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(54) **A DRAWER SYSTEM**

(57) A drawer system (100) that includes a front plate (101), back plate (102), bottom plate (103), a left side (104), a right side (105), and two sided frames that include a front vertical arm (11), a back vertical arm (12) and a horizontal rigid strip (13). The front and the back vertical arms (11) include vertical grooves. The front and the back vertical arms (11) are connected to the horizon-

tal rigid strip (13) in a way that the grooves are parallel to the horizontal rigid strip (13) and by that enabling to position the right and left sides (104, 105) in a way that they cover the horizontal rigid strip (13) and by that provide a clean and aesthetic look to the drawer system (100).

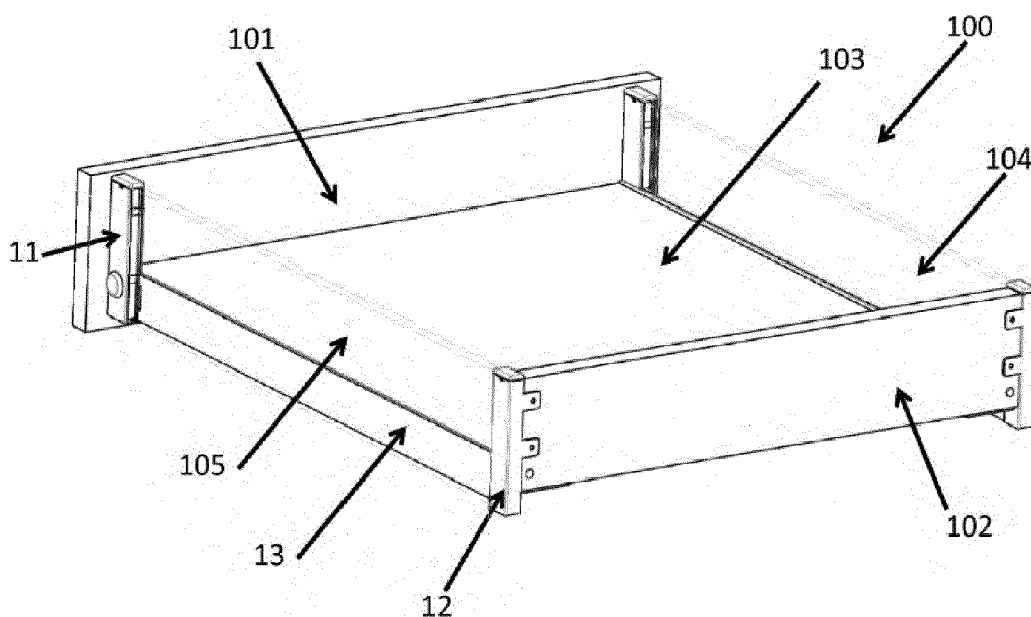


Fig. 1

Description

Technical Field

[0001] The present invention refers to a drawer system.

Background Art

[0002] In the recent years many users prefer to install in their houses and premises drawers which their sides combined with glass, metal, wood and other kind of materials wherein they prefer that these sides will be made of one kind a material and that the strip the consist the side will cover all the high of the drawer. The present patent application discloses, inter alia, a drawer that its structure enables an efficient possibility for manufacturing and installing such drawer with sides that cover all the high of the drawer.

Description of the Drawings

[0003] The intention of the drawings attached to the application is not to limit the scope of the invention and its application. The drawings are intended only to illustrate the invention and they constitute only one of its many possible implementations.

FIG. 1 depicts the drawer (100).

FIGS 2 - 5 depict the sided frame (1) and the attachment means (112)(122)(132).

FIG. 6 depicts an example of the attachment means (1012)

FIGS 7 and 8 depict the sided frame (1).

FIGS 9A and 9B depict the upper adapters (22) (24).

FIGS 9C and 9D depict the lower adapters (21) (23).

FIGS 10 and 11 depict the drawer system (500).

