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(54) **SLING SHEET FOR NURSING CARE**

(57) It is possible to form a sling sheet for nursing care and a suspension belt in an integrate manner and to stably support a torso of a person who requires nursing care.

A sling sheet for nursing care includes a sheet body 10 that supports a body of a person who requires nursing care and a suspension belt 20 for suspending the sheet body 10 on a movement lift for nursing care R, in which a pair of the suspension belts 20 is stretched along both side edge portions 10c and 10d of the sheet body 10 between shoulder side left and right corner portions 11a and 11b of a back side support portion 11 of the sheet body 10 and femur side left and right corner portions 12a and 12b of a leg side support portion 12 facing the shoulder side left and right corner portions 11a and 11b.

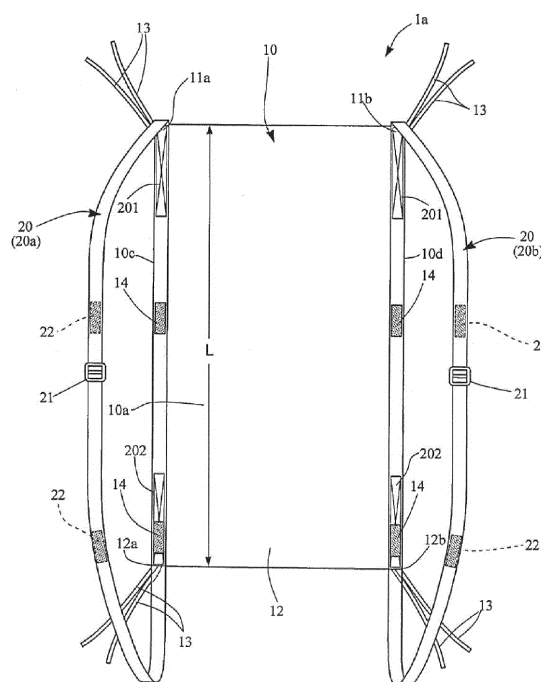


Fig.3

Description

Technical Field

[0001] The present invention relates to a sling sheet for nursing care that wraps and supports a body of a person who requires nursing care who has difficulty moving on his/her own via a suspension belt in a case of suspending the person who requires nursing care on a movement lift for nursing care, more specifically, relates to a sling sheet for nursing care that can suspend a torso of the person who requires nursing care on the movement lift for nursing care in a stable state.

Background Art

[0002] As means for moving a person who requires nursing care who has difficulty moving due to illness or old age and is bedridden to a toilet or a bath, a movement lift for nursing care, such as a ceiling traveling type lift or a floor traveling type movement lift, is used (see PTL 1).

[0003] As shown in Fig. 17, in order to move the person who requires nursing care using a movement lift for nursing care R (only a part of suspension hanger R1 is shown), a dedicated sling sheet for nursing care S for putting on and suspending the person who requires nursing care on the movement lift for nursing care R is required.

[0004] The sling sheet for nursing care S is formed of a thin sheet body, such as polyester cloth or nylon mesh, that holds the body of the person who requires nursing care, and includes, in an integrated manner, a back side support portion S1 that wraps and supports the entire back of the person who requires nursing care and a leg side support portion S2 that wraps and supports a buttock to a femur of the person who requires nursing care.

[0005] The sling sheet for nursing care S is suspended on the movement lift for nursing care R via a suspension belt B, for example, a high-strength woven fabric is used in the suspension belt B and is used by being stretched over the hanger R1 of the movement lift for nursing care R, as shown in a portion (a) in Fig. 17. An example of the hanger R1 is shown in a portion (c) in Fig. 17.

[0006] The sling sheet for nursing care S is provided with connection means to which the suspension belt B is connected, and in this example, as shown in a portion (b) in Fig. 17, as the connection means, one strap S3 is provided on each of left and right upper end portions of the back side support portion S1 and two straps S3 are provided on each of left and right side portions of the leg side support portion S2 of the sling sheet S.

[0007] In order to suspend the person who requires nursing care on the movement lift for nursing care R via the sling sheet for nursing care S, for example, a lie-down position of the person who requires nursing care on a bed is shifted, and the sling sheet for nursing care S is laid under the body of the person who requires nursing care.

[0008] In this case, the back side support portion S1 of the sling sheet for nursing care S is positioned on a back part of the person who requires nursing care, and the leg side support portion S2 is positioned on the buttock and the femur of the person who requires nursing care, the shifted body of the person who requires nursing care is laid on the sling sheet S.

[0009] Next, by lowering the movement lift for nursing care R, inserting the suspension belt B into a space of the strap S3 of the sling sheet for nursing care S, and stretching the suspension belt B to the hanger R1, the sling sheet for nursing care S and the suspension belt B are connected, as shown in the portion (a) in Fig. 17.

[0010] Then, by slowly raising the movement lift for nursing care R, the person who requires nursing care can be held and suspended in a sitting posture within the sling sheet for nursing care S.

[0011] In this way, by suspending the person who requires nursing care on the movement lift for nursing care R via the sling sheet for nursing care S, safe movement to a desired location is possible, so that a labor burden on a person who performs nursing care can be reduced.

[0012] In addition, a length of the suspension belt B is adjusted such that a deflection part is not generated in the sling sheet for nursing care S, the person who requires nursing care can be moved while holding an appropriate position of the center of gravity within the sling sheet for nursing care S, and a physical stress due to the shift of the center of gravity of the person who requires nursing care is prevented.

[0013] However, in the sling sheet for nursing care S in the related art, the length of each of a plurality of suspension belts B is adjusted and suspended on the hanger R1, but it is required to adjust the balance of the center of gravity balance of the suspension belt B according to a physique and weight of the person who requires nursing care supported by the sling sheet for nursing care S, and there is a problem of poor usability.

[0014] In particular, there may be a case that the person who requires nursing care is incorrectly positioned on the sling sheet for nursing care S or the center of gravity of the person who requires nursing care is biased back or forth within the sling sheet for nursing care S in a case of raising or moving the movement lift for nursing care R, so that the deflection is generated in the sling sheet for nursing care S, and it is pointed out that the case described above causes a physical burden on the person who requires nursing care.

[0015] For example, the position of a pelvis is important to support the torso of the body, but in a case in which the sling sheet for nursing care is deflected, the balance of the center of gravity of the person who requires nursing care is shifted, and the pelvis tilts back and forth or left and right. As a result, a feeling of anxiety of the person who requires nursing care is inspired, counterbalance is unable due to curvature, flexion or extension of the spine and a curved posture is held, so that a risk of causing a muscle stress is generated.

[0016] Therefore, the applicant of the present application has proposed a pajama for nursing care with a sling sheet that can reduce deflection of a sling sheet for nursing care by detachably forming a pajama for nursing care worn by a person who requires nursing care and a sling sheet for nursing care in an integrate manner, and can stably support a torso of the person who requires nursing care (see PTL 2).

[0017] However, according to the invention disclosed in PTL 2, although the physical burden on the person who requires nursing care due to the deflection of the sling sheet for nursing care is reduced, there are still issues to be resolved, such as the occurrence of distortion or cramp in the pajama for nursing care itself worn by the person who requires nursing care in a case of suspension.

Citation List

Patent Literature

[0018]

[PTL 1] JP-A-2004-033533

[PTL 2] JP-A-2016-017246

Summary of Invention

Technical Problem

[0019] An object of the present invention is to provide a sling sheet for nursing care that can stably support a torso of a person who requires nursing care in a case of suspension on a movement lift for nursing care.

Solution to Problem

[0020] In order to solve the problems described above, the present invention relates to a sling sheet for nursing care that is used in a movement lift for nursing care to assist movement of a person who requires nursing care, the sling sheet for nursing care including a sheet body that wraps and supports at least from an upper limb to a femur of the person who requires nursing care, and a suspension belt for suspending the sheet body on a hanger of the movement lift for nursing care, in which the sheet body is formed of a rectangular sheet including a back side support portion that supports a part from a shoulder to a waist of the person who requires nursing care, and a leg side support portion that supports a part from a buttock to the femur of the person who requires nursing care, the suspension belt includes, in pairs, a first suspension belt disposed along a left side edge portion of the sheet body in a length direction and a second suspension belt disposed along a right side edge portion of the sheet body in the length direction, the first suspension belt has one end engaged with a shoulder side left corner portion of the back side support portion and the other end

engaged with a femur side left corner portion of the leg side support portion facing the shoulder side left corner portion, and the second suspension belt has one end engaged with a shoulder side right corner portion of the back side support portion and the other end engaged with a femur side right corner portion of the leg side support portion facing the shoulder side left corner portion.

[0021] In the present invention, it is preferable that the suspension belts are detachably held on both side edge portions of the sheet body, respectively, by predetermined fastening means.

[0022] In addition, it is preferable that each of the suspension belts includes a stopper that is able to adjust a suspension position of the person who requires nursing care in a case in which the person who requires nursing care is suspended on the movement lift for nursing care.

[0023] The features of the present invention also include the sheet body that is provided with engagement means that is detachable to a pajama for nursing care worn by the person who requires nursing care.

[0024] It is preferable that the sheet body is subjected to waterproof processing and has no seams in a part that touches a body.

[0025] According to a preferable aspect of the present invention, a head support that supports a head of the person who requires nursing care is detachably attached between the first suspension belt and the second suspension belt.

[0026] The present invention includes an aspect in which the first suspension belt and the second suspension belt are disposed along both side edge portions on a rear surface side of the sheet body.

[0027] The present invention includes an aspect in which the first suspension belt and the second suspension belt are disposed along both side edge portions of the sheet body. It should be noted that the present invention includes an aspect in which the first suspension belt and the second suspension belt are disposed along both side edge portions on a front surface side of the sheet body.

[0028] As the basic configuration thereof, on the rear surface side of the sheet body, each of two shoulder left and right corner portions of the back side support portion and two femur side left and right corner portions of the leg side support portion is provided with a loop-shaped engagement portion that is foldable back to an inner side and an outer side of the sheet body, the first suspension belt is connected to the engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, and the second suspension belt is connected to the engagement portion of the shoulder side right corner portion and the engagement portion of the femur side right corner portion.

[0029] In addition, in the sheet body, each of two shoulder left and right corner portions of the back side support portion and two femur side left and right corner portions of the leg side support portion is provided with a loop-shaped engagement portion, the first suspension belt is

connected to the engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, and the second suspension belt is connected to the engagement portion of the shoulder side right corner portion and the engagement portion of the femur side right corner portion.

[0030] In addition, each of the engagement portions is formed of one piece of cloth tape, and is formed in a loop shape with both ends thereof sewn and attached to the sheet body.

[0031] In relation to this, the first suspension belt and the second suspension belt include, on both ends thereof, hook portions for connecting to the engagement portion.

[0032] In addition, as a preferable aspect of the present invention, the first suspension belt and the second suspension belt are provided with engagement mark portions indicating engagement positions with respect to the hanger of the suspension lift for nursing care.

[0033] It is preferable that the engagement mark portions are provided at a plurality of locations along a length direction of the suspension belt, and are color-coded, respectively.

[0034] The present invention also includes an aspect in which the sheet body further includes a head support portion that is provided continuously on an upper side of the back side support portion and supports a back of a head of the person who requires nursing care, and both left and right sides of the head support portion are provided with suspension strings that are detachably hooked on the hanger.

[0035] It is preferable that a plurality of suspension strings having different lengths are provided as the suspension strings for the head support portion.

[0036] In addition, the present invention also includes an aspect in which the femur side left corner portion of the leg side support portion and the femur side right corner portion of the leg side support portion are provided with clips that fix the leg side support portion to a mat of a nursing care bed.

[0037] Further, the present invention also includes a pajama for nursing care that is worn by a person who requires nursing care, the pajama for nursing care including engagement means that is detachable to the sling sheet for nursing care described above on a back part side of the pajama for nursing care.

[0038] Further, an engagement portion of the femur side left corner portion includes a first loop portion that has a loop shape and is fixed at two upper and lower locations to have a predetermined interval, a second loop portion that has a loop shape and is fixed at two upper and lower locations to have a predetermined interval, and a grip portion that supports the first loop portion and the second loop portion, an engagement portion of the femur side right corner portion includes a first loop portion that has a loop shape and is fixed at two upper and lower locations to have a predetermined interval, a second loop portion that has a loop shape and is fixed at two upper

and lower locations to have a predetermined interval, and a grip portion that supports the first loop portion and the second loop portion, the first suspension belt is movably connected to an engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, and the second suspension belt is movably connected to an engagement portion of the shoulder side right corner portion and the engagement portion of the femur side right corner portion.

[0039] In addition, each of the first suspension belt and the second suspension belt includes a loop-shaped upper end portion and a loop-shaped lower end portion disposed, respectively, at both ends thereof, the loop-shaped upper end portions are movably connected to the engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, respectively, and the loop-shaped lower end portion is movably connected to the grip portion.

[0040] In addition, the first suspension belt and the second suspension belt include a suspension belt body portion, and the suspension belt body portion further includes a first opening portion that is open to be suspended on the hanger of the movement lift for nursing care and a second opening portion that is open.

[0041] In addition, the suspension belt body portion further includes a third opening portion that is open to be suspended on the hanger of the movement lift for nursing care.

[0042] In addition, the suspension belt body portion includes ribbons that are colored in different colors from each other at positions corresponding to the first opening portion and the second opening portion.

[0043] In addition, the suspension belt body portion further includes ribbons that are colored in different colors from each other at positions corresponding to the first opening portion, the second opening portion, and the third opening portion, respectively.

Advantageous Effects of Invention

[0044] According to the present invention, by making the suspension belt as the pair of strap-shaped belt stretched between the shoulder side left and right corner portions of the back side support portion of the rectangular sheet body and the femur side left and right corner portions of the leg side support portion facing the shoulder side left and right corner portions, in a case in which the person who requires nursing care is suspended on the hanger of the movement lift for nursing care, it is possible to simply adjust a center-of-gravity balance position of the person who requires nursing care.

[0045] In this case, by passing, for example, an adjuster through the suspension belt and contacting the adjuster, as a stopper, the hanger of the movement lift for nursing care at a position at which the center of gravity of the person who requires nursing care is stable, it is possible to stably support the person who requires nursing care within the sheet body.

[0046] In addition, since the suspension belt can be stored compactly in a state of being stacked on both side edge portions of the sheet body, even in a case in which the suspension belt is not used as the sling sheet for nursing care, it is possible to quickly respond the person who requires nursing care who requires to move, by laying the suspension belt under the person who requires nursing care (for example, by laying the suspension belt on a bed or a wheelchair).

[0047] Further, since the sheet body is subjected to waterproof processing, for example, in a case in which the person who requires nursing care has incontinence, it is possible to prevent making the bed sheets or bedding under the sheet body dirty.

[0048] In addition, since the sheet body and the pajama for nursing care worn by the person who requires nursing care are detachable via the engagement means, such as a string, in a case of suspension on the movement lift for nursing care, it is possible to prevent the sheet body and the pajama for nursing care from being shifted and it is possible to stably support the person who requires nursing care.

[0049] Further, the sheet body is integrally provided with the head support portion that supports the back of the head of the person who requires nursing care, and the use or non-use of the head support portion can be selected, for example, there is no need to separately prepare a pillow-shaped head support portion as an option.

Brief Description of Drawings

[0050]

Fig. 1 is a plan view showing a sling sheet for nursing care according to a first embodiment of the present invention.

Fig. 2 is a back view (rear surface view) of the sling sheet for nursing care according to the first embodiment.

Fig. 3 is a plan view showing a state in which a suspension belt is extended from a sheet body in a plan view of Fig. 1.

Fig. 4 is a perspective view showing a state in which the suspension belt is extended from the sheet body as in Fig. 3.

Fig. 5 is a plan view showing another example of the sling sheet for nursing care according to the first embodiment.

Fig. 6 is a plan view showing an example of a pajama for nursing care suitable for the sling sheet for nursing care.

Fig. 7 is a back view of the sling sheet for nursing care showing a state in which the pajama for nursing care is fastened to the sling sheet for nursing care.

Fig. 8 is a plan view showing a state in which a head support is attached to the suspension belt.

Fig. 9 is a schematic side view showing a state in which the sling sheet for nursing care according to

the first embodiment is suspended on a movement lift for nursing care.

Fig. 10 is a back view (rear surface view) showing a sling sheet for nursing care according to a second embodiment of the present invention.

Fig. 11 is a plan view showing a suspension belt attachment part of the second embodiment.

Fig. 12 is an enlarged view showing a main portion of the suspension belt attachment part.

Fig. 13 shows a sling sheet for nursing care according to a third embodiment of the present invention, in which a portion (a) is a front view (front surface view) and a portion (b) is a back view (rear surface view).

Fig. 14 shows a portion (a) which is an enlarged view showing a configuration of a suspension string of a head support portion and a portion (b) which is an enlarged view of an engagement portion of a leg side support portion in the third embodiment.

Fig. 15 schematically shows a state in which the sling sheet for nursing care is suspended on the movement lift for nursing care when the head support portion according to the third embodiment is used, in which a portion (a) is a side view and a portion (b) is a back view (right side view of the portion (a)).

Fig. 16 schematically shows a state in which the sling sheet for nursing care is suspended on the movement lift for nursing care when the head support portion according to the third embodiment is not used, in which a portion (a) is a side view and a portion (b) is a back view (right side view of the portion (a)).

Fig. 17 shows a portion (a) which is a schematic view showing a state in which a sling sheet for nursing care in the related-art example is suspended on a movement lift for nursing care, a portion (b) which is a plan view showing the sling sheet for nursing care, and a portion (c) which is a front view showing a hanger of the movement lift for nursing care.

Fig. 18 is a plan view showing a sling sheet for nursing care according to a fourth embodiment.

Fig. 19 is a back view (rear surface view) of the sling sheet for nursing care according to the fourth embodiment.

Fig. 20 is a partially enlarged view of the sling sheet for nursing care according to the fourth embodiment.

Fig. 21 shows a portion (a) which is a side view of a fourth suspension belt and a portion (b) which is a front view of the fourth suspension belt.

Fig. 22 schematically shows a state in which the sling sheet for nursing care is suspended on the movement lift for nursing care when the head support portion according to the fourth embodiment is used, in which a portion (a) is a side view and a portion (b) is a back view (right side view of the portion (a)).

Fig. 23 schematically shows a state in which the sling sheet for nursing care is suspended on the movement lift for nursing care when the head support portion according to the fourth embodiment is not used,

in which a portion (a) is a side view and a portion (b) is a back view (right side view of the portion (a)).

Description of Embodiments

[0051] Hereinafter, some embodiments of the present invention will be described below with reference to the drawings, but the present invention is not limited thereto. It should be noted that, in the following description, a configuration of a movement lift for nursing care may be the same as the configuration in the related-art example, and the same reference numerals are given to the same components.

[0052] First, as shown in Figs. 1 to 4, a sling sheet for nursing care 1a according to a first embodiment of the present invention includes a sheet body 10 that wraps and supports from an upper limb to a femur of a person who requires nursing care in a case in which the person who requires nursing care is suspended on a hanger R1 (see Fig. 17) of a movement lift for nursing care R, and a suspension belt 20 for suspending the sheet body 10 on the movement lift for nursing care R.

[0053] It is preferable that the sheet body 10 is a rectangular sheet integrally including a back side support portion 11 that supports a part from a shoulder to a waist of the person who requires nursing care and a leg side support portion 12 that supports a part from a buttock to a femur, and is formed of a thin sheet having air permeability, such as polyester or nylon. The sheet body 10 is not limited to a rectangular shape, and may be an elliptical shape.

