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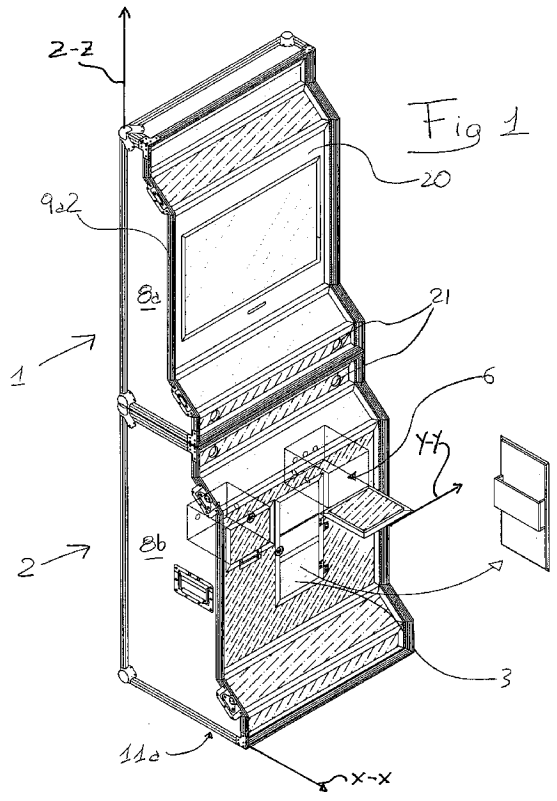
(54) Title: DISPLAY STAND FOR VIDEO GAME CONSOLE



(57) Abstract: The present invention regards a display stand (100) for video game consoles (or "totem"), the display stand (100) having a first and a second portion (1, 2), rotating with respect to each other around a horizontal axis, wherein the first portion (1) comprises a seat (4) for a monitor and the second portion (2) comprises a seat suitable to accommodate a console.

Title: "DISPLAY STAND FOR VIDEO GAME CONSOLE"

TECHNICAL FIELD

The present invention refers to a display stand for video game console.

PRIOR ART

Analysis regarding documents, deeds, materials, devices, articles and the like is described in the specifications solely with the aim of providing a context for the present invention. It is neither suggested nor deemed that these matters form part of the prior art as a whole or partly or were generally known in the field of the present invention as existent prior to the priority date of any claim of this application.

Due to the development of electronics for entertainment purposes, over the last years there has been an increase regarding sales of video game consoles. Such consoles are commonly sold in electronics stores of shopping malls or even in shops selling household appliances.

In order to promote consoles and the technical characteristics thereof, there has been the ever-growing tendency to set up dedicated spaces arranged at the centre of which is a display stand, receiving a particular console therein, provided with all accessories required for playing, among which a television (or monitor).

Due to these display stands, the potential buyers have the chance to personally test the graphic and sound capabilities of the console, by directly playing the videogames loaded therein.

However, the displays currently available in the market have various disadvantages, among which the fact that they are cumbersome to move and position, they are dedicated, i.e. they are capable of receiving only one type of console and they do not allow safe storing of the displayed material at the end of the workday.

Considering the state of the art described, the aim of the present invention is that of providing a display (otherwise known as "totem") for videogame consoles which may at least partly overcome at least some of the disadvantages described above.

Furthermore, the present invention allows obtaining advantages in terms of production simplicity, higher resistance, greater compactness and/or enhanced versatility.

SUMMARY OF THE INVENTION

According to the present invention, such object is attained by means of a display stand comprising a first portion and a second portion, wherein in said first portion is obtained at least one monitor seat suitable to receive a monitor and in said second portion is obtained at least one console seat suitable to receive a console, said first and second portion being moveable with respect to each other between a first use configuration and a second transfer configuration as well as a method for using a display stand comprising the steps of providing such display stand and rotating said upper portion to move said display stand from said transfer configuration to said use configuration or vice versa.

BRIEF DESCRIPTION OF THE DRAWINGS

The characteristics and advantages of the present invention shall be clear from the following detailed description of a practical embodiment, provided for exemplifying and non-limiting purposes with reference to the attached drawings, wherein

- figure 1 shows a perspective view of a display stand according to the present invention;

- figure 2 shows the display stand of figure 1, without the front portion;

- figure 3 shows the display stand of figure 1, in side view;

- figure 4 shows the display stand of figure 3, in side view and in closed configuration;

- figures 5, 6, and 7 show the display stand of figure 4 in closed configuration in front, rear and top view, respectively.

DETAILED DESCRIPTION

Over the description and claims of the present specifications, the word "comprises" and variations thereof, such as "comprising", is not intended to exclude elements, parts or additional components, or further steps or stages.

It should also be observed that whatever is considered already known or obvious to a man skilled in the art prior to the priority date shall not be deemed claimed (and thus specific object of disclaimer). Referring to the figures, 100 is generally used to indicate the display stand, which comprises a first portion 1 and a second portion 2, moveable with respect to each other between a first transfer configuration (visible in figures 4-7)

and a second use configuration (visible in figures 1-3).

Referring to figure 1, with respect to the display stand 100, are defined axes X-X (or depth axes), Y-Y (or width axes), Z-Z (or height axes); axis Z-Z being deemed as the vertical axis, just like plane YZ is the plane parallel to the one on which, during use, the image of the game shall be displayed, axis Y-Y being horizontal, and axis X-X being the axis perpendicular to the other two.

The display stand 100 is defined by a frame, whose height is comprised between 1.5 and 2.3 m, preferably comprised between 1.7 and 2.1 m, for example about 2 m. The frame defines a plurality of seats, for example a monitor seat 4, suitable to receive a television or monitor, a console seat 5, suitable to receive a console (not represented), one, two or more seats for the control device 6, suitable to receive the control device/s (not represented) of the console, one or more speaker seats 7, suitable to receive any speaker provided.

