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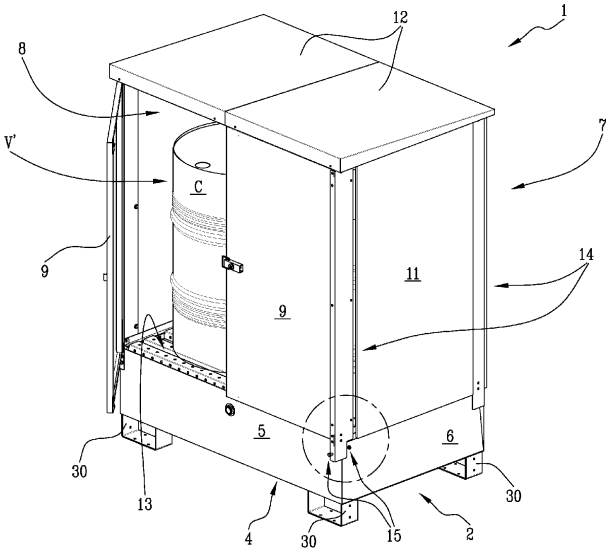
(54) **MODULAR CABINET FOR STORING CONTAINERS**

(57) A modular cabinet 1, for storing containers C, comprising a lower box-like body 2 connected to an upper box-like body 7 communicating with each other through an opening 3. A grid 13 is interposed between the lower box-like body 2 and the upper box-like body 7 to allow the support of the containers C inside the upper box-like body 7 and at the same time the collection of any liquids and/or debris leaking from the containers C into the lower box-like body 2. The modular cabinet 1 further comprises a load-bearing frame 14 adapted to promote, through reversible connecting means 15, a removable connection between said lower box-like body 2 and said upper box-like body 7.

Fig.2



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Description

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

[0002] Inside or outside warehouses, workshops, laboratories, construction sites, production departments and more generally work environments, it is necessary to use areas for the storage of raw materials and other materials, semi-finished products, tools that are used daily in one's activity.

[0003] In some cases, examples of stored materials may be, petrol, refrigerant liquids and oils, paints, liquid soaps and detergents that are generally commercially supplied in containers such as milk, barrels, drums. In other cases the storage materials, in addition to those indicated, can be solid materials, such as sawdust, chips or raw materials in the form of granules, or of a gaseous nature such as, for example, flame retardant substance or cooling gases.

[0004] The cited containers, when are not to be used, are stored inside cabinets or receiving tanks.

[0005] Then there are situations, for example, in which specific materials are handled within the work environments. In these situations, the containers are stored in cabinets or tanks forming supply areas where users go and perform operations of tapping or transfer of liquids into smaller transport units to be handled within the work environments.

[0006] To cite an example, we can think of a car workshop that provides a tank for storing a barrel of liquid for radiators from which several mechanics draw and collect a quantity of refrigerant liquid so as to bring it close to a respective vehicle repair station.

[0007] Then, there are other situations in which substances that are either highly flammable or dangerous or toxic to the human organism are contained within the containers and which, as such, cannot be located within a closed working environment. In these contexts, it is mandatory to locate these substances outdoors and protect the containers from atmospheric agents and/or from any access by people not in charge of the work.

[0008] For these reasons, the tanks are replaced by cabinets with the function of enclosing and protecting the content stored inside it. The cabinet is a structure generally defined by an external panelling that confers a structural stiffness of the cabinet and at the same time fulfils the function of enclosing a volume within which to store certain containers.

[0009] An example of the state of the art is illustrated in figure 1.

[0010] The structure is defined by a monolithic box-like body S, defining inside a compartment V, having on one side a pair of leaves A for access to the compartment V (only one leaf A is represented for illustrative purposes). Internally, the compartment V is subdivided into two subunits, upper compartment and lower compartment, through a metal grid G. Above the metal grid G there are containers, for example barrels B, accessible by the operator through the opening of the leaves A, while below the metal grid liquids leaking from the containers can be collected to prevent them from dispersing into the environment.

[0011] These shanks have several disadvantages.

[0012] First of all, the monolithic shape of the cabinet makes the packaging very bulky and therefore very expensive to ship. In some cases, the manufacturer finds it uneconomical to market and therefore to send one or more tanks beyond a certain mileage away from his headquarters.

[0013] Secondly, these structures, although made of metal, suffer from high fragility especially during shipping operations. Since they are substantially defined by metallic cladding panellings, these are subject to possible dents that force the manufacturer to reinforce the packaging with stiffening and shock absorbing materials. This is at the expense of overall packaging costs.

[0014] Still, the cabinets of the prior art have reduced flexibility of use. In the event that it is wished to convert the cabinet into a tank, perhaps due to the change in the location of the cabinet or due to the change in the material to be stored, the user is forced to replace the cabinet with a new tank.

[0015] The technical task of the present invention is therefore to provide a modular cabinet for storing containers that is able to overcome the drawbacks which have emerged from the prior art.

[0016] An object of the present invention is therefore to make available a modular cabinet for storing containers, which is dismountable when it is to be shipped and which has contained overall dimensions to facilitate packaging and shipping operations.

[0017] Another object of the present invention is to make available a modular cabinet for storing containers that is equipped with a reinforcement structure capable of making it resistant.

[0018] Furthermore, a further object of the present invention is to make available a modular cabinet for storing containers that has a high flexibility of use and that can be converted from cabinet into tank and vice versa without particular modifications to the structure.

[0019] Another object of the present invention is to make available a modular cabinet for storing containers whose conversion and flexibility of use from tank into cabinet and vice versa takes place with reversible connecting means isolated from the inside of the cabinet and which therefore cannot be attacked by, or do not come into contact with, the liquids contained in the containers.

[0020] The stated technical task and specified objects are substantially achieved by a modular cabinet for storing containers comprising the technical features set forth in one or more of the appended claims.

[0021] 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 modular cabinet for storing containers.

[0022] 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 cabinet of the prior art.
- Figure 2 is a perspective view of a modular cabinet in accordance with the present invention in a use configuration;
- figure 3 is a perspective view of the cabinet of figure 2 with some parts removed to better illustrate others;
- figure 4 is a perspective view, with some parts interrupted, illustrating a first group of elements defining a lower box-like body of the cabinet of figure 2;
- figure 5 is a detailed perspective view of a portion of the lower box-like body of figure 4;
- figure 6 is a perspective view of a component of the lower box-like body of figure 4;
- figure 7 is an external detailed perspective view of a portion of the modular cabinet of figure 2;
- figure 8 is an internal detailed view, with some parts removed to better illustrate others, of the cabinet portion of figure 7.
- Figure 9 is an exploded view of the cabinet in a dismounting configuration in which the lower box body is visible and the remaining cabinet components can be housing on the lower box body
- Figure 10 is a perspective view of the cabinet in a packaging configuration in which the remaining components of the cabinet are placed in the lower box-like body.

[0023] With reference to the attached figures, a modular cabinet for storing containers C has been indicated overall with 1. By storage is meant the temporary storage of the container C, and of 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 picking the material contained therein, when necessary. In the first case, the function of the modular cabinet 1 is to create a temporary container location station, while in the second case, the function of the modular cabinet 1 is to create a material supply station.

[0024] The containers C can contain among the most disparate materials in the liquid, solid or gaseous state such as oils, petrol, lubricants, detergents or sawdust, chips, raw materials in granular form, or flame retardant gases or refrigerants.

[0025] All these materials can, during the operations of manoeuvring and picking of the containers, be dispersed in the environment and for this reason, to contain the dispersion thereof they are stored inside the modular cabinet 1. Some of the materials mentioned above cannot be placed inside a work environment, for worker safety and protection reasons, and they are put in locations outside the work environment however protected inside the modular cabinet 1.