[0054] Fig. 1 shows a front surface 10a side of the sheet body 10 on which the person who requires nursing care is placed, and the front surface 10a of the sheet body 10 is subjected to waterproof processing. It should be noted that, for the sheet body 10, for example, a cloth material that secures water repellency and moisture permeability by compressing a high-density fabric using microfiber from above and below with high pressure may be used. In addition, in order to reduce a burden on the skin, it is preferable that there are no seams in a part that touches a body.

[0055] As shown in Figs. 1 and 3, the suspension belt 20 includes a left side suspension belt 20a stretched between a shoulder side left corner portion 11a of a back side support portion 11 of the sheet body 10 and a femur side left corner portion 12a of a leg side support portion 12 facing the shoulder side left corner portion 11a, and a right suspension belt 20b stretched between a shoulder side right corner portion 11b of a back side support portion 11 of the sheet body 10 and a femur side right corner portion 12b of a leg side support portion 12 facing the shoulder side right corner portion 11b. It should be noted that the corner portion includes a corner and a peripheral part thereof. That is, the suspension belts 20a and 20b may be attached to the corner of the sheet body 10 and the peripheral part thereof.

[0056] It should be noted that the shoulder side left

corner portion 11a and the shoulder side right corner portion 11b described above are concepts that also include an upper end portion of the back side support portion 11, in addition to both side surface portions 10e. In addition, the femur side left corner portion 12a and the femur side right corner portion 12b is a concept that also includes a lower end portion of the leg side support portion 12, in addition to both side surface portions 10e.

[0057] The left side suspension belt 20a and the right side suspension belt 20b are both high-strength (tough) strap-shaped belts formed of nylon, for example, and the suspension belt 20 is simply used in a case in which there is no need to distinguish between the left side and the right side.

[0058] In Fig. 1, a distance between the shoulder side left corner portion 11a of the back side support portion 11 of the sheet body 10 and the femur side left corner portion 12a of the leg side support portion 12 (also a distance between the shoulder side right corner portion 11b of the back side support portion 11 and the femur side right corner portion 12b of the leg side support portion 12) is used as a length L of the sheet body 10, the suspension belt 20 has a length longer than the length L, and has one end 201 of the suspension belt 20 that is sewn on the sides of the shoulder side corner portions 11a and 11b of the back side support portion 11 and the other end 202 that is sewn on the sides of the femur side corner portions 12a and 12b of the leg side support portion 12, in this example.

[0059] The suspension belt 20 is provided with a stopper 21 that contacts the hanger R1 of the movement lift for nursing care R and adjusts a suspension position of the person who requires nursing care in a case in which the sheet body 10 is suspended on the suspension lift for nursing care R. In this example, the stopper 21 is a rectangular ribbed (S-shaped) adjuster (for example, manufactured by YKK Corporation; product name "KOKI") that is movably inserted into the suspension belt 20.

[0060] The left side suspension belt 20a is disposed along a left side edge portion 10c of the sheet body 10 and the right side suspension belt 20b is disposed along a right side edge portion 10d of the sheet body 10, but the suspension belts 20a and 20b are detachably fastened to the side edge portions 10c and 10d of the sheet body 10 via predetermined fastening means, as shown in Fig. 3.

[0061] In this example, surface fasteners are used as the fastening means, hook surface fasteners 22 are provided at two locations of the sides of the suspension belts 20a and 20b, and loop surface fasteners 14 are provided at two locations of the sides of the side edge portions 10c and 10d of the sheet body 10. The hook surface fasteners 22 may be provided on the sides of the side edge portions 10c and 10d of the sheet body 10, and the loop surface fasteners 14 may be provided on the sides of the suspension belts 20a and 20b.

[0062] As a result, as shown in Fig. 1, the sling sheet

for nursing care 1a can be stored planarly and compactly by overlapping the suspension belts 20a and 20b on the side edge portions 10b and 10c of the sheet body 10, and in a case in which the sling sheet for nursing care 1a is laid in advance on a bed or a wheelchair on which the person who requires nursing care is placed, it is possible to quickly respond the person who requires nursing care who requires to move.

[0063] In addition, since the front surface 10a of the sheet body 10 is subjected to waterproof processing, even in a case in which there is an action of making the sheet body dirty, such as incontinence of the person who requires nursing care, it is hygienic without making the bed or the wheelchair dirty.

[0064] It should be noted that, in the present embodiment, as shown in Figs. 1 and 2, in a case in which the suspension belts 20a and 20b are disposed on the side edge portions 10c and 10d of the sheet body 10, the suspension belt 20 has a length such that a surplus portion protrudes toward, for example, a femur support portion 13 side of the sheet body 10, but the present invention is not limited to this, and the length need only be a length for suspending the person who requires nursing care in a well-balanced manner.

[0065] For example, as shown in Fig. 5, the lengths of the suspension belts 20a and 20b may be set to the same length as the length L of the sheet body 10, the suspension belts 20a and 20b may be set to have lengths that fit within the side edge portions 10c and 10d of the sheet body 10, and sizes of the sheet body 10 and the suspension belt 20 can be appropriately changed in design according to a body shape of the person who requires nursing care.

[0066] In addition, as shown in Fig. 4, the suspension belts 20a and 20b may have a length equal to or greater than twice the length L of the sheet body 10, both ends thereof may be connected to form a loop shape, and a part thereof may be sewn along the side edge portions 10c and 10d of the sheet body 10.

[0067] In the present embodiment, the sheet body 10 is provided with engagement means for detachably attaching a pajama for nursing care P shown in Fig. 6 worn by a person who requires nursing care. In this example, as the engagement means, two engagement strings 13 are sutured at each of four locations of the shoulder side left and right corner portions 11a and 11b and the femur side left and right corner portions 12a and 12b in the sheet body 10.

[0068] In addition, in the pajama for nursing care P worn by the person who requires nursing care, on the back part side thereof, as a counterpart of the engagement means, four ring-shaped loops Pr are provided at positions capable of being engaged with the engagement strings 13 of the shoulder side left and right corner portions 11a and 11b and the femur side left and right corner portions 12a and 12b of the sheet body 10.

[0069] Specifically, the loop Pr is formed by forming a string formed of the same material as the engagement

string 13 in a ring shape, and is sewn and attached, one by one, to left and right shoulders P1 and P2 and left and right femurs P3 and P4 on the back part side of the pajama for nursing care P.

[0070] As a result, as shown in Fig. 7, by inserting the engagement strings 13 of the shoulder side left and right corner portions 11a and 11b and the femur side left and right corner portions 12a and 12b into the corresponding loop Pr of the pajama for nursing care P and connecting, the pajama for nursing care P is attached to the sheet body 10.

[0071] In this way, since the pajama for nursing care P worn by the person who requires nursing care and the sling sheet for nursing care 1 are connected via the engagement means (engagement string 13 and loop Pr), in a case in which the person who requires nursing care is suspended by lifting the sling sheet for nursing care 1a to the movement lift for nursing care R, the accidents, such as falling off of the person who requires nursing care from the sling sheet for nursing care 1a, can be prevented.

[0072] In the present embodiment, as shown in Figs. 8 and 9, a head support 30 that supports the head of the person who requires nursing care is detachably attached between the suspension belts 20a and 20b.

[0073] In this example, the head support 30 includes a head support portion 31 that is applied to the head of the person who requires nursing care, and an engagement tool 32 that detachably engages the head support portion 31 with the suspension belts 20a and 20b.

[0074] The head support portion 31 is formed of a pillow-shaped cushion body having moderate elasticity for supporting the head of the person who requires nursing care, and two engagement tools 32, such as a spring hook (carabiner-shaped hook), that can be inserted into the suspension belts 20a and 20b are provided in each of the left and right side surfaces 31a and 31b in Fig. 8.

[0075] Therefore, as shown in Fig. 9, in a case in which the sling sheet for nursing care 1a is suspended on the movement lift for nursing care R, by attaching the head support 30 between a pair of the suspension belts 20a and 20b, it is possible to support the head of the person who requires nursing care in addition to supporting from the upper limb to the femur of the person who requires nursing care by the sheet body 10, and it is possible to stably move the person who requires nursing care.

[0076] Next, an example of suspending the person who requires nursing care on the movement lift for nursing care R using the sling sheet for nursing care 1a according to the first embodiment will be described. It should be noted that, in this example, the person who requires nursing care wears the pajama for nursing care P with which the sling sheet for nursing care 1a is engaged in advance, and the person who requires nursing care is placed on a placement surface of the bed, for example.

[0077] First, the suspension list for nursing care R is lowered and stopped at a predetermined position on the person who requires nursing care. Next, the surface fas-

teners 14 and 22 are released, the pair of suspension belts 20a and 20b are detached from the side edge portions 10c and 10d of the sheet body 10 and are stretched to the hanger R1 of the suspension list for nursing care R for nursing care.

[0078] In this case, as shown in a direction of the arrow in Fig. 9, the suspension belt 20 stretched to the hanger R1 is slidable, and the suspension belt 20 is slid to adjust the balance of the center of gravity of the person who requires nursing care.

[0079] Then, at a position at which the balance of the center of gravity of the person who requires nursing care is stable, the stopper (adjuster) 21 is moved to contact the hanger R1, and further movement of the suspension belt 20 is restricted.

[0080] Next, the head support 30 is attached to the suspension belt 20 to be applied to the head of the person who requires nursing care. As a result, the upper limb to the femur of the person who requires nursing care are stably supported within the sheet body 10, and the head of the person who requires nursing care is supported by the head support 30.

[0081] Thereafter, the sheet body 10 is raised by the suspension lift for nursing care R via the suspension belt 20 (20a and 20b), and the person who requires nursing care is moved to a desired place, such as a bathroom.

[0082] As described above, according to the present invention, by making the suspension belt 20 slideable in a state of being stretched to the hanger R1 of the suspension lift for nursing care R and giving a degree of freedom to the adjustment of the balance of the center of gravity of the person who requires nursing care, it is possible to simply adjust the balance of the center of gravity of the person who requires nursing care, and as a result, it is possible to reduce physical/mental burden on the person who requires nursing care.

[0083] In addition, since the sling sheet for nursing care 1a of the present invention and the pajama for nursing care P worn by the nursing person who requires nursing care are engaged via the predetermined engagement means (engagement string 13 and loop Pr), the accidents, such as falling off of the person who requires nursing care from the sheet body 10, can be prevented.

[0084] In this case, the pajama for nursing care P is not completely fixed on the sheet body 10 by the engagement string 13 and can be moved to some extent (see Fig. 7). Therefore, the distortion or cramp in the pajama for nursing care P does not occur due to the movement of the sling sheet for nursing care 1a, and the person who requires nursing care does not feel uncomfortable.

[0085] It should be noted that, in the first embodiment, the example has been described in which the surface fasteners 14 and 22 are used as the fastening means between the sheet body 10 and the suspension belt 20, but the present invention is not limited to this, and it is sufficient that the suspension belt 20 can be fastened to both side edge portions 10e of the sheet body 10, for example, a button or the like that is fitted with recesses

and protrusions may be used.

[0086] In addition, in the first embodiment, the example has been described in which the engagement means between the sling sheet for nursing care 1a and the pajama for nursing care P is configured by the engagement string 13 and the loop Pr, but the engagement means need only be able to engage the pajama for nursing care P with the sheet body 10 with a certain amount of clearance. For example, a belt having a protrusion type button at a distal end may be used instead of the engagement string, a recess type button that can be fitted to the protrusion type button may be used instead of the loop Pr, and it can be selected as appropriate.

[0087] Further, in the first embodiment, the example has been described in which the head support 30 is formed of a pillow-shaped cushion body, but the head support 30 is not limited to the rectangular shape as long as the head of the person who requires nursing care can be supported, and may be a simple sheet body instead of the cushion body.

[0088] Next, a sling sheet for nursing care 1b according to a second embodiment of the present invention will be described with reference to Figs. 10 to 12.

[0089] In the second embodiment, as shown in Fig. 10, the suspension belt 20 (20a and 20b) is attached to a rear surface 10b side of the sheet body 10 and pulled out to the front surface 10a side during use. Therefore, since the suspension belt 20 is disposed on the rear surface 10b side of the sheet body 10 during non-use, the suspension belt 20 does not be a hindrance even in a case of being laid on the placement surface of the bed. Of course, the suspension belt 20 (20a and 20b) can also be attached to the front surface 10a side of the sheet body 10 (not shown). In this case, the example has been described in which the surface fasteners 14 and 22 are used as the fastening means between the sheet body 10 and the suspension belt 20, but the present invention is not limited to this, and it is sufficient that the suspension belt 20 can be fastened to both side edge portions 10e on the front surface 10a of the sheet body 10, for example, a button or the like that is fitted with recesses and protrusions may be used.

[0090] As the suspension belt 20 is attached to the rear surface 10b side of the sheet body 10, an engagement portion 41 (41a to 41d) for the suspension belt 20 is provided at four corners on the rear surface 10b side of the sheet body 10 (four locations of the shoulder side left and right corner portions 11a and 11b and the femur side left and right corner portions 12a and 12b).

[0091] In this example, each engagement portion 41 is formed in a triangular loop shape by folding a tough cloth tape in an inverted-V shape and sewing both ends thereof to the sheet body 10. As another example, the cloth tape may be formed in a U shape and both ends thereof may be sewn to the sheet body 10. In any case, the loop (ring) need only be foldable back from an inner side to an outer side of the sheet body 10 and from the inner side to the outer side.

[0092] On the other hand, hook portions 43 (43a to 43d) that are hooked on the engagement portion 41 are provided at both ends of the suspension belt 20 (20a and 20b).

[0093] In this example, each hook portion 43 is formed by hooking a tough cloth tape on the engagement portion 41 and sewing both ends thereof to the end portion of the suspension belt 20, but a spring hook (carabiner-shaped hook) or the like may be used in each hook portion 43.

[0094] As in the first embodiment, the suspension belt 20 and the sheet body 10 are provided with surface fasteners 14 and 22 for storing the suspension belt 20 along the rear surface side of the side edge portions 10c and 10d of the sheet body 10 (see Fig. 3 or the like) when the sling sheet for nursing care 1b is not used.

[0095] In a case of using the sling sheet for nursing care 1b, as shown in Fig. 12, the suspension belt 20 is pulled out from the rear surface 10b of the sheet body 10 to the front surface 10a side. Along with this, the engagement portion 41 is folded back to the outer side of the sheet body 10.

[0096] Since the root parts (base parts) of the engagement portion 41 (41a to 41d) are sewn to the sheet body 10 at two locations, the sheet body 10 is supported at a total of eight locations by the suspension belts 20a and 20b. Therefore, the person who requires nursing care can be suspended in a more stable state.

[0097] In addition, in the first embodiment, the suspension belt 20 is provided with the stopper (adjuster) 21 to position the suspension belt 20 with respect to the hanger R1 of the suspension lift for nursing care R. However, in the second embodiment, the suspension belt 20 is provided with an engagement mark portion indicating a preferable engagement position (hook position) with respect to the hanger R1.

[0098] With reference particularly to Fig. 11, in this example, the suspension belt 20 is provided with three engagement mark portions 231, 232, and 233. These engagement mark portions 231, 232, and 233 are formed of non-slip cloth and are color-coded.

[0099] As an example, in Fig. 11, both ends of the upper engagement mark portion 231 are fringed with a red thread 231a, both ends of the middle engagement mark portion 232 are fringed with a yellow thread 232a, and both ends of the lower engagement mark portion 233 are fringed with a yellow thread 233a.

[0100] Therefore, when the suspension belt 20 is hooked on the hanger R1 of the suspension lift for nursing care R, by looking at the color of the fringed thread, the engagement positions of one suspension belt 20a and the other suspension belt 20b with respect to the hanger R1 can be easily aligned with each other, and a holding posture of the sheet body 10 can be prevented from being unbalanced. The number of the engagement mark portions is not limited to three. The number of the engagement mark portions may be two, or four or more, and can be optionally selected.

[0101] In addition, in Figs. 10 to 12 showing the second embodiment, the engagement string 13 that engages the pajama for nursing care P, but also in the second embodiment, as in the first embodiment, the engagement string 13 may be provided in each of the shoulder side left and right corner portions 11a and 11b and the femur side left and right corner portions 12a and 12b of the sheet body 10.

[0102] As described above, according to the second embodiment, since the suspension belt 20 is disposed on the rear surface 10b side of the sheet body 10 during non-use, the suspension belt 20 does not be a hindrance even in a case of being laid on the placement surface of the bed.

[0103] In addition, the loop-shaped engagement portion 41 for the suspension belt 20 is provided at the four corners on the rear surface 10b side of the sheet body 10, and the sheet body 10 is supported at a plurality of points (eight points), so that it is possible to move the person who requires nursing care in a more stable state.

[0104] Further, the suspension belts 20a and 20b are provided with color-coded designated engagement positions for the hanger R1 of the suspension lift for nursing care R in an easy-to-understand manner, so that the effects can be achieved, such as prevention of an unbalanced suspended state of the suspension belts 20a and 20b.

[0105] Next, a third embodiment of the present invention will be described with reference to Figs. 13 to 16. A nursing sling sheet for nursing care 1c according to the third embodiment includes a head support portion 110 that supports the back of the head of the person who requires nursing care and is provided integrally with the sheet body 10.

[0106] It should be noted that Fig. 13 showing the sling sheet for nursing care 1c according to the third embodiment is based on the sling sheet for nursing care 1b according to the second embodiment shown in Fig. 10, but may be based on the sling sheet for nursing care 1a according to the first embodiment shown in Fig. 1. That is, the third embodiment can be applied to both the sling sheet for nursing care 1a according to the first embodiment and the sling sheet for nursing care 1b according to the second embodiment.

[0107] As shown in Fig. 13, in the third embodiment, in addition to the configurations of the first embodiment and the second embodiment, the sheet body 10 further includes the head support portion 110 that supports the back of the head of the person who requires nursing care provided continuously on an upper side of the back side support portion 11.

[0108] The upper side of the back side support portion 11 means a part on the upper side (opposite to the leg side support portion 12) in Fig. 13 than the attachment positions of the engagement portions 41 (41a and 41b) provided on both left and right sides of the upper end of the back side support portion 11.

[0109] In addition, the head support portion 110 may

be a part obtained by extending the back side support portion 11 as it is, or may be a part obtained by sewing or joining a separate member integrally with the upper end of the back side support portion 11. A height of the head support portion 110 (length in an up-down direction in Fig. 13) may be appropriately determined as long as a size is a size for supporting the back of the head of the person who requires nursing care.

[0110] Both left and right sides of the upper end of the head support portion 110 are provided with suspension string (strap) 120 that are detachably hooked on the hanger R1 of the suspension lift for nursing care R.

[0111] With reference to a portion (a) in Fig. 14 together, in the third embodiment, as the suspension string 120, two suspension strings having different lengths are provided, that is, a length of a first suspension string 121 having a long length and a length of a second suspension string 122 having a shorter length.

[0112] In the present embodiment, the first suspension string 121 is formed in a loop shape with both ends of a ribbon piece sewn to the end portion of the head support portion 110, and the second suspension string 122 is formed in a loop shape with both ends of a ribbon piece sewn to an inner side of the first suspension string 121. However, a configuration may be adopted in which both the first suspension string 121 and the second suspension string 122 have a round ring or the like that can be hooked on the hanger 1 at a distal end of one ribbon piece, for example. As another aspect, for example, one suspension string, such as a buckle belt, of which a length can be adjusted may be provided.

[0113] A portion (a) in Fig. 15 and a portion (b) in Fig. 15 show a state in which the sling sheet for nursing care 1c is suspended from the hanger R1 of the movement lift for nursing care R when the head support portion 110 provided in the third embodiment is used.