Preferably, the movement between the transfer configuration and the use configuration is a rotational movement, for example around a horizontal axis, advantageously around axis Y-Y. Alternatively the movement could also be a mutual sliding, or a combination of this with a rotation indicated above.

For example, the first and the second portion 1, 2 of the display stand 100 represented in the figures are hinged around a horizontal axis parallel to axis Y-Y and arranged at half the height of the display stand 100 itself.

The display stand 100 may be defined by two lateral walls 8, which end with a respective front profile 9, i.e. facing towards the front portion of the display stand 100 (the one from which the images shall be seen).

The front profile 9 is advantageously shaped in such a manner that the upper portion 9a may be overlapped with respect to the lower portion 9b. Advantageously the upper 9a and lower 9b portions of each profile 9 are identical (or matching).

Now, focusing on figures 4 and 7, it is clearly visible how the display stand 100, in the transfer configuration, is considerably less cumbersome than in use configuration.

In the example, the shape of the display stand 100 is parallelepiped-shaped, but other shapes may also be provided for.

As clearly visible from figure 4, the front profiles 9, in their entirety, define an ideal separation surface between the first and la second portion 1, 2 of the display stand 100.

More generally, the separation surface may be seen as the result of the sliding on the profiles 9 of a line parallel to axis Y-Y.

When the display stand 100 is in transfer configuration, the separation surface intersects the upper 10 and lower 11 walls thereof, dividing them into a front wall 10a, 11a and a rear wall 10b, 11b.

Advantageously, the separation surface does not intersect the centre of the lateral walls 8 of the display stand 100 when the latter is closed.

In particular, the lateral walls 8b of the second portion 2, are deeper (i.e. they have greater extension along the axis X-X) on average than the lateral walls 8a of the first portion 1.

In the embodiment of the figures, the walls 10a and 10b are substantially identically shaped, in such a manner to be overlapped when the display stand 100 is in the use configuration; it is however possible to provide for an alternative embodiment wherein the wall 11a has a shape that can be substantially overlapped with respect to the wall 10b.

In a preferred embodiment, the front profile portions 9a and 9b comprise a central straight section 9a2, 9b2, advantageously parallel to axis Z-Z, at the height of the monitor seat 4 and of the console seat 5. Clearly, design requirements may imply aesthetically different though still technically equivalent shapes.

The front profile portions 9a, 9b may also comprise one or more sections 9a1, 9a3, 9b1, 9b3 not parallel to axis Z-Z, for example straight sections inclined with respect to the adjacent ones by an angle comprised between 110° and 150°, advantageously by about 130°.

The display stand 100 may comprise an upper intermediate area 14c having depth P2 and/or a lower intermediate area 14g having depth P4>P2.

Such areas are advantageously at the height of the central rectilinear sections 9a2 and 9b2; advantageously the monitor seats 4 and for the console 5 are respectively

obtained in the upper intermediate area 14c and in the lower intermediate area 14g.

Between the two areas 14c, 14g there may be a hinge area 14e having depth P3. Advantageously, P4>P3>P2, for example P3 is equivalent to half the depth of the upper wall 10, or P3=(P4+P2)/2.

Above and beneath the intermediate areas 14c, 14g there may be a first, a second, a third and a fourth connection area 14b, 14d, 14f, 14h, respectively, advantageously having non-vertical profile, for example having a profile defined by the sections 9a1, 9a3, 9b1, 9b3.

At the top and at the bottom of the display stand 100 there may be an upper area 14a having depth P1 and a lower area 14i, having depth P5>P1. Advantageously P5>P4>P3>P2>P1.

The display stand 100 further comprises lateral lock devices 13, suitable to lock the first and the second portions 1, 2, with respect to each other when the display stand 100 is in transfer configuration.

The lateral lock devices 13 may advantageously be arranged in such a manner to have resistance mainly along an inclined axis, for example by about 40° with respect to axis X-X and/or Z-Z .

The lateral lock devices 13 may advantageously be arranged at the height of the sections 9a1, 9a2, 9b1, 9b2, which may also not be rectilinear.

Advantageously, on the lateral walls 8 there are lock devices 13 at two different positions, for example at about 1/4 and 3/4 of the height of each portion 1, 2.

Conveniently, on the lateral walls 8 there are handles 15 for moving the display stand 100. According to a preferred embodiment, the handles 15 are arranged at the centre of lateral walls 8, for example on the lower portions 8b.

Advantageously, handles 15 may also be arranged on the rear wall, for example near the upper edge both of the first portion 1 and the second portion 2, when the display stand 100 is in use configuration.

On the rear wall 16 of the display stand 100, when in use configuration, there are further rear lock devices 17 suitable to lock of the first and second portion 1, 2 to each other, when the display stand 100 is in use configuration. Such devices 17 are

advantageously analogous to the lateral lock devices 13 arranged on the lateral walls 8.

The display stand 100 may comprise movement rollers 18, for example four rollers arranged in proximity to the corners or two rear rollers 18a and having one, two or more feet 18b, whose height is such to allow correct levelling of the display stand 100. For example, the feet 18 and/or the rollers may be height-adjustable.

Conveniently, on the upper wall 10 there are seats (not shown in the figures) whose dimensions are slightly larger than those of the rollers or feet 18b, so as to allow stacking several displays 100 without them laying on the upper wall 10 of the display stand 100 immediately beneath, by means of the feet 18b or the rollers.

Advantageously, the seats and the feet/rollers 18b/18 make a positive coupling to prevent the respective sliding of two stacked displays 100.

As shown in figure 1, the display stand 100 may comprise a front panel which covers almost the entire (or the entire) front part of the display stand 100.

Advantageously, the front panel is made using sturdy material and is provided with burglar-proof features.

As visible in figure 2, the interior of the display stand 100 may comprise one or more shelves 19 for supporting the monitor 4, the console 5 or the other interior elements.