[0026] The modular cabinet 1 consists of two main elements: a lower box-like body 2 and an upper box-like body 7 ideally subdivided between them, as better illustrated below, by a grid 13.

[0027] The lower box-like body 2 has the function of receiving and containing liquids and/or additional debris that may accidentally leak from the containers C. The function of the lower box-like body 2 is therefore that of a receiving tank.

[0028] The upper box-like body 7 has the function of enclosing and protecting the containers C, resting on the grid 13, delimiting the volume within which the containers themselves are stored. The upper box-like body 7 together with the grid 13 delimit the receiving space of the containers C.

[0029] When the modular cabinet 1 is assembled, i.e. assumes a use configuration, the upper box-like body 7 overhangs the lower box-like body 2 and is solidly connected to the latter as illustrated in figure 2.

[0030] The lower box-like body 2 defines inside a first compartment V intended to receive and contain liquids and/or other debris coming from the containers C.

[0031] The lower box-like body 2, better illustrated in figure 4, provides a bottom 4 below from which a first pair of walls 5 extend that are spaced apart from one another and opposite, which are connected to a second pair of walls 6, which are spaced apart and opposite.

[0032] The lower box-like body 2 is open above, communicating with the upper box-like body 7, through an opening 3.

[0033] In contrast to the opening 3, the lower box-like body 2 has, connected to the bottom 4 on the opposite side to the first compartment V, four support feet 30 adapted to maintain the bottom 4 and therefore the lower box-like body 2 above a support plane (only three are illustrated in figures 2 and 3 for representative needs). In this way, the four support feet 30 allow both to avoid any contact of the ground with the bottom 4, to avoid potential deterioration of the latter, and to allow the entire modular cabinet 1 to be forked by the forks of a forklift to be handled.

[0034] The first pair of walls 5 has an extension with walls that are parallel to one another. In other words, each wall belonging to the first pair of walls 5 extends, moving away from the bottom 4, with a vertical course. Each first wall 5 forms with the bottom 4 an angle α substantially equal to 90° (in figure 4 for representative needs only one has been represented).

[0035] The second pair of walls 6 has an extent with walls converging on one another. In other words, each wall belonging to the second pair of walls, extends, moving away from the bottom 4, with an oblique course towards the inside of the first compartment V. Each second wall 6 forms with the bottom 4 an angle β smaller than 90°, preferably comprised between 75°and 85° (in figure 4 for representative needs only one has been represented).

[0036] Ideally if it is wished to extend the second pair of walls 6 these would intersect in a segment that pro-

jected vertically on the bottom 4 would fall within it.

[0037] Due to this particular conformation of the second pair of walls 6, the coupling thereof with the first pair of walls 5 does not take place along a vertical line. In other words, the coupling between the ends of a second wall 6 does not take place by matching the ends of the first pair of walls 5.

[0038] Due to the particular conformation of the second pair of walls 6, the coupling with the first pair of walls 5 takes place by delimiting a central portion 50, which is predominant, of each first wall 5 inside the first compartment V and excluding a pair of peripheral portions 52 of each first wall 5 from inside the first compartment V leaving it outside the same.

[0039] At each peripheral portion 52 there is a first through hole 53 whose function will be explained later.

[0040] For greater clarity, taking figure 5 as a reference, defining with 65 each side edge of a second wall 6 and with 55 each side edge of a first wall 5, the connection between first and second wall does not take place by overlapping the side edges.

[0041] Due to the convergence between the second pair of walls 6, i.e. the inclined extension of each second wall 6, the coupling between a wall belonging to the second pair of walls 6 with a part belonging to the first pair of walls 5 takes place inside the first wall 5 generating a peripheral portion 52 external to the lower box-like body 2 and therefore to the first compartment V.

[0042] Still referring to the second pair of walls 6, each wall ends above with a step profile 60 defining a horizontal section 61 and a vertical section 62.

[0043] As a result of this step profile 60, the second pair of walls 6, through the respective vertical sections 62, defines a support plane for the grid 13.

[0044] Above the lower box-like body 2 there is the upper box-like body 7 defining inside a second compartment V' intended to contain the containers C (in figure 2 they have been represented by barrels).

[0045] The containment space of the modular cabinet 1 is given by the sum of the first compartment V and of the second compartment V'. More precisely, the sum of the compartments V, V' defines the total space of the modular cabinet 1 subdivided into loading space, delimited by the second compartment V', and receiving space, delimited by the first compartment V. In other words, the containers C can be stored in the second compartment V' while the liquids or debris leaking from the containers can be received in the first compartment V.

[0046] This subdivision occurs as a result of the grid 13, of a substantially known type, which has a plurality of openings 130. Said plurality of openings 130 is obtained through the intersection of a plurality of crosspieces, crossed one another perpendicularly, defining a stiff net acting as a support plane for the containers C. Alternatively, as illustrated in the attached figures, the grid 13 is defined by a plurality of crosspieces parallel to each other and defining, due to the effect of the local approach, the plurality of openings 130.

[0047] Any leakage of material from the containers C through the plurality of openings 130 and from the container C, thus from the second compartment V', is received inside the first compartment V.

[0048] Said upper box-like body 7 comprises a pair of leaves 9, which are openable or closable to permit or inhibit access to a gap 8 from which an operator can access the containers C. Said pair of leaves 9 is positioned in vertical continuation of one of the first pair of walls 5.

[0049] In contrast to the pair of leaves 9, the box-like body 7, provides a back 10 placed in vertical continuation of the other wall belonging to the first pair of walls 5 not engaged by the pair of leaves 9.

[0050] In other words, the back 10 is placed at a wall belonging to the first pair of walls 5 and the pair of leaves 9 is present in the other wall belonging to the pair of walls 5.

[0051] Laterally, the box-like body 7 comprises a pair of flanks 11 each in vertical continuation of a respective wall belonging to the second pair of walls 6.

[0052] Each flank 11, laterally connects a respective leaf 9 to the back 10.

[0053] Above, the upper box-like body 7 is closed by a cover 12 connected to the pair of leaves 9, to the back 10 and to the pair of flanks 11.

[0054] As can be seen in figures 2 and 3, the cover 12 can be subdivided into two portions each located at a respective leaf belonging to the pair of leaves 9. The lower box-like body 2 and the upper box-like body 7 are removably connected to each other through a load-bearing frame 14 and reversible connecting means 15 (better illustrated in figure 3).

[0055] As a result of this removable connection, the modular cabinet 1 can assume two configurations: a use configuration, illustrated in figure 2, and a packaging configuration, illustrated in figure 10.

[0056] In the use configuration, the reversible connecting means 15 is mounted and the lower box-like body 2 is surmounted by the lower box-like body 7. The two box bodies 2,7 are solidly constrained to each other and form a single body defining the modular cabinet 1.

[0057] In the packaging configuration, the reversible connecting means is dismounted and the box-like body 7 is fractioned, i.e. subdivided, into the individual components that make it up.

[0058] In other words, in the packaging configuration, pair of leaves 9, back 10, pair of flanks 11, cover 12 are disjointed and disconnected from one another. In this specific configuration the pair of leaves 9, the back 10, the pair of flanks 11, the cover 12 and the load-bearing frame 14 can be nested inside the first compartment V defined by the lower box-like body 2 (to facilitate this operation the back is preferably subdivided into two portions each having an area substantially equal to that of a leaf belonging to the pair of leaves 9).

[0059] In this way, the overall dimensions subtended by the modular cabinet 1 are smaller than the overall

dimensions of the same in the use configuration.

[0060] By doing so, it is possible to package the modular cabinet 1 in a dismounted configuration using the first compartment V of the lower box-like body 2 as a container for the other elements that make up the cabinet itself. In addition to a reduction in the overall dimensions, it is possible to protect the other dismounted parts of the upper box-like body 7 by taking advantage of the protection provided by the first and second pair of walls 5,6.