[0114] The above state is obtained by hooking the suspension string 120 on the hanger R1 after hooking the suspension belt 20 (20a and 20b) on the hanger R1 of the suspension lift for nursing care R according to the first embodiment and the second embodiment.

[0115] In this case, in a case in which the first suspension string 121 having a longer length is selected, the head of the person who requires nursing care can be supported in a more backward tilted state. On the other hand, in a case in which the second suspension string 122 having a shorter length is selected, the head of the person who requires nursing care can be supported in a more forward tilted state.

[0116] In the embodiment described above, two long and short types (two types) of the first suspension string 121 and the second suspension string 122 are used as the suspension string 120, but three or more types of suspension strings 120 having different lengths can be used as necessary. It should be noted that, when the head support portion 110 is not used, as shown in a portion (a) in Fig. 16 and a portion (b) in Fig. 16, the suspension string 120 need only not be hooked on the hang-

er R1.

[0117] As described above, according to the third embodiment, the sheet body 10 is integrally provided with the head support portion 110 that supports the back of the head of the person who requires nursing care, and the use or non-use of the head support portion 110 can be selected, for example, there is no need to separately prepare the pillow-shaped head support portion 30 shown in Figs. 8 and 9 as an option.

[0118] Here, with reference to Fig. 13 again, according to the third embodiment, the femur side left corner portion and the femur side right corner portion of the leg side support portion 12 are provided with clips 130 that fix the leg side support portion 12 to a mat (not shown) of a nursing care bed.

[0119] Therefore, in a case of setting the sling sheet for nursing care 1c on the nursing care bed, the leg side support portion 12 can be prevented from being shifted. It should be noted that the clips 130 may also be provided on both left and right ends of the back side support portion 11.

[0120] In addition, according to the third embodiment, as shown in a portion (b) in Fig. 14, engagement portions 41c and 41d of the leg side support portion 12 are both formed to be tougher.

[0121] That is, in the third embodiment, the engagement portions 41c and 41d of the leg side support portion 12 include a first loop portion 411 and a second loop portion 412 disposed up and down with a predetermined interval, and a grip portion 413 stretched to the first loop portion 411 and the second loop portion 412, and the hook portions 43c and 43d on the lower portion side of the suspension belt 20 are attached to the grip portion 413.

[0122] As described above, since the engagement portions 41c and 41d of the leg side support portion 12 include two loop portions 411 and 412, the engagement portions 41c and 41d can withstand a large load, and can support the femur side more stably. In addition, convenience, such as easy portability, is obtained by providing the grip portion 413.

[0123] As described above, the sling sheet according to the present invention can also be used for posture change and posture holding. In addition, the sling sheet can be used in a case of movement on the bed. Further, the sling sheet can be used instead of a stretcher in an emergency. In addition, a mesh fabric may be sewn on the back of the femur to provide cushioning, and the present invention also includes such an aspect.

[0124] In addition, the sling sheet according to the present invention is easy to fit in one size for people of various physiques, from children to adults, and the selection of the sling does not take much time. Further, the suspension belts disposed on the left and right sides can be hung on the hanger of the lift with one action, and these points are also the features of the present invention. In addition, these points are the same for a sling sheet for nursing care 1d of a fourth embodiment de-

scribed below.

[0125] Next, a fourth embodiment will be described with reference to Figs. 18 to 23. The nursing sling sheet for nursing care 1d according to the fourth embodiment includes the head support portion 110 that supports the back of the head of the person who requires nursing care and is provided integrally with the sheet body 10. That is, the head support portion 110 is provided in an upper U of the back side support portion 11, the leg side support portion 12 is provided in a lower D of the back side support portion 11, and the head support portion 110 and the leg side support portion 12 are integrally formed.

[0126] It should be noted that Figs. 18 and 19 showing the sling sheet for nursing care 1d according to the fourth embodiment are based on the sling sheet 1c according to the third embodiment shown in Fig. 13, the same reference numerals may be given to the same configurations, and the description thereof may be omitted. Therefore, as the sling sheet 1c according to the third embodiment, the engagement portions 41c and 41d of the leg side support portion 12 according to the fourth embodiment are also formed to be tougher.

[0127] In addition, the engagement portions 41c and 41d of the leg side support portion 12 according to the fourth embodiment include the first loop portion 411 and the second loop portion 412 which are disposed up and down with a predetermined interval, and the grip portion 413 stretched to the first loop portion 411 and the second loop portion 412, both end portions 760 and 760 disposed on both ends of the suspension belt 20 are movably disposed in the grip portion 413. This point will be further described below. In addition, the hook portions (not shown) can be used instead of both end portions 760 and 760.

[0128] As described above, since each of the engagement portions 41c and 41d of the leg side support portion 12 includes the two loop portions 411 and 412, the engagement portions 41c and 41d can withstand a large load, and can support the femur side more stably. In addition, convenience, such as easy portability, is obtained by providing the grip portion 413.

[0129] In addition, the sling sheet for nursing care 1d according to the fourth embodiment includes suspension string portions 520 and 520 that support the head support portion 110. The suspension string portions 520 and 520 are disposed on both left and right sides of the head support portion 110, that is, in pairs. Therefore, in Fig. 18, the suspension string portion 520 disposed on the left side (right side of the drawing in Figs. 19 and 20) will be described, and the same reference numerals may be given to the suspension string portion 520 disposed on the right side (left side of the drawing in Fig. 19), and the description thereof will be omitted.

[0130] The suspension string portion 520 is fixed to the left side of the head support portion 110 in a front view with a predetermined interval in the up-down direction, and includes a loop-shaped suspension string loop portion 530 and a first suspension string portion 540 that

can be detachably attached to the suspension string loop portion 530. The suspension string loop portion 530 supports the head support portion 110 at two upper and lower locations on the left side of the front view. The same applies to the right side of the head support portion 110 in the front view.

[0131] The first suspension string portion 540 is constructed by sewing and attaching a strap-shaped member at predetermined locations in a substantially 8 shape, so to speak, like a single stroke of the brush. The first suspension string portion 540 includes an annular-shaped inner ring portion 550 and an annular-shaped outer ring portion 560 that is disposed on an outer side of the inner ring portion 550 and has a strap shape to share a base portion 551 which is a part of the inner ring portion 550.

[0132] As described above, the first suspension string portion 540 is detachably attached to the suspension string loop portion 530. That is, by inserting the base portion 551 of the first suspension string portion 540 into the suspension string loop portion 530 and inserting the inner ring portion 550 and the outer ring portion 560 into the base portion 551, the first suspension string portion 540 is detachably attached to the suspension string loop portion 530. By the attachment in this way, the first suspension string portion 540 can be movably attached to the suspension string loop portion 530.

[0133] In addition, the outer ring portion 560 described above has a larger diameter than the inner ring portion 550, and has a longer length to the hanger R1 in a state in which the outer ring portion 560 of the first suspension string portion 540 is hooked on the hanger R1 than in a state in which the inner ring portion 550 of the first suspension string portion 540 is hooked on the hanger R1, and it is possible to support the head of the person who requires nursing care in a more backward tilted state. It should be noted that, although not shown, a member having a diameter larger than the outer ring portion 560 can further be attached according to a distance between the first suspension string portion 540 and the hanger R1, as appropriate and as necessary.

[0134] In addition, in the sling sheet for nursing care 1d according to the fourth embodiment, as the suspension belt 20 (20a and 20b) is attached to the rear surface 10b side of the sheet body 10, the four corners (four locations of the shoulder side left and right corner portions 11a and 11b and the femur side left and right corner portions 12a and 12b) at both side edge portions 10e of the sheet body 10, the engagement portion 41 (41a to 41d) for attaching the suspension belt 20 (20a and 20b) is provided. It should be noted that, as described above, the shoulder side left corner portion 11a and the shoulder side right corner portion 11b described above are concepts that also include the upper end portion of the back side support portion 11, in addition to both side surface portions 10e. In addition, the femur side left corner portion 12a and the femur side right corner portion 12b is a concept that also includes a lower end portion of the leg side

support portion 12, in addition to both side surface portions 10e. Therefore, although not shown, a case in which the engagement portion 41 (41a to 41d) described above is disposed at tilted positions with respect to both side edge portions 10e is not excluded.

[0135] In addition, the engagement portions 41 (41a and 41b) provided on both left and right sides of the upper end (lower U of the head support portion 110) of the back side support portion 11 includes an upper end portion 610 that has a loop shape and is disposed in an upper U direction, and a lower end portion 620 that is disposed in a lower D direction with a predetermined interval. In this way, the back side support portion 11 includes first string portions 630 fixed at two upper and lower locations of the upper end portion 610 and the lower end portion 620 with a predetermined interval. In this manner, the engagement portions 41 (41a and 41b) are connected to two locations of the upper end portion 610 and the lower end portion 620 on both right and left sides of the back side support portion 11 in the front view. Therefore, in the engagement portion 41 (41a and 41b), the shoulder side left and right corner portions 11a and 11b of the back side support portion 11 are supported at two upper and lower locations with an interval. The same applies to the right side of the back side support portion 11 in the front view.

[0136] In addition, the sling sheet for nursing care 1d according to the fourth embodiment includes the engagement portion 41c and 41d of the leg side support portion 12. The engagement portions 41c and 41d of the leg side support portion 12 are disposed on both left and right sides of the leg side support portion 12, that is, in pairs. Therefore, in Fig. 20, the engagement portion 41c of the leg side support portion 12 disposed on the right side will be described, and the description of the engagement portion 41d of the leg side support portion 12 disposed on the left side may be omitted.

[0137] The engagement portions 41c and 41d of the leg side support portion 12 include a first loop portion 411 that has a loop shape and is fixed at two upper and lower locations with a predetermined interval, and a second loop portion 412 that is disposed in the lower D direction of the first loop portion 411, supports the leg side support portion 12, has a loop shape, and is fixed at two upper and lower locations with a predetermined interval.

[0138] On the left side of the leg side support portion 12 in the front view, the first loop portion 411 is connected at two locations, and the second loop portion 412 is In addition connected at two locations. Therefore, the left side of the leg side support portion 12 in the front view is supported at a total of four points. The same applies to the right side of the leg side support portion 12 in the front view. It should be noted that, although not shown, one of the two connected portions of the first loop portion 411 may form a loop shape (ring) extending over the front surface 10a or the rear surface 10b of the sheet body 10. The same applies to the second loop portion 412 or the engagement portion 41 (41a and 41b).

[0139] In addition, the engagement portion 41c and 41d of the leg side support portion 12 include the first loop portion 411 and the grip portion 413 that supports the second loop portion 412. The grip portion 413 includes both end portions 760 and 760 at both ends, and both end portions 760 and 760 have an annular shape.

[0140] In addition, the first loop portion 411 and the second loop portion 412 are inserted into inner sides of both end portions 760 and 760 having an annular shape, and the grip portion 413 is movably disposed with respect to the first loop portion 411 and the second loop portion 412.

[0141] In addition, the nursing sling sheet for nursing care 1d according to the fourth embodiment includes the suspension belt 20 (20a and 20b) for suspending the sheet body 10 on the movement lift for nursing care R in a case of suspending the person who requires nursing care on the hanger R1 (see Figs. 22 and 23) of the movement lift for nursing care R.

[0142] The suspension belts 20 (20a and 20b) are disposed on both left and right sides of the sheet body 10 in the sling sheet for nursing care 1d according to the fourth embodiment, that is, in a left and right pair. Therefore, for example, the suspension belt 20 (20a) disposed on the left side in Fig. 18 (right side of the drawing in Figs. 19 and 20) will be described, and the description of the suspension belt 20 (20b) disposed on the right side (left side of the drawing in Fig. 19) may be omitted.

[0143] The suspension belt 20 (20a and 20b) includes a suspension belt body portion 810 for engaging the hanger R1 (particularly, see Fig. 21) in a case of the suspension on the movement lift for nursing care R, loop-shaped upper end portions 850 disposed on both ends thereof, and a loop-shaped lower end portion 860. The suspension belt body portion 810 is configured by sewing, that is, by sewing and attaching belt portions 811 and 812, which are two high-strength (tough) strap-shaped belts formed of, for example, nylon, and in the present embodiment, 10 locations are sewn and attached. That is, the 10 locations include end portion sewing/attaching portions 815 and 815 disposed in the upper U direction and the lower D direction, first sewing/attaching portions 820a and 810a disposed therebetween and disposed with an interval in the upper U direction and the lower D direction, second sewing/attaching portions 820b and 820b disposed with an interval in the upper U direction and the lower D direction, third sewing/attaching portions 820c and 820c disposed with an interval in the upper U direction and the lower D direction, a fourth sewing/attaching portion 820d disposed in the lower D direction, and a fifth sewing/attaching portion 820e disposed in the lower D direction (see Fig. 21).

[0144] The first sewing/attaching portions 820a and 820a are not sewn and attached, and the belt portions 811 and 812 can be separated. Therefore, a first opening portion 830a that is open is formed between the first sewing/attaching portions 820a and 820a, and a red strap-shaped first ribbon 840a is sewn and attached to the front

surface of the belt portion 811 between the first sewing/attaching portions 820a and 820a. That is, since the red strap-shaped first ribbon 840a is sewn and attached to the position corresponding to the first opening portion 830a, it is easy to specify the position of the first opening portion 830a in the suspension belt 20 (20a and 20b) in a case of looking at the red strap-shaped first ribbon 840a. However, the coloring of the ribbon is not limited to red, and it is preferable that the ribbon can be distinguished from other ribbons described below, and it is sufficient that the ribbons are colored in different colors from each other. In addition, the first sewing/attaching portions 820a and 820a can also be seamed with a red thread.

[0145] In addition, the second sewing/attaching portions 820b and 820b are not sewn and attached, and the belt portions 811 and 812 can be separated. Therefore, a second opening portion 830b that is open is provided between the second sewing/attaching portion 820b and 820b, a yellow strap-shaped second ribbon 840b is sewn and attached to the front surface of the belt portion 811 between the second sewing/attaching portions 820b and 820b. That is, since the yellow strap-shaped second ribbon 840b is sewn and attached to the position corresponding to the second opening portion 830b, it is easy to specify the position of the second opening portion 830b in the suspension belt 20 (20a and 20b) in a case of looking at the yellow strap-shaped second ribbon 840b. In addition, the second sewing/attaching portions 820b and 820b can also be and with a yellow thread.

[0146] In addition, the third sewing/attaching portions 820c and 820c are not sewn and attached, and the belt portions 811 and 812 can be separated. Therefore, a third opening portion 830c that is open is provided between the third sewing/attaching portion 820c and 820c, a white strap-shaped third ribbon 840c is sewn and attached to the front surface of the belt portion 811 between the third sewing/attaching portions 820c and 820c. In addition, the third sewing/attaching portion 820c and 820c can also be and with a white thread.

[0147] That is, since the white strap-shaped third ribbon 840c is sewn and attached to the position corresponding to the third opening portion 830c, it is easy to specify the position of the third opening portion 830c in the suspension belt 20 (20a and 20b) in a case of looking at the white strap-shaped third ribbon 840c. It should be noted that the entire portion between the fourth sewing/attaching portion 820d and the fifth sewing/attaching portion 820e is sewn and attached. Therefore, there is no opening between the fourth sewing/attaching portion 820d and the fifth sewing/attaching portion 820e

[0148] In addition, the rear surface of the belt portion 812 between the third sewing/attaching portion 820c and the fourth sewing/attaching portion 820d is configured to be detachably fastened to both side edge portions 10e of the sheet body 10 by the predetermined fastening means. As shown in Fig. 19, the sling sheet for nursing care 1d according to the fourth embodiment is the same

as the sling sheet for nursing care 1a in that the sling sheet for nursing care 1d can be stored planarly and compactly by overlapping the suspension belt 20 (20a and 20b) on both side edge portions 10e of the sheet body 10, and in a case in which the sling sheet for nursing care 1a is laid in advance on a bed or a wheelchair on which the person who requires nursing care is placed, it is possible to quickly respond the person who requires nursing care who requires to move.

[0149] In the sling sheet for nursing care 1d according to the fourth embodiment, as the fastening means, a button portion 813 and a buttoned portion 814 that are fitted with recesses and protrusions may be used. It is preferable that one of the button portion 813 and the buttoned portion 814 is disposed on the rear surface of the belt portion 812 and the other is disposed on both side edge portions 10e. It should be noted that, although not shown, instead of the button portion 813 and the buttoned portion 814, the hook surface fastener or the loop surface fastener in the surface fastener may be disposed.

[0150] It should be noted that, in the sling sheet for nursing care 1d according to the fourth embodiment, the suspension belt 20 (20a and 20b) is disposed on the rear surface 10b side of both side edge portions 10e of the sheet body 10 of the sheet body 10 in the sling sheet for nursing care 1d according to the fourth embodiment, but can be disposed on the front surface 10a side (not shown). In this case, the button portion 813 and the buttoned portion 814 that are fitted with recesses and protrusions as the fastening means described above can be appropriately disposed (not shown).

[0151] In addition, by hooking the hanger R1 of the suspension lift for nursing care R on any of the three opening portions of the first opening portion 830a, the second opening portion 830b, and the third opening portion 830c, it is possible to suspend the person who performs nursing care in an appropriate posture. In addition, since the first ribbon 840a, the second ribbon 840b, and the third ribbon 840c, which are color-coded to correspond to the respective opening portions as described above, are provided, it is also easy to visually recognize the position at which the person who performs nursing care can be suspended in an appropriate posture according to the physique.

[0152] In addition, the loop-shaped upper end portion 850 is formed in an annular shape by inserting the tough cloth tape into the opening portion 631 formed by the first string portion 630 and sewing both ends thereof on the end portion of the suspension belt body portion 810 of the suspension belt 20 (20a and 20b). It should be noted that, although not shown, as the loop-shaped upper end portion 850, a spring hook (carabiner-shaped hook) or the like may be used. With the configuration described above, the loop-shaped upper end portion 850 is movably disposed with respect to the engagement portion 41 (41a and 41b).

[0153] The loop-shaped lower end portion 860 is movably connected to the grip portion 413. Therefore, the

suspension belt 20 (20a and 20b) is movably connected to the grip portion 413. It should be noted that, although not shown, as the loop-shaped lower end portion 860, a spring hook (carabiner-shaped hook) or the like may be used.

[0154] A portion (a) in Fig. 22 and a portion (b) in Fig. 22 show a state in which the sling sheet for nursing care 1d is suspended from the hanger R1 of the movement lift for nursing care R when the head support portion 110 provided in the fourth embodiment is used.

[0155] The above state is obtained by hooking the suspension belt 20 (20a and 20b) on the hanger R1 after hooking the suspension string portions 520 and 520 on the hanger R1 of the suspension lift for nursing care R in the substantially same manner as in the first embodiment and the second embodiment. Figs. 22 and 23 show a state in which the first opening portion 830a of the suspension belt 20 (20a and 20b) is hooked on the hanger R1. However, it is also preferable that the hanger R is hooked on the second opening portion 830b or the third opening portion 830c in order to obtain a desired posture of the person who requires nursing care. In this case, by using, as a mark, the first ribbon 840a corresponding to the first opening portion 830a, the second ribbon 840b corresponding to the second opening portion 830b, or the third ribbon 840c corresponding to the third opening portion 830c, it is easy to distinguish between the opening portions. Further, since the first sewing/attaching portions 820a and 810a, the second sewing/attaching portions 820b and 820b, and the third sewing/attaching portions 820c and 820c are also colored in the respective colors described above, it is also possible to distinguish between the opening portions.

[0156] In this case, in a case in which the outer ring portion 560 having a longer length is selected, the head of the person who requires nursing care can be supported in a more backward tilted state. On the other hand, in a case in which the inner ring portion 550 having a shorter length is selected, the head of the person who requires nursing care can be supported in a more forward tilted state.