The Invention

[0004] The main objective of the present invention is to provide a drawer system (100) that includes a front plate (101), back plate (102), bottom plate (103), a left side (104) a right side (105), and two sided frames (1). The structure of the drawer system (100) enables the user to use sides that are made of one kind a material and that the strips that consists these sides cover all the high of the drawer. The right side (105) and the left side (104) can be made of wood, metal, marble or transparent materials such as glass or plastic. The front plate (101), the back plate (102) and the bottom plate (103) can be made of wood, plastic and any other materials that are customarily used for manufacturing such plates. Fig. 1 depicts the drawer (100).

[0005] The sided frame (1) includes a front vertical arm (11), a back vertical arm (12) and a horizontal rigid strip (13). The front vertical arm (11) includes a vertical groove (111) and attachment means (112) for attaching the back

plate (102), such as a small piece that enables the user to attach the back plate to it for example by screws or pins. The back vertical arm (12) includes a vertical groove (121) and attachment means (122) for attaching the front plate (101). This attachment means (122) should correspond with an attachment means of the front plate (101) as will be discussed later bellow. The horizontal rigid strip (13) includes and attachment means (132) for attaching the bottom plate (103), such as a small pieces or long narrow plate that enables the user to attach the bottom plate to it for example by screws or pins.

[0006] The front end of the horizontal rigid strip (13) is connected to the lower end of the front vertical arm (11) in a way that the groove (111) is in parallel to the horizontal rigid strip (13). The back end of the horizontal rigid strip (13) is connected to the lower end of the back vertical arm (12) in a way that the groove (121) is in parallel to the horizontal rigid strip (13). The parts of the sided frames (1) may be made of metal sheets and they may be welded together as one part for being ready to be assembled in the relevant place. Figs 2 - 5 depict the sided frame (1) and the attachment means (112) (122) (132).

[0007] The front plate (101) includes an attachment means (1012) that is designed to be correspondent with the attachment means (112) of the front vertical arm (11). Thus, to enable the user to attach the front plate (101) to the front vertical arms (11) of the sided frames (1) as depicts for example in Figs 7 and 8. The attachment means (1012) and (112) can be for example in the shapes of mortar and pestle, pin and a hole, horizontal pin and a piece that includes a groove with an upper opening, as describes in the Figs, or any other kind of known attachment means. Fig. 6 depicts an example of attachment means (1012) in a shape of horizontal pin whereas the attachment means (112) of the front vertical arm (11) is in a shape of a piece that includes a groove with an upper opening that enable the user to assemble the front plate (101) to the vertical arms (11) as described in Figs 7 and 8.

[0008] Assembling the right side (105) and the left side (104) into the sided frames (1) is easy and don simply by inserting these sides (105) (104) into the grooves (111) (121) of the sided frame (1). The fact that the these grooves (111) (121) are along all the length of these vertical arms (11) (12) enables to position these sides (104) (105) in a way that they are cover the horizontal rigid strip (13) and by that provides a clean and aesthetic look to the drawer (100). It is possible to color the lower part of these sides (104) (105), if they are made of transparent materials, in order to prevent the possibility to see the horizontal rigid strip (13) through those transparent sides (104) (105).

[0009] It is possible to use adapters for enabling usage of different thicknesses of sides (104) (105). Figs 9A and 9B depict upper adapters (22) (24) and Figs 9C and 9D depict lower adapters (21) (23). It is also possible to use reinforcing screws (25) to tight the front plate (101) to the

sided frames (1).

[0010] In the second embodiment of the drawer system (100) the front vertical arms (11) includes an additional vertical groove (51) perpendicularly to the vertical groove (111) and by that enables the user to insert a transparent plate as a front plate (101).

[0011] which its front vertical arms (51) includes two vertical grooves (52) (53) that are perpendicularly one to the other, and by that enables the user to insert a plate as a front plate (54), that covers all the high of the drawer, as depict in Figs 10 and 11.