[0061] Returning to figure 3 the load-bearing frame 14 comprises a first front uptight 16, a second front uptight 17, a first rear uptight 18 and a second rear uptight 19.

[0062] The first front upright 16 is connected below to the lower box-like body 2 through the reversible connecting means 15 and acts as a connecting upright for a first leaf, belonging to the pair of leaves 9, and a flank belonging to the pair of flanks 11.

[0063] The second front upright 17 is connected below to the lower box-like body 2 through reversible connecting means 15 and acts as a connecting upright for the other leaf, belonging to the pair of leaves 9 and not affected by the first upright 16, and a flank belonging to the pair of flanks 11 not affected by the first upright 16.

[0064] In other words, first and second front uprights 16, 17 are specularly arranged at opposite edges of a first wall belonging to the first pair of walls 5 and maintain a pair of leaves 9 and a pair of flanks 11 stably connected to each other.

[0065] The first rear upright 18 is connected below to the lower box-like body 2, through the reversible connecting means 15 and acts as a connecting upright between a flank, belonging to the pair of flanks 11, and a side of the back 10.

[0066] The second rear upright 19 is likewise connected below to the lower box-like body 2, through the reversible connecting means 15 and acts as a connecting upright between a flank, belonging to the pair of flanks 11 not affected by the first rear upright 18, and a side of the back 10, opposite to that affected by the first rear upright 18.

[0067] In other words, the uprights are arranged at the vertices of the upper box-like body 7 and give structural stiffness to the elements that make it up.

[0068] Optionally, the load-bearing frame 14 may comprise an auxiliary upright 26, connected below to the lower box-like body 2 and interposed between the first and second rear upright 17, 18 to confer structural stiffness between the lower box-like body 2 and the back 10. In particular, the auxiliary upright 26 is preferred in the case where the back is subdivided into two portions so as to guarantee a coplanar alignment of said two portions and to guarantee a structural stiffness of the back 10.

[0069] Again in order to increase the stiffness of the load-bearing frame 14, auxiliary upright 26, first and second rear upright 17, 18 can be connected below to a connecting crosspiece 27 extending along a wall belonging to the first pair of walls 5, specifically the one affected by the back 10.

[0070] Returning to the conformation of the front and rear uprights 16,17,18,19, these have an angular profile defined by a first side 20 and a second side 21.

[0071] The first side 20, when mounting the load-bearing frame 14, is placed close to a part belonging to the first pair of walls 5, while the second side 21 is placed close to a wall belonging to the second pair of walls 6.

[0072] At the first side 20 there is a second through hole 23 engageable by the reversible connecting means 15.

[0073] Figure 7 illustrates the first front upright 16 from the outside of the upper box-like body 7 while figure 8 illustrates the same upright 16 from the inside of the upper box-like body 7. The conformation of the first and second front upright 16, 17 is substantially similar to the conformation of the first and second rear upright 18, 19 being shaped specularly with respect to a vertical plane of symmetry of the upper box-like body 7.

[0074] As visible from figures 7 and 8, the first side 20 has a less extensive surface extension than the surface extension of the second side 21. First and second side 20, 21 are angled transversely at a right angle, i.e. they have an L-shape in cross-section. The first side 20 of each upright is preferably connected at a respective side edge 55 of the wall belonging to the first pair 5. More precisely, the first side 20 is connected to a wall belonging to the first pair of walls 5 opposed to a corresponding peripheral portion 52.

[0075] The second side 21 of each upright is instead placed in contact with a wall belonging to the second pair of walls 6, preferably at a respective side edge 65.

[0076] Each first side 20 can have a shelf extending moving away from the first side 20 with direction of extension substantially parallel to the second side 21. Each shelf is adapted to rest on the step profile 60 when the load-bearing frame 14 and the reversible connecting means 15 are mounted between the lower box-like body 2 and the upper box-like body 7.

[0077] First and second through holes 53, 23 are engaged to the reversible connecting means 15.

[0078] Said reversible connecting means 15 comprises a connecting screw 150 and a clamping nut 151, screwed onto said connecting screw 150.

[0079] The connecting screw 150 is fitted on first and second through holes 23, 53 and has a head 152 clamped in abutment against the first side 20 of each upright 16-19, and a shank 153 passing through said first and second through holes 23, 53.

[0080] The clamping nut 151, screwed onto the shank 153, is clamped in abutment on the peripheral portion 52 of each wall belonging to the first pair of walls 5.

[0081] As a result of the connection between the first pair of walls 5 and the second pair of walls 6, the reversible connecting means 15 is always accessible from outside the modular cabinet 1.

[0082] This means that, in the event that the user wishes to convert the modular cabinet 1 into a tank, by dismounting the upper box-like body 7 from the lower box-

like body 2, he will be able to do so without unloading the containers C from the grid 13.

[0083] Advantageously, the present invention is capable of overcoming the drawbacks which have emerged from the prior art.

[0084] Firstly, the modular cabinet 1 allows to assume a particularly compact packaging configuration that allows to ship the cabinet in a partially dismounted configuration. The overall dimensions of the cabinet 1 in the packaging configuration, by reducing the overall dimensions with respect to an assembled configuration, downsizes the volumes and consequently shipping costs.

[0085] Secondly, the possibility of nesting all the components of the upper box-like body 7, together with the load-bearing frame 14, inside the first compartment V defined by the lower box-like body 2, allows to reduce the packaging costs since the lower box-like body 2 assumes a protective function of the packaging.

[0086] Still, the modular cabinet 1 has a high flexibility of use since it is possible to convert it from tank into cabinet and vice versa at any time and in a reversible way.

[0087] The coupling between the first and second pair of walls 5,6 and the particular convergent conformation of the second pair of walls 6 that leaves the reversible connecting means 15 outside the compartments V, V', allows to obtain other advantages. The reversible connecting means 15 external to the first and second compartments V, V' is not subject to corrosive actions of substances contained in the containers C and is therefore protected from possible damage.

[0088] Its placement outside the first and second compartments V, V allows the upper box-like body 7 to be dismounted from the lower box-like body without having to remove the grid 13 and the containers C resting thereon.

[0089] Finally, the placement of the reversible connecting means 15 simplifies the mounting of the upper box-like body 7 to the lower box-like body 2 for easy access thereof.

Claims

1. A modular cabinet (1) for storing containers (C), of the type comprising:

- a lower box-like body (2), defining inside a first compartment (V) intended to receive and contain liquids and/or further debris coming from the containers (C), having an opening (3) above and a bottom (4) below from which, moving away from the bottom (4) towards the opening (3), a first pair of walls (5) extend that are spaced apart from one another and opposite, and a second pair of walls (6), which are spaced apart and opposite, which are connected to the first pair of walls (5) to define in cross section a closed contour;
- an upper box-like body (7), defining inside a second compartment (V') intended to contain the overall dimensions of the containers (C) and comprising:
  - a pair of leaves (9), which are openable or closable to permit or inhibit access to an access gap (8) of the cabinet (1), placed at and prolonging a wall belonging to the first pair of walls (5);
  - a back (10), opposite the pair of leaves (9), placed at and prolonging the other first wall belonging to the first pair of walls (5);
  - a pair of flanks (11), each placed at and prolonging a respective second wall belonging to the second pair of walls (6), adapted to make a connection between a respective leaf, belonging to the pair of leaves (9), and the back (10);
  - a cover (12), located on the top of the upper box-like body (7), adapted to close the second compartment (V') from above; said second compartment (V') being in communication with the first compartment (V);
- a grid (13), interposed between the lower box-like body (2) and the upper box-like body (7) at the opening (3), defining a support plane for possible containers (C), which are storable inside the second compartment (V'), and having a plurality of through openings (130) to enable the fluid exiting the containers (C) to pass from the second compartment (V') to the first compartment (V);

characterized in that it comprises a load-bearing frame (14) adapted to promote, through reversible connecting means (15), a removable connection between said lower box-like body (2) and said upper box-like body (7).