[0157] The sling sheet for nursing care 1d according to the fourth embodiment includes two long and short types (two types) of the inner ring portion 550 and the outer ring portion 560, but three or more types having different lengths can be used as necessary. It should be noted that, when the head support portion 110 is not used, as shown in a portion (a) in Fig. 23 and a portion (b) in Fig. 23, the suspension string portions 520 and 520 need only not be hooked on the hanger R1.

[0158] As described above, with the sling sheet for nursing care 1d according to the fourth embodiment, the sheet body 10 is integrally provided with the head support portion 110 that supports the back of the head of the person who requires nursing care, and the use or non-use of the head support portion 110 can be selected, for example, there is no need to separately prepare the pillow-shaped head support portion 30 shown in Figs. 8 and

9 as an option.

[0159] In addition, as described above, since the head support portion 110 is supported at a total of four locations on both left and right sides, the back side support portion 11 is supported at a total of four locations on both left and right sides, and the leg side support portion 12 is supported at a total of eight locations on both left and right sides, the entire sling sheet for nursing care 1d according to the fourth embodiment is supported at a total of 16 locations, so that it is possible to move the person who requires nursing care in a more stable state. In addition, the durability of the sheet body 10 can be held by distributing the force applied to the sheet body 10 to the 16 locations.

[0160] In addition, as described above, since both ends of the suspension belt 20 (20a and 20b) include the loop-shaped upper end portion 850 and the loop-shaped lower end portion 860, respectively, the suspension belt can be moved with respect to the engagement portions 41c and 41d of the leg side support portion 12 and the grip portion 413, respectively. Therefore, even in a case in which the person who requires nursing care is moved, the suspension belt 20 (20a and 20b) is moved with respect to the engagement portions 41c and 41d of the leg side support portion 12 and the grip portion 413, so that the sling sheet 1d according to the fourth embodiment can be moved to follow the moving person who requires nursing care, and can securely hold the person who requires nursing care. In addition, since the grip portion 413 is movably disposed with respect to the first loop portion 411 and the second loop portion 412, it is possible to follow and securely hold the moving person who requires nursing care. Therefore, the sling sheet 1d according to the fourth embodiment can further follow a change in the posture of the person who requires nursing care. In this way, the sling sheet for nursing care 1d according to the fourth embodiment can simply adjust the center-of-gravity balance position of the person who requires nursing care.

Reference Signs List

[0161]

- 1a, 1b, 1c, 1d: sling sheet
- 10: sheet body
- 11: back side support portion
- 11a, 11b: shoulder side left and right corner portion
- 12: leg side support portion
- 12a, 12b: femur side left and right corner portion
- 13: engagement string
- 14: loop surface fastener
- 20(20a, 20b): suspension belt
- 21: stopper
- 22: hook surface fastener
- 231, 232, 233: designated engagement position
- 30: head support
- 31: head support portion

32: engagement tool
 41(41a to 41d): engagement portion
 43(43a to 43d): hook portion
 110: head support portion
 120: suspension string
 121: first suspension string
 122: second suspension string
 411: first loop portion
 412: second loop portion
 413: grip portion
 420: suspension string portion
 430: suspension string loop portion
 440: first suspension string portion
 450: inner ring portion
 460: outer ring portion
 630: first string portion
 760: both end portion
 810: suspension belt body portion
 850: upper end portion
 860: lower end portion
 820a: first sewing/attaching portion
 820b: second sewing/attaching portion
 820c: third sewing/attaching portion
 830a: first opening portion
 830b: second opening portion
 830c: third opening portion
 840a: first ribbon
 840b: second ribbon
 840c: third ribbon

Claims

1. A sling sheet for nursing care that is used in a movement lift for nursing care to assist movement of a person who requires nursing care, the sling sheet for nursing care comprising:

a sheet body that wraps and supports at least from an upper limb to a femur of the person who requires nursing care; and
 a suspension belt for suspending the sheet body on a hanger of the movement lift for nursing care, wherein the sheet body is formed of a rectangular sheet including a back side support portion that supports a part from a shoulder to a waist of the person who requires nursing care, and a leg side support portion that supports a part from a buttock to the femur of the person who requires nursing care,
 the suspension belt includes, in pairs, a first suspension belt disposed along a left side edge portion of the sheet body in a length direction and a second suspension belt disposed along a right side edge portion of the sheet body in the length direction,
 the first suspension belt has one end engaged with a shoulder side left corner portion of the

back side support portion and the other end engaged with a femur side left corner portion of the leg side support portion facing the shoulder side left corner portion, and
 the second suspension belt has one end engaged with a shoulder side right corner portion of the back side support portion and the other end engaged with a femur side right corner portion of the leg side support portion facing the shoulder side left corner portion.

2. The sling sheet for nursing care according to Claim 1, wherein the suspension belts are detachably held on both side edge portions of the sheet body, respectively, by predetermined fastening means.
3. The sling sheet for nursing care according to Claim 1 or 2, wherein each of the suspension belts includes a stopper that is able to adjust a suspension position of the person who requires nursing care in a case in which the person who requires nursing care is suspended on the movement lift for nursing care.
4. The sling sheet for nursing care according to any one of Claims 1 to 3, wherein the sheet body is provided with engagement means that is detachable to a pajama for nursing care worn by the person who requires nursing care.
5. The sling sheet for nursing care according to any one of Claims 1 to 4, wherein the sheet body is subjected to waterproof processing and has no seams in a part that touches a body.
6. The sling sheet for nursing care according to any one of Claims 1 to 5, wherein a head support that supports a head of the person who requires nursing care is detachably attached between the first suspension belt and the second suspension belt.
7. The sling sheet for nursing care according to any one of Claims 1 to 6, wherein the first suspension belt and the second suspension belt are disposed along both side edge portions on a rear surface side of the sheet body.
8. The sling sheet for nursing care according to any one of Claims 1 to 6, wherein the first suspension belt and the second suspension belt are disposed along both side edge portions of the sheet body.
9. The sling sheet for nursing care according to Claim 7 or 8, wherein, on the rear surface side of the sheet body,

- each of two shoulder left and right corner portions of the back side support portion and two femur side left and right corner portions of the leg side support portion is provided with a loop-shaped engagement portion that is foldable back to an inner side and an outer side of the sheet body, the first suspension belt is connected to the engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, and the second suspension belt is connected to the engagement portion of the shoulder side right corner portion and the engagement portion of the femur side right corner portion.
10. The sling sheet for nursing care according to Claim 7 or 8, wherein, in the sheet body, each of two shoulder left and right corner portions of the back side support portion and two femur side left and right corner portions of the leg side support portion is provided with a loop-shaped engagement portion, the first suspension belt is connected to the engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, and the second suspension belt is connected to the engagement portion of the shoulder side right corner portion and the engagement portion of the femur side right corner portion.
11. The sling sheet for nursing care according to Claim 8 or 9, wherein each of the engagement portions is formed of one piece of cloth tape, and is formed in a loop shape with both ends thereof sewn and attached to the sheet body.
12. The sling sheet for nursing care according to any one of Claims 7 to 10, wherein the first suspension belt and the second suspension belt include, on both ends thereof, hook portions for connecting to the engagement portion.
13. The sling sheet for nursing care according to any one of Claims 1 to 12, wherein the first suspension belt and the second suspension belt are provided with engagement mark portions indicating engagement positions with respect to the hanger of the suspension lift for nursing care.
14. The sling sheet for nursing care according to Claim 13, wherein the engagement mark portions are provided at a plurality of locations along a length direction of the suspension belt, and are color-coded, respectively.
15. The sling sheet for nursing care according to any one of Claims 1 to 14, wherein the sheet body further includes a head support portion that is provided continuously on an upper side of the back side support portion and supports a back of a head of the person who requires nursing care, and both left and right sides of the head support portion are provided with suspension strings that are detachably hooked on the hanger.
16. The sling sheet for nursing care according to Claim 15, wherein a plurality of suspension strings having different lengths are provided as the suspension strings.
17. The sling sheet for nursing care according to any one of Claims 1 to 15, wherein the femur side left corner portion of the leg side support portion and the femur side right corner portion of the leg side support portion are provided with clips that fix the leg side support portion to a mat of a nursing care bed.
18. A pajama for nursing care that is worn by a person who requires nursing care, the pajama for nursing care comprising: engagement means that is detachable to the sling sheet for nursing care according to any one of Claims 1 to 17 on a back part side of the pajama for nursing care.
19. The sling sheet for nursing care according to Claim 8 or 9, wherein an engagement portion of the femur side left corner portion includes a first loop portion that has a loop shape and is fixed at two upper and lower locations to have a predetermined interval, a second loop portion that has a loop shape and is fixed at two upper and lower locations to have a predetermined interval, and a grip portion that supports the first loop portion and the second loop portion, an engagement portion of the femur side right corner portion includes a first loop portion that has a loop shape and is fixed at two upper and lower locations to have a predetermined interval, a second loop portion that has a loop shape and is fixed at two upper and lower locations to have a predetermined interval, and a grip portion that supports the first loop portion and the second loop portion,

the first suspension belt is movably connected to an engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, and the second suspension belt is movably connect- 5
ed to an engagement portion of the shoulder side right corner portion and the engagement portion of the femur side right corner portion.

- 20.** The sling sheet for nursing care according to Claim 19, 10

wherein each of the first suspension belt and the second suspension belt includes a loop-shaped upper end portion and a loop-shaped lower end portion disposed, respectively, at both ends thereof, 15
the loop-shaped upper end portions are movably connected to the engagement portion of the shoulder side left corner portion and the engagement portion of the femur side left corner portion, respectively, and 20
the loop-shaped lower end portion is movably connected to the grip portion.

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- 21.** The sling sheet for nursing care according to Claim 19 or 20,

wherein the first suspension belt and the second suspension belt include a suspension belt body portion, and 30
the suspension belt body portion further includes a first opening portion that is open to be suspended on the hanger of the movement lift for nursing care and a second opening portion 35
that is open.

- 22.** The sling sheet for nursing care according to Claim 21,

wherein the suspension belt body portion further includes a third opening portion that is open to be suspended on the hanger of the movement lift for nursing care. 40

- 23.** The sling sheet for nursing care according to Claim 21 or 22, 45

wherein the suspension belt body portion includes ribbons that are colored in different colors from each other at positions corresponding to the first opening portion and the second opening portion. 50

- 24.** The sling sheet for nursing care according to Claim 22 or 23,

wherein the suspension belt body portion further includes ribbons that are colored in different colors from each other at positions corresponding to the first opening portion, the second opening portion, and the third opening portion, respectively. 55

