment V therein and having an opening 3 above and a bottom 4 below from which a side flank 5 extends, laterally delimiting the compartment V.
At least one pair of support elements 6 located near the opening 3 distributed on the side flank 5 and a grid 7, placed abutting on the support element 6, having a plurality of discharge slits 8 adapted to permit the transit
- of possible liquids and/or debris from the abutting grid 7 to inside the compartment V of the box-like body 2. Said grid 7 is defined by a plurality of crosspieces 9 reversibly connected to the support element 6; each crosspiece belonging to the plurality of crosspieces 9 being singly separable from the support element 6 and from the other crosspieces 9 to enable the dimension volumes of the abutting grid 7 to be reduced when dismantled from the tank 1.



Description

[0001] The present invention relates to a tank for storing containers.

[0002] Within warehouses, workshops, laboratories, construction sites, production departments and more generally work environments, it is necessary to use areas for storing raw materials and other materials, semi-finished products, tools that are used daily in carrying out activities.

[0003] In some cases, examples of stored materials may be petrol, refrigerating liquid and oils, paints, liquid soaps and detergents which are generally commercially supplied in containers, for example cans, barrels, drums. In other cases, the storage materials, in addition to those indicated, may be solid materials, such as sawdust, chips or raw materials in the form of granules, or of a gaseous nature such as flame retardants or cooling gases. The aforementioned containers, when they must not be used, are stored inside cabinets or collection tanks.

[0004] Situations also exist where specific materials are moved within the work environments. In these situations, the containers are stored in tanks forming supply areas where users go to perform liquid tapping or transfer operations into smaller transport units to be handled within the work environments. For example, it may happen that a barrel of liquid for radiators is stored in the tank located inside a garage, from which several mechanics draw to withdraw a quantity so as to bring it near a respective vehicle repair station. The collection tank is therefore one of the most popular shelter systems because it has a liquid recovery and containment compartment at its base. By means of the recovery compartment, the liquids which exit from the containers, in some cases due to damage and deterioration of the containers, in other cases due to clumsy or incomplete withdrawal manoeuvres, are not dispersed in the environment surrounding the tank. The recovery of liquids from the collection tank therefore becomes essential for the user in order to safeguard the environment and the health of employees in the workplace, to be compliant with environmental protection laws (see for example Italian Legislative Decree 152/2006) which regulate the containment of the spillage of liquids in the environment surrounding the location area of tanks and cabinets, and to allow a recovery or disposal of liquids in an easy manner.

[0005] The collection tanks of the prior art generally consist of a box-like body defining the liquid collection compartment therein. The box-like body is defined by a plurality of walls, joined together, closed below by a bottom. Opposite the bottom, the box-like body has an upper opening. A grid defining a rest plane for the containers is located on the opening. The grid, also called grille, is a monolithic element, generally made of steel, with an internal space divided by a first series of first bars, spaced and parallel to each other, crossed perpendicularly to a second series of bars, spaced and parallel to each other.

[0006] The first and second series of bars, also known

in the market as loadbearing plates and transverse connections, define a plurality of links each underlying an opening therein through which a material, liquid or solid, can pass, to be collected on the bottom of the tank.

[0007] The tanks of the prior art have a disadvantage linked to the reduced transport flexibility in the packaging and shipping process.

[0008] While the box-like body can be broken down into a desired number of pieces, generally bottom and sides, to reduce the dimensions of the tank, the grid, being monolithic, cannot be split into subunits. The tank, which when assembled would occupy the maximum dimensions, could be sent disassembled to reduce the overall dimensions of the packaging, but the grid makes this optimization of spaces impractical. This is because the disassembled box-like body may require a short time for assembly by unskilled labour, while the grid would require specialised personnel and long assembly times. That is, the box-like body could be assembled by means of operations of interlocking or screwing the side walls to the bottom, while the assembly of the grid would require a positioning mask of the plates and the parallel and perpendicular transverse connections therebetween and the fixing would require the intervention of a skilled welder. Given the complexity of assembling the grid, the tanks are currently packaged assembled or substantially pre-finished for shipment with the grid already formed and installed by the manufacturer. As indicated above, this entails several disadvantages.

[0009] Firstly, the overall dimensions of the mounted tank make the packaging very bulky and thus very expensive to ship. In certain cases, the manufacturer finds it uneconomical to send one or more tanks beyond a certain distance from its location.

[0010] Secondly, having established that the grid must be sent in monolithic form, a tendency to make the same through production channels expert in the production of mesh (and grids) in steel has been consolidated. This leads to the creation of the grid only in steel, a material mainly treated in the production channels of the mesh and grids, further increasing the weight of the shipping packaging of the tank.

[0011] Moreover, the weight and the overall dimensions of the grid make it a body which can deform, scratch and damage the other elements of the tank during the shipment thereof.

[0012] The technical task of the present invention is thus to provide a tank for storing containers which is able to overcome the prior-art drawbacks which have emerged.

[0013] Therefore, an object of the present invention is to provide a tank for storing containers, which can be dismantled when it must be shipped and which has contained overall dimensions to facilitate the packaging and shipping operations.

[0014] Furthermore, a further object of the present invention is to provide a tank for storing containers which is provided with a light grid, which is easy to install on

the tank once it has reached the destination.

[0015] The set technical task and aims are substantially attained by a tank for storing containers comprising the technical characteristics set out in one or more of the appended claims.

[0016] Further characteristics and advantages of the present invention will become more apparent from the indicative and thus non-limiting description of an embodiment of a tank for storing containers.

[0017] Such a description will be set out below with reference to the accompanying drawings, which are provided solely for illustrative and therefore non-limiting purposes, in which:

- Figure 1 is a perspective view of a tank for storing containers preferably containing liquids in accordance with the present invention;
- Figure 2 is a perspective view of the tank of figure 1 with some parts removed to better illustrate others;
- Figure 3 is a detailed and enlarged view of a constructive detail of the tank of figure 1;
- Figure 4 corresponds to the view of figure 3 with a first component in a partial disengagement position from the tank;
- Figure 5 corresponding to the view of figure 3 with the first component in a total disengagement position from the tank;
- Figure 6 is a perspective view of the first component of the tank of figure 1 partially illustrated in figures 3-5;
- Figure 7 is a perspective view of a second component of the tank of figure 1;
- figure 8 is a perspective sectional view of a second embodiment of the first component of figure 5.

