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(54) PACKING BODY CARRIER AND PACKING BODY

(57) A packing body carrier (20) includes a body portion on which a packed body (100) is placed and a load receiving member (30) that is provided at the body portion and that has a load receiving portion which receives a load of the packed body, in which in a case where the packed body has horizontally moved, the load receiving portion (30) is inclined with respect to a horizontal plane.

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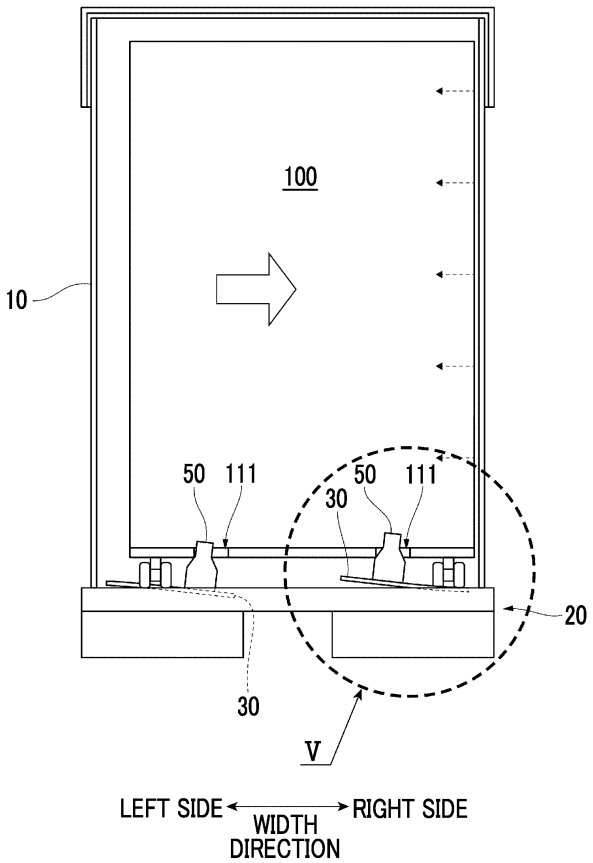
FIG. 4



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Description

BACKGROUND OF THE INVENTION

(i) Field of the Invention

[0001] The present invention relates to a packing body carrier and a packing body.

(ii) Description of Related Art

[0002] In general, in order to reduce a shock in a case of transporting a product, various types of shock absorbing materials are used. The shock absorbing materials fill a gap between the product and a packing material such that the product does not move in the packing material which packs the product. In general, many of the shock absorbing materials are disposable and are not reused in many cases. In order to reduce the amount of disposable shock absorbing material, a shock absorbing member is provided at a reusable pallet in some cases.

[0003] For example, JP2007-69925A describes a packing device including a base portion that is a packing device body, a receiving plate that is disposed to form a space above the base portion, and a shock absorbing member that is provided to be interposed between the receiving plate and the base portion.

[0004] For example, JP2004-99150A describes a device consisting of a pallet for transporting an article, a shock absorbing member that is placed on the pallet and that is for absorbing vibration, a shock, or the like in a case of article transportation, cargo handling, storage, or the like, and a board material that is disposed on the shock absorbing member and is for placing the article thereon, in which a recessed portion to which at least the shock absorbing member is fitted is provided in a pallet upper surface.

SUMMARY OF THE INVENTION

[0005] In a case where a shock absorbing material that fills a gap between a packing body and a packed body is not provided, a gap between a side surface of the packed body and an inner surface of the packing body is generated. For example, in a case where a force is applied to the packed body in a horizontal direction, the packed body is tilted and locally collides with the inner surface of the packing body in some cases.

[0006] An object of the present invention is to suppress a local shock to the packed body.

[0007] According to a first aspect of the present disclosure, there is provided a packing body carrier including a body portion on which a packed body is placed and a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body, in which in a case where the packed body has horizontally moved, the load receiving portion may be inclined with respect to a horizontal plane.

[0008] According to a second aspect of the present disclosure, there is provided a packing body carrier including a body portion on which a packed body is placed and a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body, in which the load receiving member may be fixed to the body portion in a region between load receiving portions.

[0009] According to a third aspect of the present disclosure, in the packing body carrier according to the first or second aspect, a restricting portion that has one end fixed to the load receiving member and that restricts the horizontal movement of the packed body by coming into contact with a part of the packed body in a case where the packed body has horizontally moved may be further included, and a part of the load receiving portion may rise in a case where the restricting portion receives a force in a horizontal direction.

[0010] According to a fourth aspect of the present disclosure, in the packing body carrier according to any one of the first to third aspects, the load receiving member may be a member that extends in a longitudinal direction.

[0011] According to a fifth aspect of the present disclosure, in the packing body carrier according to the fourth aspect, the body portion may support the load receiving member in a lateral direction intersecting the longitudinal direction.

[0012] According to a sixth aspect of the present disclosure, in the packing body carrier according to the fifth aspect, the load receiving portion may rise as the restricting portion receives a force in the longitudinal direction compared to a case where the restricting portion receives a force in the lateral direction.

[0013] According to a seventh aspect of the present disclosure, in the packing body carrier according to the first or second aspect, the body portion may include a shock absorbing member that comes into contact with the load receiving portion and that reduces a shock.

[0014] According to an eighth aspect of the present disclosure, in the packing body carrier according to the seventh aspect, the shock absorbing member may be provided at a surface different from a surface of the load receiving portion, which receives the load of the packed body.

[0015] According to a ninth aspect of the present disclosure, there is provided a packing body including a body portion on which a packed body is placed, a box body that covers the packed body, and a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body, in which in a case where the packed body has horizontally moved, the load receiving portion may be inclined with respect to a horizontal plane.

[0016] In the first aspect of the present invention, a local shock to the packed body can be suppressed.

[0017] In the second aspect of the present invention, a local shock to the packed body can be suppressed.

[0018] In the third aspect of the present invention, it

can be suppressed that the packed body is tilted with respect to the packing body.

[0019] In the fourth aspect of the present invention, a load received from the packed body can be dispersed.

[0020] In the fifth aspect of the present invention, a rise in the longitudinal direction can be increased.

[0021] In the sixth aspect of the present invention, a rise in the longitudinal direction can be increased.

[0022] In the seventh aspect of the present invention, a shock to the packed body can be reduced.

[0023] In the eighth aspect of the present invention, a shock to the packed body can be reduced.