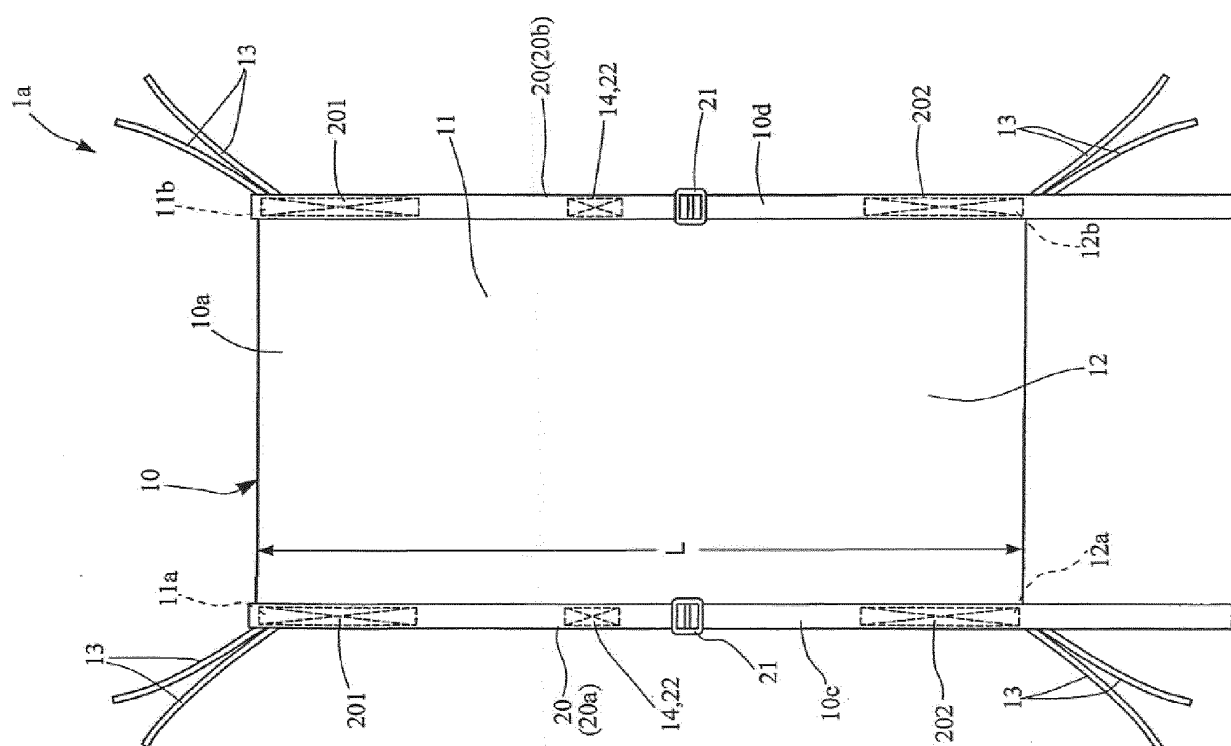


Fig. 1

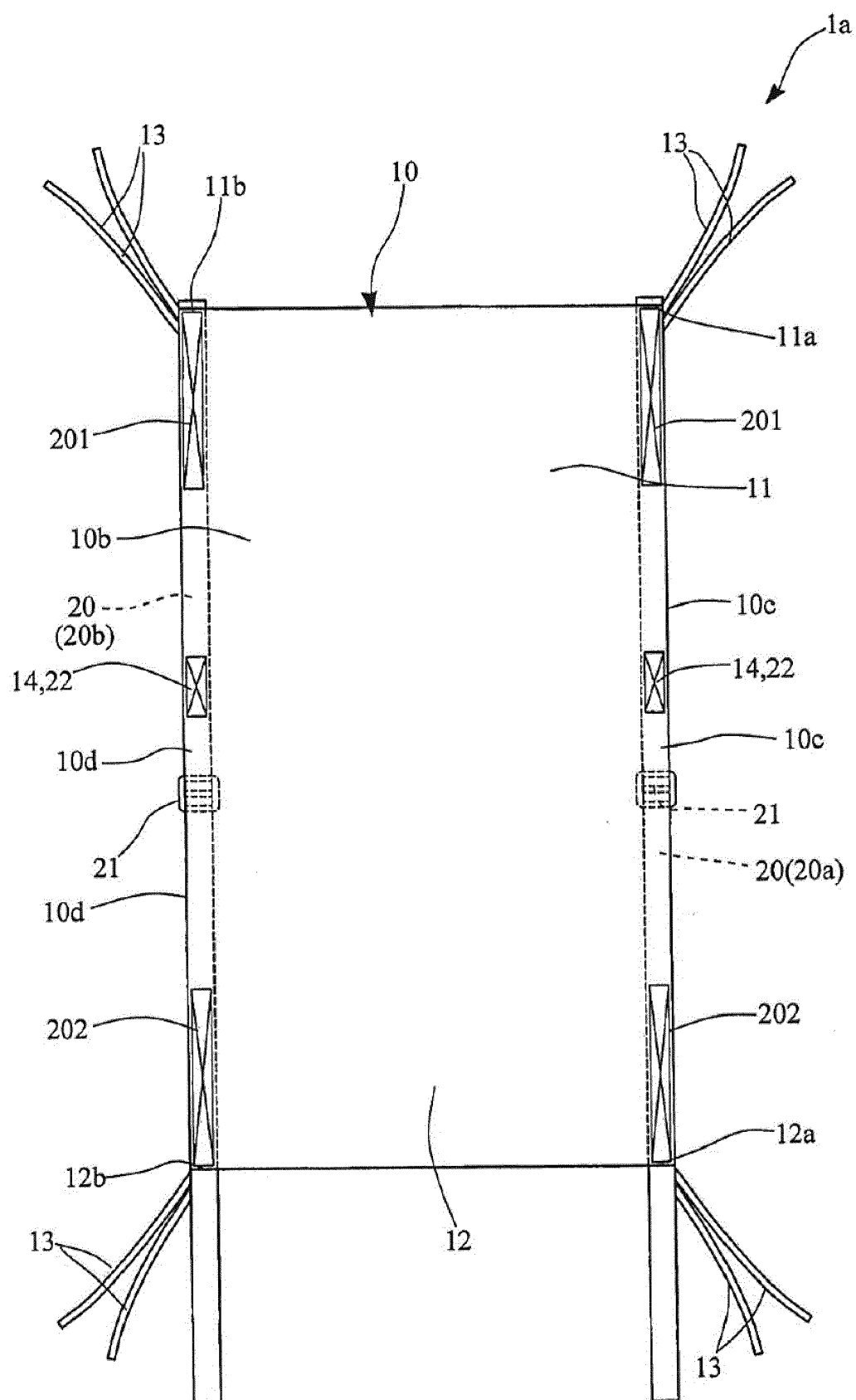


Fig. 2

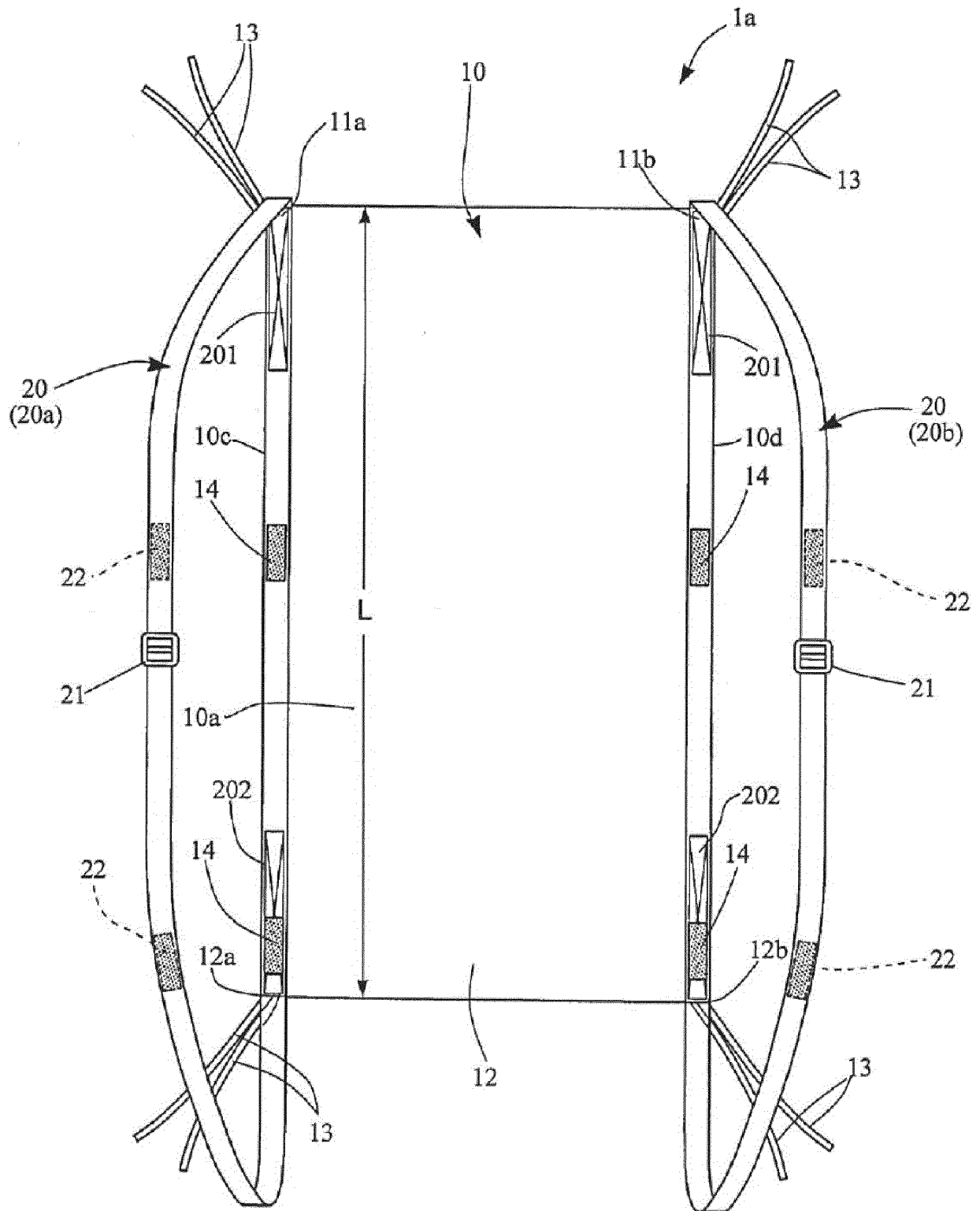


Fig.3

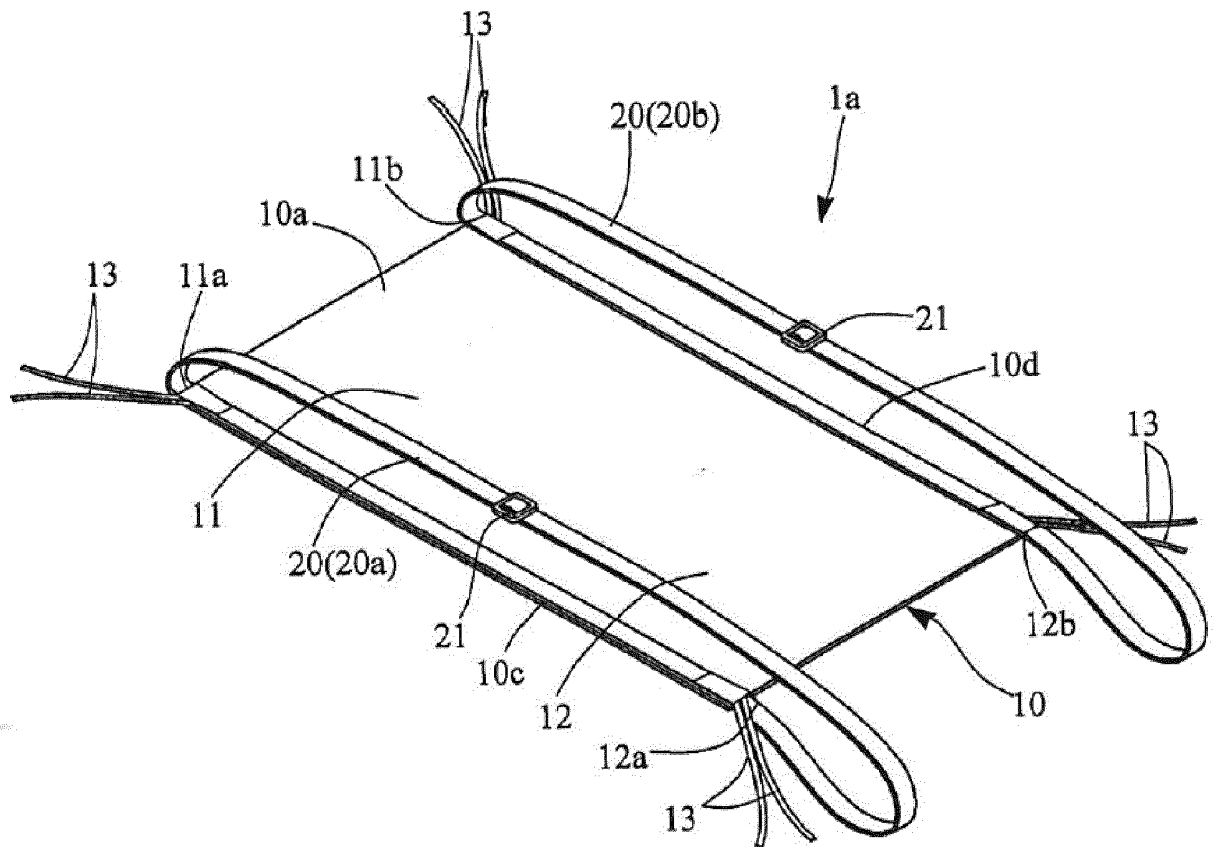


Fig. 4

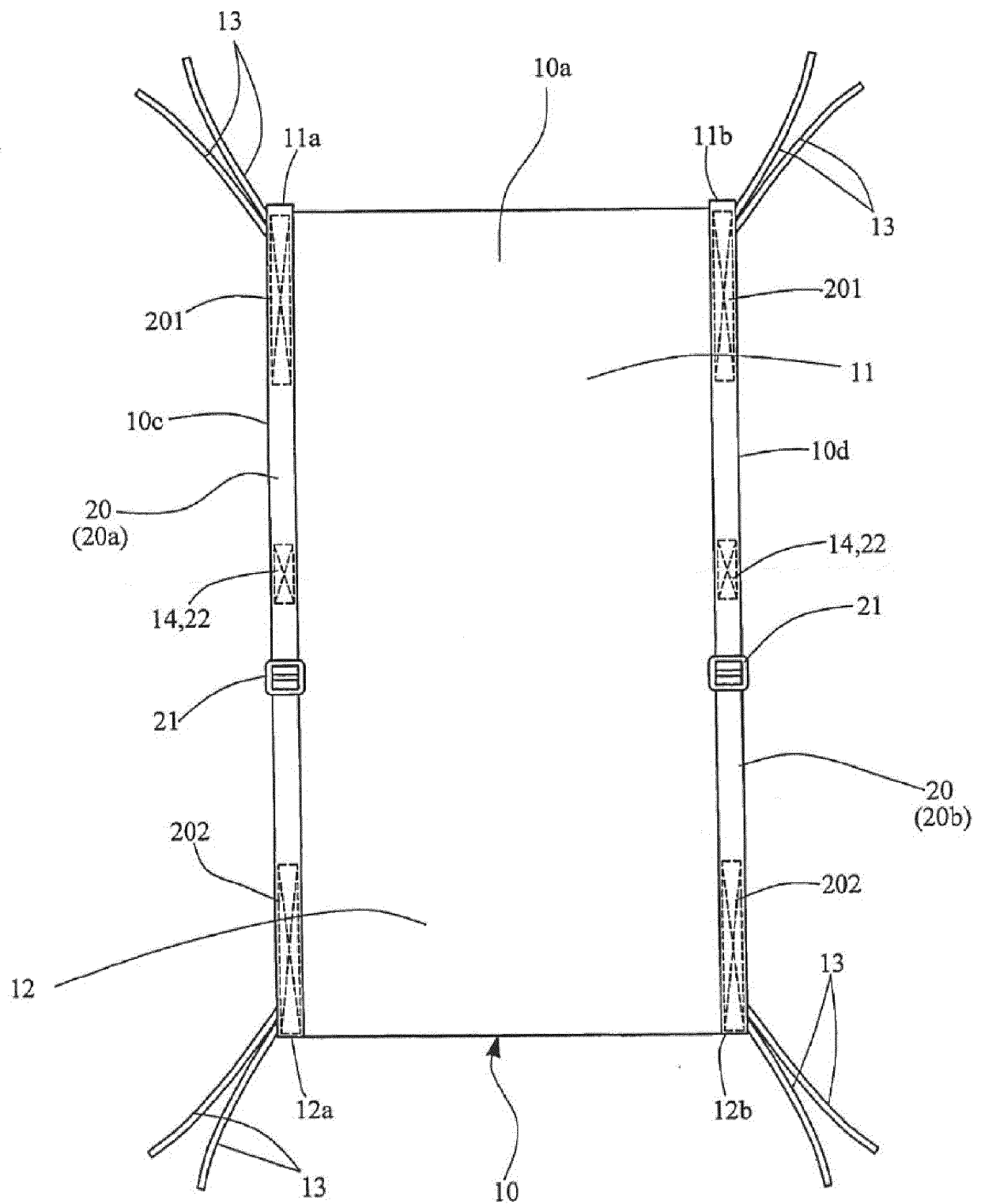


Fig. 5

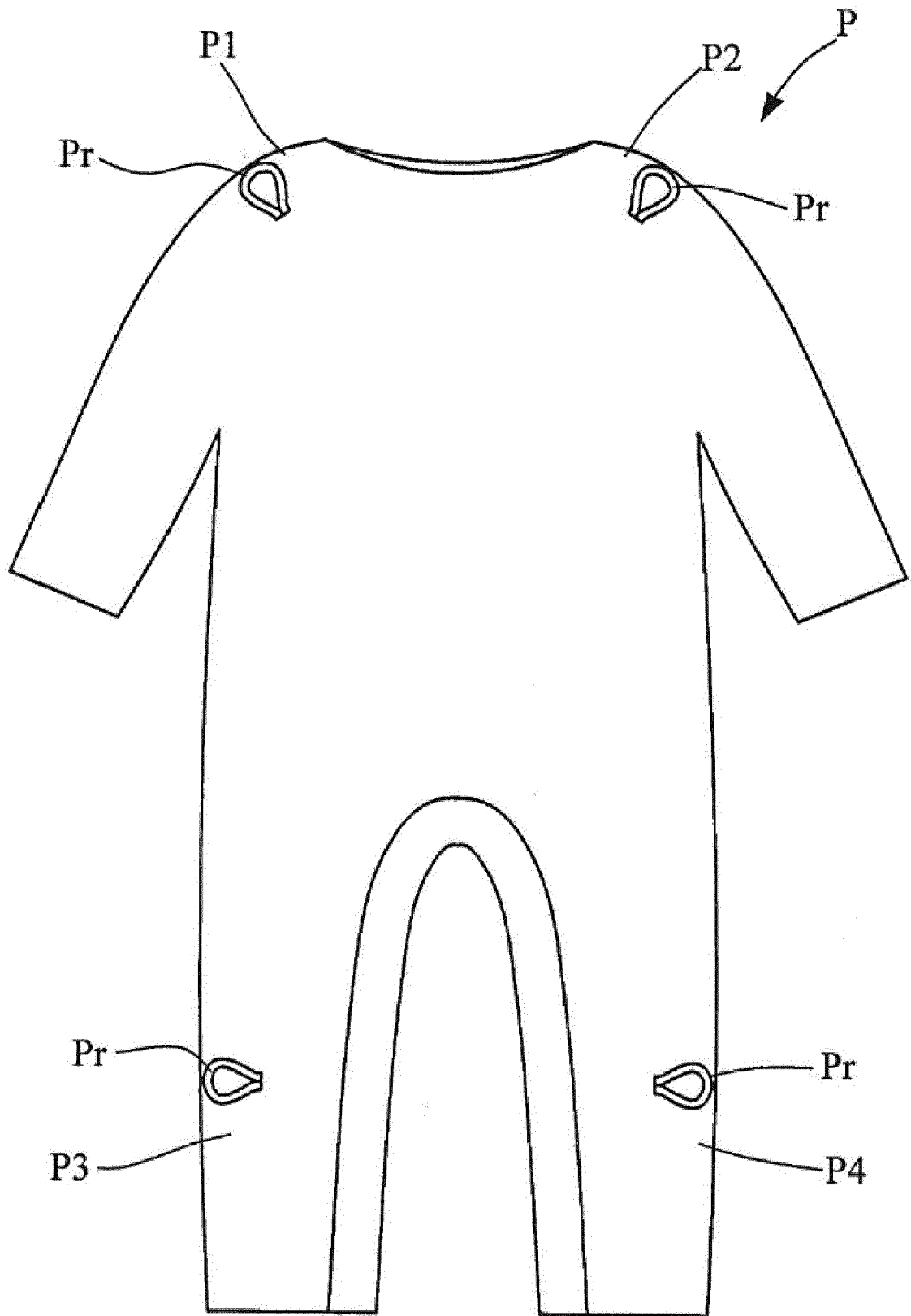


Fig. 6