[0012] The drawer system (100) subject matter of the present patent application has several important advantages: The fact that the sides (104) (105) are parallel with the base of the sided frame (1), means the horizontal rigid strip (13), make the overall look of the drawer more aesthetic and also make it possible to implement the invention also to drawers with low height; The adapters (21) - (24) enable the user to use different thicknesses of sides (104) (105); The attachment means (132) of the sided frames (1) enable to use these drawers with many kinds of rails and not necessarily with rails that must be accompanied with drawers as it is according the prior art; The second embodiment of the drawer (100) enable the user to use a front plate (101) made of transparent materials; Each side of the drawer made of one piece or unit and therefore enabling a simple and quick assembling of the drawer and an inventory management; In addition, such structure make it easy to clean these sides and to replace them in case of damages.

nesses of said left side and right side.

3. The drawer system according to claim 1 wherein said front vertical arms includes an additional vertical groove perpendicularly to said vertical groove; whereby enables said user to insert a plate as a front plate.
4. Aside frame for a drawer system, comprising: a front vertical arm, a back vertical arm and a horizontal rigid strip; wherein the front vertical arm includes a vertical groove and attachment means for attaching the back plate; wherein the back vertical arm includes a vertical groove and attachment means for attaching a front plate of said drawer system; wherein the horizontal rigid strip includes and attachment means for attaching a bottom plate of said drawer system; wherein a back end of the horizontal rigid strip is connected to a lower end of the back vertical arm in a way that the groove is in parallel to the horizontal rigid strip; wherein said front plate includes an attachment means that is designed to be correspond with the attachment means of the front vertical arm; and whereby enabling to position right and left sides of said drawer system in a way that they are cover the horizontal rigid strip and by that provides a clean and aesthetic look to the drawer system.

Claims

1. A drawer system that includes a front plate, back plate, bottom plate, a left side, a right side, and two sided frames; wherein the sided frame includes a front vertical arm, a back vertical arm and a horizontal rigid strip; wherein the front vertical arm includes a vertical groove and attachment means for attaching the back plate; wherein the back vertical arm includes a vertical groove and attachment means for attaching the front plate; wherein the horizontal rigid strip includes and attachment means for attaching the bottom plate; wherein a back end of the horizontal rigid strip is connected to a lower end of the back vertical arm in a way that the groove is in parallel to the horizontal rigid strip; wherein the front plate includes an attachment means that is designed to be correspond with the attachment means of the front vertical arm; and whereby enabling to position the right and left sides in a way that they are cover the horizontal rigid strip and by that provides a clean and aesthetic look to the drawer system.
2. The drawer system according to claim 1 which further includes adapters for said left side and right side; whereby enabling said user to use different thick-