The shelves 19, in particular those received in the first portion 1, may comprise aeration holes 22, preferably arranged in proximity to the front panel, for example in the half of the shelf 19 closer to the front panel (see for example figure 2).

Advantageously, the aeration holes 22 differ from other holes (e.g. indicated with 24 in figure 2) made in the shelves 19 because neither cables nor other types of connections pass through the aeration holes 22.

Advantageously arranged in the second portion 2, instead, may be a fan 23, or analogous cooling means, for example (forced) air circulation means.

It is however possible to have, if required, a fan 23 even in the first portion and/or aeration holes 22 even in the shelves 19 of the second portion 2.

At the connection areas 14b, 14d, 14f, 14h, for example, there may be transparent

plexiglas panels, possibly having neon lights arranged at the rear part with respect thereto.

The monitor seat 4 of the upper intermediate area 14c is advantageously suitable to contain a monitor having a twenty-two inch diagonal (about 56 cm), preferably in 16:9 format. Though such dimensions may be varied, it is deemed that a monitor having a diagonals comprised between twenty and twenty-six inches (between 51 and 66 cm) may guarantee optimal playing experience for the display stand 100.

The monitor shall advantageously be a colour monitor and/or in high definition (for example at least 768i, 768p, 1080i or 1080p).

The monitor seat 4 has a position such that the centre of the monitor is at a vertical height comprised between 100 and 200 cm, advantageously between 140 and 190 cm, preferably about 180 cm.

The width of the display stand 100 is slightly greater than the width of the monitor or television insertable or inserted therein: in case of a twenty-two inch monitor, for example, the display stand 100 may be about 15 cm wider.

Indicatively, the display stand 100 is 5-25 cm wider than the theoretical width calculated according to the diagonal of the screen of the largest monitor which may be arranged in the monitor seat 4.

The monitor seat 4 is advantageously delimited by a front frame 20 which serves to retain the monitor itself during the operation of opening and folding the display stand 100, for example when the monitor is no longer supported by the shelf 19. The interior opening of the front frame 20 is such to leave almost the entire screen of the monitor visible.

The monitor seat 4 may thus comprise fixing elements capable of holding the monitor substantially fixed with respect to the seat thereof during all movements for opening/closing the display stand 100.

Such fixing elements may also possibly be suitable to hold the monitor fixed with respect to the seat thereof against movements towards any direction.

For example, provided for may be bumpers 25, advantageously arranged in proximity to the upper corners of the monitor seat 4, for example rubber bumpers 25.

The monitor seat 4 may advantageously be closed by a transparent plate, possibly burglar-proof, for example made of plexiglas®, possibly removable to allow operations for installing and removing the monitor itself (when neede).

Furthermore, in order to protect the monitor against accidental damage, should the upper portion 1 fall against the lower portion 2 during the operations of closing the display, the monitor seat 4 may comprise dampening elements, for example foam products or actual shock absorbers, in such a manner to reduce the damaging effects caused by the impact of the upper portion 1 against the lower portion 2 to the minimum.

Clearly, it is also possible to automate and/or dampen the opening/closing movement of the display stand 100.

The display stand 100 further comprises, preferably in the lower portion 2, a console seat 5, which may also be closed by a plate, for example transparent and/or tamperproof, for example made of plexiglas®.

The console seat 5 is dimensioned in such a manner to be compatible with different models and different brands of consoles, even having different external dimensions. As a matter of fact, the present invention is not a "dedicated" display, i.e. it does not comprise any compartment for receiving the console having shape and dimensions such to be perfectly adapted to only one type of console, without however allowing receiving other types of consoles in an equally easy manner.

Furthermore, the lower portion 2 may comprise one or more (for example two or four) control device seats 6 for receiving the control devices of the console. Such seats may be closed by openable doors, for example hinged on the lower side, in such a manner to open by rotating downwards.

The hinges may be provided with means for locking the rotation, suitable to stop the doors at a substantially horizontal position, after a rotation of about 90°, in such a manner to form a support surface when they are open (see figure 1).

Advantageously the control device seats 6 may comprise devices for preventing shoplifting, so as to reduce the risk of fraudulent removal of the control devices contained therein. Such need particularly arises regarding control devices capable of wireless operations.

When needed, the doors may be closed by a combination lock, which is safer in environments wherein many different people have access, but only temporarily, to the seat protected by the lock.

The display stand 100 may also comprise one or more arrangement (or even all) for the connections selected from the group comprising: power supply, video transmission (e.g. HDMI, VGA, Component), audio/video or audio, computer network connection (e.g. Ethernet, USB, Firewire, bluetooth).

The display stand 100 may already comprise, therein, all connections required for a quick installation: advantageously between the lower portion 1 and the upper portion 2 there may be the cables for connecting the console and the monitor to each other, and to connect them to the external power supply.

Advantageously, the front panel of the hinge portion 14e comprises at least one hole 21 in the first portion 1 and one hole 21 in the second portion 2, for example having approximately the same diameter and/or comprised between 1 and 7 cm, in such a manner to allow the passage of the cables between the interior of the second portion 2 and the interior of the first portion 1 so that the operations for closing and opening the display stand 100 may be carried out without damaging the cables and, when the display stand 100 is in transfer configuration, the connection cables are concealed.

Should the display stand 100 also comprise speakers separated from the monitor and the console, the display stand 100 may comprise special sound connections between the console, the speakers and/or the monitor.

In a preferred embodiment, the display stand 100 is already provided complete with monitors, speakers and interior connections, so that it simply is required is to connect the console to the power supply and to the output cables provided for in the respective seats.

Thus, the display stand 100 described above is conceived to be used in commercial spaces, in combination with at least one console and one monitor, and not in household environments. Usually, the weight of the display stand 100 exceeds 60 Kg: In order to facilitate movement thereof, the display stand 100 may comprise handles 15 for at least two people.