2. The modular cabinet according to claim 1 wherein said reversible connecting means (15) is placed entirely outside the first and second compartment (V,V') so as not to come into contact with the liquids exiting the containers (C).

3. The modular cabinet according to claim 1 wherein said load-bearing frame (14) and said reversible connecting means (15) enable, when the reversible connecting means (15) are fitted, a use configuration of the cabinet (1) to be assumed in which the lower box-like body (2) is surmounted by the upper box-like body (7) and firmly connected thereto and when the reversible connecting means (15) is dismantled, a packaging configuration of the cabinet (1) in which the upper box-like body (7) has a pair of leaves (9), back (10) pair of flanks (11) and cover (12) that are

disjointed and disconnected from one another; said pair of leaves (9), back (10), pair of flanks (11), cover (12) and load-bearing frame (14), when the cabinet (1) is in the packaging configuration, being nestable inside the first compartment (V) of the box-like body (2) to decrease the overall packaging dimensions of the cabinet (1) compared with when the latter assumes the use configuration.

4. The modular cabinet according to claim 1 wherein said first pair of walls (5) has an extension with walls that are parallel to one another, defining each wall (5) with the respective bottom (4) a right angle, and said second pair of walls (6) has an extent with walls converging on one another, each wall defining with the respective bottom (4) an acute angle; said second pair of walls (6), when coupling with the first pair of walls (5), delimiting internally a central portion (50) of the first wall (5) facing the inside of the compartment (V) of the lower box-like body (2) and delimiting externally a pair of peripheral portions (52), located at opposite lateral ends of each first wall (5), outside the compartment (V) of the lower box-like body (2); each peripheral portion (52) being traversed by a first through hole (53) engageable by the reversible connecting means (15).

5. The modular cabinet according to claim 4 wherein each wall belonging to the second pair of walls (6) ends above, at the opening (3), with a step profile (60) defined by a horizontal section (61) and a vertical section (62); said second pair of walls (6) defining together, through the respective horizontal sections (61), a support plane for the grid (13);

6. The modular cabinet according to claim 1 wherein said load-bearing frame (14) comprises:

- a first front upright (16) connected below to the lower box-like body (2) through the reversible connecting means (15) and connecting laterally a respective leaf, belonging to the pair of leaves (9), to a respective flank, belonging to the pair of flanks (11);
- a second front upright (17), connected below to the lower box-like body (2) through the reversible connecting means (15) and connecting laterally a respective leaf, belonging to the pair of leaves (9) and opposite to the one engaged by the first front upright (16), to a respective flank, belonging to the pair of flanks (11) and facing the flank engaged by the first front upright (16);
- a first rear upright (18), connected below to the lower box-like body (2) through the reversible connecting means (15) and connecting laterally a respective leaf, belonging to the pair of leaves (9), to a back (10);
- a second rear upright (19), connected below to the lower box-like body (2) through reversible connecting means (15) and connecting laterally a respective leaf, belonging to the pair of leaves (9) and opposite to the one engaged by the first rear upright (18), to a back (10); said first and second front upright (16,17) and said first and second rear upright (18,19) being connected above to the cover (12).

7. The modular cabinet (1) according to claim 6 wherein each upright (16,17,18,19) has an angular profile defined by a first side (20) and a second side (21); said first side (20) and said second side (21), when said reversible connecting means (15) are active on the lower box-like body (2) and the upper box-like body (7), being placed respectively close to a wall belonging to the first pair of walls (5) and close to a wall belonging to the second pair of walls (6); said first side (20) being traversed by a second through hole (23) that is engageable by the reversible connecting means (15).

8. The modular cabinet (1) according to claims 4 and 7 wherein said reversible connecting means (15) comprises:

- a connecting screw (150) fitted to the first and second through hole (53,23);
- a clamping nut (151) screwed onto said connecting screw (150);

said clamping nut (151) and said connecting screw (150) being located outside the first compartment (V) of the lower box-like body (2) and of the second compartment (V') of the upper box-like body (7), which are accessible from the outside of the cabinet (1) even when the latter has the upper box-like body (7) mounted on the lower box-like body (2).

9. The modular cabinet (1) according to claim 6 wherein said load-bearing frame (14) further comprises:

- an auxiliary upright (26), connected below to the lower box-like body (2) interposed between the first and second rear upright (17,18) to confer structural stiffness between the lower box-like body (2) and the back (10);
- a connecting crosspiece (27) to make the auxiliary upright (26) solidly constrained to the first and second rear upright (17,18).

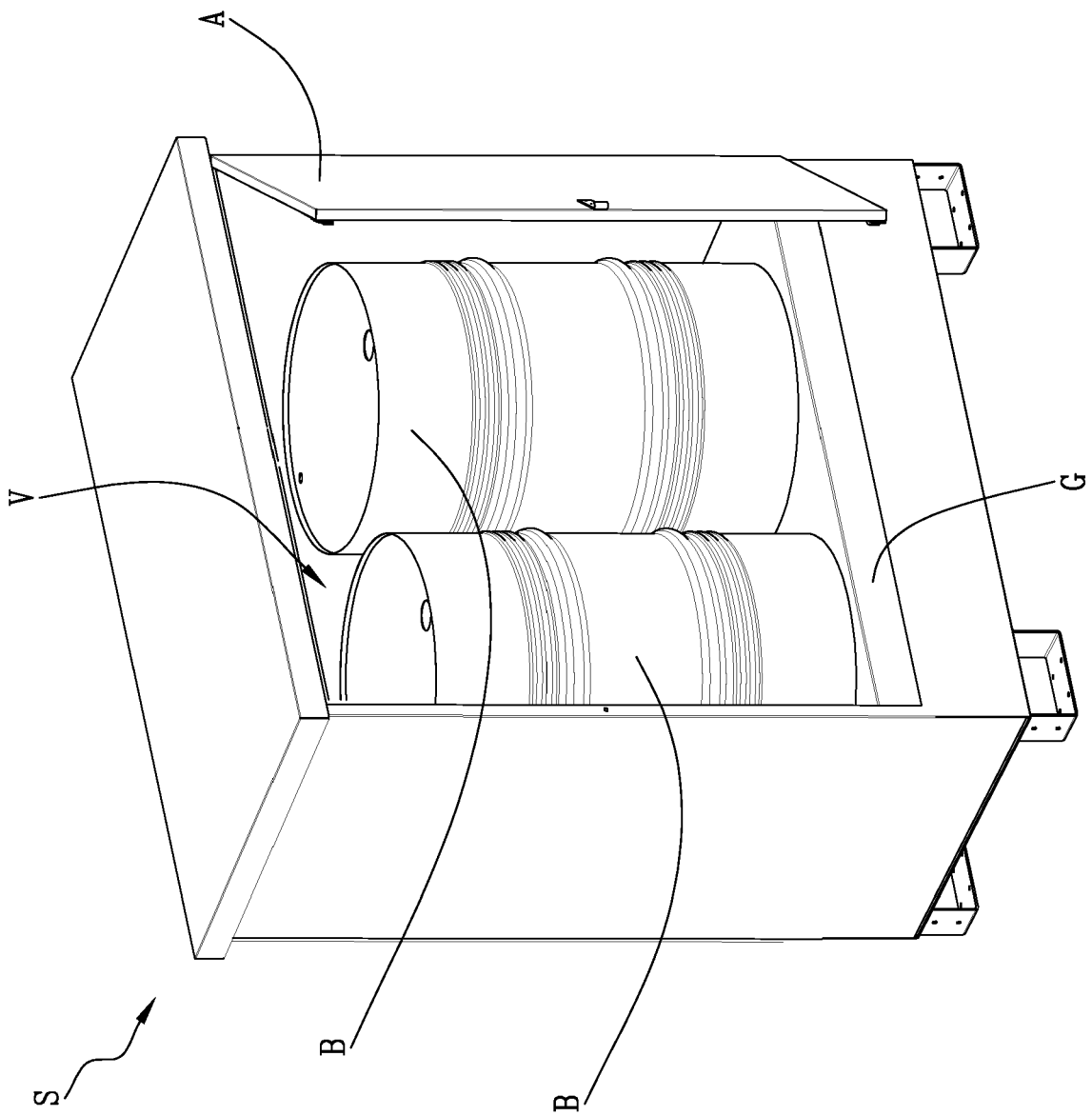

Fig.1
(PRIOR ART)