[0018] With reference to the accompanying drawings, 1 overall indicates a tank for storing containers C. Storage is intended as the temporary storage of the container C, and the material contained therein, until a subsequent movement of the container C to a different location or the temporary storage of the container C for the withdrawal of the material contained therein, when necessary. In the first case, the function of the tank 1 is to create a temporary container location station, while in the second case, the function of the tank 1 is to create a material supply station.

[0019] The containers C can contain the most disparate materials in liquid, solid or gaseous state, such as oils, fuels, lubricants, detergents or sawdust, chips, raw materials in granular form, or flame retardant or refrigerant gases.

[0020] All these materials can, during the operations and manoeuvring and withdrawal of the containers, be dispersed in the environment and for this reason, to contain the dispersion thereof they are stored inside the tank 1. The tank 1 is defined by a box-like body 2, open above with an opening 3 and enclosing a compartment V open above therein.

[0021] As a shape, the box-like body 2 comprises a bottom 4 which can include a flat extension or include inclined surfaces to favour the conveying of the collected material towards a specific area of the bottom itself (possibly provided with a drain hole, closed by a cap and openable during material recovery operations).

[0022] A side flank 5 extends from the bottom 4, which laterally delimits the compartment V.

[0023] Figure 1 depicts a preferred shape of the box-like body 2 of parallelepiped shape, by means of which the side flank 5 is composed of a first pair of walls 51, spaced from each other and preferably parallel, connected to a second pair of walls 52, spaced from each other and preferably parallel. That is, the first and second pair of walls 51, 52 are connected to each other so as to define in cross-section, passing through a plane parallel and spaced from the bottom 3, a closed quadrangular contour adapted to laterally delimit the compartment V. Without departing from the scope of protection of the present invention, the box-like body 2 can have any shape, such as cylindrical or pyramidal trunk, as long the condition is respected in which the side flank 5 has, on a section plane parallel to the bottom 3, a closed contour.

[0024] Connected to the bottom 4, on the side opposite the compartment V, i.e., outside the tank 1, there are support elements 10, preferably defined by a set of four support feet, to maintain the tank 1, in particular the bottom 4, lifted from a rest plane and to facilitate the movement of the tank 1 for example by means of the forks of a forklift.

[0025] Near the opening 3, there is at least one pair of support elements 6 better visible in figures 2-5. As can be seen from figure 2, the pair of support elements is arranged on opposite sides of the side flank 5, in particular at the first pair of walls 51, and faces the inside of the compartment V.

[0026] The support elements 6 can be connected, by means of fixing, welding or other means, on shelves located inside the side flank 5 or through a quadrangular frame connected inside the side flank 5.

[0027] In the accompanying drawings, a pair of support elements 6 placed on the first pair of side walls 51 is illustrated, but the tank 1 can include one pair of support elements 6 on the second pair of side walls 52, or further two pairs of support elements 6 with each support element arranged on a respective side wall.

[0028] The pair of support elements 6 is defined by a first elongated bar 61 and a second elongated bar 62.

[0029] The first and second elongated bars 61, 62, as shown in figure 2, are parallel to each other arranged along a pair of generatrices X parallel to each other. Each elongated bar 61, 62, illustrated in figure 7, is defined by an element having a predominant dimension with respect to the other two. In figure 7 it can be noted how the extension along the generatrix X is predominant with respect to the dimensions of the base and height of the cross section. The cross section of each elongated bar is preferably rectangular but, without departing from the

scope of protection of the present invention, can have any shape, e.g., square or round section.

[0030] Each elongated bar 61,62 has a respective plurality of first and second slits 610, 620 which extend from an upper end of the bar up to reaching about half the height of the bar itself. That is, the slits 610, 620 are blind at an intermediate height of the low and open above to communicate with the opening 3 of the box-like body 2.

[0031] The first plurality of slits 610 is associated with the first elongated bar 61 and the second plurality of slits 620 is associated with the second elongated bar 62.

[0032] A grid 7 is placed abutting against the pair of support elements 6 which, given the location of the support elements 6, lies near the opening 3.

[0033] Said grid 7 defines a rest plane for any containers C placed thereabove. As a result of a plurality of discharge slits 8, the grid 7 partially closes the opening 3 and thus above the compartment V of the box-like body 2.

[0034] As a result of the plurality of discharge slits 8, any liquid and/or debris exiting from the containers C resting on the grid 7, crosses the grid 7 and is collected inside the compartment V of the box-like body 2.

[0035] The grid 7 is defined by a plurality of crosspieces 9 arranged parallel to each other and resulting rested, on opposite sides, on the pair of support elements 6.

[0036] Each crosspiece belonging to the plurality of crosspieces 9 is spaced from a contiguous crosspiece so as to define a corresponding discharge slit 8 therebetween. Each crosspiece 9 belonging to the plurality of crosspieces 9 is singly separable from the pair of support elements 6 and from the other crosspieces 9 to enable the dimension volumes of the grid 7 to be reduced when dismantled from the tank 1. That is, when the tank 1 is dismantled, for example for shipping needs, the grid 7 can be dismantled into a plurality of single crosspieces 9. The latter can be located inside the box-like body 2. The formation and subsequent installation of the grid 7 does not occur entirely covering the opening 3 of the box-like body 2 due to the laying of a monolithic element but occurs gradually, connecting one crosspiece after the other on the pair of support elements 6.

[0037] That is, the grid 7 can assume two configurations of use: an assembled configuration, in which the plurality of crosspieces 9 is connected to the pair of support elements 6 so that each crosspiece is substantially coplanar to the adjacent crosspieces, and a disassembled configuration, in which the plurality of crosspieces 9 is disconnected from the pair of support elements 6 and the crosspieces can be placed inside the box-like body so as to arrange the tank 1 ready to be packaged and shipped. The assembled configuration is implemented by positioning one crosspiece at a time 9 between the pair of support elements 6 and the disassembled configuration occurs by extracting one crosspiece at a time from the pair of support elements 6.

[0038] As better illustrated in figures 2, 6 and 8, each crosspiece belonging to the plurality of crosspieces 9 has a main extension axis Y. The main extension of each

crosspiece 9 along the axis Y causes the plurality of crosspieces 9 to be located on the pair of support elements 6 lying transversely, preferably perpendicular, to the extension axes X of the first and second elongated bar 61,62.

[0039] Thereby also each slit belonging to the plurality of discharge slits 8, obtained from the spacing of a pair of contiguous crosspieces 9, also has extension along an axis parallel to the main extension axis Y of the crosspieces.