[0024] In the ninth aspect of the present invention, a local shock to the packed body can be suppressed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0025] Exemplary embodiment(s) of the present invention will be described in detail based on the following figures, wherein:

Fig. 1 is a perspective view showing a state where a multifunction machine is packed using a packing body to which the present exemplary embodiment is applied;

Fig. 2 is a perspective view for describing a transportation pallet according to the present exemplary embodiment;

Fig. 3 is an exploded view for describing an inside of the transportation pallet;

Fig. 4 is a schematic view showing a state where the multifunction machine moves in a horizontal direction with respect to the transportation pallet and has come into contact with a box body;

Figs. 5A and 5B are enlarged views of a region V of Fig. 4; Fig. 5A is a view showing a state where the multifunction machine horizontally moves and starts to come into contact with a restricting member, and Fig. 5B is a view showing a state where the multifunction machine has further horizontally moved; and

Fig. 6 is a schematic view showing a comparative example in which a position of the restricting member does not change with respect to the transportation pallet.

DETAILED DESCRIPTION OF THE INVENTION

[0026] Hereinafter, an exemplary embodiment of the present invention will be described in detail with reference to the accompanying drawings.

[0027] Fig. 1 is a perspective view showing a state where a multifunction machine 100 is packed using a packing body 1 to which the present exemplary embodiment is applied. In Fig. 1, a box body 10 is shown by a broken line, and the multifunction machine 100 and a transportation pallet 20 are shown by solid lines. The transportation pallet 20 is an example of a packing body carrier.

[0028] As shown in Fig. 1, the multifunction machine 100 is covered with the box body 10 after placed on an upper surface of the transportation pallet 20. The multifunction machine 100 is provided with casters 101 as legs for supporting the multifunction machine 100, and the multifunction machine 100 is supported by the four casters 101.

[0029] The box body 10 includes a square tubular side surface portion 11 that protects side surfaces of the multifunction machine 100 and a lid portion 12 that protects an upper surface of the multifunction machine 100. The side surface portion 11 of the box body 10 is configured to have a square tubular shape, and a lower end portion and an upper end portion thereof are open. In a case of packing the multifunction machine 100, in a state where the multifunction machine 100 is placed on the transportation pallet 20, the multifunction machine 100 is passed from an opening of a lower portion of the side surface portion 11 of the box body 10 to be wrapped up, and a lower end portion of the box body 10 is brought into contact with the transportation pallet 20 to place the box body 10.

[0030] An opening of the upper end portion of the side surface portion 11 of the box body 10 is closed by the lid portion 12, and the multifunction machine 100 is packed by the box body 10. In the present exemplary embodiment, the box body 10 is formed of so-called cardboard. The cardboard is obtained by pasting thick paper to both sides of paper formed in a corrugated shape and is configured by a paper member. A material for the box body 10 is not limited thereto and may be formed of, for example, a resin material.

[0031] Next, the transportation pallet 20 will be described with reference to Figs. 2 and 3.

[0032] Fig. 2 is a perspective view for describing the transportation pallet 20 according to the present exemplary embodiment. In addition, Fig. 3 is an exploded view for describing the inside of the transportation pallet 20. Fig. 3 is shown with only one of two plates 30 removed, and also a place hidden by the other plate 30 has the same structure.

[0033] As shown in Fig. 2, the transportation pallet 20 includes a body portion 21 that is a major structure of the transportation pallet 20, the plate 30 that receives a load from the casters 101 of the multifunction machine 100, and a restricting member 50 that restricts a movement of the multifunction machine 100 in a horizontal direction. The transportation pallet 20 of the present exemplary embodiment is formed of a resin material. The plate 30 is an example of a load receiving member. In the present exemplary embodiment, there is two plates 30, but the number of plates 30 is not limited, may be one, or may be three or more.

[0034] As shown in Figs. 2 and 3, the body portion 21 includes a foot 22 that is a base for supporting the transportation pallet 20, a contact unit 23 that positions the box body 10, a fixing portion 24 that fixes the plate 30 to

the transportation pallet 20, a shock absorbing member 25 that absorbs a shock to the multifunction machine 100, and an accommodating portion 26 that accommodates the shock absorbing member 25.

[0035] Four feet 22 are provided on a lower side of the body portion 21 and are provided on four sides of the transportation pallet 20. In addition, a plurality of provided feet 22 have a cavity through which a fork of a forklift passes.

[0036] The contact unit 23 that positions the box body 10 is a protrusion provided at each of four corners of an upper surface of the body portion 21. The contact unit 23 is configured in a shape in which a long side of a right-angled triangle is recessed in a bow shape in a case of being viewed from a viewing direction in Fig. 2, that is, the transportation pallet 20 is viewed from an upper side. In addition, four contact units 23 are disposed such that a rectangular region formed by linking a right-angled portion of each of the four contact units 23 is formed at a determined interval inside an outer shape of the transportation pallet 20. In addition, the rectangular region formed by linking the right-angled portion of each of the four contact units 23 corresponds to a region of an opening of the lower end portion of the box body 10.

[0037] The fixing portion 24 that fixes the plate 30 to the transportation pallet 20 is provided in a central region of the transportation pallet 20 in a lengthwise direction of Fig. 3, drops by a thickness D of the plate 30 from the lower side from the upper surface of the body portion 21, and forms a surface parallel to the upper surface of the body portion 21. The parallel surface is configured in a rectangular shape.

[0038] The fixing portion 24 includes a protruding portion 28 that performs positioning with the plate 30 and a screw fixing portion 29 for tightening a screw which fixes the plate 30. The protruding portion 28 is, for example, a protrusion configured in a cylindrical shape. The protruding portion 28 is provided at, for example, a central region of the fixing portion 24 in the lengthwise direction of Fig. 3, and a plurality of protruding portions 28, such as two, are arranged in a width direction. The screw fixing portions 29 are screw holes and are provided in, for example, four corners of the fixing portion 24 configured in a rectangular shape.

[0039] The shock absorbing member 25 is provided below the plate 30 and gently supports the plate 30. The shock absorbing member 25 is made of, for example, a material having shock absorbing properties, such as a foamed resin material and a rubber material, and a plurality of (herein, two) shock absorbing members 25 are provided with respect to one plate 30 via the fixing portion 24 in the present exemplary embodiment. The shock absorbing member 25 has a substantially right-angled parallelepiped shape and is configured to have, for example, the same thickness as the thickness of the fixing portion 24. In Fig. 3, the thickness is shown as a length L.