Installation may for example occur by providing for a display stand 100 as described above already combined with a monitor, by opening the display itself and fixing it in the use configuration, inserting and connecting a console 5 in the seat provided for such purpose.

Upon terminating using the display stand 100, it may be moved from the use configuration to the transfer configuration, for example, without removing the console from its console seat 5,

Obviously, the configurations described above may be subjected to numerous modifications and variants by a man skilled in the art with the aim of meeting contingent and specific requirements.

For example, it is clear that the shape of the frame may be modified in a manner perfectly equivalent to the one represented herein, without departing from the previously described inventive concept.

In addition, such variants and modifications fall within the scope of protection of the invention as defined by the claims that follow.

CLAIMS

1. Display stand (100) comprising a first portion (1) and a second portion (2), wherein in said first portion (1) there is at least one monitor seat (4) suitable to receive a monitor and in said second portion (2) there is at least one console seat (5) suitable to receive a console, said first (1) and second (2) portions being moveable with respect to each other between a first use configuration and a second transfer configuration.

2. Display stand (100) according to the preceding claim wherein, in said use configuration, said first portion (1) is located above said second portion (2).

3. Display stand (100) according to the preceding claim wherein said first portion (1), in order to be moved from said transfer configuration to said use configuration and vice versa, rotates about a normally horizontal axis, arranged width-wise.

4. Display stand (100) according to the preceding claim, wherein said monitor seat (4) is delimited by a front frame (20), whose internal opening is such to leave almost the entire screen of the monitor visible, when the latter is inserted in said monitor seat.

5. Display stand (100) according to the preceding claim, comprising fixing elements capable of holding the monitor received inside said monitor seat (4) substantially fixed with respect to said monitor seat (4) during all movements for opening and closing the display stand (100) itself.

6. Display stand (100) according to the preceding claim, wherein said monitor seat (4) comprises dampening elements, so as to reduce possible damaging effects caused by possible impact of the upper portion (1) against the lower portion (2) during the closure operation.

7. Display stand (100) according to the preceding claim, wherein said dampening elements comprise a frame made of soft material arranged internally with respect to said front frame (20).

8. Display stand (100) according to the preceding claim, wherein said soft material is foam rubber.

9. Display stand (100) according to the preceding claim, comprising lateral lock devices (13), suitable to to mutually lock the first and the second portions (1, 2), when

the display stand (100) is in transfer configuration, and/or rear lock devices (17) suitable to mutually lock the first and the second portions (1, 2), when the display stand (100) is in use configuration.

10. Display stand (100) according to the preceding claim, comprising a monitor, preferably a twenty-two inch diagonal one, received inside said monitor seat (4).

11. Display stand (100) according to any one of the preceding claims, comprising a fan (23) capable of obtaining forced ventilation in one of said first or second portion (1, 2)

12. Method for using a display stand (100) comprising the steps of:

(a) providing a display stand (100) according to any one of the preceding claims;

(b) rotating said upper portion (1) to move said display stand (100) from said transfer configuration to said use configuration or vice versa

13. Method according to the preceding claim further comprising the steps of:

(c) installing a console in said console seat (4);

(d) installing a monitor in said monitor seat (5);

(e) connecting said console to said monitor.