[0040] In figure 6 a first crosspiece variant 9 is depicted, while in figure 8 a second crosspiece variant 9 is illustrated. The common parts of both variants will be described below.

[0041] The crosspiece 9 has a planar surface 90 above defining, together with other planar surfaces belonging to other respective crosspieces 9, the rest plane of the grid 7.

[0042] At one end of the crosspiece 9 there is a head portion 91 reversibly engageable with a support element belonging to the pair of support elements 6.

[0043] At an opposite end of the crosspiece 9 there is a bottom portion 92, reversibly engageable with the other support element, belonging to the pair of support elements 6, not affected by the head portion 91.

[0044] The planar surface 90 has a pair of folds 93 on opposite sides, which are parallel to one another and extending along the main extension axis Y from the head portion 91 to the bottom portion 92. Each fold 93, angled with respect to the planar surface 90, preferably at a right angle, ends with a hooked body or with a body with hook.

[0045] More precisely, there is a first pair of hooked bodies 94 at the head portion 91, while there is a second pair of hooked bodies 95 at the bottom portion 92.

[0046] The first pair of hooked bodies 94 is preferably connectable to the first elongated bar 61 while the second pair of hooked bodies 95 is preferably connected to the second elongated bar 62.

[0047] The shape of the first pair of hooked bodies 94 is such as to generate a free space subtended within a curved section of the hooked portion. Such a space can be occupied by the transverse section of the first elongated bar 61. This coupling occurs in the same manner between the second pair of hooked bodies 95 and the transverse section of the second elongated bar 62.

[0048] As a result of the coupling between hooked pairs 94,95 and elongated bars 61,62, each crosspiece 9 is inhibited from moving along the main extension axis Y.

[0049] It is then possible to constrain the movement of each crosspiece 9 also along a direction incident to the main extension axis Y. To do this, it is necessary to couple the hooked bodies with corresponding slits obtained on the first and second elongated bar.

[0050] More precisely, the first pair of hooked bodies 94 is coupled, with shape coupling, inside a pair of first slits 610 while the second pair of hooked bodies 95 is coupled, with shape coupling, inside a pair of second slits

620. Thereby the first and second slits 610, 620, together with first and second pair of hooked bodies 94, 95, constrain the crosspieces 9 on the pair of support elements 6, preventing translating movements of each crosspiece along directions transverse to the axis Y.

[0051] The planar surface 90 can be divided into a first section 901 and a second section 902, spaced apart and joined by a groove 903.

[0052] The transverse section of the groove 903 is preferably V-shaped and ends with a vertex 904 located at a lower height with respect to that subtended by the planar surface 90, i.e., at the height subtended by the pair of sections 901, 902.

[0053] Therefore, following the cross-section of the crosspiece 9, it has a vertical section, defined by one of the folds 93, a horizontal section, defined by the first section 901 of the planar surface 90, a V-shaped section, defined by the groove 903 ending below with the vertex 904, again a horizontal section, defined by the second section 902 of the planar surface 90, and again a vertical section, defined by the other fold 93. The vertex 904 is perceptible in section as a point-like element, but throughout the three-dimensional extension of the crosspiece 9 it extends as a linear recess.

[0054] Through this specific configuration, the planar extension of each crosspiece 9 is interrupted to prevent any material from accumulating and stagnating on a flat surface.

[0055] Due to the groove 903, the liquid exiting the container C can be conveyed therein, accumulating on the vertex 904.

[0056] To facilitate the conveyance of fluids and/or debris through each crosspiece 9, it is preferable to make a plurality of discharge holes thereon.

[0057] Figure 6 shows a crosspiece 9 provided with a first plurality of discharge holes 96 uniformly spaced on at least the planar surface 90, preferably uniformly distributed on the first and second section 901 and 902 of the planar surface 90.

[0058] In addition, a second plurality of discharge holes 97 may be included at the groove 903 preferably located at the vertex 903.

[0059] With reference to the variant of figure 8, it can be seen how the crosspiece 9 is preferably lacking the plurality of discharge holes 96 or 97.

[0060] The crosspiece of figure 8 is preferably used to favour the loading of solid material in granular format, for example a plastic material, inside collection bags.

[0061] In this case, the crosspiece 9, maintaining the function of supporting the load above the box-like body 2, has the purpose of preventing, as far as possible, the granular material from falling inside the compartment V, mixing with waste liquids, consequently becoming irrecoverable.

[0062] With the crosspiece 9 of figure 8, the granular material which has exited from a bag container falls onto the crosspiece itself, at the planar surface 90 or the groove 903, and, once the bag is removed, could be re-

covered to be transferred into another bag of raw materials.

[0063] The crosspiece 9 of figure 8 differs from the crosspiece 9 of figure 6 for a different location of first and second pair of hooked bodies 94, 95 with respect to the extension along the axis Y of head and bottom portion 91, 92 of the crosspiece.

[0064] Referring now to figure 6, it can be noted how for example the first pair of hooked bodies 94 is protruding with respect to a vertical cutting plane of the head portion 90. That is, the underlying spacing A between the first pair of hooked bodies 94 and the second pair of hooked bodies 95, measured as a distance along the axis Y, is greater than the underlying spacing B between the head portion 90 and the bottom portion 91, measured as a maximum distance along the axis Y of the crosspiece 9. Thereby, when the crosspiece 9 is coupled between the pair of support elements 6, at the opposite ends of the crosspiece 9, i.e., between the head portion 91 and relative support element 6 and bottom portion 92 and relative support element 6, two outlet openings are generated which facilitate the conveyance of liquid towards the compartment V.

[0065] Referring now to figure 8, it can be noted how the crosspiece is sheared at the ends, at the head portion 91 and bottom portion 92 with two vertical planes.

[0066] With this configuration, the first and second pair of hooked bodies 94, 95 end having a spacing B, measured as a distance along the axis Y, greater than an extension A of the groove 903 and of the planar surface 90, always measured along the axis Y. Thereby, the crosspiece 9 rests on the pair of support elements 6 with the head portions 91 and the bottom portion 92 near the support elements 6.

[0067] To prevent the groove 903 from interfering with the pair of support elements 6, a pair of slots 905 is included, obtained at the vertex 904, which can be coupled with the first and second elongated bar 61, 62.

[0068] Advantageously, the present invention is capable of overcoming the drawbacks which have emerged from the prior art.