[0040] The accommodating portion 26 that accommodates the shock absorbing member 25 is recessed in accordance with the shape of the shock absorbing member 25 and is formed in accordance with the number of shock absorbing members 25. As described above, since the shock absorbing member 25 is provided below the plate 30, the accommodating portion 26 is at a position of being covered with the plate 30, and one accommodating portion 26 is provided for each of a back side and a front side in the lengthwise direction with respect to the fixing portion 24 in the example shown in Fig. 3. In addition, in the example shown in Fig. 3, the accommodating portion 26 is recessed downward by a length of L in accordance with the thickness of the shock absorbing member 25 with the position of the fixing portion 24 as reference and is recessed from a surface of the body portion 21 by a length of D + L obtained by adding the thickness D of the plate 30.

[0041] In a case of being viewed from the upper side of Fig. 2, the plate 30 is a plate that has a shape of a rectangle extending in the lengthwise direction and of which four corners of the rectangle are rounded. The plate 30 is made of a material having elasticity with respect to plate bending deformation and is formed of, for example, a resin material.

[0042] The plate 30 includes a positioning hole 31 that is a through-hole for performing positioning with the body portion 21, a fixing hole 32 that is a through-hole for fixing to the body portion 21, and a load receiving portion 35 that receives a load from the casters 101 (see Fig. 1) of the multifunction machine 100. The positioning hole 31 is removed such that the cylindrical shape of the protruding portion 28 of the fixing portion 24 is accommodated and is disposed in a central region in a longitudinal direction of the plate 30, and two positioning holes 31 are arranged in a lateral direction.

[0043] The fixing hole 32 is a through-hole through which a screw passes and is provided corresponding to the screw fixing portion 29 of the fixing portion 24.

[0044] The load receiving portions 35 are regions on both end sides from a region where the plate 30 is fixed to the body portion 21 and are regions that receive a load from the casters 101 of the multifunction machine 100. In other words, the plate 30 is fixed to the body portion 21 in a region between the load receiving portions 35.

[0045] The restricting member 50 shown in Fig. 2 is a member for restricting a horizontal movement of the multifunction machine 100 (see Fig. 1) placed on the transportation pallet 20. The restricting member 50 is, for example, a plate member made of a sheet metal formed of high-tensile steel. The restricting member 50 is configured by, for example, an L-shaped leaf spring. The restricting member 50 includes a base portion 51 that is fixed to the load receiving portion 35 of the plate 30, an insertion portion 52 that is inserted from a gap in an exterior of a lower surface of the multifunction machine 100, and a hook portion 53 that is inserted from the exterior of the lower surface of the multifunction machine 100 and that is hooked to the inside of the multifunction machine 100.

[0046] The base portion 51 is configured in, for example, a rectangular shape and has a through-hole for fixing the base portion 51 to the load receiving portion 35 of the plate 30 at a central portion of the rectangular shape. By passing a bolt through the through-hole and fixing the bolt to the load receiving portion 35 of the plate 30, the base portion 51 is fixed to the plate 30.

[0047] In a case where the multifunction machine 100 is placed on the transportation pallet 20, the insertion portion 52 is a plate that extends from one side of the rectangle of the base portion 51 to be inserted into the gap in the exterior of the lower surface of the multifunction machine 100 and extends from the upper surface of the transportation pallet 20 toward the upper side.

[0048] The hook portion 53 is hooked from the inside of the exterior of the lower surface of the multifunction machine 100 and restrains the multifunction machine 100 such that the restricting member 50 does not come off the multifunction machine 100 in a case where the multifunction machine 100 moves upward. In the present exemplary embodiment, the hook portion 53 bends from an upper portion of the insertion portion 52.

[0049] Herein, in order to facilitate understanding of features of the present exemplary embodiment, a comparative example will be given and described.

[0050] As the comparative example, a transportation pallet 200 that does not have the plate 30 and that restricts a horizontal movement of the multifunction machine 100 with a restricting member 500 which does not elastically deform will be described.

[0051] Fig. 6 is a schematic view showing the comparative example in which the position of the restricting member 500 does not change with respect to the transportation pallet 200 and shows, in a case where the multifunction machine 100 has moved horizontally with respect to the transportation pallet 200, an example in a case where the horizontal movement is restricted by the restricting member 500.

[0052] As shown in Fig. 6, one end of the restricting member 500 fixed to the transportation pallet 200 enters a hole 111 provided in the lower portion of the multifunction machine 100, and the horizontal movement of the multifunction machine 100 is restricted. However, for example, in a case where the transportation pallet 200 which has been moving in a rightward direction of Fig. 6 suddenly stops, the multifunction machine 100 receives a high load in the rightward direction, but in this case, in a case where the restricting member 500 hits the hole 111 of the multifunction machine 100, the transportation pallet 200 cannot move in the rightward direction any further due to the stopped restricting member 500. For this reason, the multifunction machine 100 rotates clockwise with a contact portion between the restricting member 500 and the hole 111 on a right side as reference. As a result, an upper end of the multifunction machine 100 is tilted, collides with the box body 10, and receives a locally great shock.

[0053] In the present exemplary embodiment, a local shock generated at the multifunction machine 100 in which the upper end of the multifunction machine 100 shown in Fig. 6 is tilted and collides with the box body 10 is reduced.

(About Horizontal Movement of Multifunction Machine 100 in Present Exemplary Embodiment)

[0054] Next, a movement in a case where the multifunction machine 100 has horizontally moved in the transportation pallet 20 of the present exemplary embodiment will be described with reference to Figs. 4 to 5B.

[0055] Fig. 4 is a schematic view showing a state where the multifunction machine 100 moves in the horizontal direction with respect to the transportation pallet 20 and has come into contact with the box body 10. A case where the transportation pallet 20, which has been moving in the rightward direction of Fig. 4, is suddenly stopped is assumed.

[0056] The restricting member 50 of the transportation pallet 20 of the present exemplary embodiment is provided at the plate 30 that has elasticity. As described above, a central region of the plate 30 in the longitudinal direction of the plate 30 is fixed, and the load receiving portions 35 (see Fig. 3) on both end sides of the plate 30 are not fixed and are placed on the shock absorbing members 25. For this reason, the load receiving portions 35 can rise and sink. The load receiving portions 35 rise with a weaker force from the central region in the longitudinal direction to which the plate 30 is fixed toward a tip. In addition, a plate surface of the plate 30 can rise in a twisted manner depending on the structure of the plate 30.

[0057] As shown in Fig. 4, in a case where the multifunction machine 100 moves right and left in the width direction, a part of the plate 30 rises. As the plate 30 rises, the restricting member 50 can be tilted. Accordingly, the multifunction machine 100 horizontally moves without rotating around the restricting member 50. A side surface of the multifunction machine 100 which has horizontally moved collides with the box body 10. As the side surface of the multifunction machine 100 collides with the box body 10, for example, as a wide region of the side surface, such as the entire side surface, collides, a shock can be dispersed, and generation of a locally great shock can be suppressed.