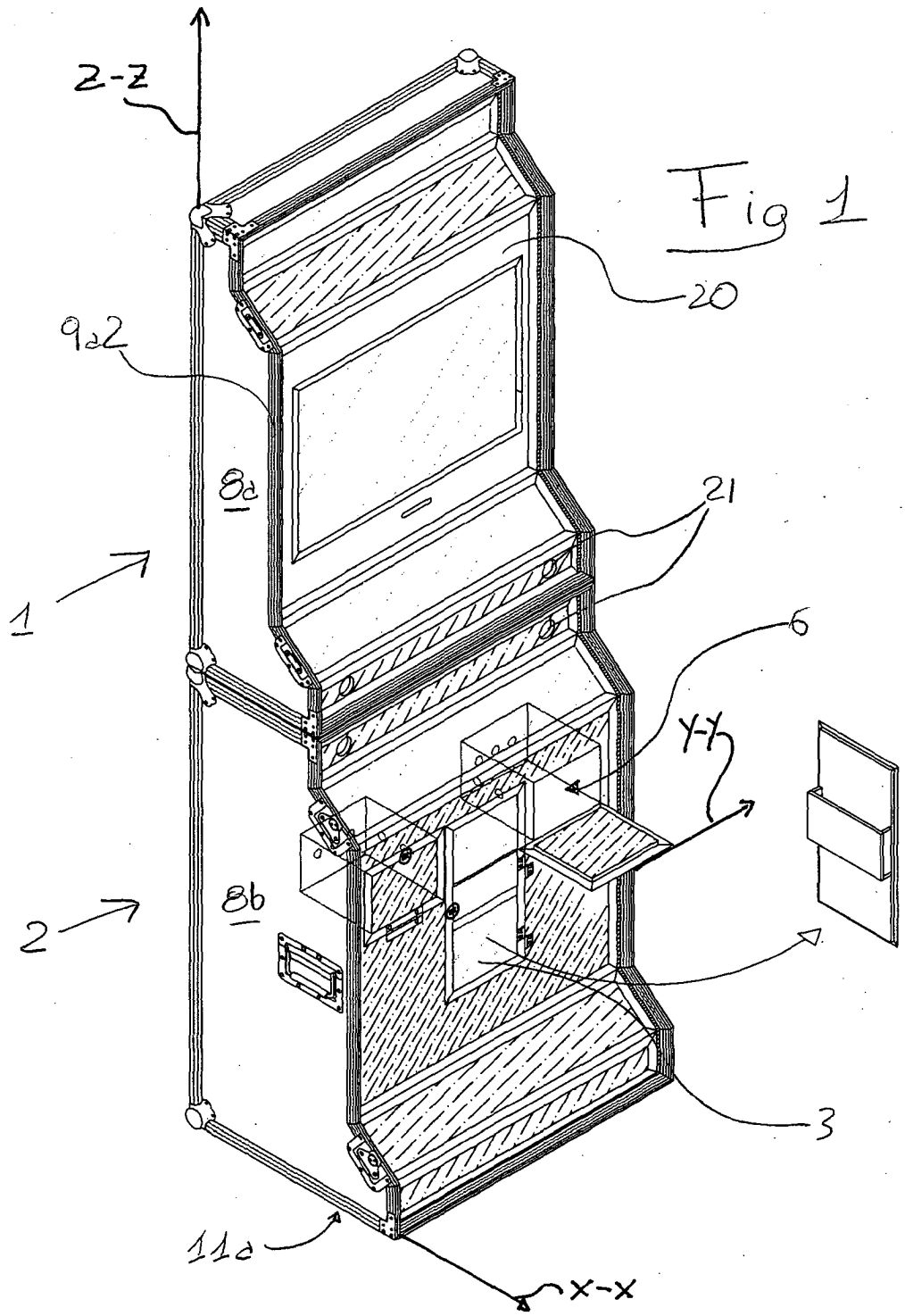


Fig 1