[0069] Advantageously, the tank 1 allows to be shipped in a particularly compact packaging configuration, reducing weight and shipping costs and therefore allowing shipping even to places far from the production factory of the tank. Secondly, the presence of a plurality of crosspieces 9 composing the grid 7 allows to facilitate the assembly and disassembly operations of the tank 1, being implementable in a short time and by unskilled personnel.

[0070] Even where a portion of the grid 7 may rust or deteriorate over time due to contact with corrosive materials, it is possible to replace the deteriorated part, changing one or more crosspieces, and not the entire grid 7.

[0071] The splitting of the grid into several parts also allows the possibility of making a mixed grid or with a part made with full crosspieces 9, i.e., without holes such as those illustrated in figure 8, and with a part with per-

forated crosspieces 9, i.e., as those illustrated in figure 6.

Claims

1. A tank (1) for storing containers (C), preferably containers containing liquids, of the type comprising:

- a box-like body (2), defining inside a compartment (V) intended to collect and contain liquids and/or further debris coming from the containers (C), having an opening (3) above and a bottom (4) below from which a side flank (5) extends moving away from the bottom (4) to the opening (3) and delimiting laterally the compartment (V); said side flank (5) comprising a first pair of walls (51), which are spaced apart from one another and a second pair of walls (52), which are spaced apart from one another and parallel, which are connected to the first pair of walls (51) to define in cross section a closed contour;
- at least one pair of support elements (6) located near the opening (3) distributed on the side flank (5) on opposite sides with each support element facing inside the compartment (V);
- a grid (7) that is solidly coupled with the tank (1), placed abutting on the support element (6) to interpose between the compartment (V) and the opening (3), defining a rest plane for possible containers (C) and having a plurality of discharge slits (8) adapted to permit the transit of possible liquids and/or debris from the abutting grid (7) to inside the compartment (V) of the box-like body (2);

characterised in that said abutting grid (7) is defined by a plurality of crosspieces (9), arranged parallel to one another and spaced apart so as to define the plurality of slits (8), connected reversibly to the support element (6); each crosspiece belonging to the plurality of crosspieces (9) being singly separable from the support element (6) and from the other crosspieces (9) to enable the dimension volumes of the abutting grid (7) to be reduced when the abutting grid (7) is dismantled from the tank (1).

2. The tank according to claim 1 wherein said grid (7) can consist of the plurality of crosspieces (9) assuming an assembled configuration in which the plurality of crosspieces (9) is connected to the pair of support elements (6), to a disassembled configuration, in which the plurality of crosspieces (9) is disconnected from the pair of support elements (6) and the crosspieces are housable inside the box-like body (2); said grid (7) passing from the disassembled configuration to the assembled configuration through fitting one crosspiece (9) at a time on the pair of support elements (6); and passing from the assembled configuration

to the disassembled configuration through dismantling of the pair of support elements (6) of one crosspiece (9) at a time.

3. The tank according to claim 1 wherein each crosspiece belonging to the plurality of crosspieces (9) extends along a main extension axis (Y) and comprises:
 - a planar surface (90) defining, together with the other planar surfaces belonging to the respective crosspieces (9), the rest plane of the grid (7);
 - a head portion (91), located at one end of the crosspiece (9), which is reversibly engageable to a support element belonging to the pair of support elements (6);
 - a bottom portion (92), located at the opposite end of the crosspiece (9) in opposition to the head portion (91), which is engageable to the other support element belonging to the pair of support elements (6) that is not engaged by the head portion (91).
4. The tank according to claim 1 wherein said pair of support elements (6) is defined by a first and a second elongated bar (61,62) that are parallel to one another and arranged respectively on the first pair of walls (51) or on the second pair of walls (52).
5. The tank according to claims 3 and 4 wherein said first and second elongated bar (61,62) extend along corresponding parallel axes (X) that are transverse, preferably perpendicular, to the main extension axis (Y) of each crosspiece (9).
6. The tank according to claims 3 and 4 wherein each crosspiece belonging to the plurality of crosspieces (9) comprises at opposite ends of the planar surface (90) a pair of folds (93) that are parallel to one another and extending along the main extension axis (Y) from the head portion (91) to the bottom portion (92); each fold (93) having at the head portion (91) a first pair of hooked bodies (94), which is engageable on the first elongated bar (61), and at the bottom portion (92) a second pair of hooked bodies (95), which is engageable on the second elongated bar (62); said first and second pair of hooked bodies (94,95) making a locking constraint on the respective first and second elongated bar (61,62) to prevent translating movements of each crosspiece (9) along directions parallel to the axis (Y).
7. The tank according to claim 6 wherein said first elongated bar (61) has a plurality of first slits (610) that are engageable, two by two, by the first pair of hooked bodies (94) belonging to each crosspiece (9) and wherein said second elongated bar (62) has a

plurality of second slits (620) that are engageable, two by two, by the second pair of hooked bodies (95) belonging to each crosspiece (9); said pluralities of first and second slits (610, 620) making a locking constraint on the respective pairs of hooked bodies (94,95) to prevent translating movements of each crosspiece (9) along directions transverse to the axis (Y).

8. The tank according to claim 3 wherein each planar surface (90) has a first section (901) and a second section (902) that are coplanar and joined together by a groove (903), having in cross section a V profile ending with a vertex (904) placed below the planar surface (90); said groove promoting the conveyance of the liquid to the vertex (904) of each crosspiece (9).
9. The tank according to claims 4 and 8 wherein said groove (903) has, near the bottom and head portion (91,92), a pair of slots (905), obtained at the vertex (904), couplable with the first or second elongated bar (61,62).
10. The tank according to claim 3 wherein each cross-piece belonging to the plurality of crosspieces (9) has a first plurality of discharge holes (96) distributed at the planar surface (90) to facilitate the transit and the collection of fluids and/or debris inside the compartment (V) of the box-like body (2), preventing the fluids and/or debris from being retained on the planar surface (90).
11. The tank according to claim 8 wherein each cross-piece belonging to the plurality of crosspieces (9) has a second plurality of discharge holes (97) distributed along the bottom of the groove (903) to facilitate the transit and collection of fluids and/or debris inside the compartment (V) of the box-like body, preventing the fluids and/or debris from being retained inside the groove (903).