[0058] Herein, a movement until the multifunction machine 100 moves from a left side to the right side in the width direction and the state of Fig. 4 is reached will be described with reference to Figs. 5A and 5B.

[0059] Figs. 5A and 5B are enlarged views of a region V of Fig. 4. Fig. 5A is a view showing a state where the multifunction machine 100 horizontally moves and starts to come into contact with the restricting member 50. In addition, Fig. 5B is a view showing a state where the multifunction machine 100 has further horizontally moved.

[0060] As shown in Fig. 5A, the load receiving portion

35 (see Fig. 3) of the plate 30 is disposed on the shock absorbing member 25. In addition, the longitudinal direction of the plate 30 is disposed in a direction from the front side to the back side of Fig. 5A. The restricting member 50 is disposed such that a plate surface of the insertion portion 52 of the restricting member 50 faces a direction toward the front of Fig. 5A. That is, the restricting member 50 does not elastically deform even in a case where a force is applied to the insertion portion 52 from the left side to the right side in the width direction of Fig. 5A.

[0061] In a case where the multifunction machine 100 moves from the left side to the right side in the width direction with respect to the transportation pallet 20, the insertion portion 52 and the hole 111 come into contact with each other. Then, in a case where the multifunction machine 100 further moves to the right side in the width direction, the insertion portion 52 receives a force to the right side in the width direction. The plate 30 of the present exemplary embodiment has elasticity, and a part thereof rises in a case where a force to the right side in the width direction is generated at the insertion portion 52. Accordingly, the insertion portion 52 is tilted, a position where the insertion portion 52 and the hole 111 come into contact with each other moves in the rightward direction, and the multifunction machine 100 horizontally moves as it is.

[0062] In addition, even in a case where the multifunction machine 100 does not rotate around the restricting member 50, for example, a case where a frictional force between the casters 101 and the plate 30 is great, rotation around the casters 101 is performed in some cases.

[0063] In the present exemplary embodiment, as shown in Fig. 5B, as the load receiving portion 35 of the plate 30 is tilted to move downward in a movement direction of the multifunction machine 100 (downward to the right), an increase in the frictional force between the casters 101 and the plate 30 can be suppressed, and the occurrence of rotation around the casters 101 is suppressed. Accordingly, the multifunction machine 100 continues to horizontally move.

[0064] In addition, although an example in which the multifunction machine 100 horizontally moves to the right side in the width direction (the lateral direction of the plate 30) has been described with reference to Fig. 4, as the load receiving portion 35 of the plate 30 rises and is tilted also in a case where the multifunction machine 100 has horizontally moved in the longitudinal direction of the plate 30, the restricting member 50 is tilted, and the movement of the multifunction machine 100 is continued. Accordingly, by colliding with a wide region of a front surface or a back surface of the multifunction machine 100, a shock can be dispersed.

[0065] In addition, the load receiving portion 35 of the plate 30 of the present exemplary embodiment is placed on the shock absorbing member 25, a shock in an up-down direction is absorbed by the shock absorbing member 25, and a shock to the multifunction machine 100 is suppressed.

[0066] Although the multifunction machine 100 has been described hereinbefore as an example of a packed body in the exemplary embodiment of the present invention, the packed body packed by the packing body 1 is not limited to the multifunction machine 100 and can also be, for example, an electronic device to be packed.

< Supplementary Note>

[0067]

(((1))) A packing body carrier comprising:

a body portion on which a packed body is placed; and
a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body,
wherein in a case where the packed body has horizontally moved, the load receiving portion is inclined with respect to a horizontal plane.

(((2))) A packing body carrier comprising:

a body portion on which a packed body is placed; and
a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body,
wherein the load receiving member is fixed to the body portion in a region between load receiving portions.

(((3))) The packing body carrier according to (((1))) or (((2))), further comprising:

a restricting portion that has one end fixed to the load receiving member and that restricts the horizontal movement of the packed body by coming into contact with a part of the packed body in a case where the packed body has horizontally moved,
wherein a part of the load receiving portion rises in a case where the restricting portion receives a force in a horizontal direction.

(((4))) The packing body carrier according to any one of (((1))) to (((3))),
wherein the load receiving member is a member that extends in a longitudinal direction.

(((5))) The packing body carrier according to (((4))), wherein the body portion supports the load receiving member in a lateral direction intersecting the longitudinal direction.

(((6))) The packing body carrier according to (((5))), wherein the load receiving portion rises as the restricting portion receives a force in the longitudinal direction compared to a case where the restricting

portion receives a force in the lateral direction.
(((7))) The packing body carrier according to (((1))) or (((2))),
wherein the body portion includes a shock absorbing member that comes into contact with the load receiving portion and that reduces a shock.
(((8))) The packing body carrier according to (((7))), wherein the shock absorbing member is provided at a surface different from a surface of the load receiving portion, which receives the load of the packed body.
(((9)))
A packing body comprising:

a body portion on which a packed body is placed;
a box body that covers the packed body; and
a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body,
wherein in a case where the packed body has horizontally moved, the load receiving portion is inclined with respect to a horizontal plane.

[0068] In the packing body carrier according to (((1))), a local shock to the packed body can be suppressed.
[0069] In the packing body carrier according to (((2))), a local shock to the packed body can be suppressed.
[0070] In the packing body carrier according to (((3))), it can be suppressed that the packed body is tilted with respect to the packing body.
[0071] In the packing body carrier according to (((4))), a load received from the packed body can be dispersed.
[0072] In the packing body carrier according to (((5))), a rise in the longitudinal direction can be increased.
[0073] In the packing body carrier according to (((6))), a rise in the longitudinal direction can be increased.
[0074] In the packing body carrier according to (((7))), a shock to the packed body can be reduced.
[0075] In the packing body carrier according to (((8))), a shock to the packed body can be reduced.
[0076] In the packing body according to (((9))), a local shock to the packed body can be suppressed.
[0077] The foregoing description of the exemplary embodiments of the present invention has been provided for the purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise forms disclosed. Obviously, many modifications and variations will be apparent to practitioners skilled in the art. The embodiments were chosen and described in order to best explain the principles of the invention and its practical applications, thereby enabling others skilled in the art to understand the invention for various embodiments and with the various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the following claims and their equivalents.

Brief Description of the Reference Symbols

[0078]

1: packing body
10: box body
20: transportation pallet
21: body portion
22: foot
24: fixing portion
25: shock absorbing member
26: accommodating portion
29: screw fixing portion
30: plate
32: fixing hole
35: load receiving portion
50: restricting member
100: multifunction machine
101: caster
111: hole

Claims

1. A packing body carrier comprising:

a body portion on which a packed body is placed; and
a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body,
wherein in a case where the packed body has horizontally moved, the load receiving portion is inclined with respect to a horizontal plane.