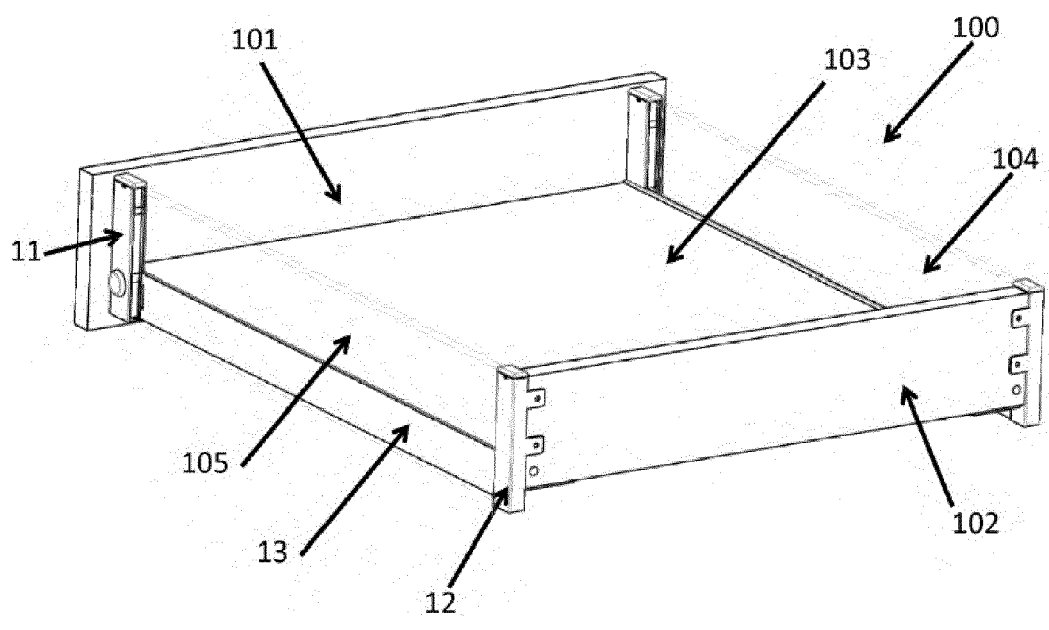


Fig. 1

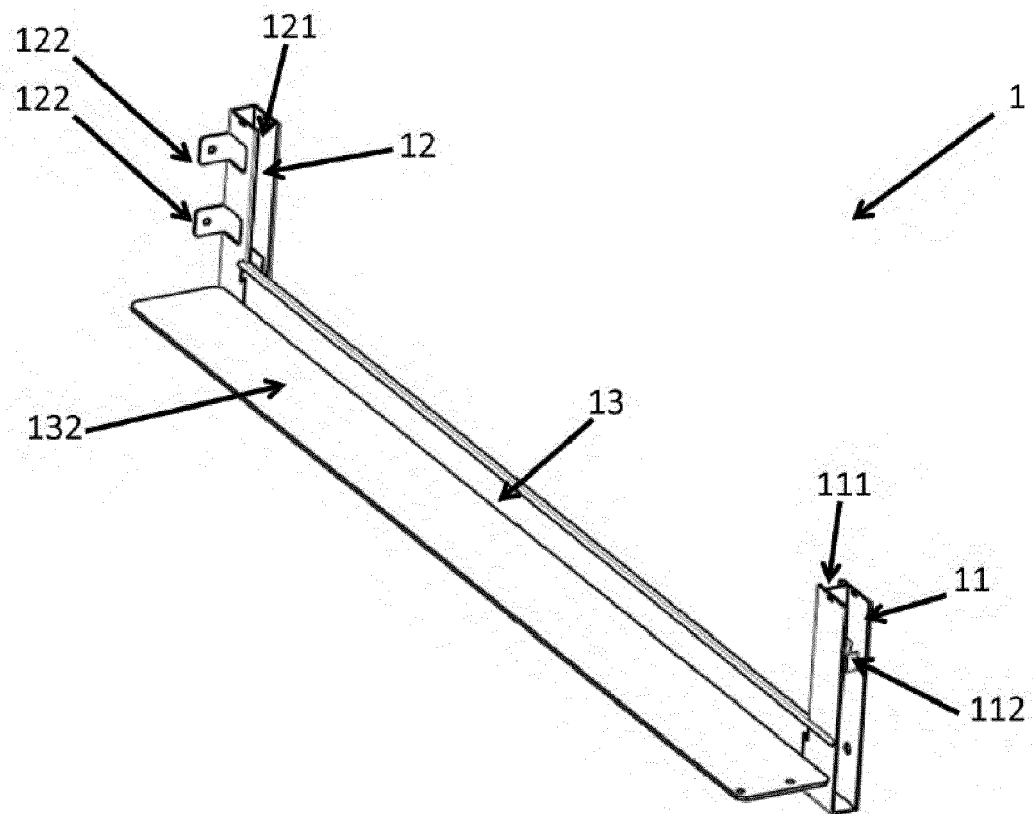


Fig. 2

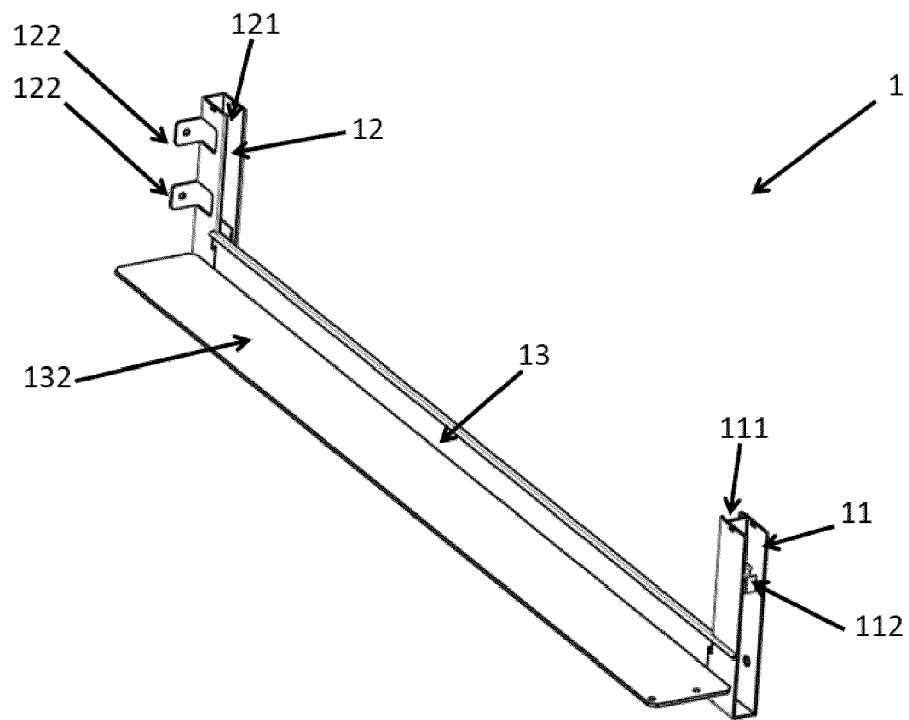


Fig. 3

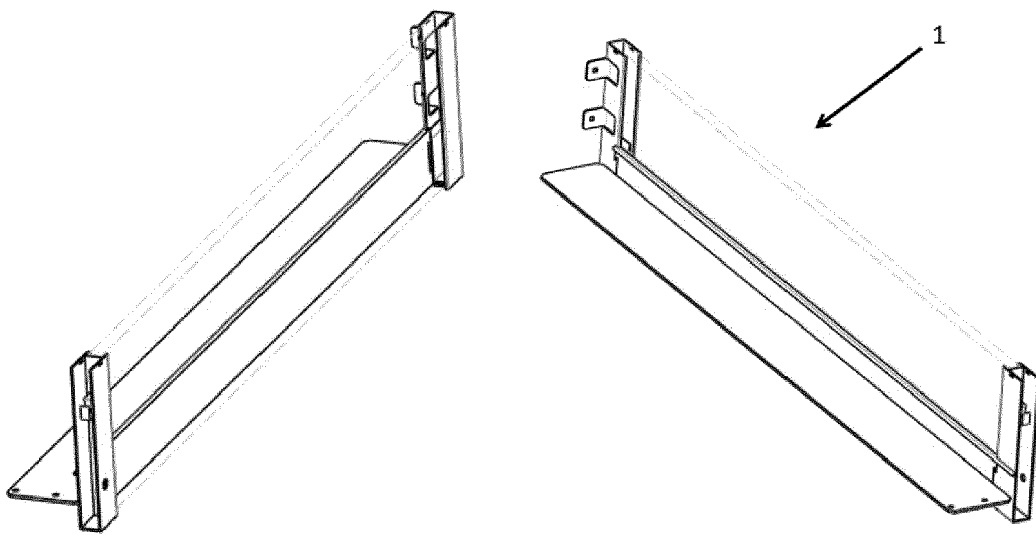