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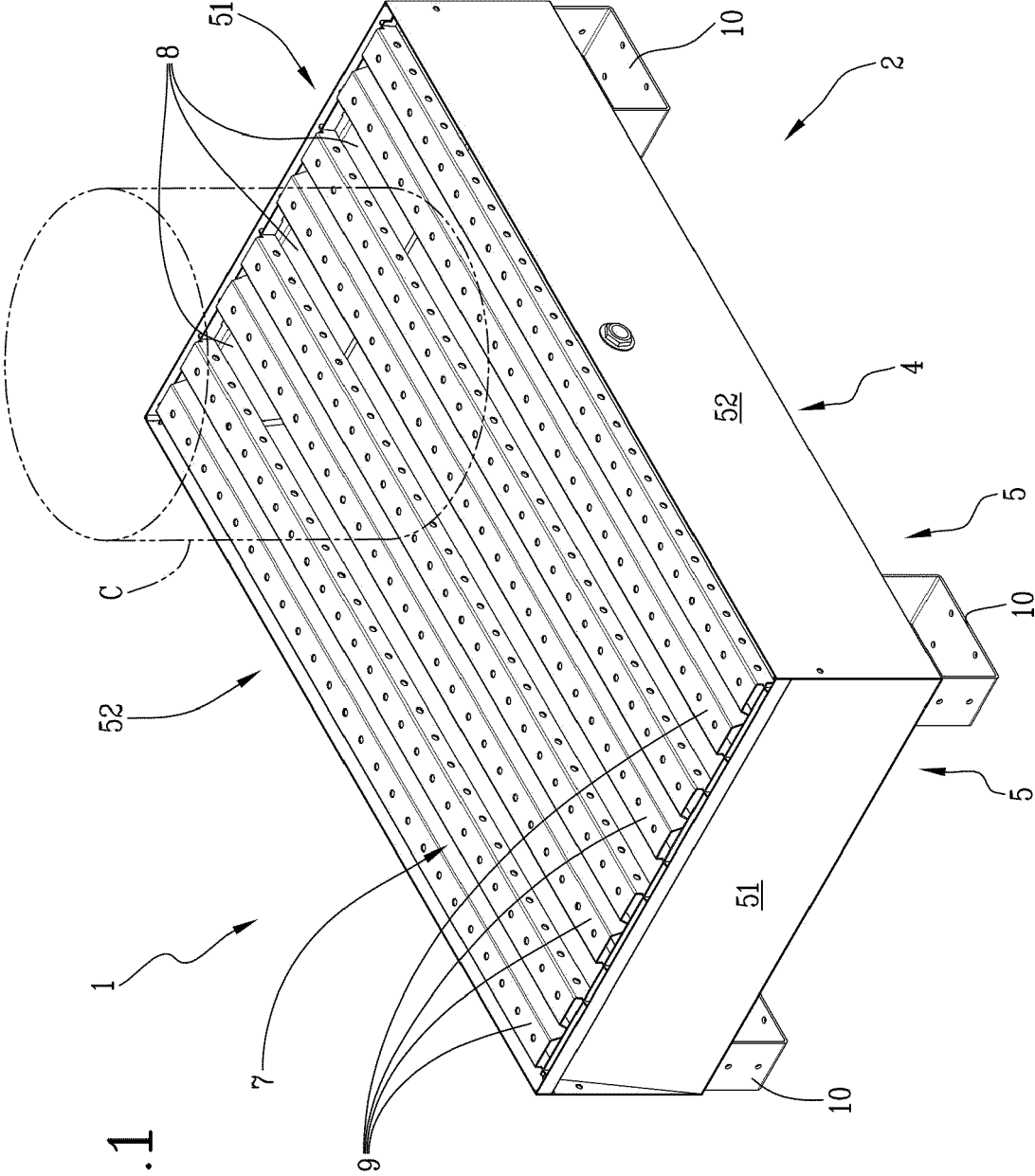