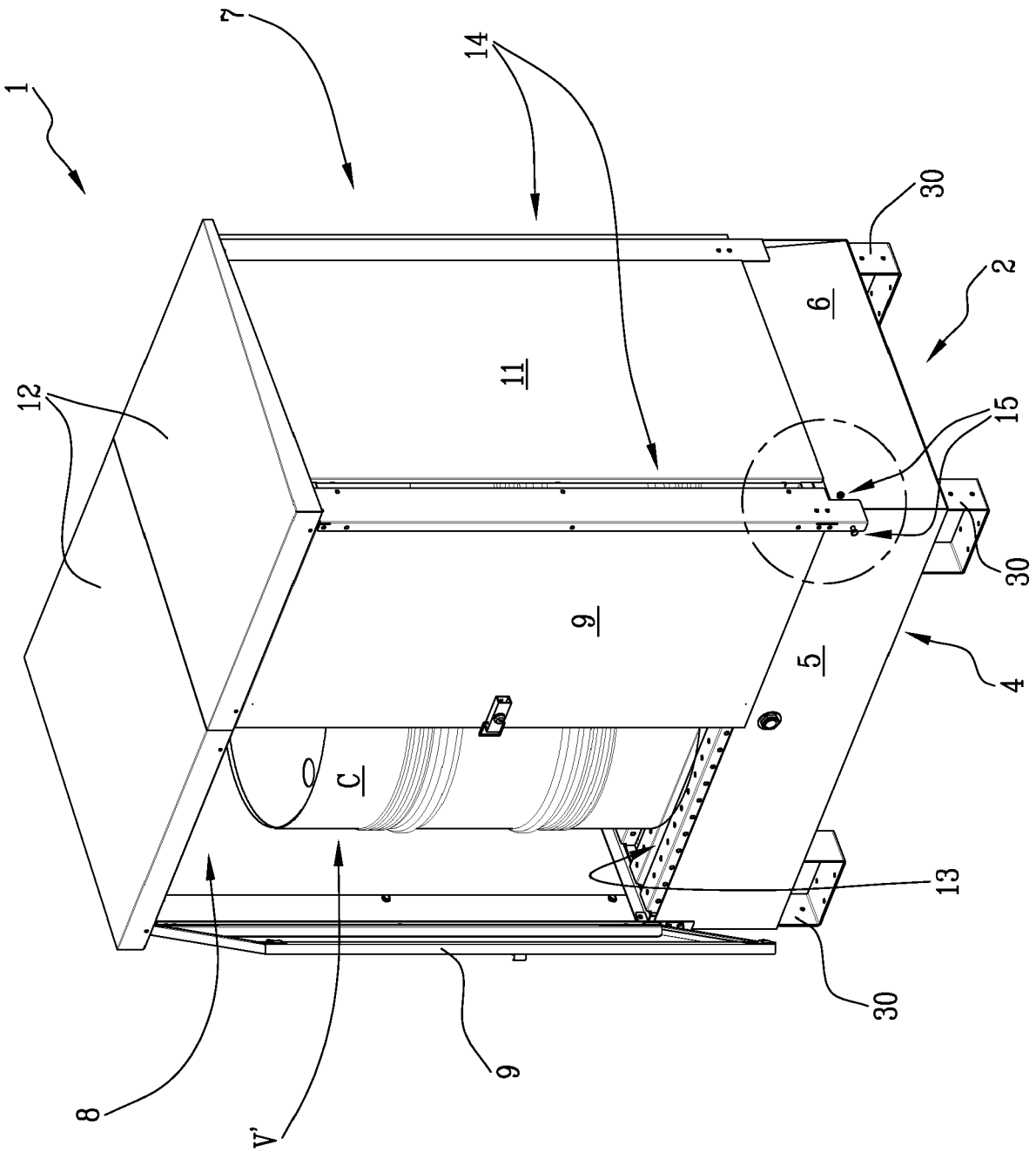

Fig.2

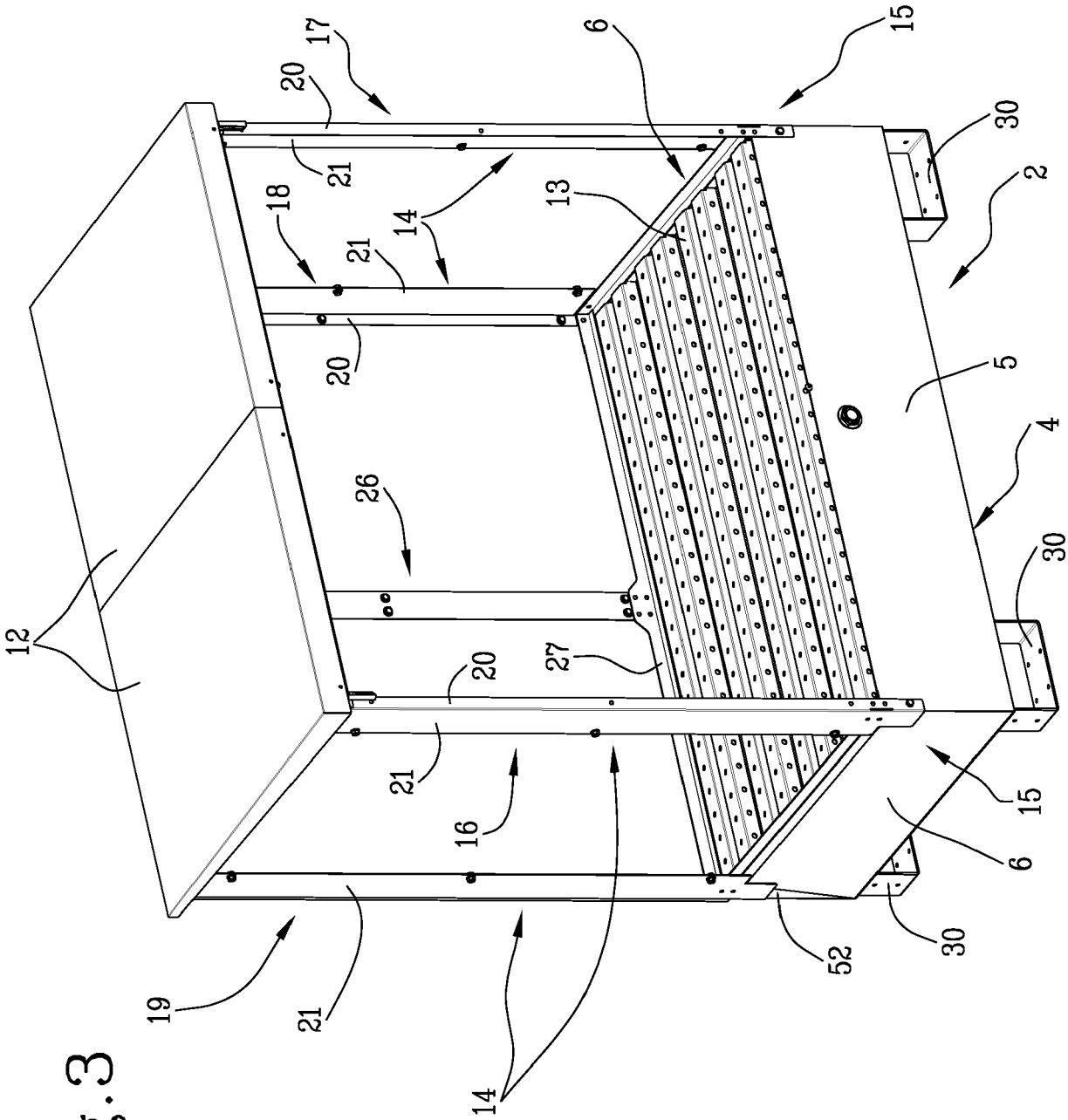
17
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Fig.3