2. A packing body carrier comprising:

a body portion on which a packed body is placed; and
a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body,
wherein the load receiving member is fixed to the body portion in a region between load receiving portions.

3. The packing body carrier according to claim 1 or 2, further comprising:

a restricting portion that has one end fixed to the load receiving member and that restricts the horizontal movement of the packed body by coming into contact with a part of the packed body in a case where the packed body has horizontally moved,
wherein a part of the load receiving portion rises in a case where the restricting portion receives a force in a horizontal direction.

4. The packing body carrier according to any one of claims 1 to 3,
wherein the load receiving member is a member that extends in a longitudinal direction.

5. The packing body carrier according to claim 4,
wherein the body portion supports the load receiving member in a lateral direction intersecting the longitudinal direction.

6. The packing body carrier according to claim 5,
wherein the load receiving portion rises as the restricting portion receives a force in the longitudinal direction compared to a case where the restricting portion receives a force in the lateral direction.

7. The packing body carrier according to claim 1 or 2,
wherein the body portion includes a shock absorbing member that comes into contact with the load receiving portion and that reduces a shock.

8. The packing body carrier according to claim 7,
wherein the shock absorbing member is provided at a surface different from a surface of the load receiving portion, which receives the load of the packed body.

9. A packing body comprising:

a body portion on which a packed body is placed;
a box body that covers the packed body; and
a load receiving member that is provided at the body portion and that has a load receiving portion which receives a load of the packed body,
wherein in a case where the packed body has horizontally moved, the load receiving portion is inclined with respect to a horizontal plane.