Fig. 1

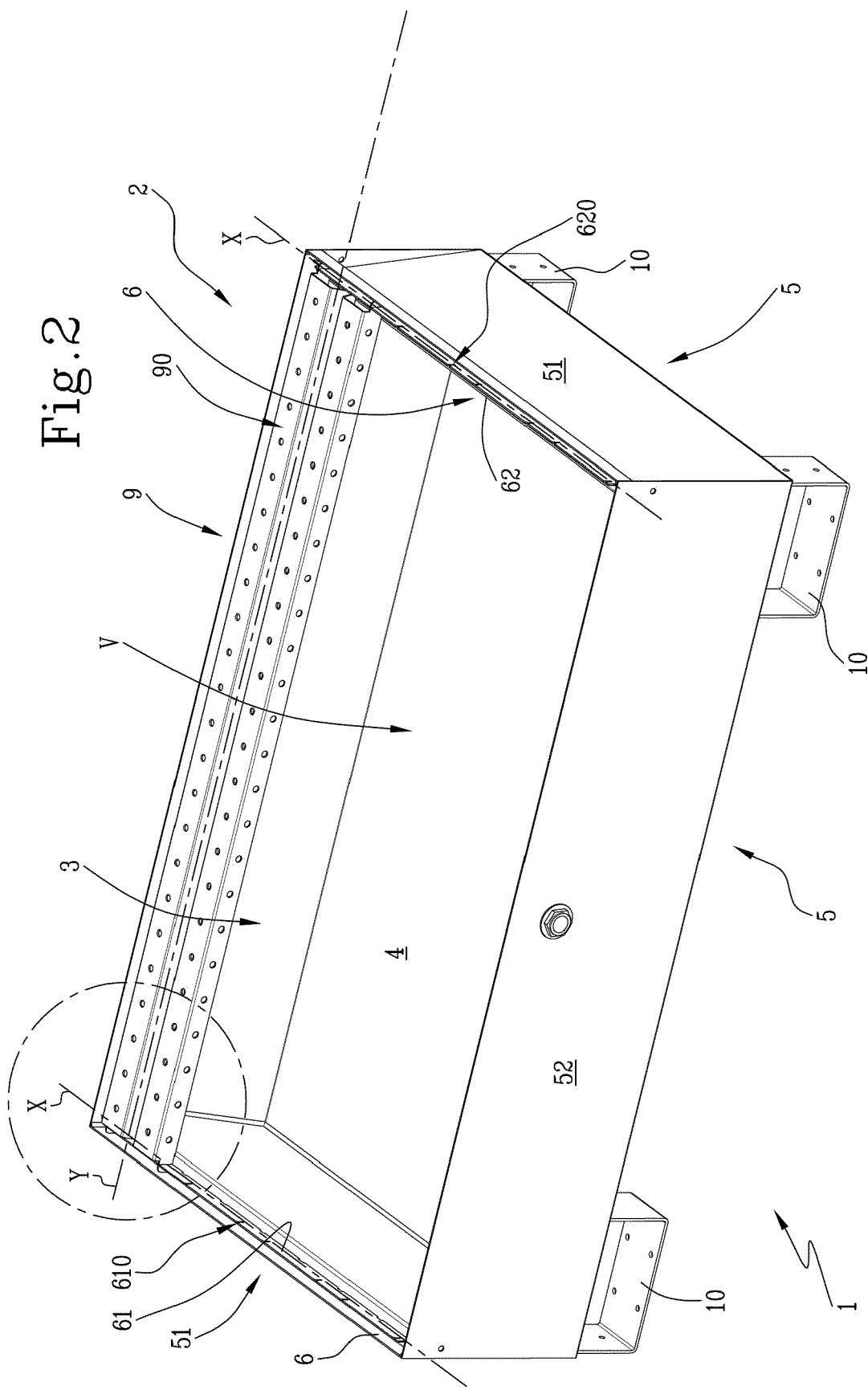
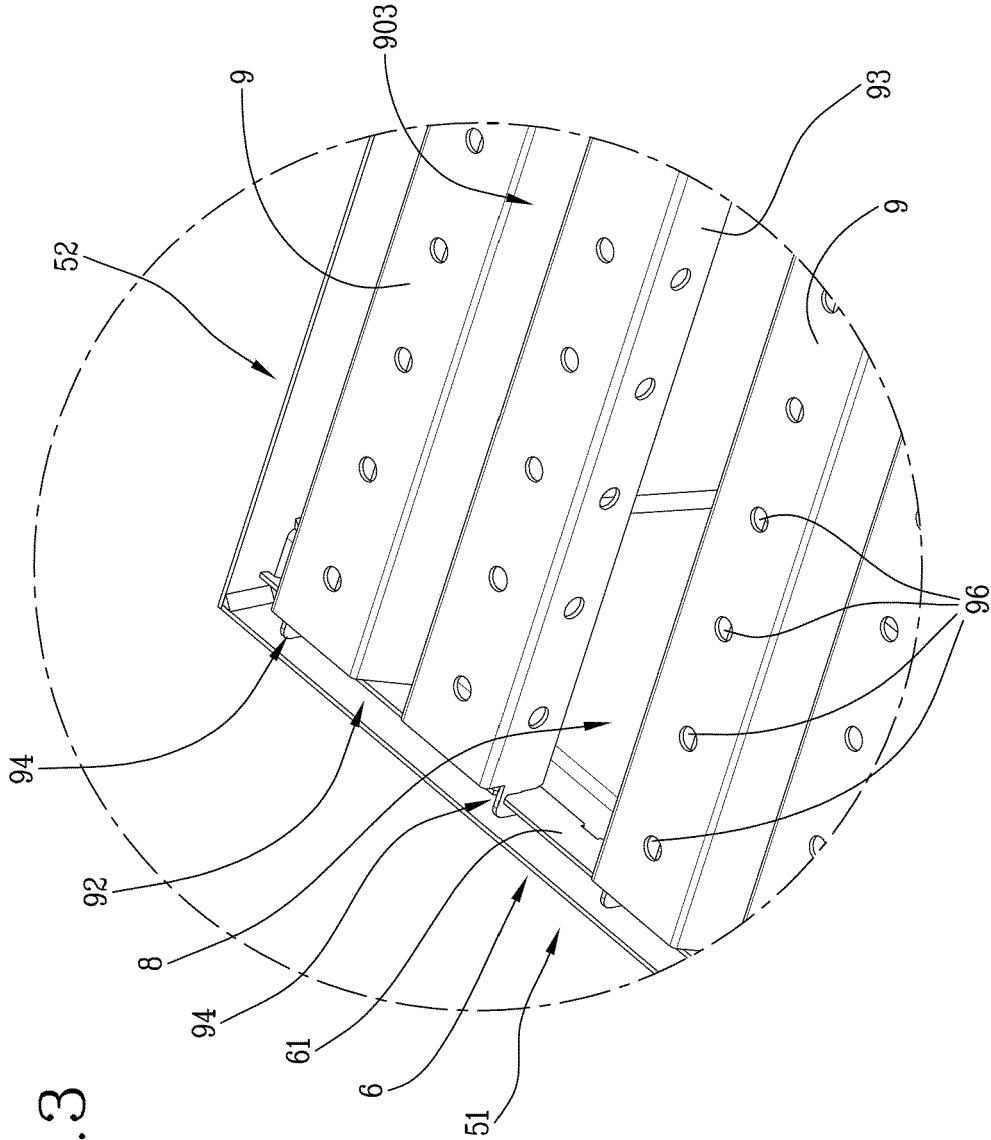