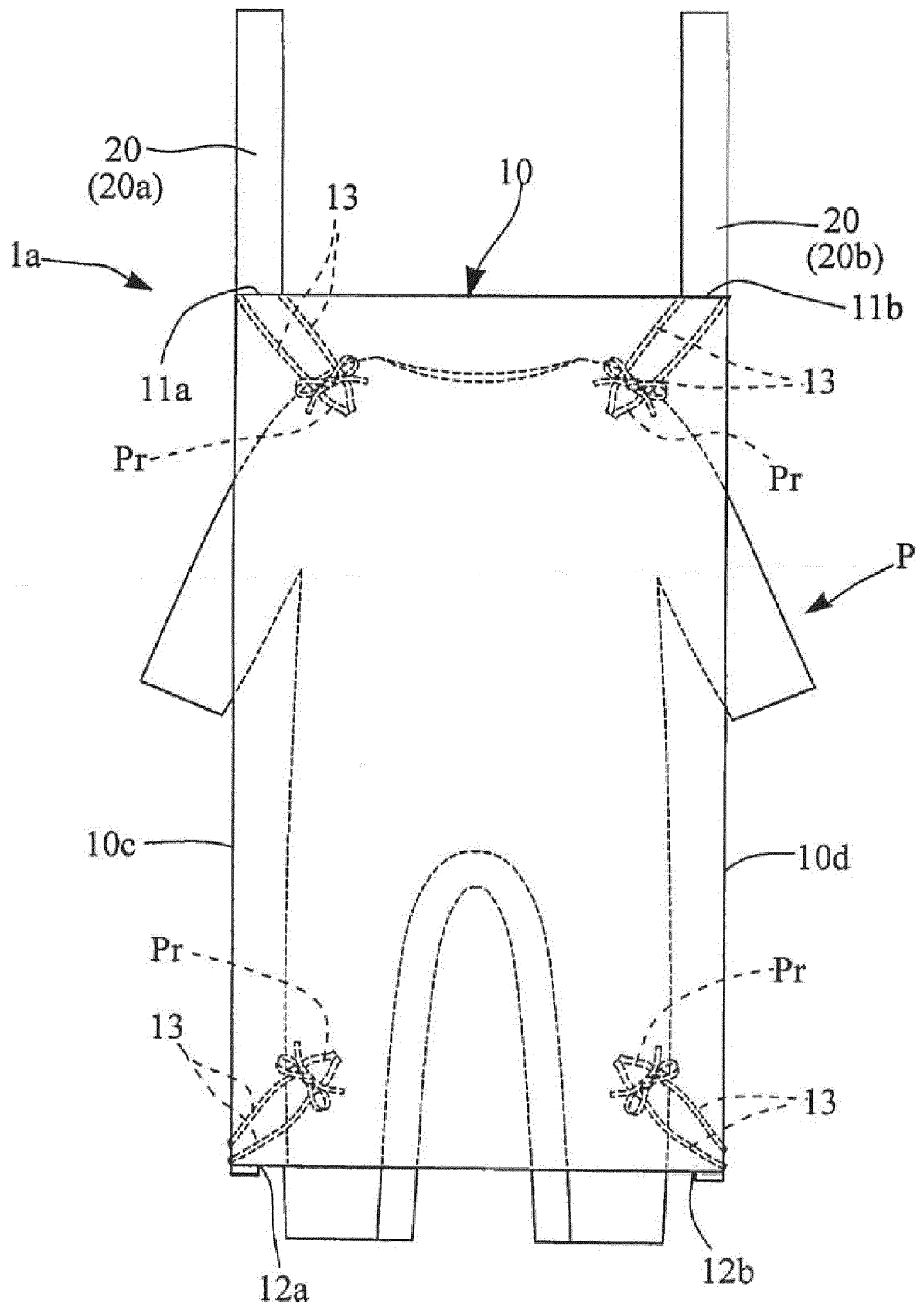


Fig. 7

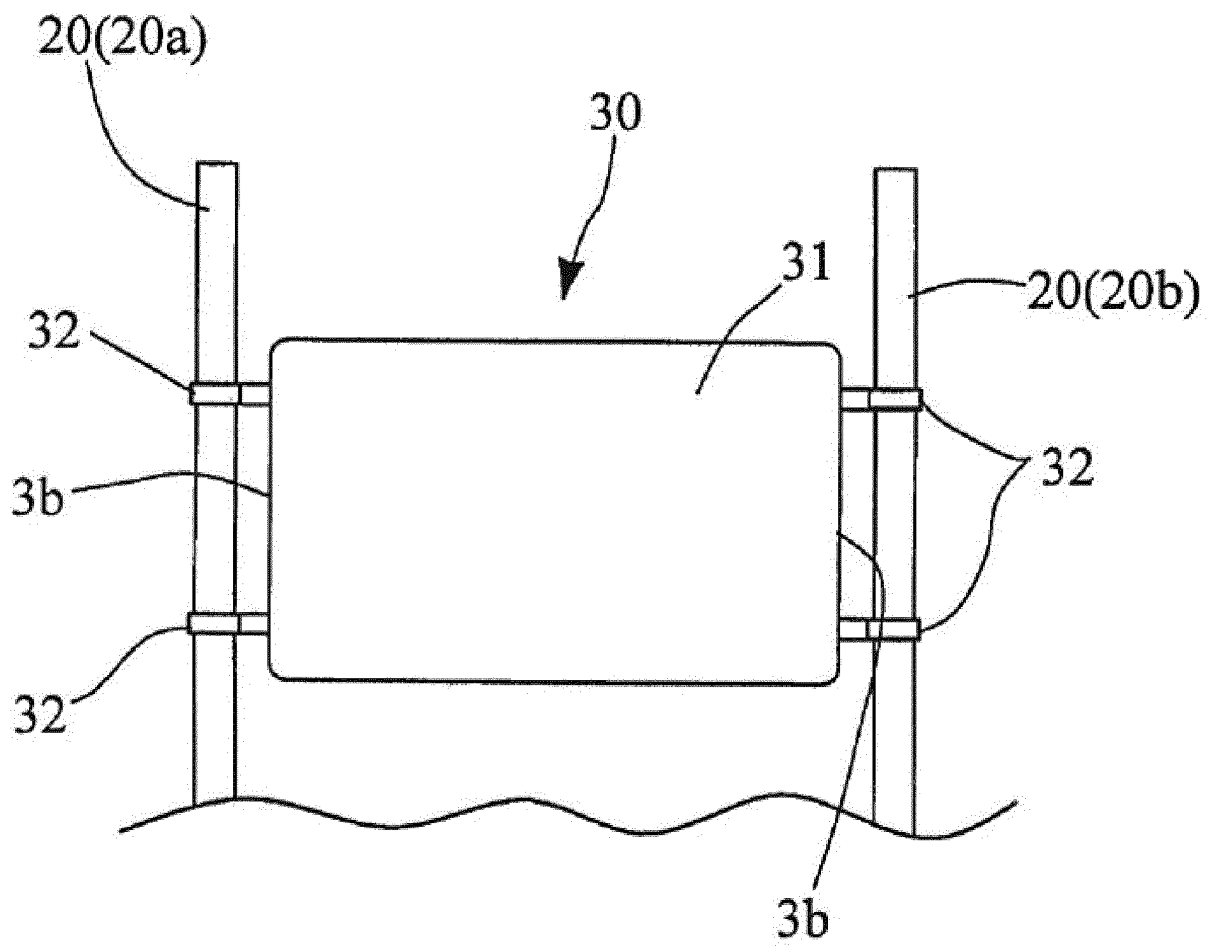


Fig. 8

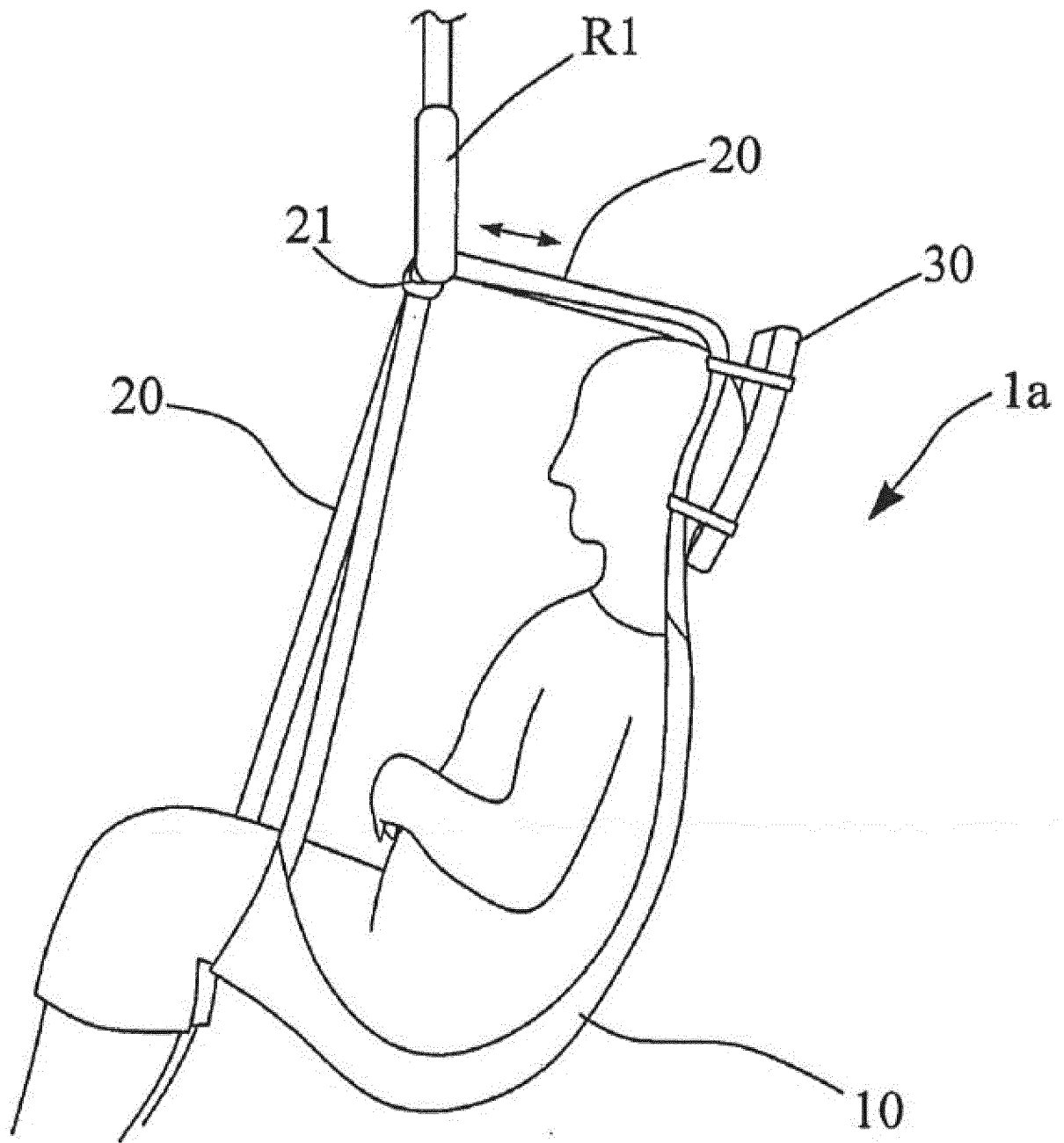


Fig. 9

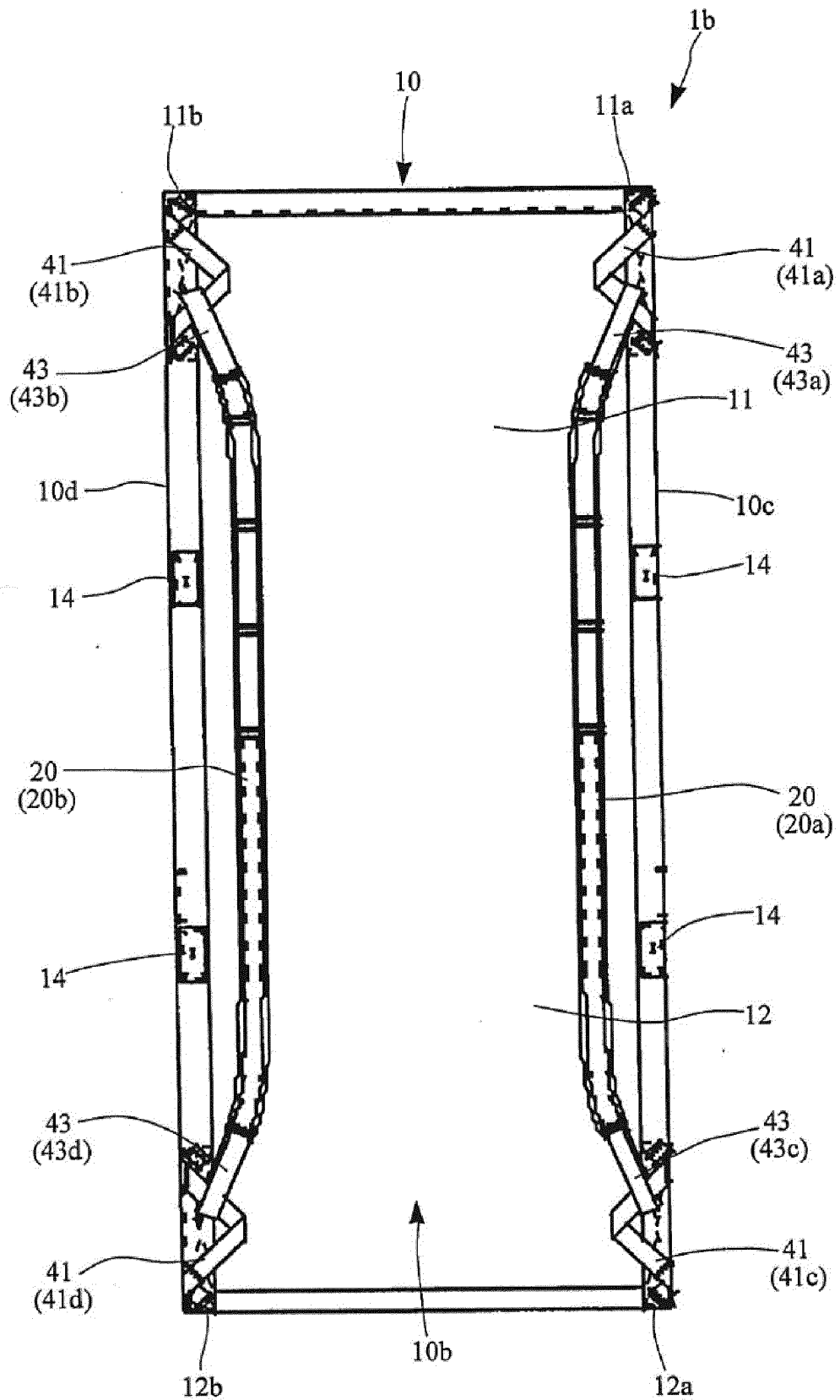


Fig. 10

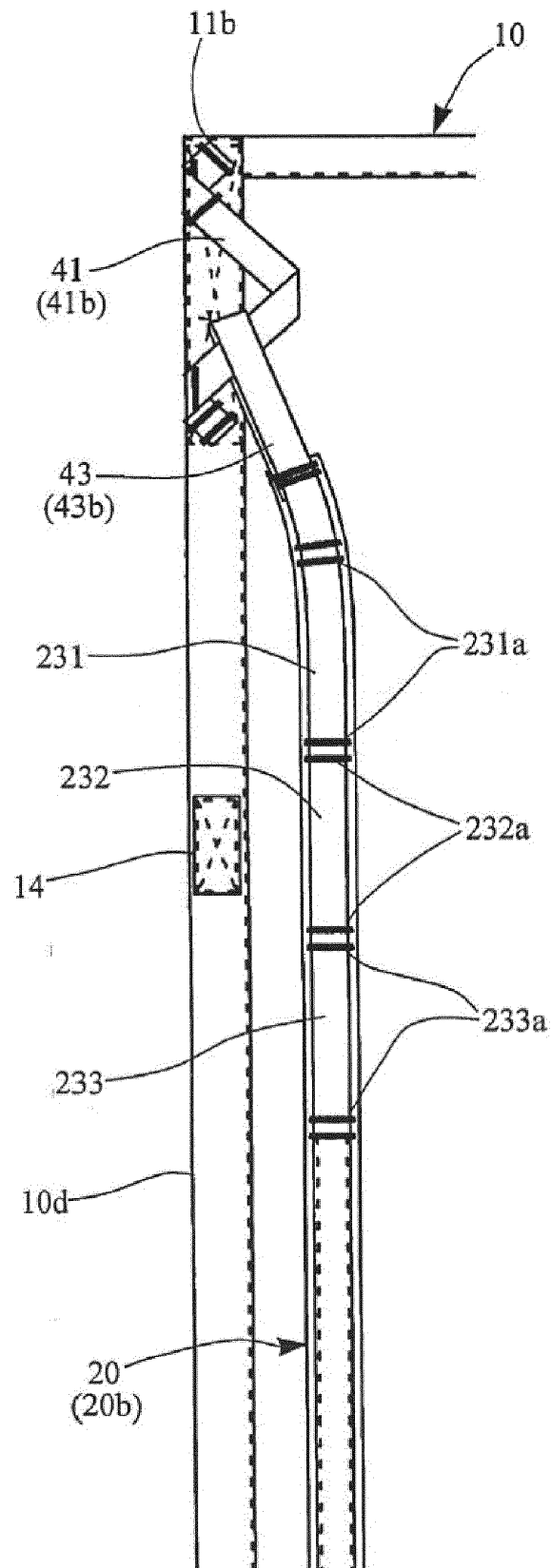


Fig. 11

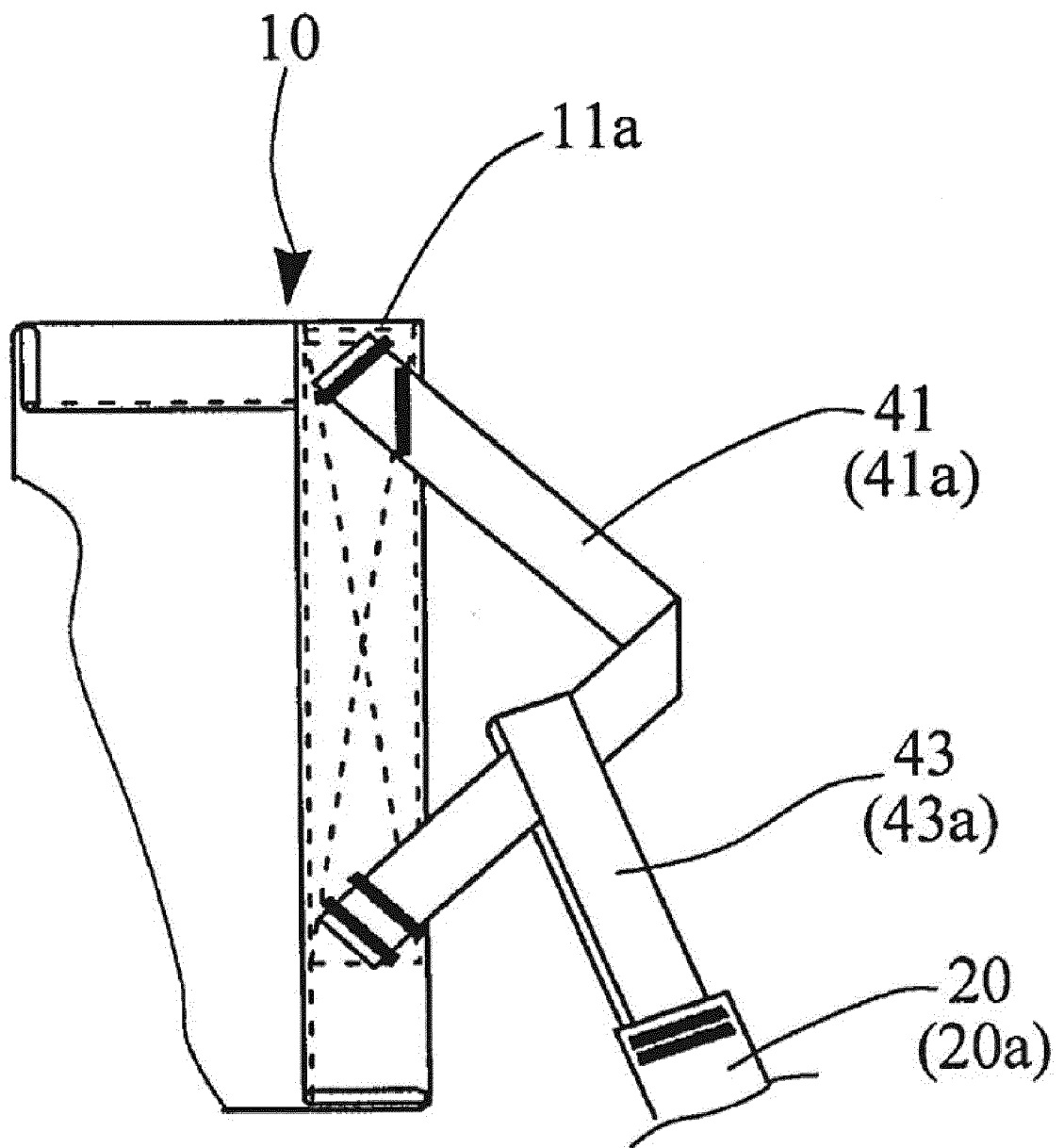
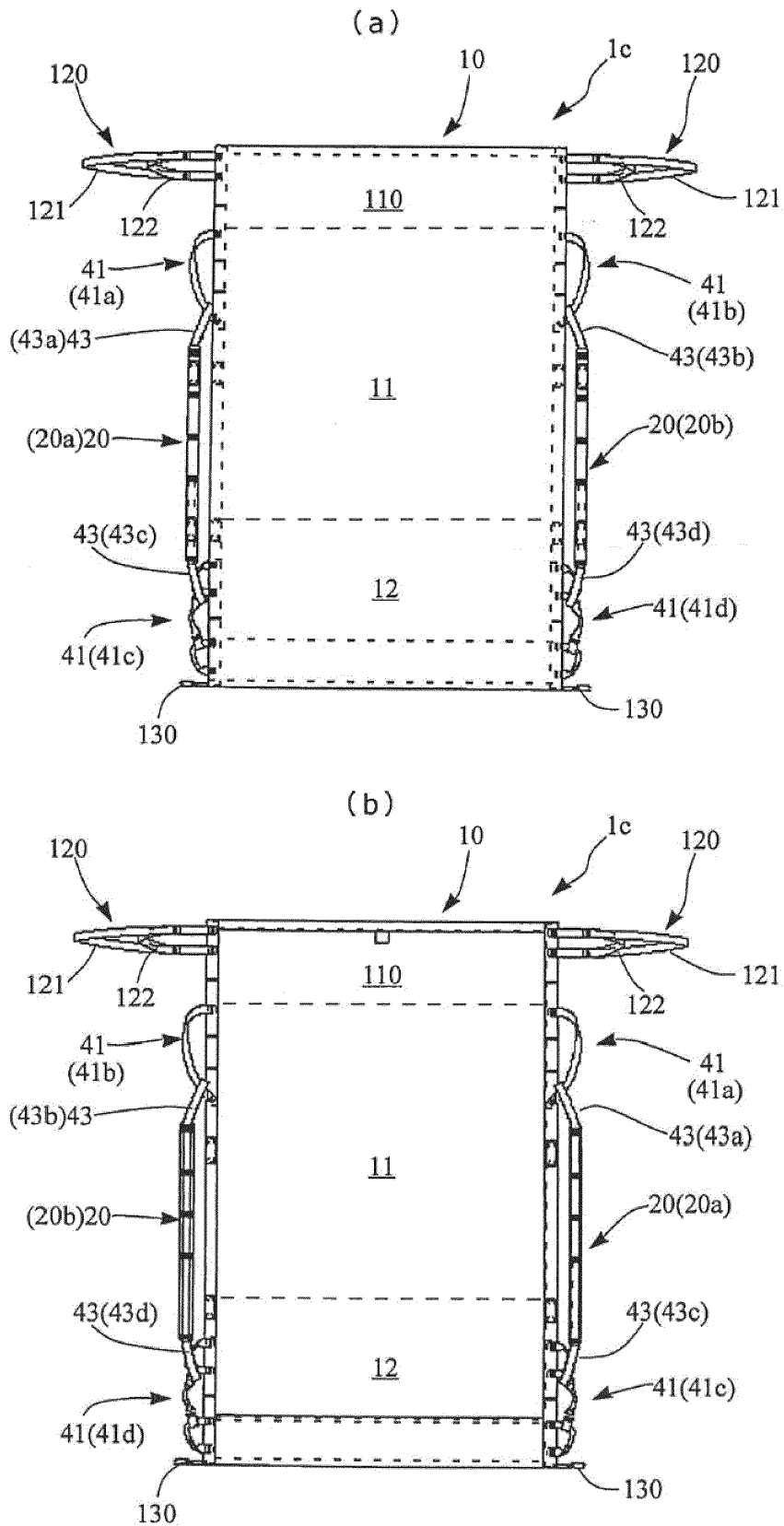