Fig. 4

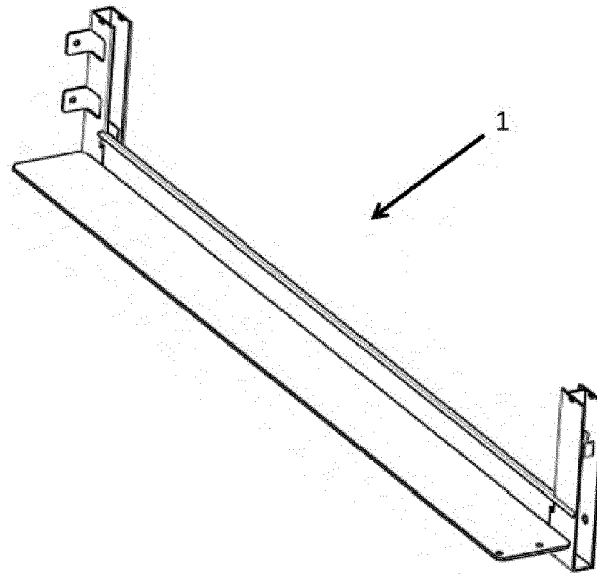


Fig. 5

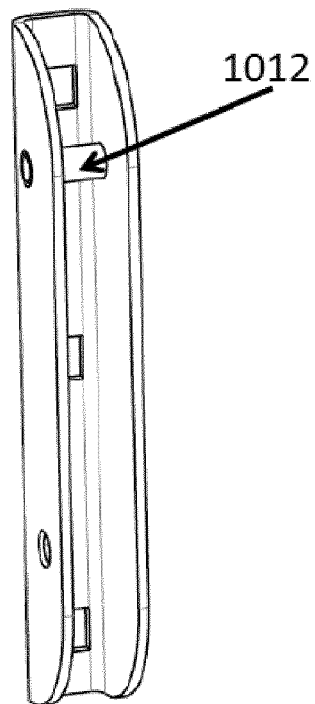


Fig. 6

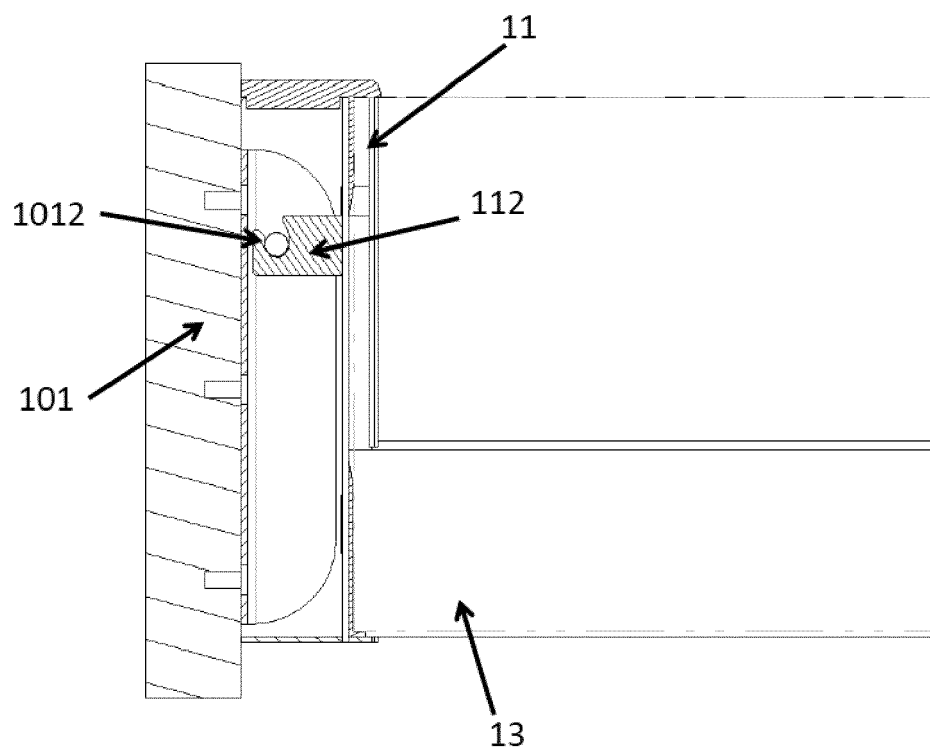


Fig. 7

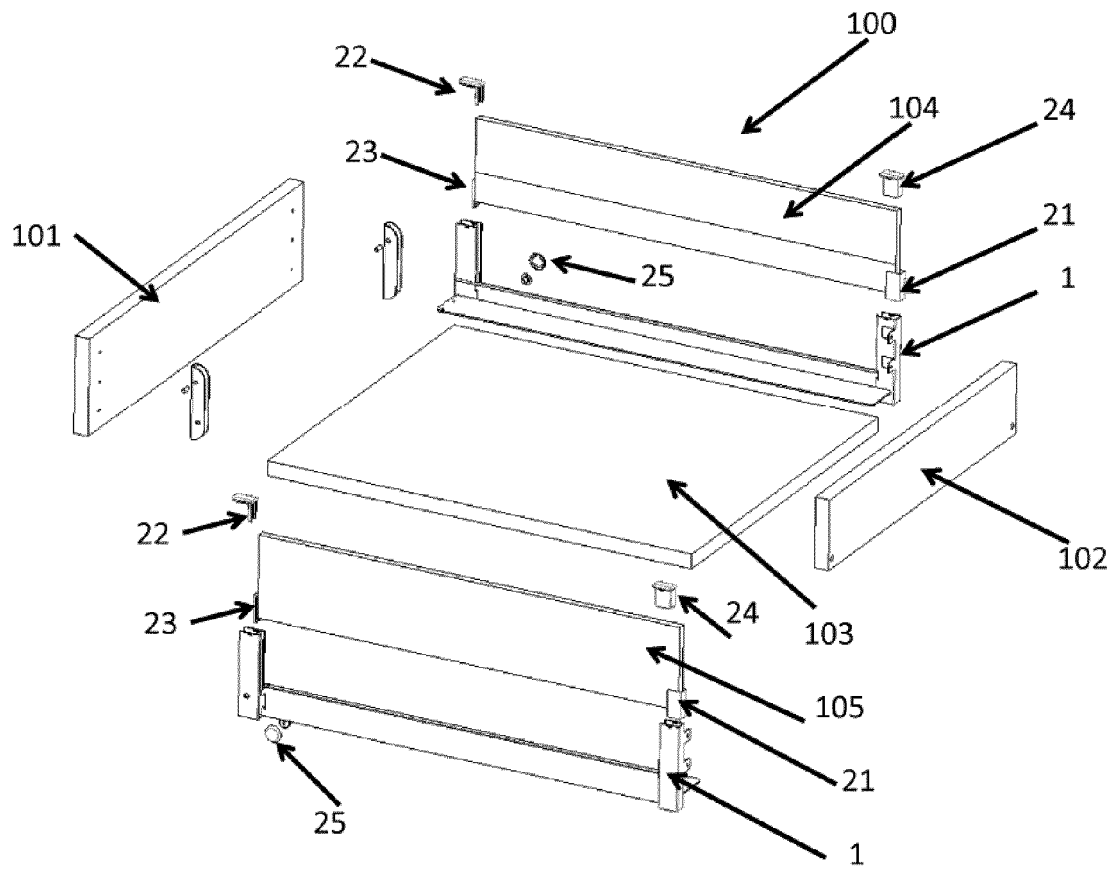