Fig. 3



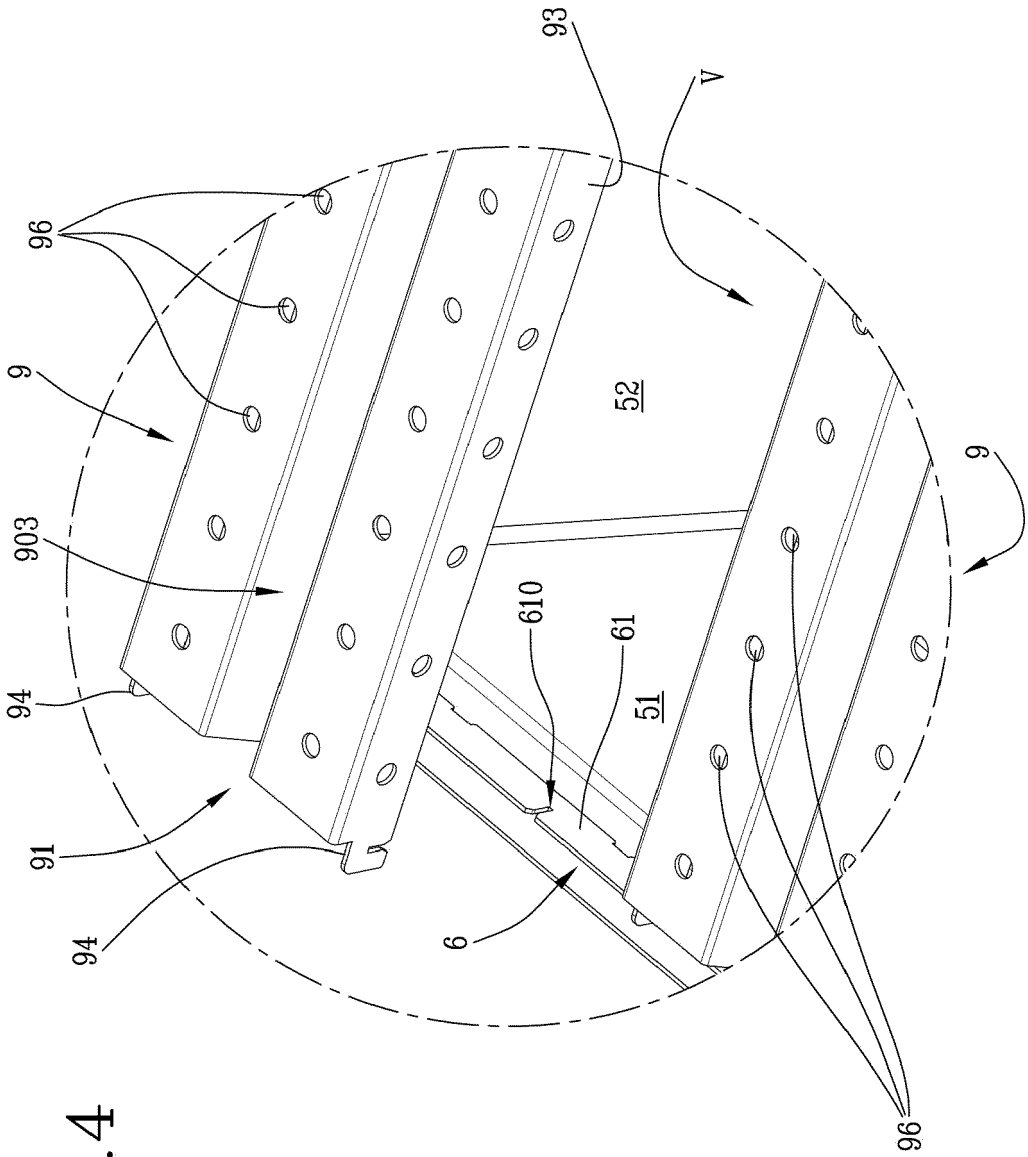


Fig.4

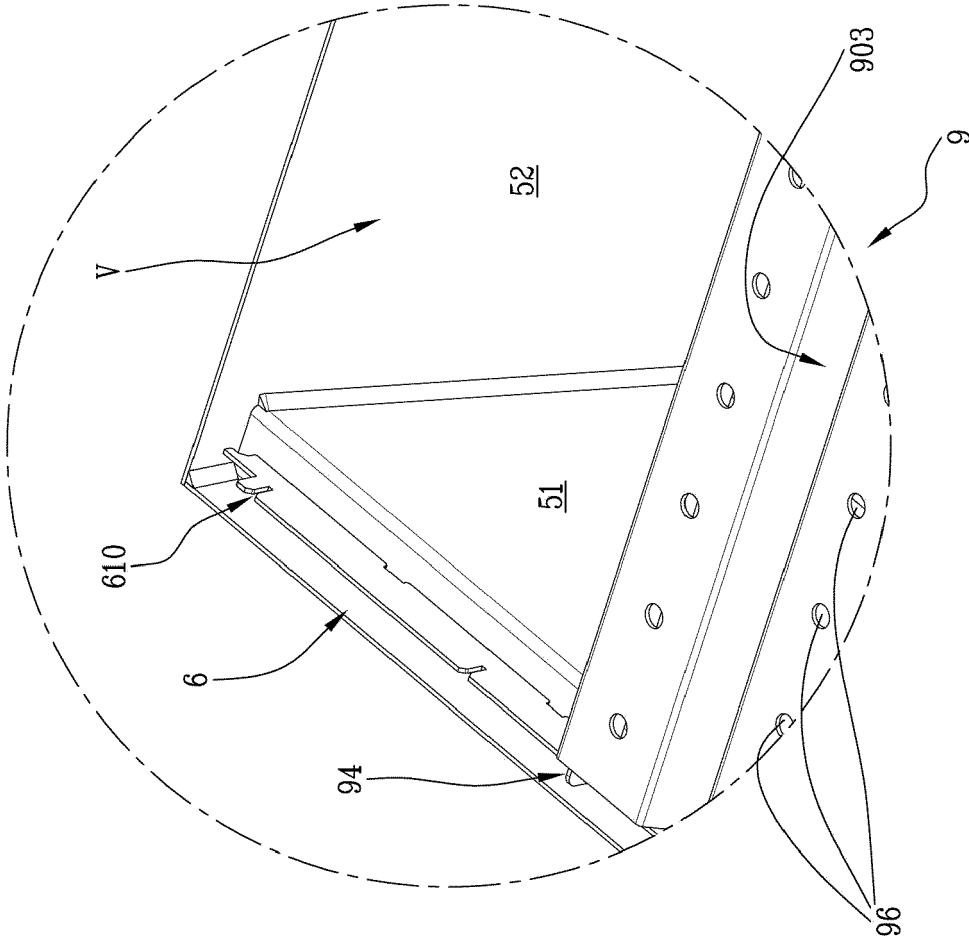
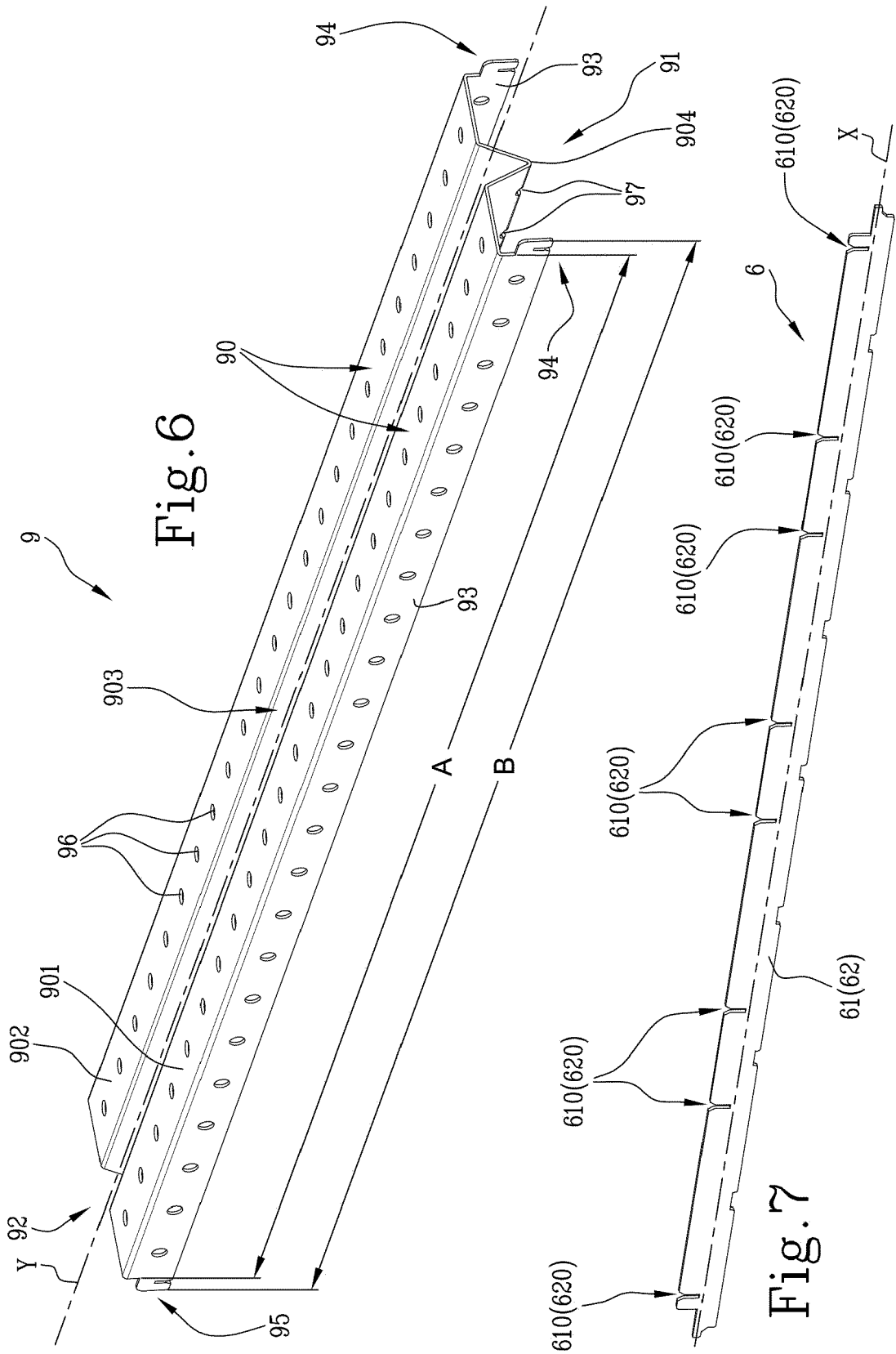