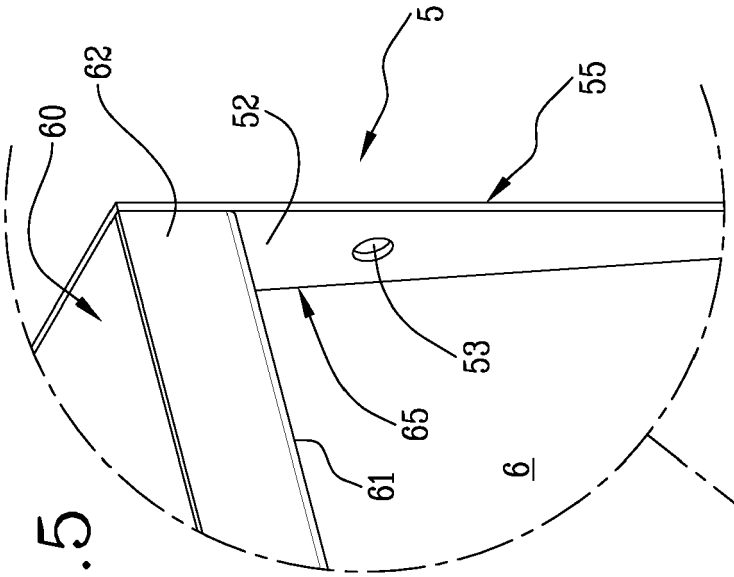


Fig.5

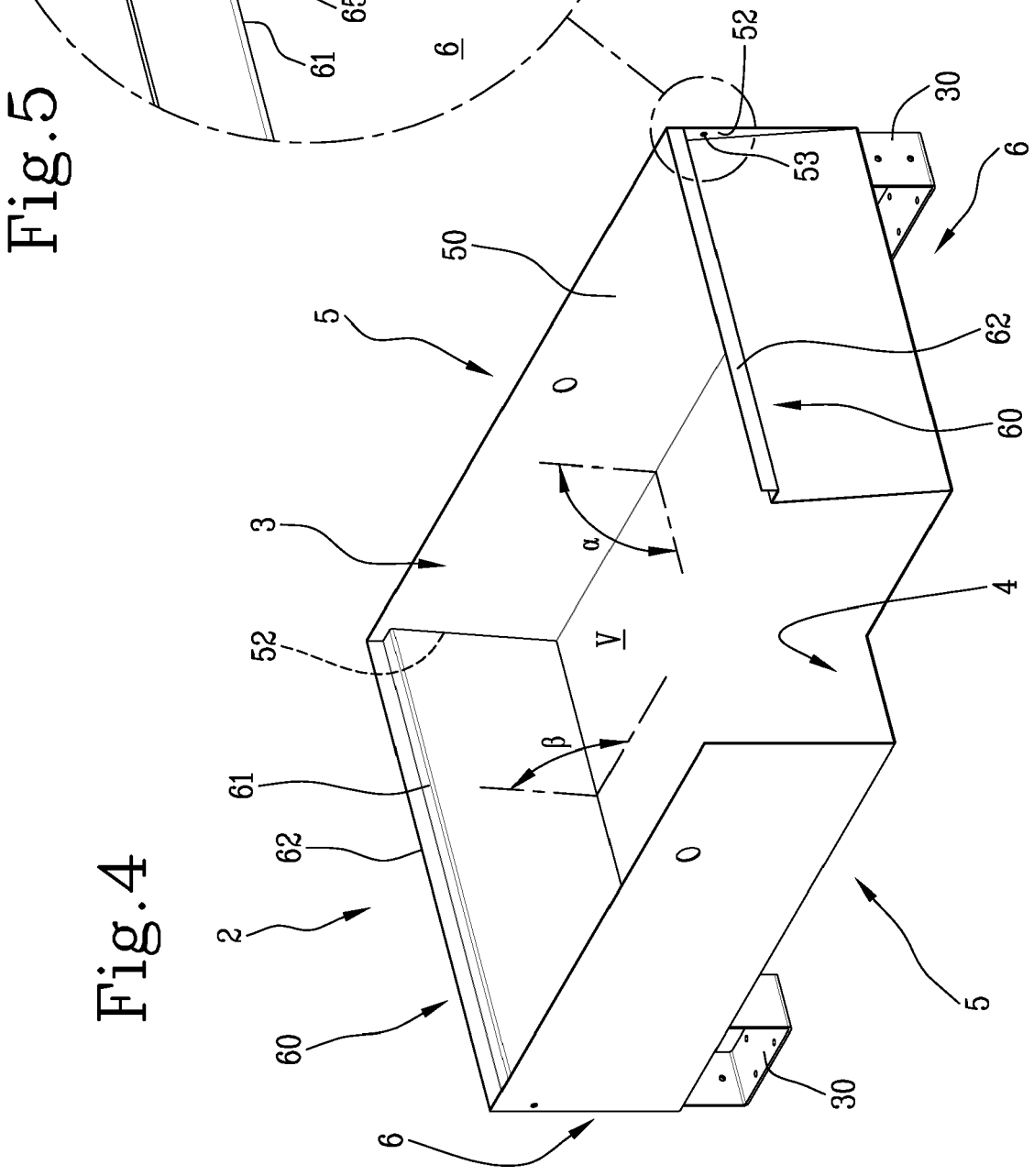


Fig.4

Fig.7

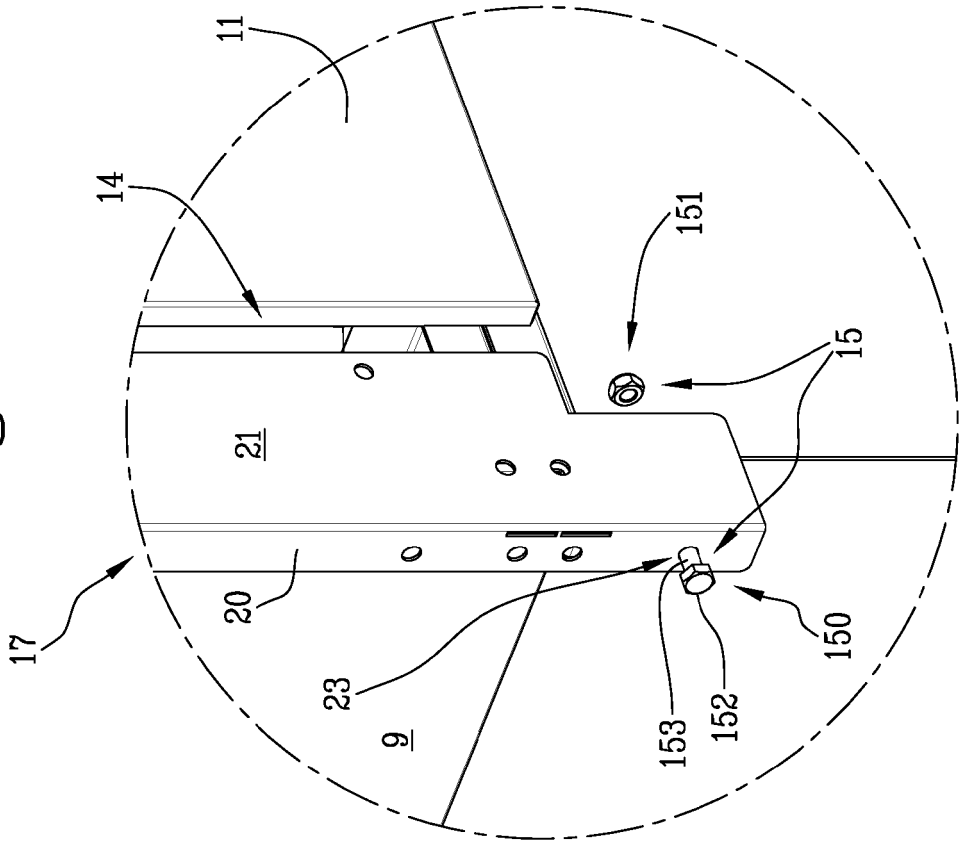
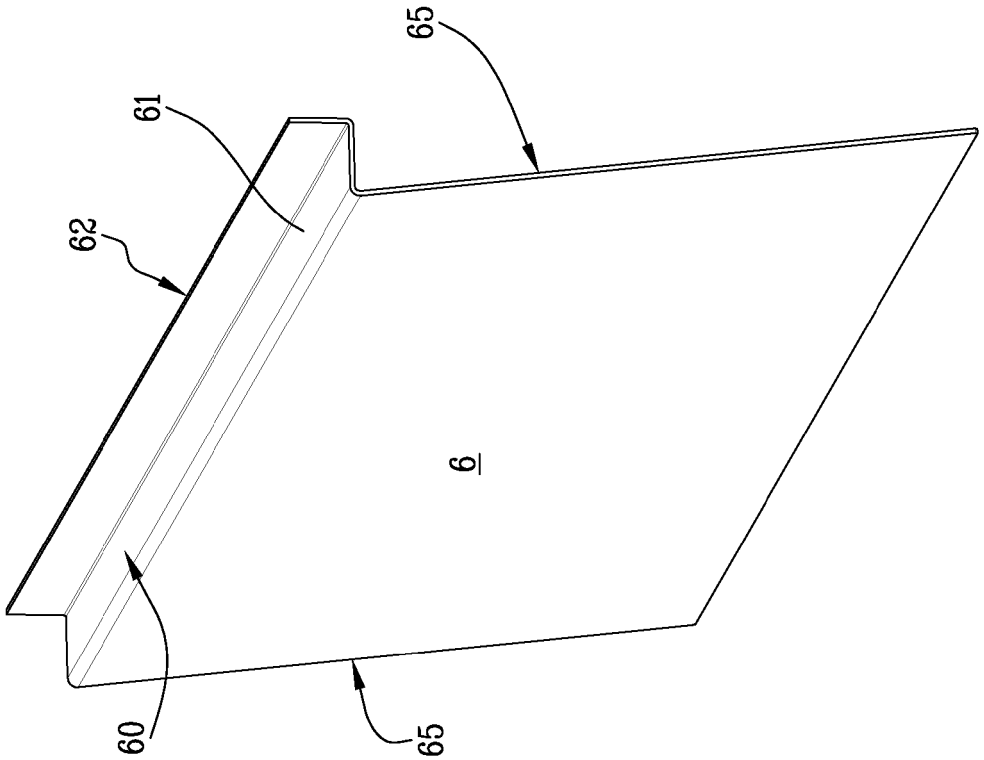