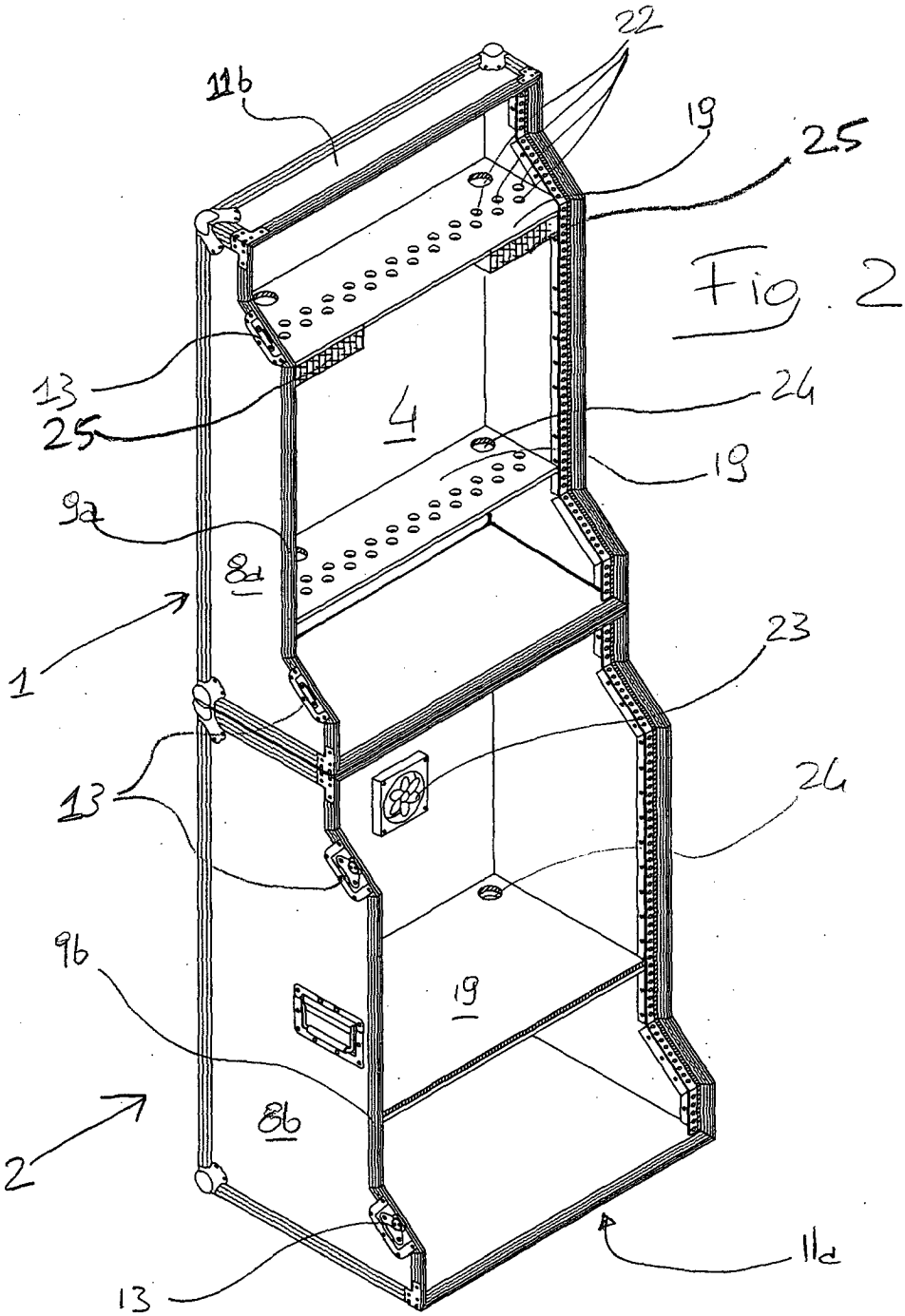
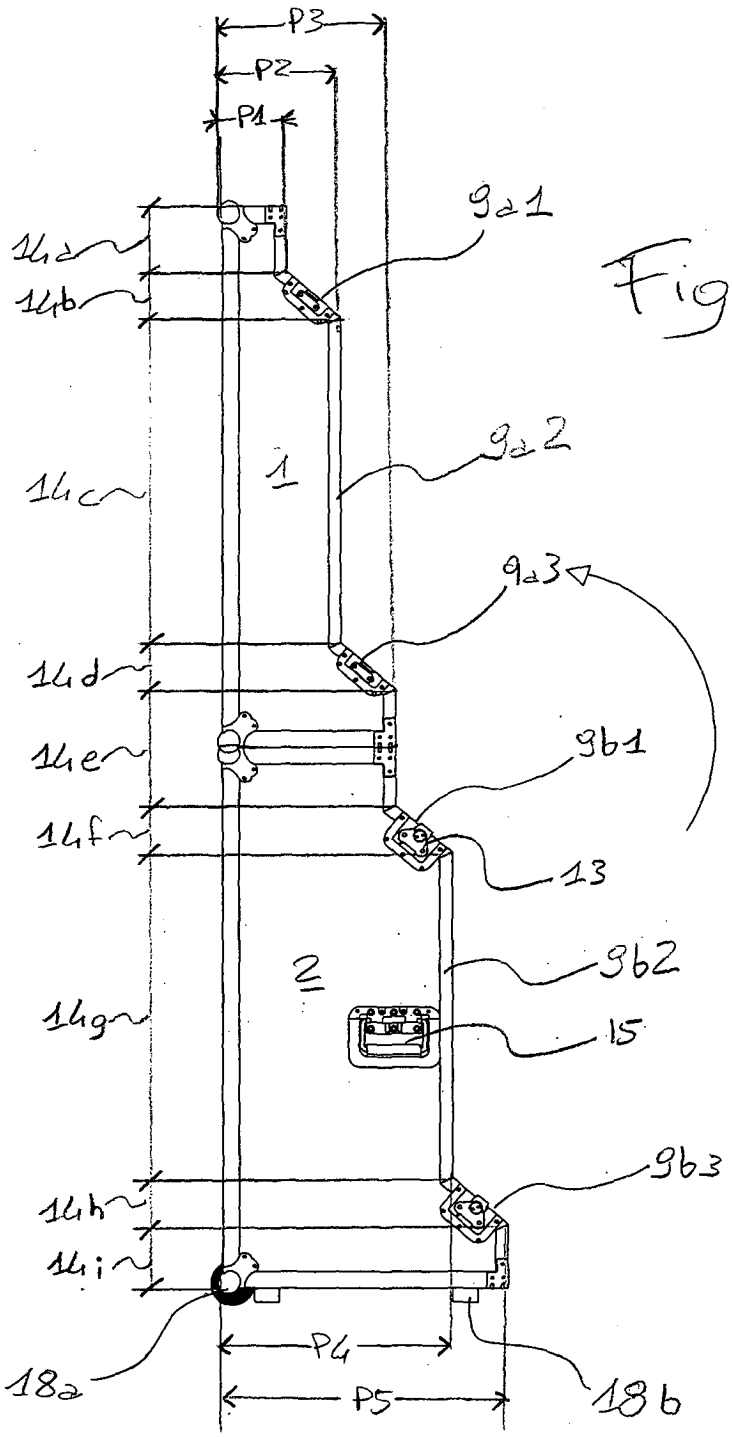