Fig. 5



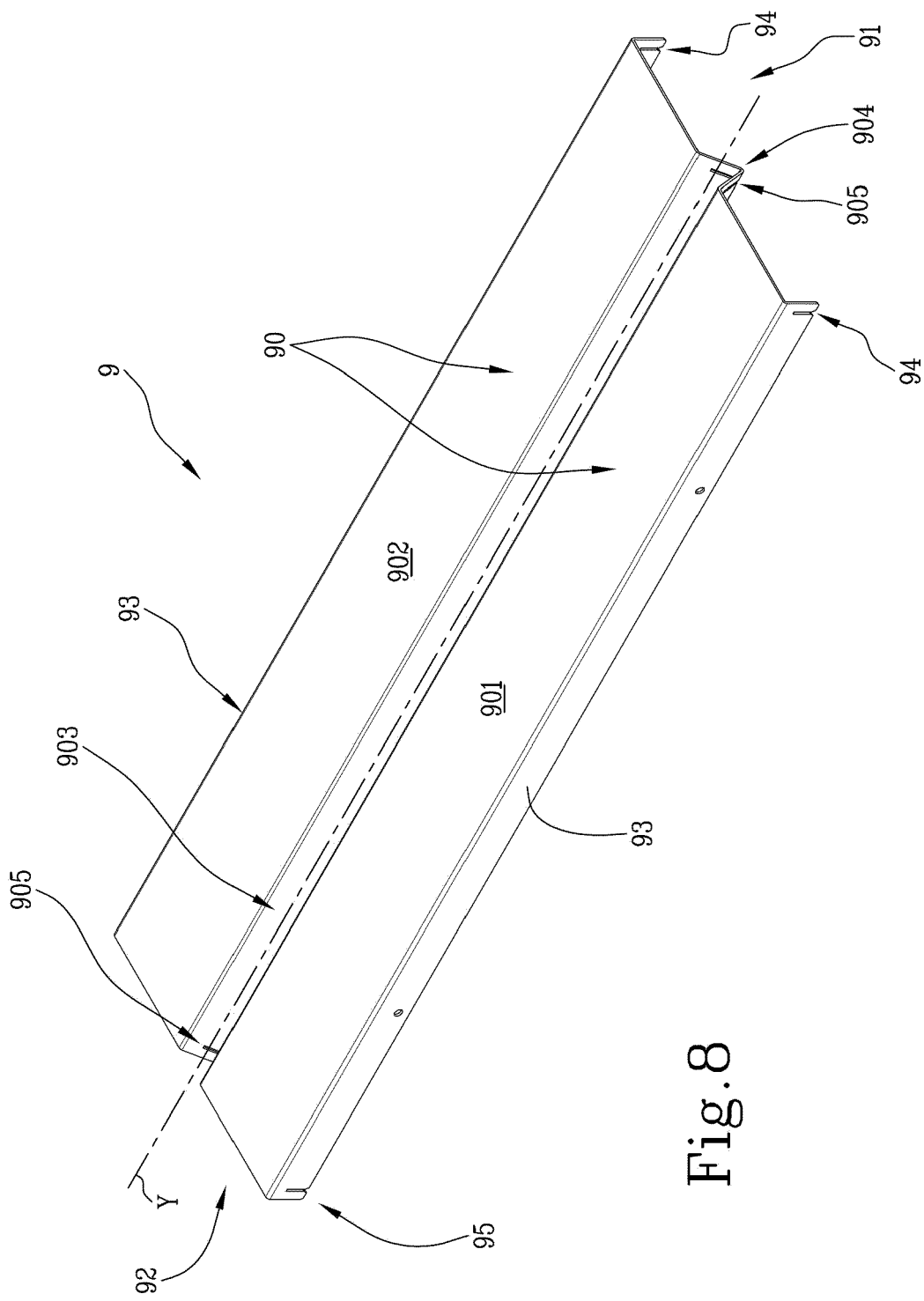


Fig. 8



EUROPEAN SEARCH REPORT

Application Number

EP 23 18 7616

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EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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