Fig.6



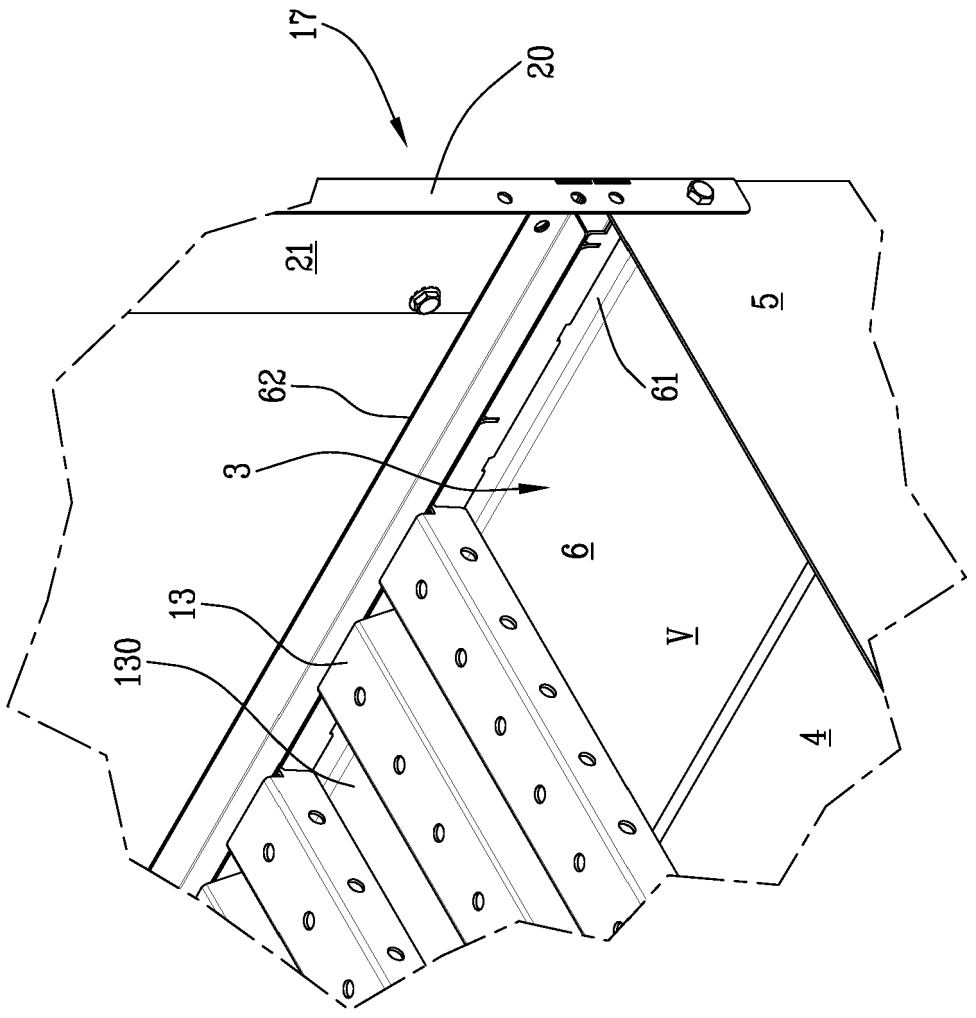


Fig.8

Fig.9

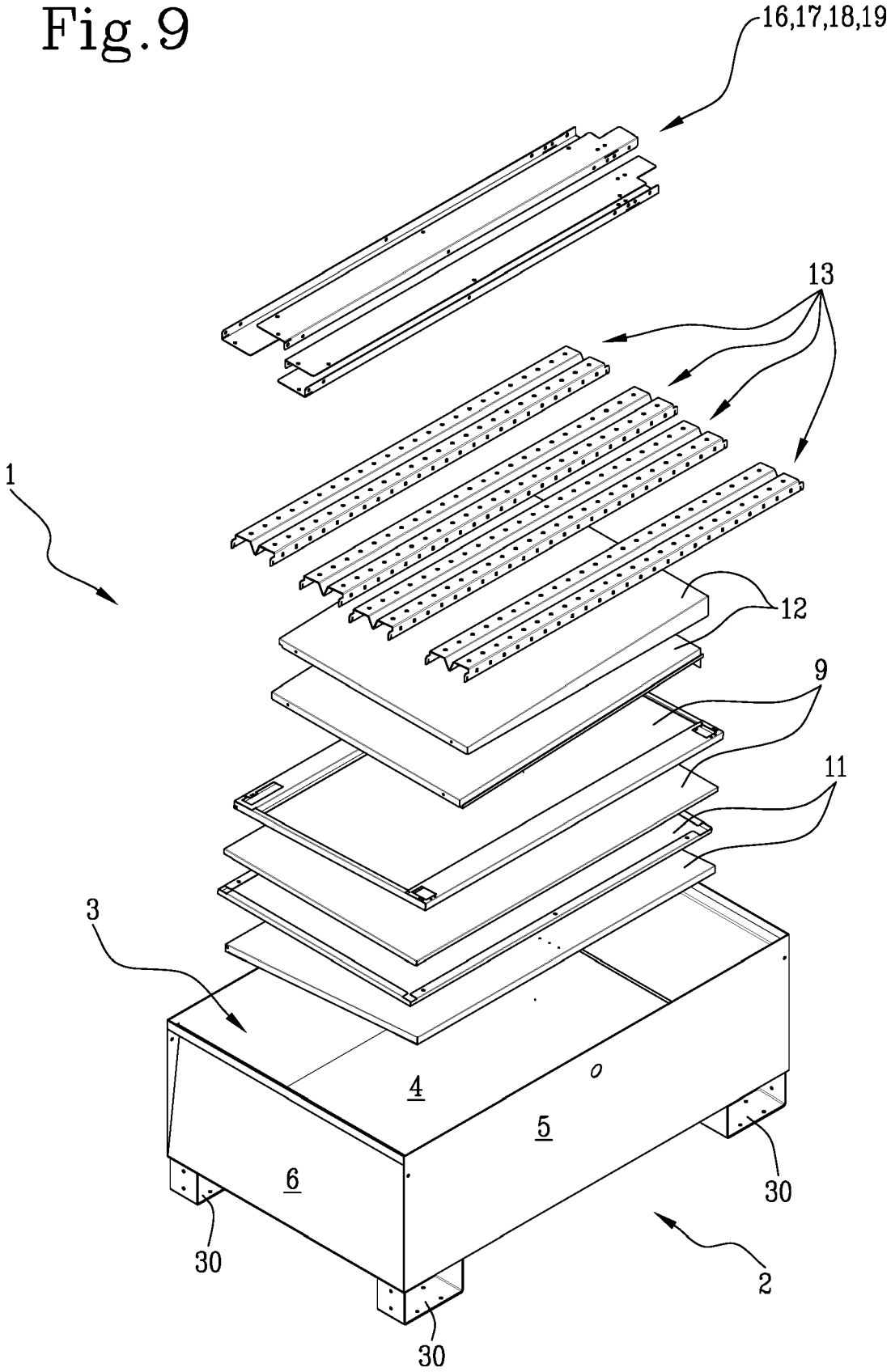
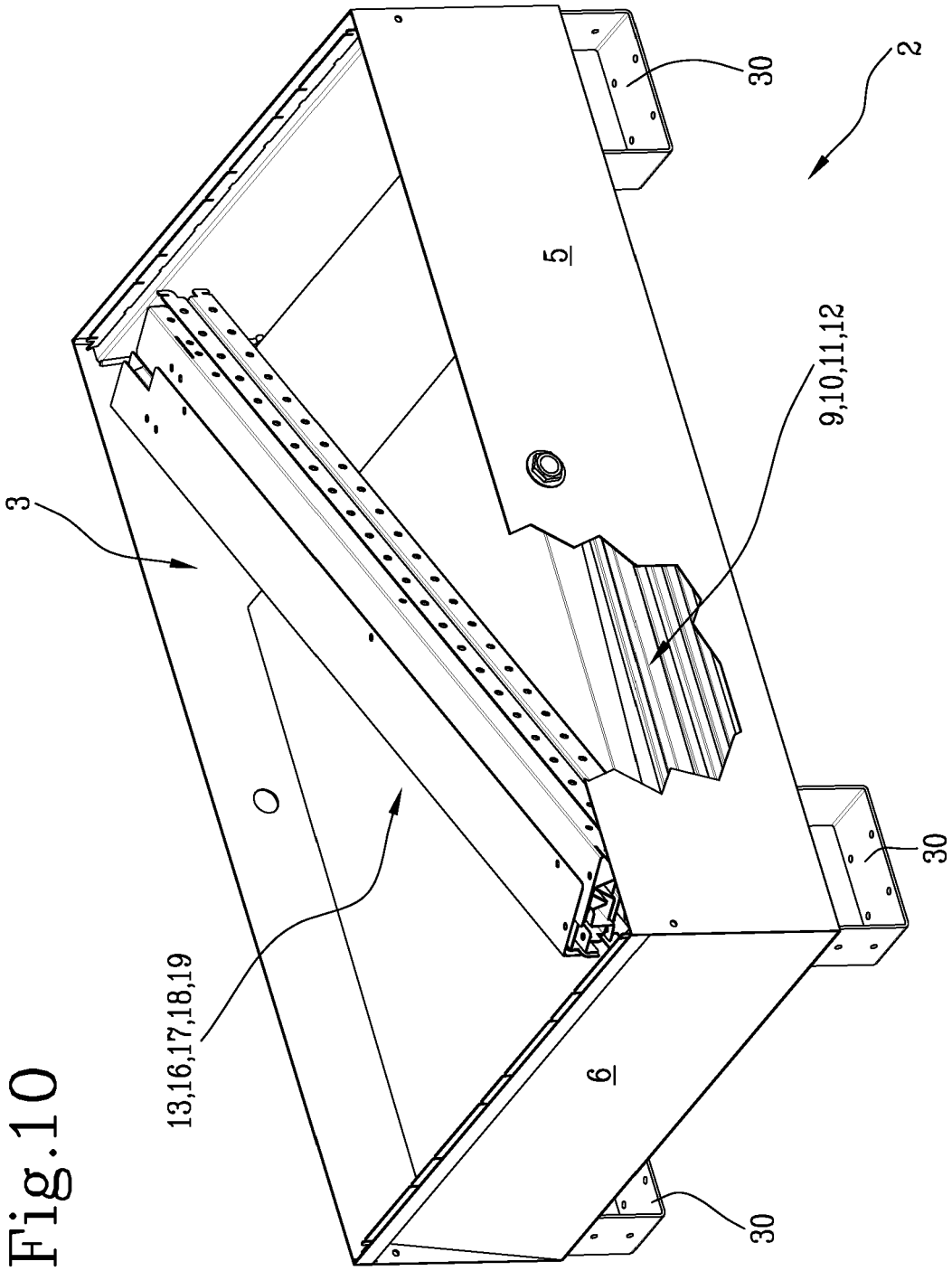


Fig.10



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EUROPEAN SEARCH REPORT

Application Number
EP 23 18 7777

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X A	FR 2 872 790 A1 (RAVARY ROLAND [FR]) 13 January 2006 (2006-01-13) * page 1, line 1 - line 6 * * page 3, line 2 - page 4, line 23 * * figures *	1,2,6,7, 9 3-5,8	INV. B25H3/00 B65D19/08 B65D90/24
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	16 January 2024	van Woerden, N

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