FIG. 1

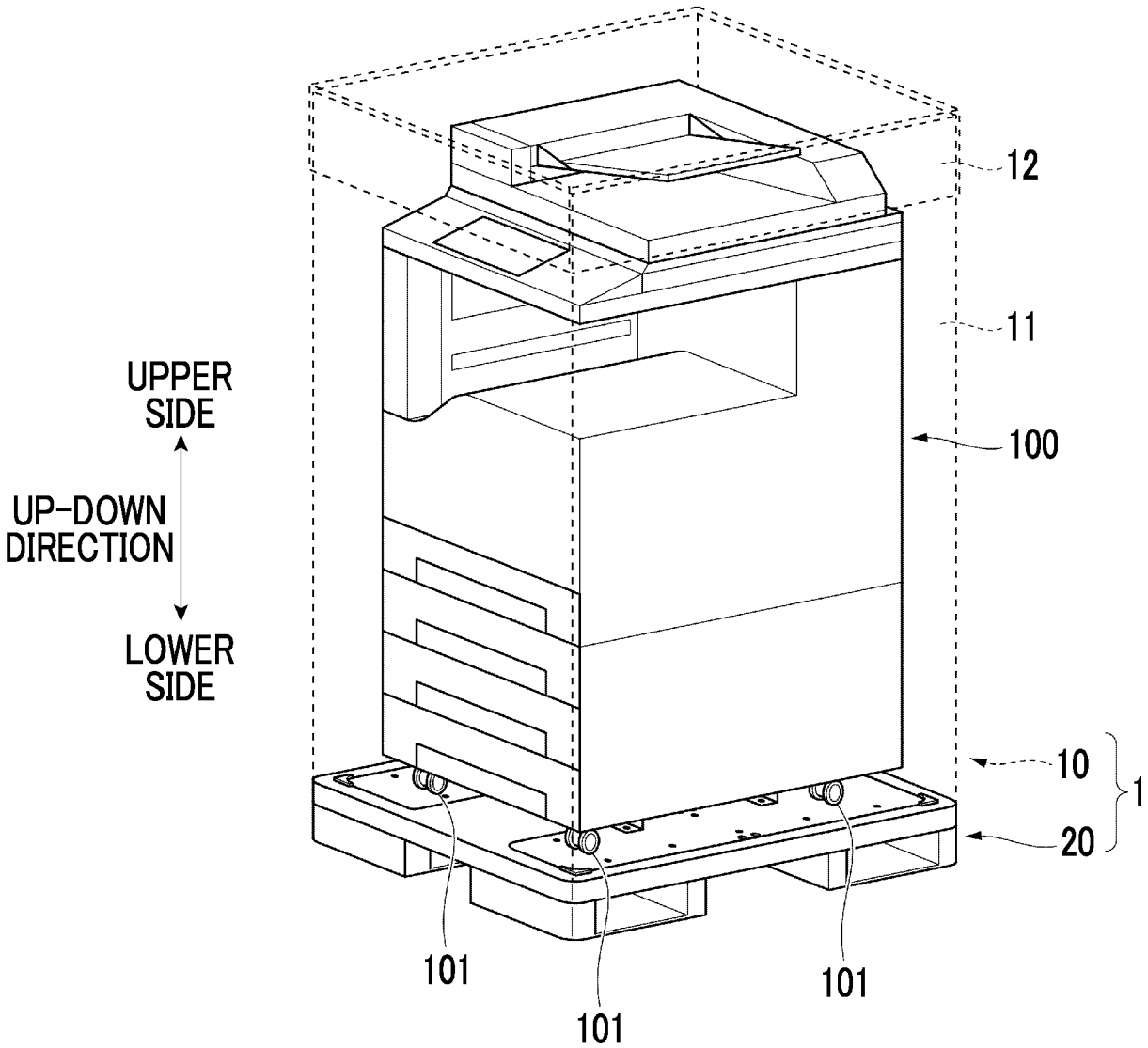

UPPER SIDE
UP-DOWN DIRECTION
LOWER SIDE
12
11
100
10
1
20
101
101
101

FIG. 2

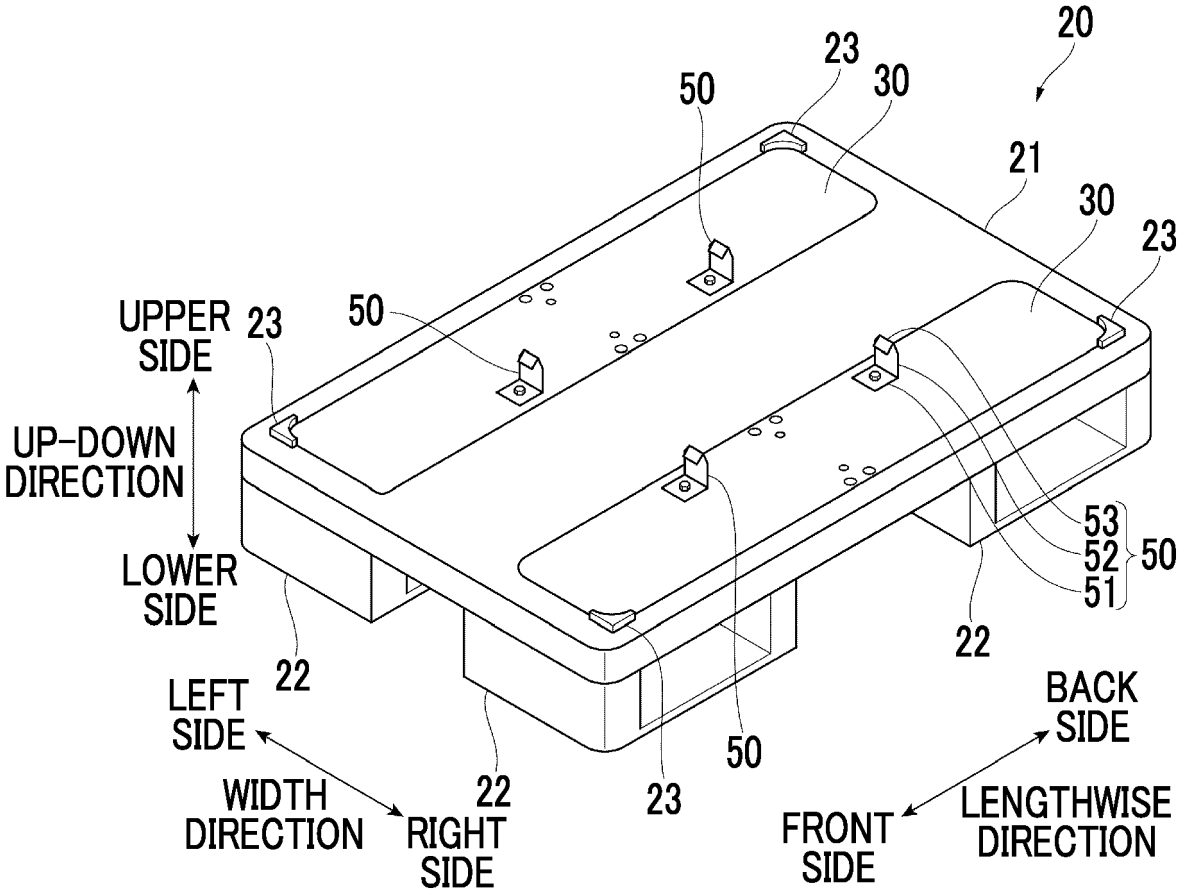

20
23
50
30
21
30
23
UPPER SIDE
23
50
UP-DOWN DIRECTION
LOWER SIDE
53
52
51
50
22
22
LEFT SIDE
WIDTH DIRECTION
RIGHT SIDE
22
50
23
BACK SIDE
FRONT SIDE
LENGTHWISE DIRECTION

FIG. 3

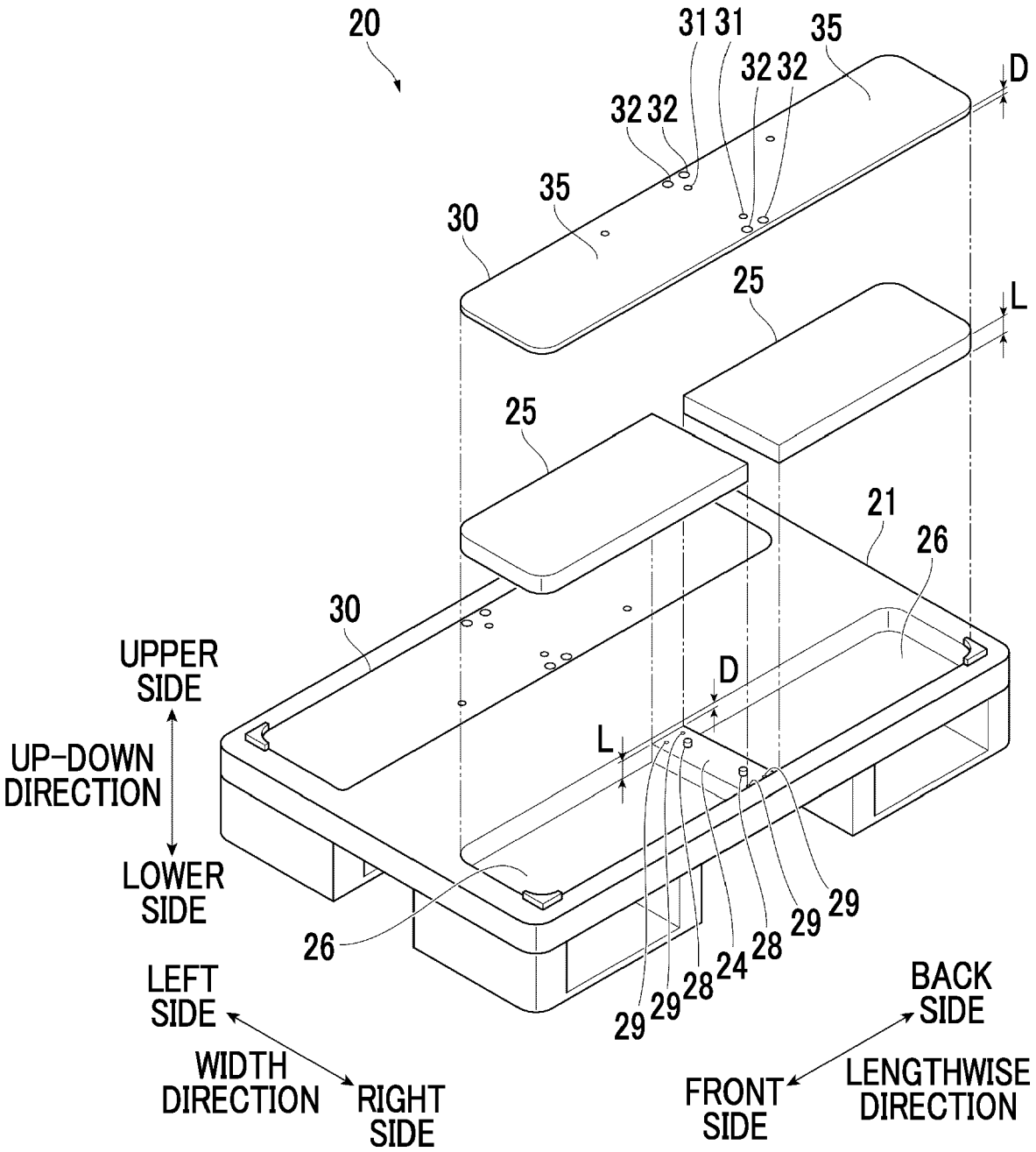

20
31 31
35
32 32
D
32 32
35
30
25
L
25
21
26
30
UPPER SIDE
UP-DOWN DIRECTION
LOWER SIDE
D
L
26
29 29
28
24
28
29 29
LEFT SIDE
WIDTH DIRECTION
RIGHT SIDE
BACK SIDE
FRONT SIDE
LENGTHWISE DIRECTION