Fig. 8

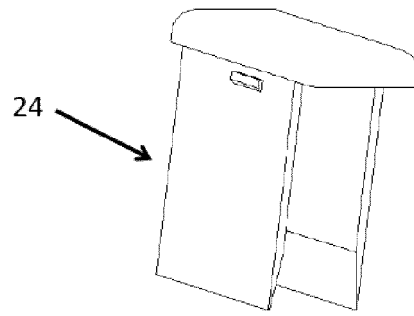


Fig. 9A

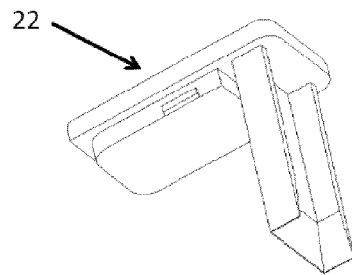


Fig. 9B

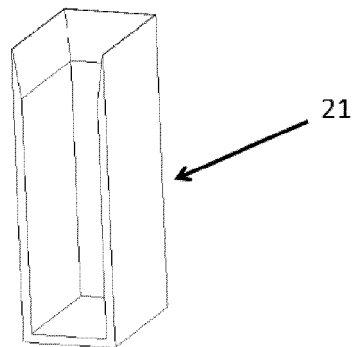


Fig. 9C

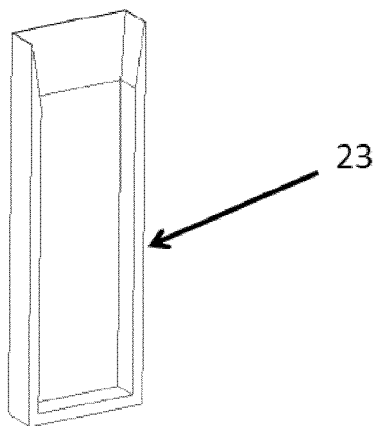