Fig. 12



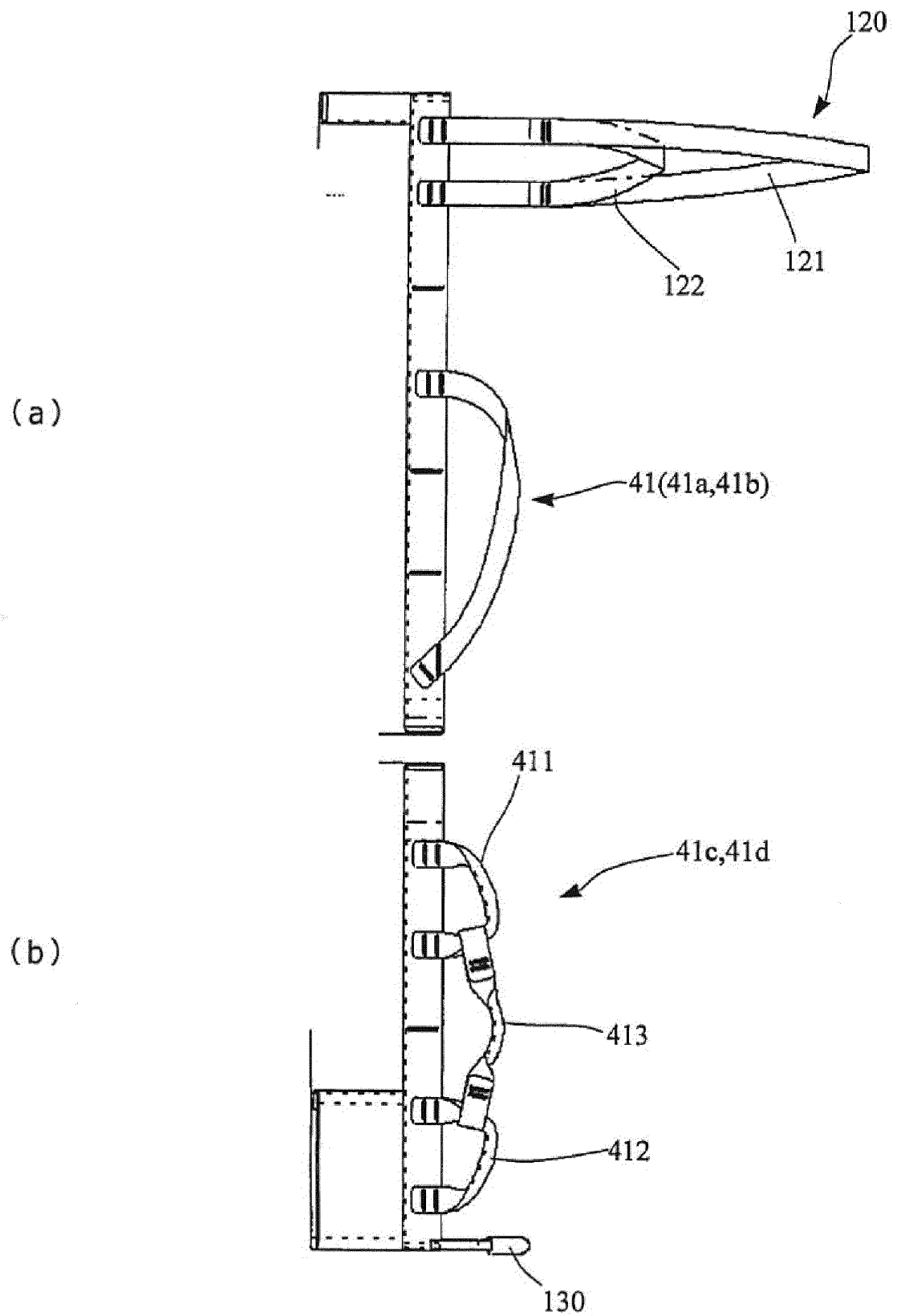


Fig. 14

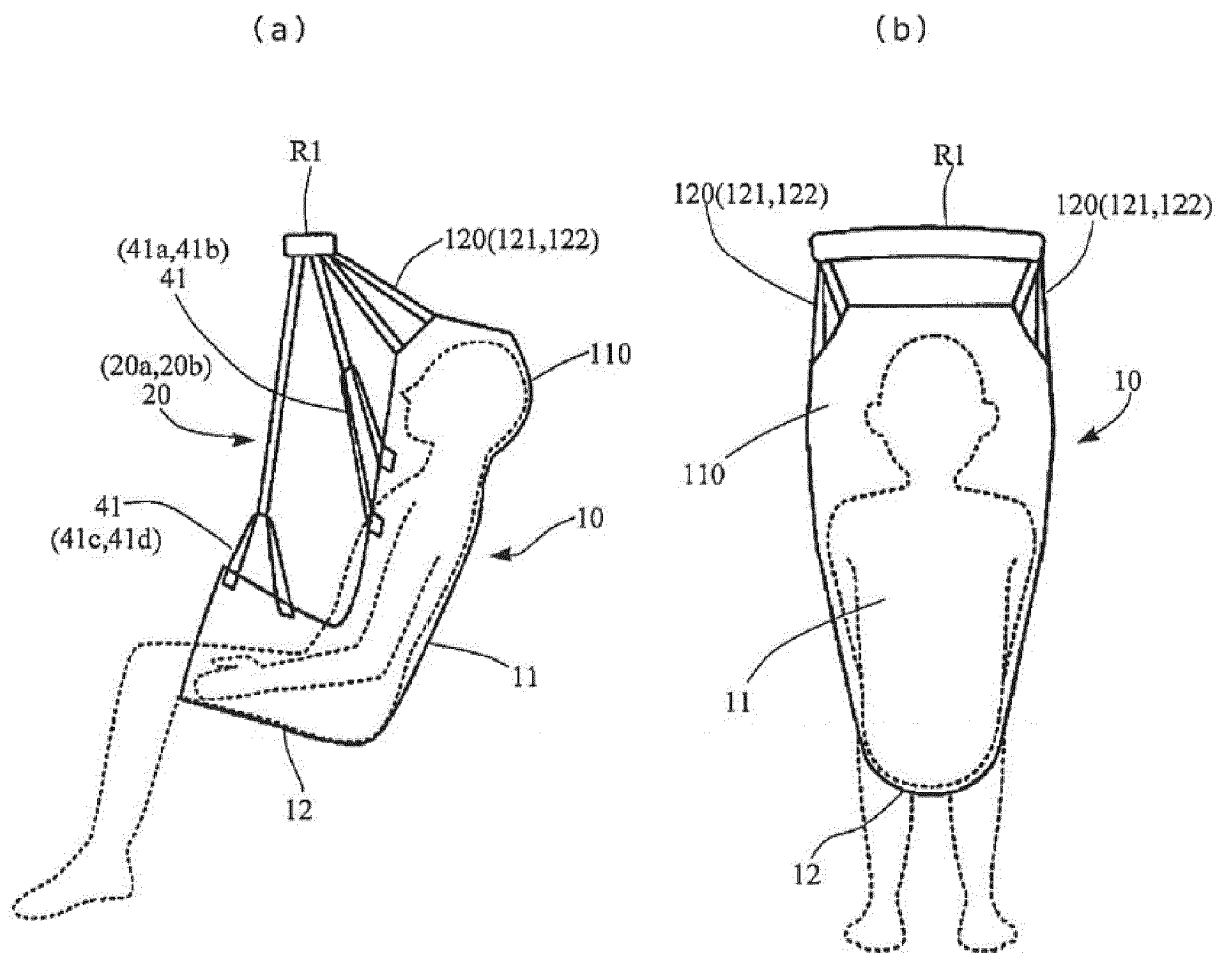


Fig. 15

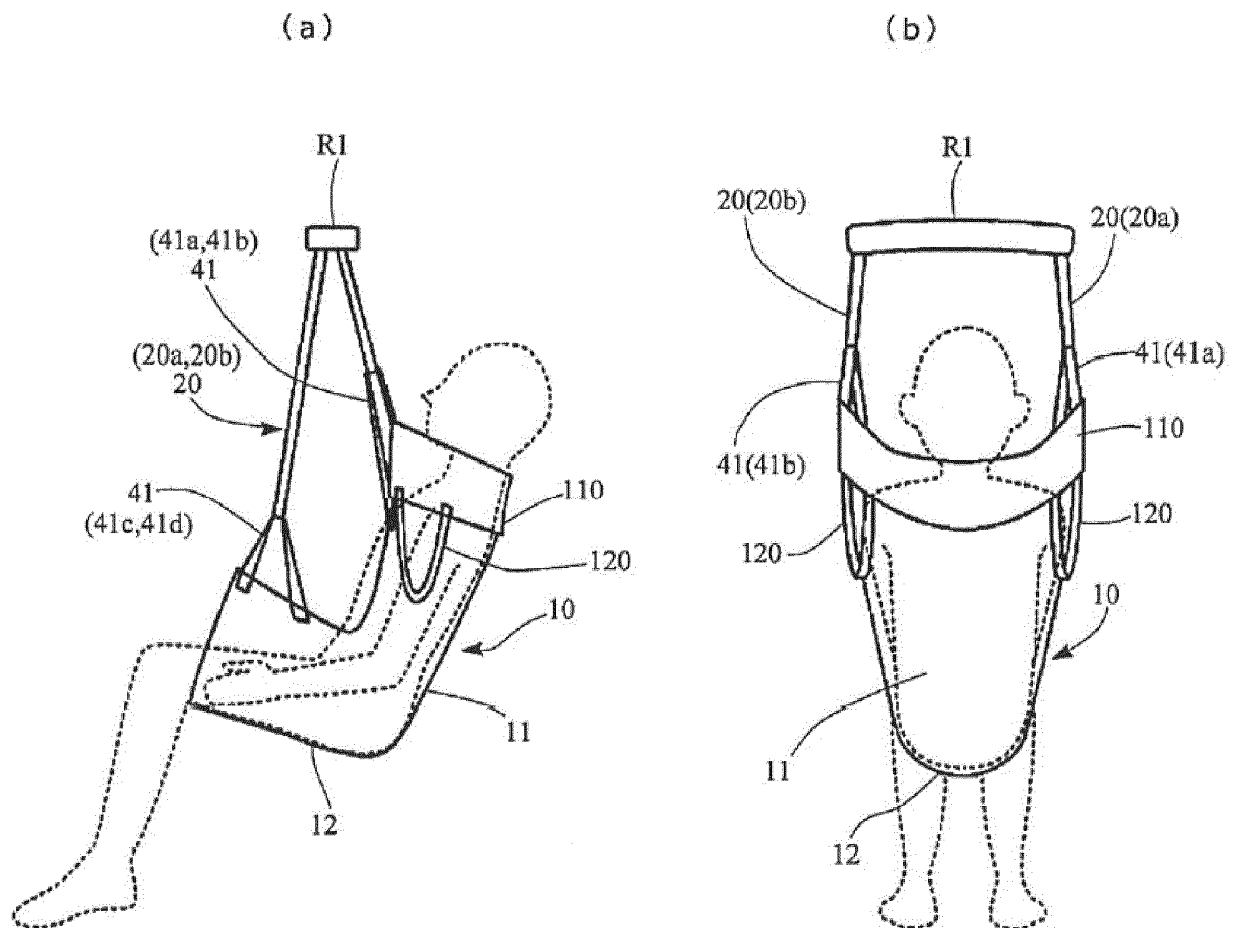


Fig. 16

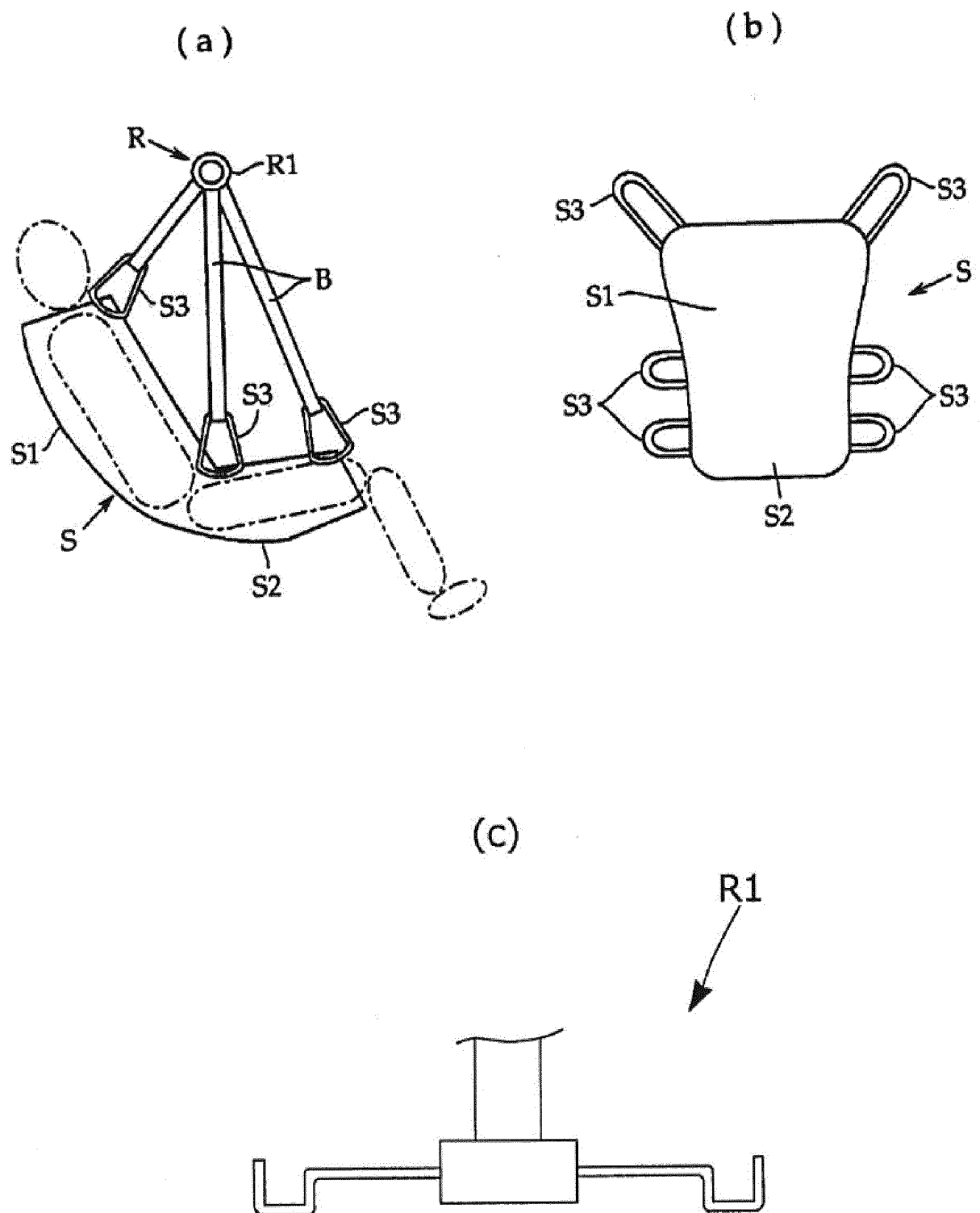


Fig. 17

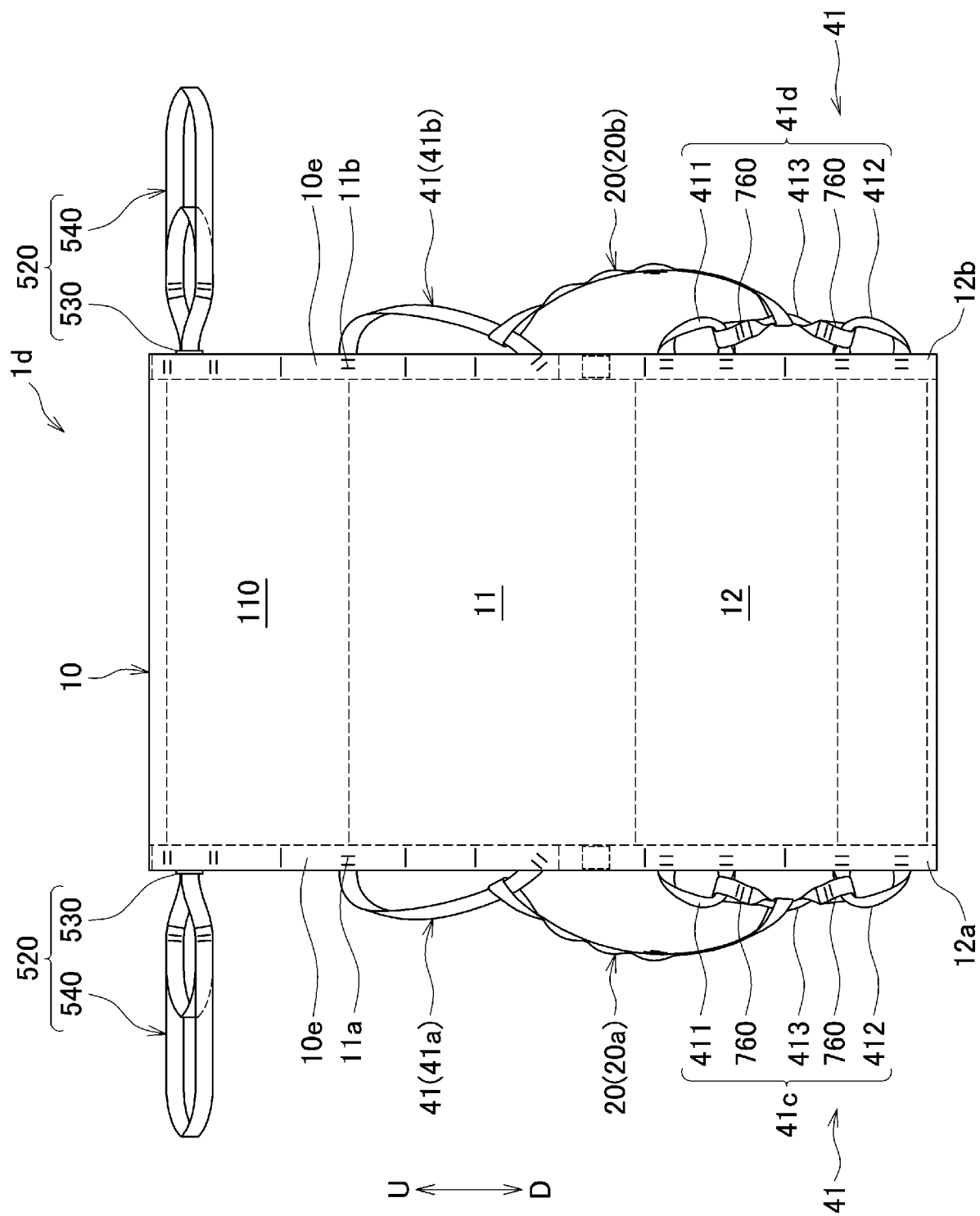


Fig. 18

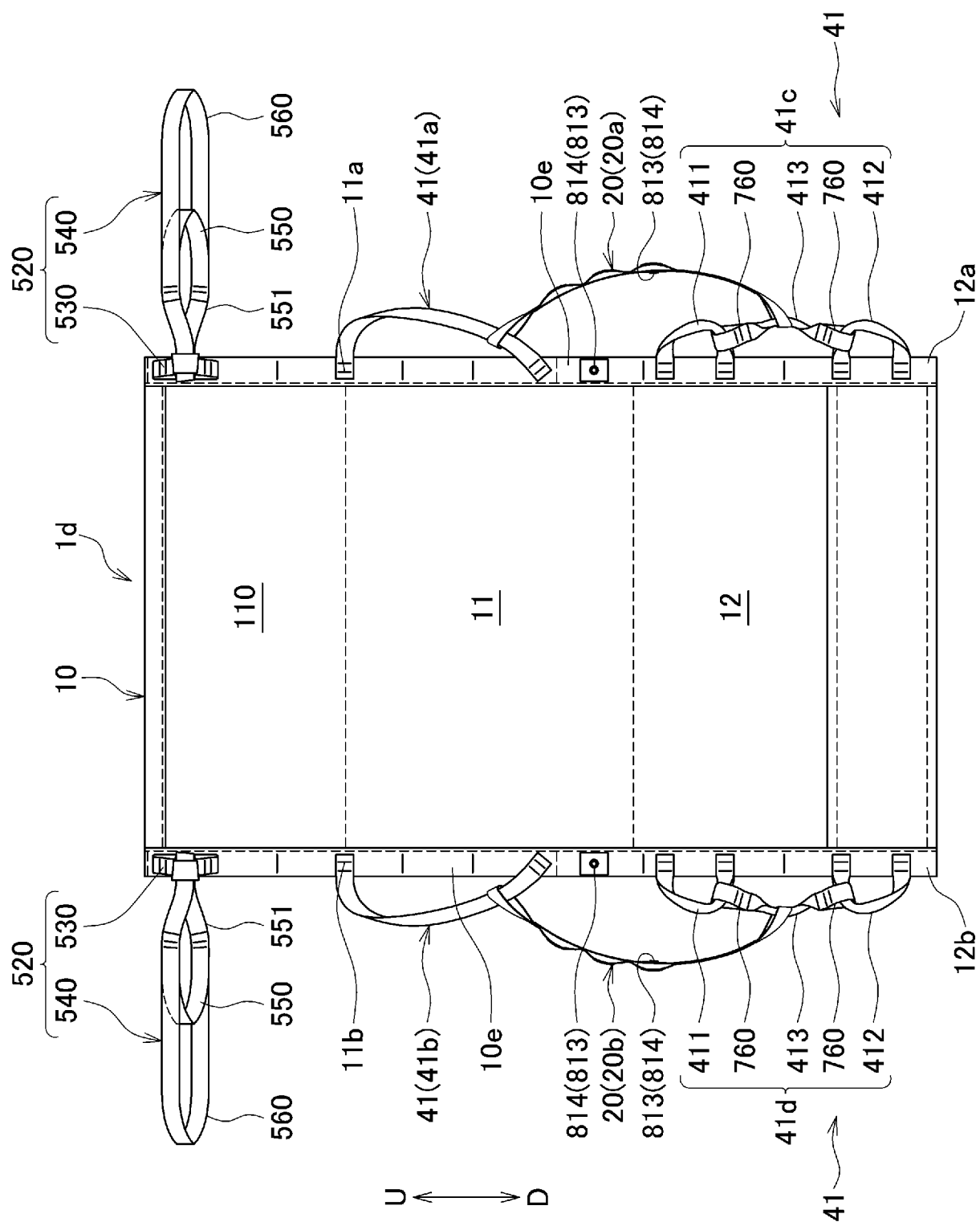


Fig. 19

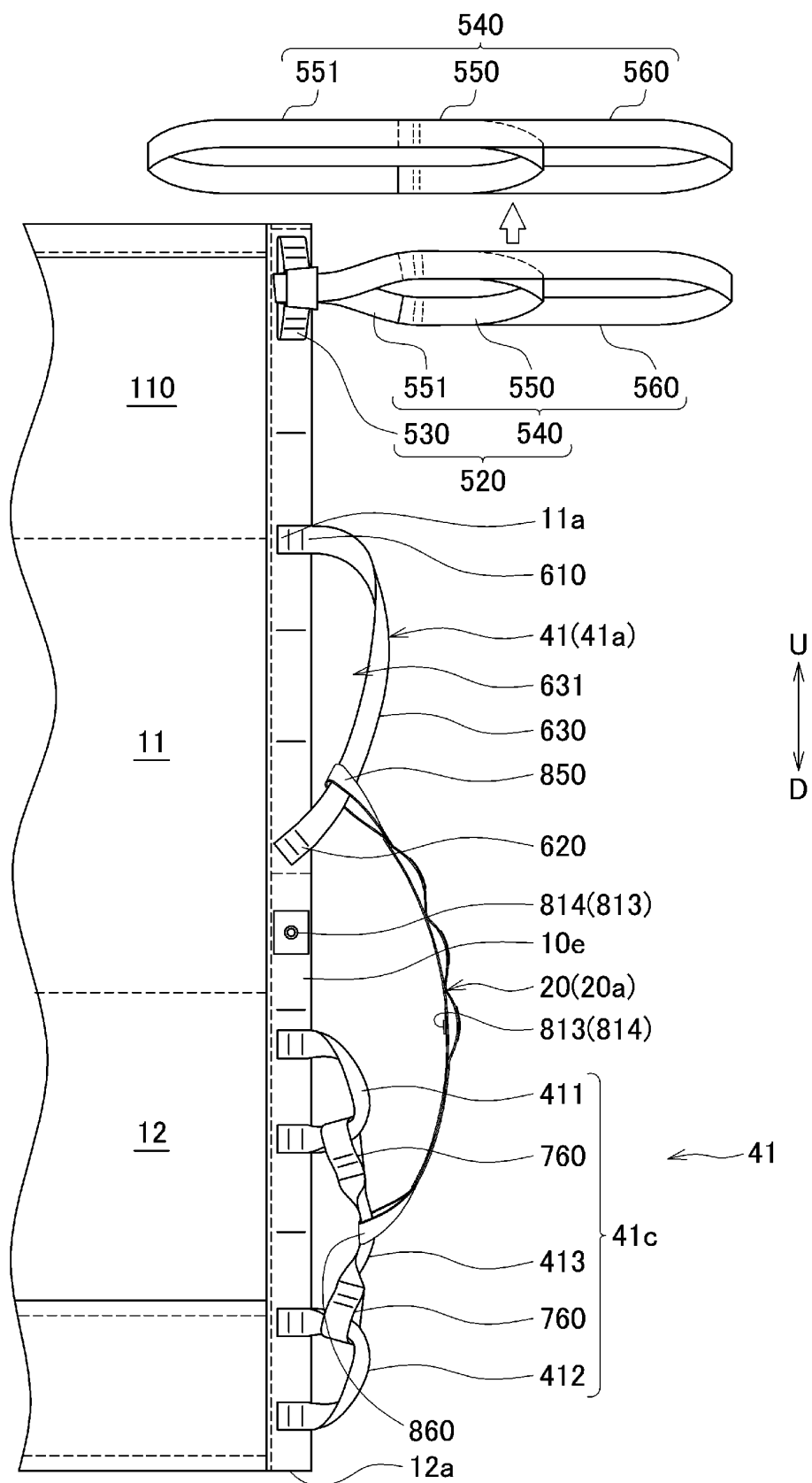


Fig. 20

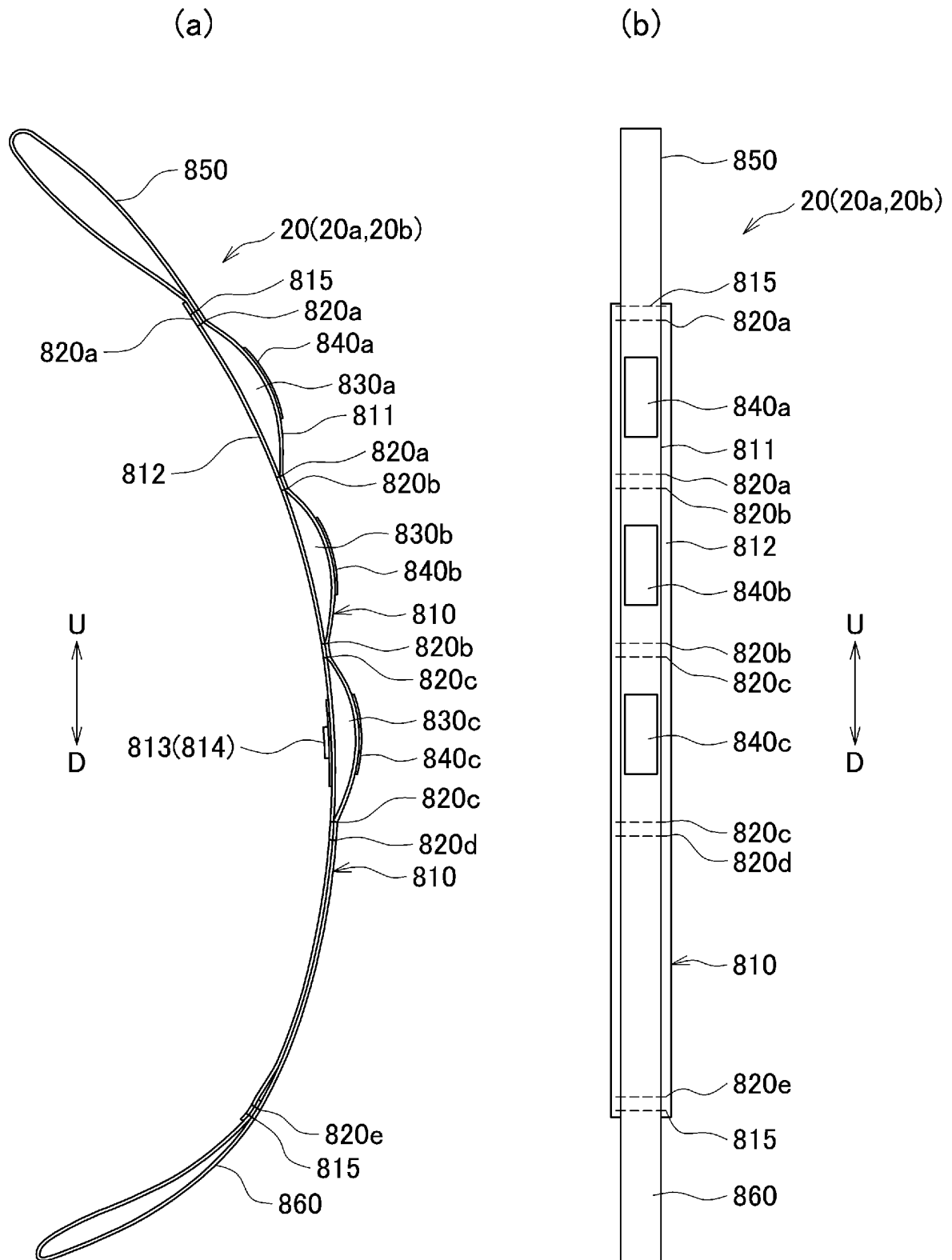


Fig. 21

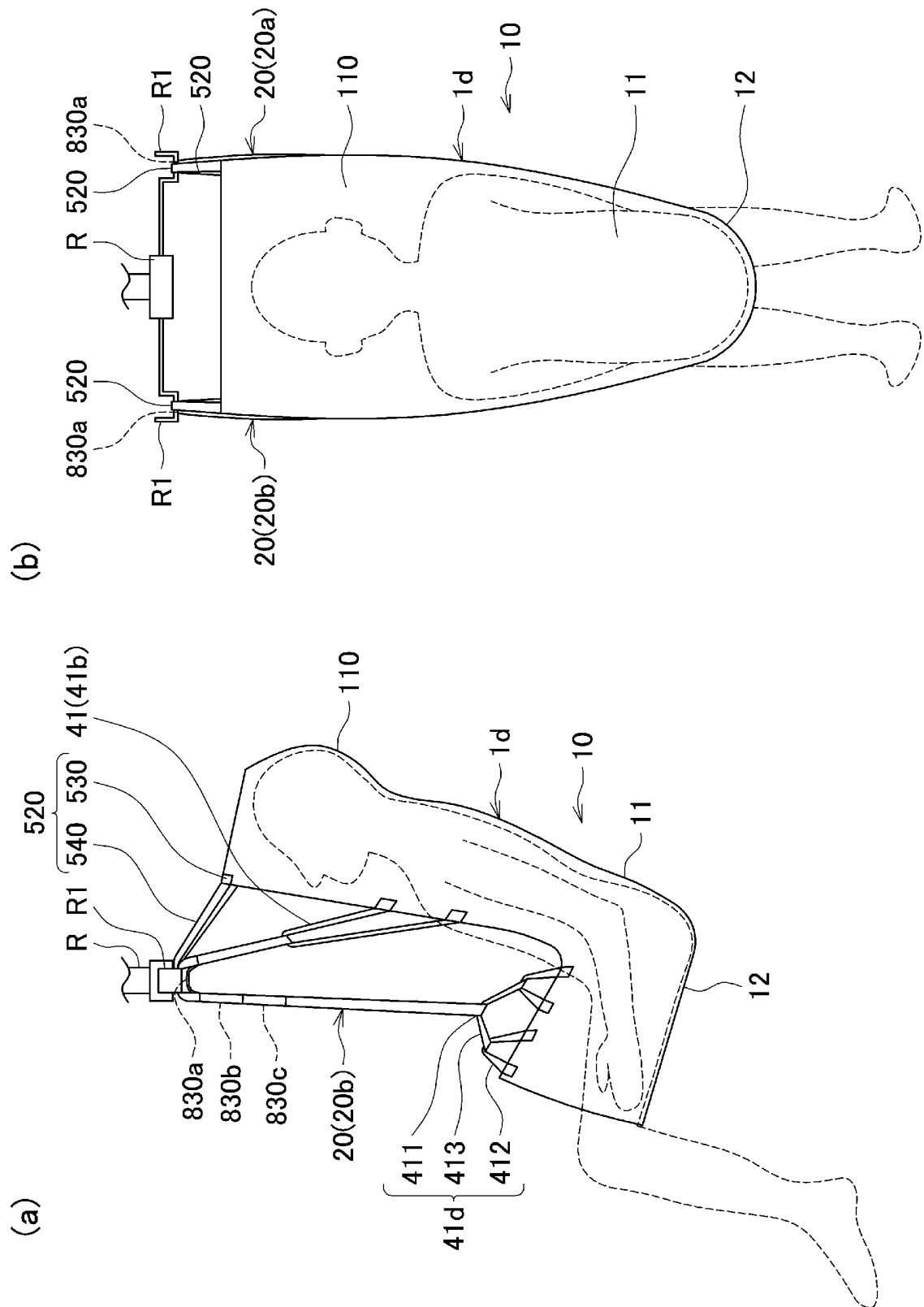


Fig. 22

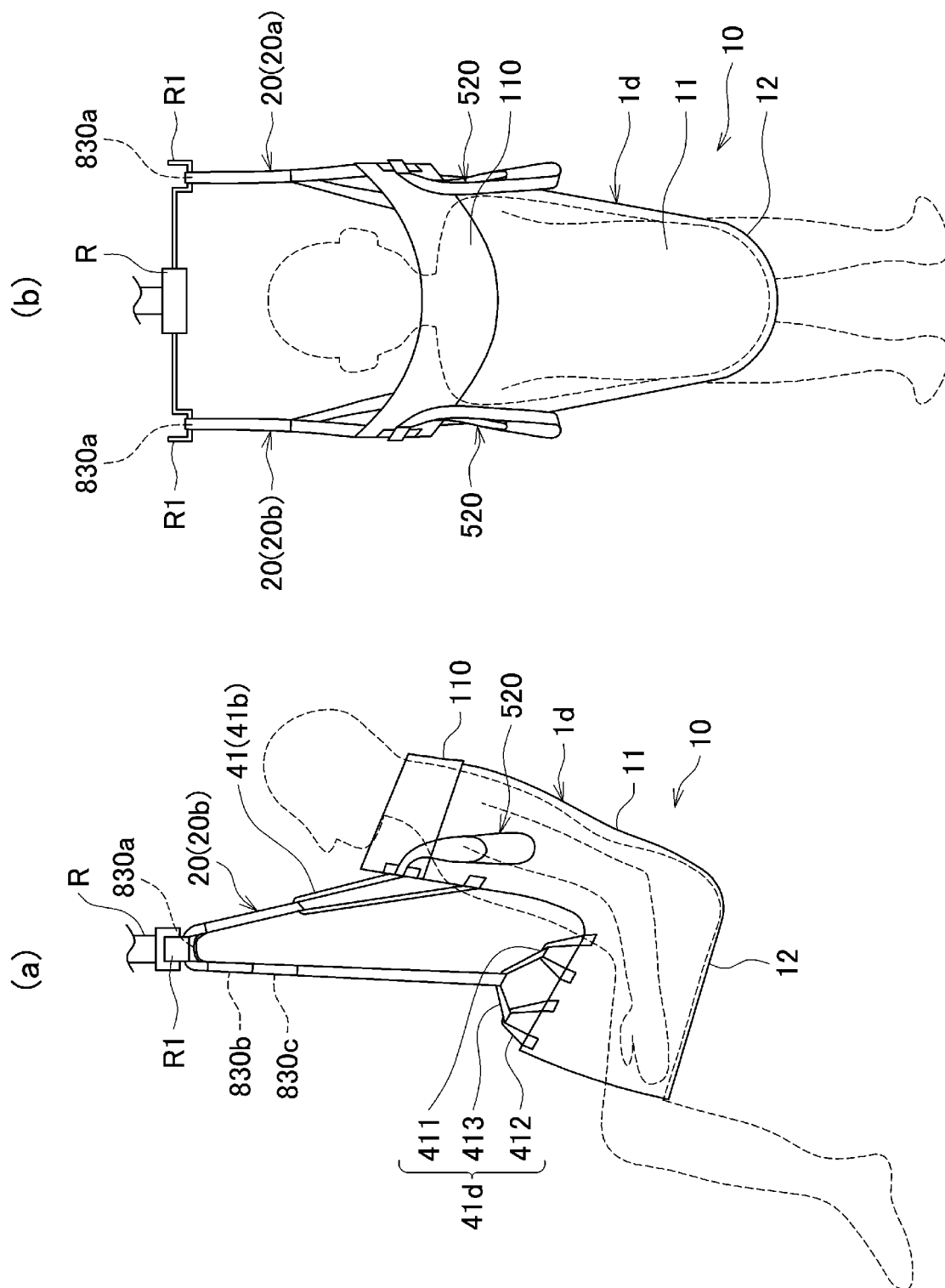


Fig. 23

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2021/031494

A. CLASSIFICATION OF SUBJECT MATTER A61G 1/00 (2006.01)i FI: A61G1/00 702 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) A61G1/00, A61G7/10 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Published examined utility model applications of Japan 1922-1996 Published unexamined utility model applications of Japan 1971-2021 Registered utility model specifications of Japan 1996-2021 Published registered utility model applications of Japan 1994-2021 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)																								
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>JP 10-99385 A (YABE SANGYO KK) 21 April 1998 (1998-04-21) paragraphs [0004]-[0005], fig. 1-7</td> <td>1-2, 4-12, 15-18</td> </tr> <tr> <td>A</td> <td></td> <td>3, 13-14, 19-24</td> </tr> <tr> <td>Y</td> <td>JP 2001-87324 A (MORITOO:KK) 03 April 2001 (2001-04-03) paragraphs [0014]-[0023], fig. 1-5</td> <td>1-2, 4-12, 15-18</td> </tr> <tr> <td>Y</td> <td>JP 2016-17246 A (TAKETORA KK) 01 February 2016 (2016-02-01) paragraphs [0035]-[0067], fig. 1-6</td> <td>4, 18</td> </tr> <tr> <td>Y</td> <td>JP 2005-279184 A (OZAX CORP) 13 October 2005 (2005-10-13) paragraphs [0015]-[0024], fig. 1-4</td> <td>5</td> </tr> <tr> <td>Y</td> <td>JP 2008-36100 A (MORITOO:KK) 21 February 2008 (2008-02-21) paragraphs [0020]-[0030], fig. 1-6</td> <td>6</td> </tr> <tr> <td>Y</td> <td>JP 2015-202121 A (YASKAWA ELECTRIC CORP) 16 November 2015 (2015-11-16) paragraphs [0019], [0036]-[0038], fig. 1-5</td> <td>15-16</td> </tr> </tbody> </table>	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y	JP 10-99385 A (YABE SANGYO KK) 21 April 1998 (1998-04-21) paragraphs [0004]-[0005], fig. 1-7	1-2, 4-12, 15-18	A		3, 13-14, 19-24	Y	JP 2001-87324 A (MORITOO:KK) 03 April 2001 (2001-04-03) paragraphs [0014]-[0023], fig. 1-5	1-2, 4-12, 15-18	Y	JP 2016-17246 A (TAKETORA KK) 01 February 2016 (2016-02-01) paragraphs [0035]-[0067], fig. 1-6	4, 18	Y	JP 2005-279184 A (OZAX CORP) 13 October 2005 (2005-10-13) paragraphs [0015]-[0024], fig. 1-4	5	Y	JP 2008-36100 A (MORITOO:KK) 21 February 2008 (2008-02-21) paragraphs [0020]-[0030], fig. 1-6	6	Y	JP 2015-202121 A (YASKAWA ELECTRIC CORP) 16 November 2015 (2015-11-16) paragraphs [0019], [0036]-[0038], fig. 1-5	15-16
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Y	JP 2015-202121 A (YASKAWA ELECTRIC CORP) 16 November 2015 (2015-11-16) paragraphs [0019], [0036]-[0038], fig. 1-5	15-16																						
☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.																								
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2021/031494

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