Fig. 2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18b

Fig 3

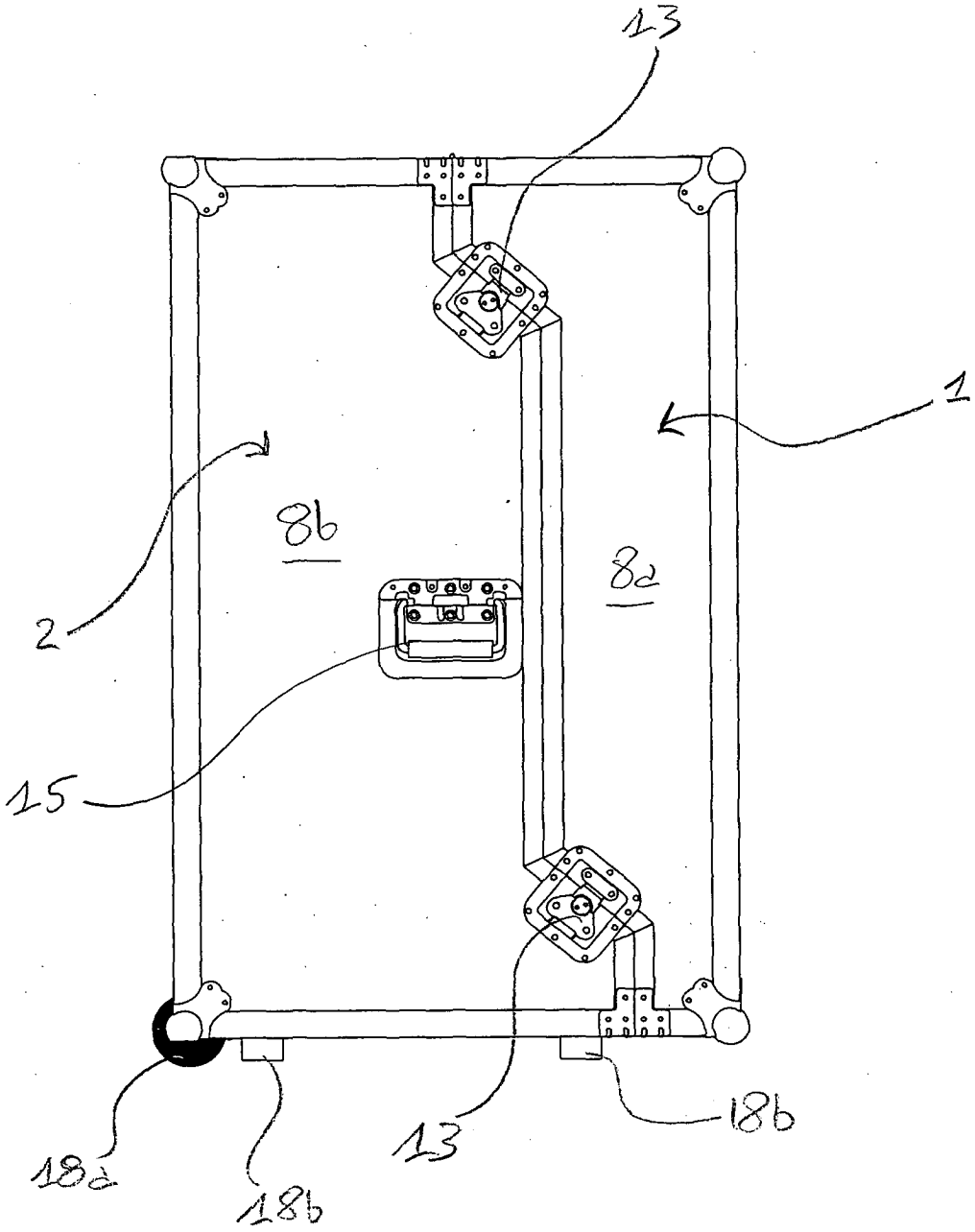

Fig. 4

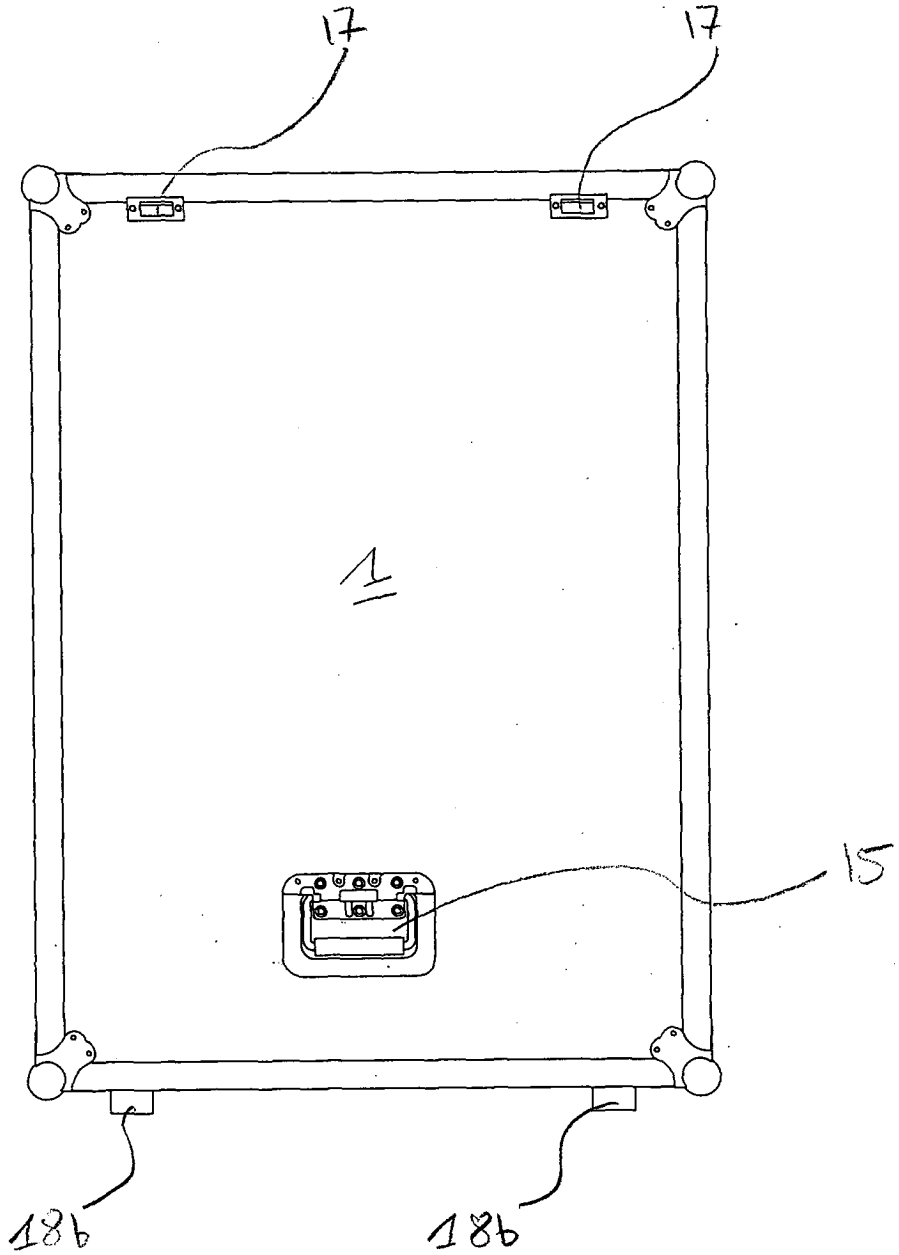

Fig. 5

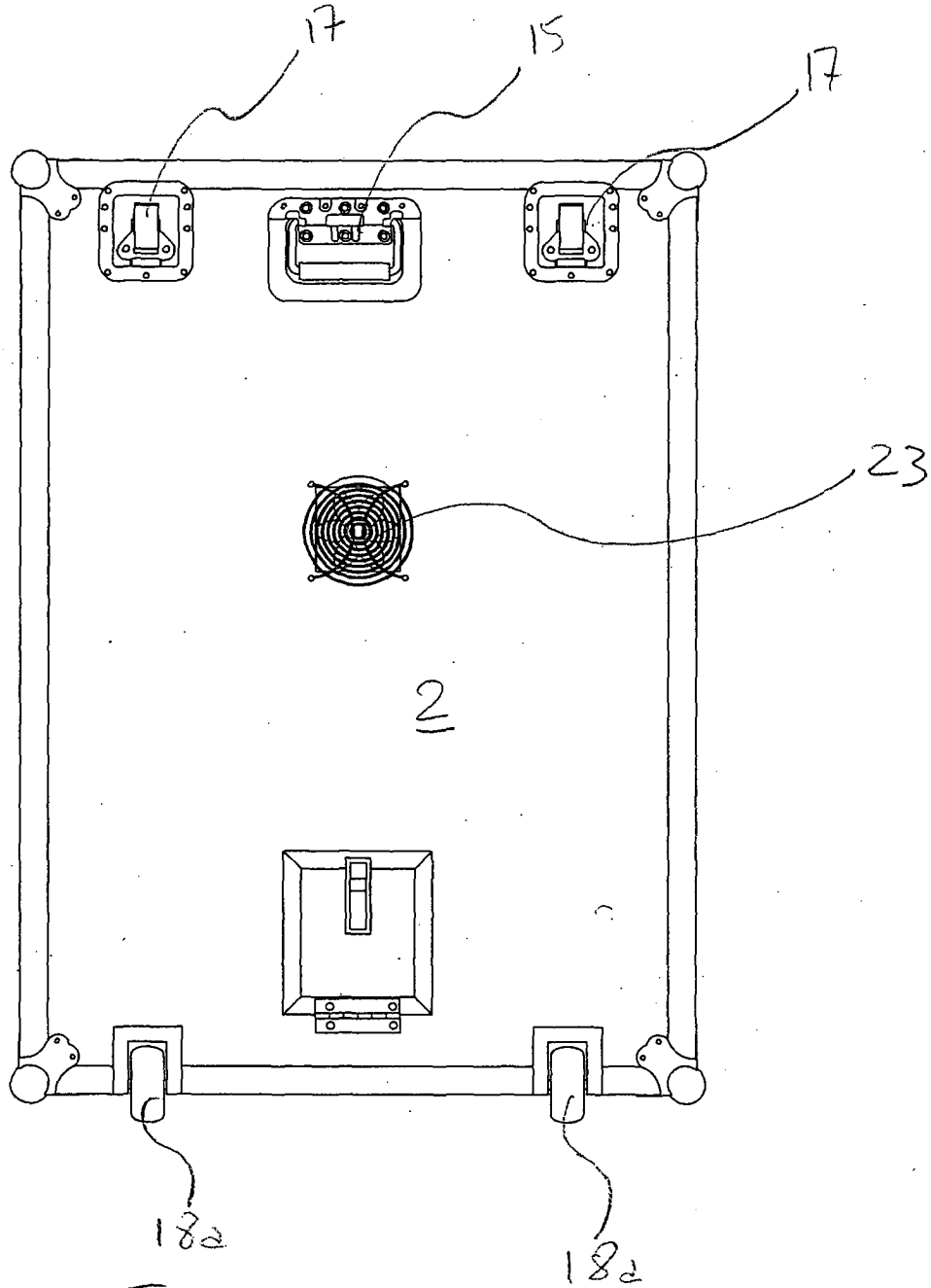

Fig. 6

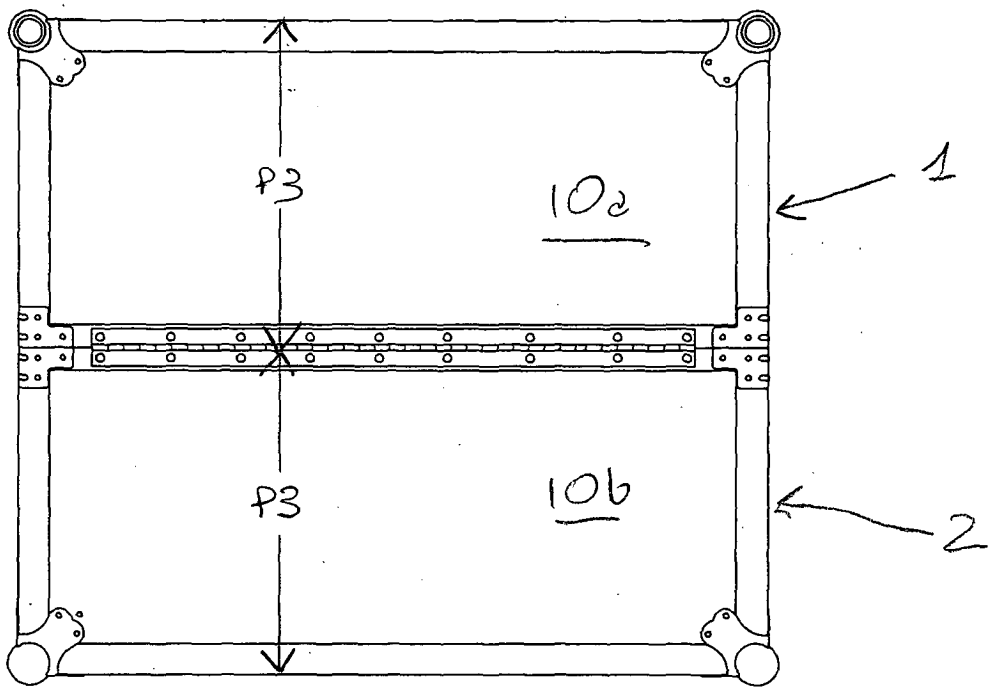

Fig. 7

INTERNATIONAL SEARCH REPORT

International application No
PCT/IT2010/000120

A. CLASSIFICATION OF SUBJECT MATTER
INV. A63F13/08
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A63F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 199 51 309 A1 (WILKHAHN WILKENING & HAHNE [DE]) 26 April 2001 (2001-04-26) claim 11	1-13
A	FR 2 838 314 A1 (BOULET PATRICK [FR]; BACOT ERIC [FR]) 17 October 2003 (2003-10-17) figures 1,2	1-13
A	JP 2002 149084 A (UCHIDA YOKO KK) 22 May 2002 (2002-05-22) * abstract; figure 1	1-13
A	US 2005/170895 A1 (BUSINGER KURT [US] ET AL) 4 August 2005 (2005-08-04) figure 1	1-13

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
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"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
17 September 2010	08/10/2010

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Fax: (+31–70) 340–3016	Arnold, Stuart

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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