FIG. 4

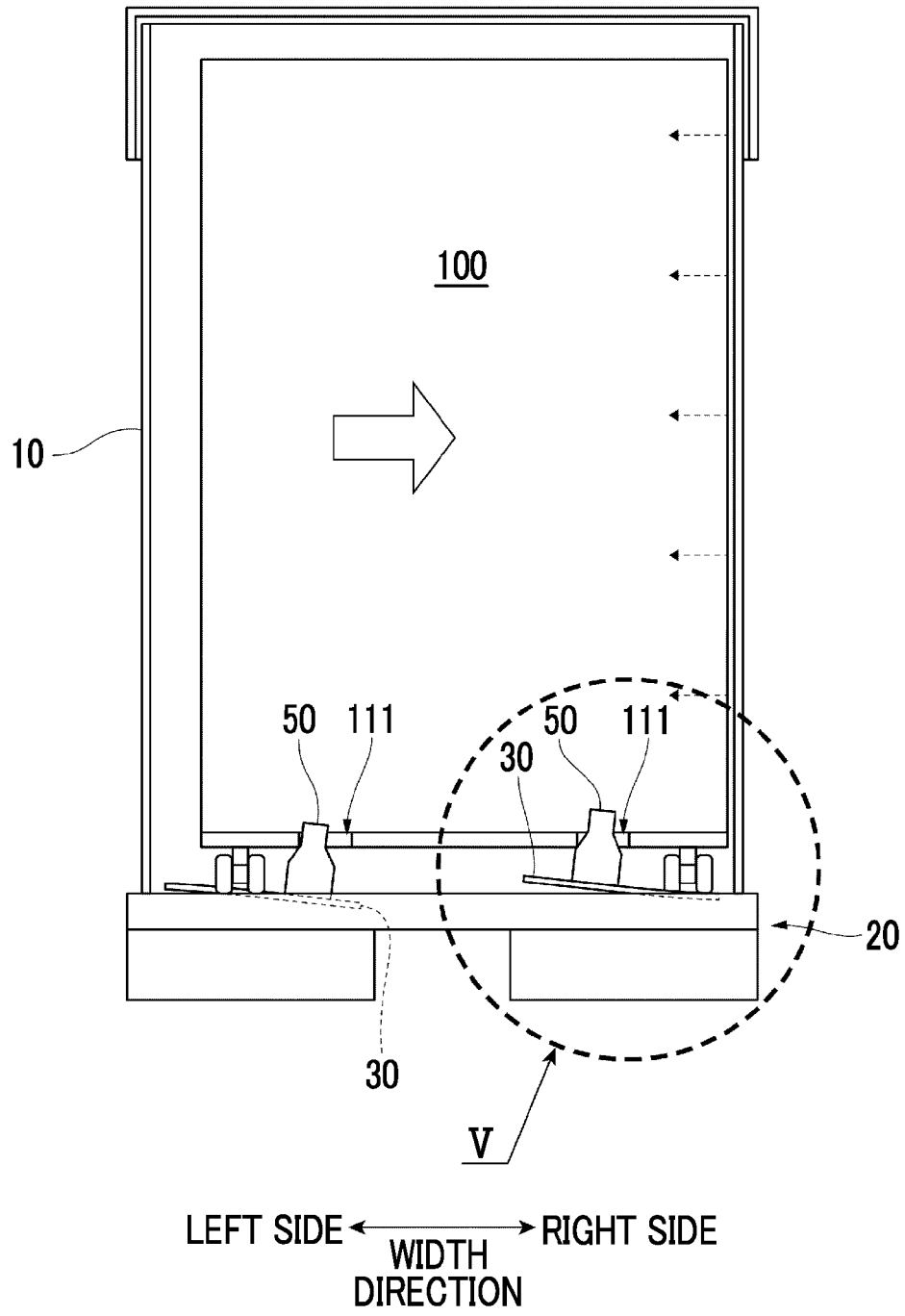

100
10
50
111
50
111
30
20
30
V
LEFT SIDE
RIGHT SIDE
WIDTH
DIRECTION

FIG. 5A

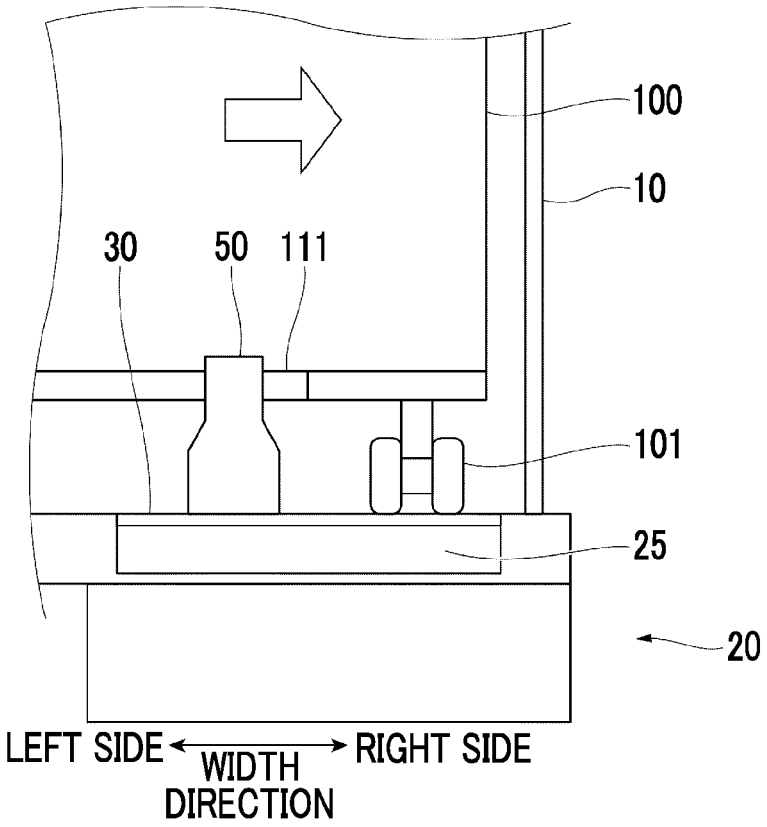

100
10
30
50
111
101
25
20
LEFT SIDE
WIDTH DIRECTION
RIGHT SIDE

FIG. 5B

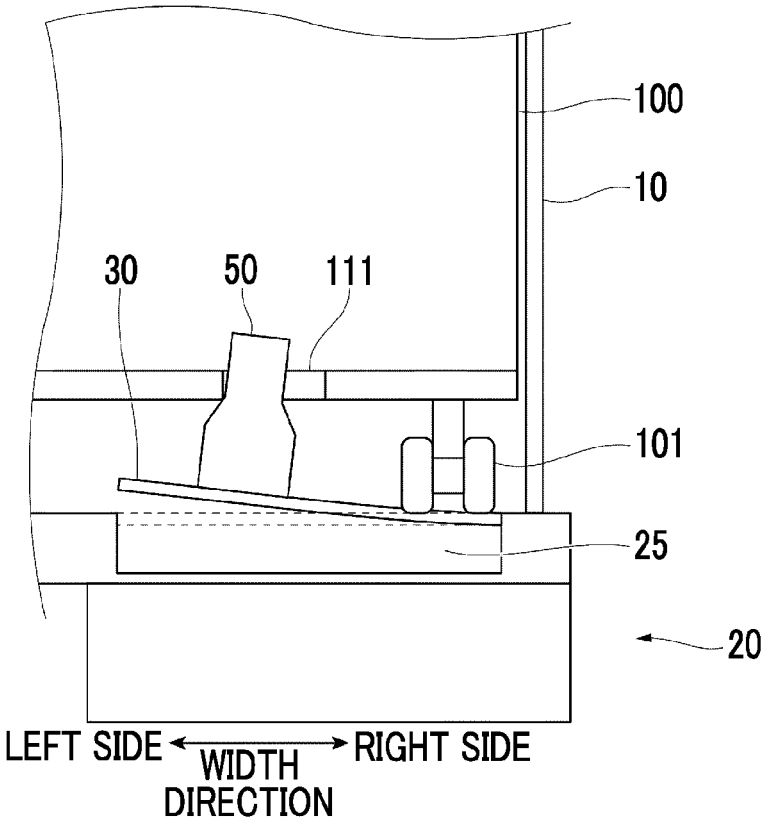
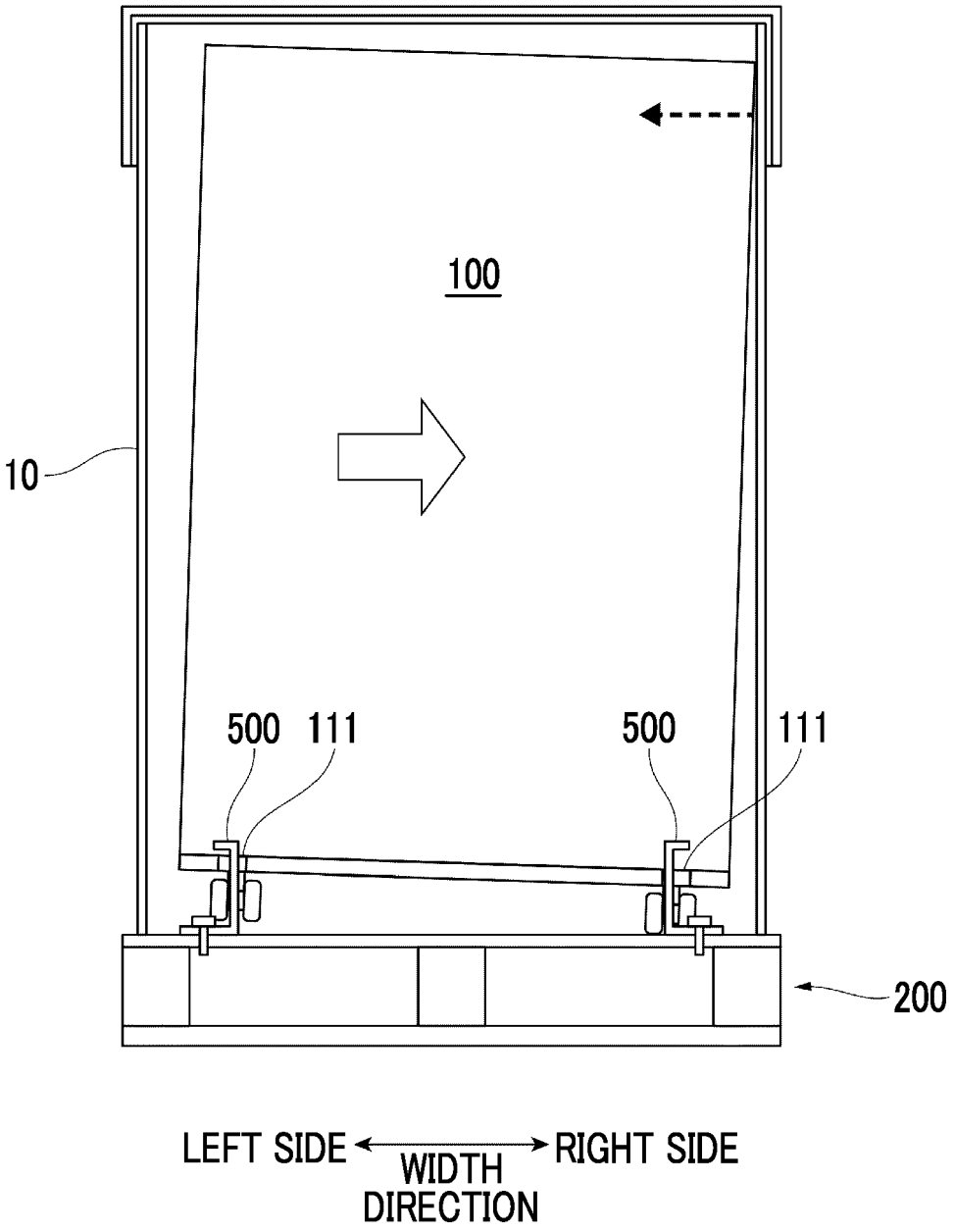

100
10
30
50
111
101
25
20
LEFT SIDE
WIDTH DIRECTION
RIGHT SIDE

FIG. 6


100
10
500
111
500
111
200
LEFT SIDE
WIDTH DIRECTION
RIGHT SIDE

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EUROPEAN SEARCH REPORT

Application Number
EP 23 18 6669

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Place of search	Date of completion of the search	Examiner
Munich	10 July 2024	Fitterer, Johann

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