Fig. 9D

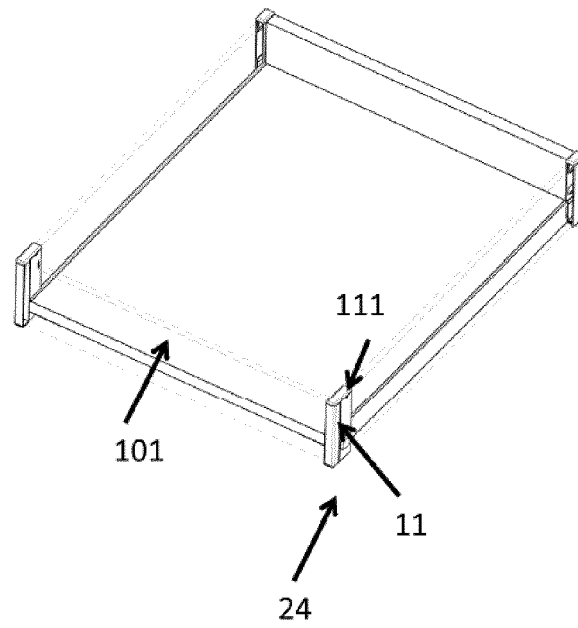


Fig. 10

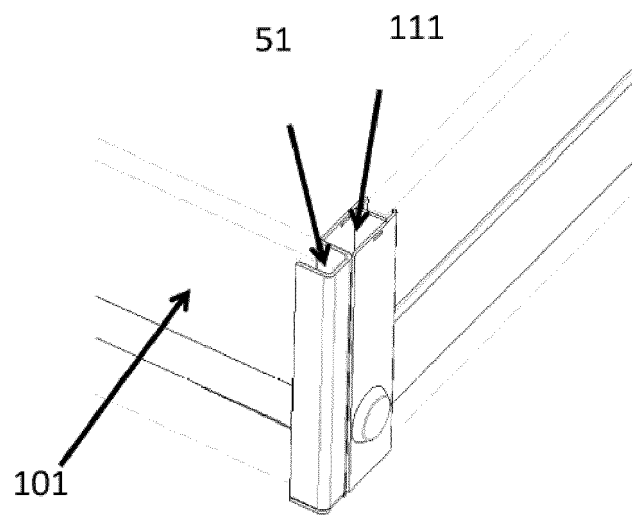


Fig. 11



EUROPEAN SEARCH REPORT

Application Number
EP 18 16 8163

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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 3 August 2018	Examiner Martinez Valero, J
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