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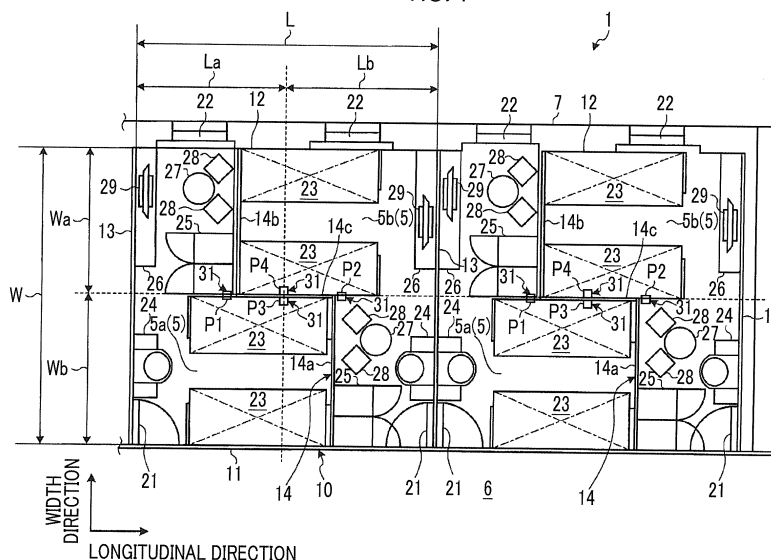
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(54) **CABIN STRUCTURE FOR VESSEL**

(57) Provided is a cabin structure for a vessel (1) including cabin spaces (10) comprising two adjacent cabins (5a, 5b). The cabin spaces (10) are provided with: a passageway-side wall (11) facing a passage-way (6) inside the ship; a hull-side wall (12) situated facing and parallel to the passage-way-side wall (11); two side walls (13) respectively furnished towards the stern side and the bow side of the vessel (1); a longitudinal partition wall

(14c) furnished at a central location extending parallel between the passageway-side wall (11) and the hullside wall (12); and transverse partition walls (14a, 14b) respectively furnished between the longitudinal partition wall (14c) and the passageway-side wall (11), and between the longitudinal partition wall (14c) and the hull-side wall (13). The longitudinal partition wall (14c) is a structural strengthening wall.

FIG. 1



Description

Technical Field

[0001] The present invention relates to a cabin structure for a vessel such as passenger ships.

Background Art

[0002] In the related art, a passenger ship is known which has multiple passenger cabins (for example, refer to PTL 1). The passenger ship is provided with two parallel sidewalls and a partition wall furnished between the two sidewalls and arranged so as to isolate two passenger cabins. The partition wall forms a continuous wall by employing two sections parallel to the sidewalls and a connecting section orthogonal to the sidewalls and connecting the two sections to each other.

Citation List

Patent Literature

[0003] [PTL 1] Japanese Unexamined Patent Application Publication No. 2007-204030

Summary of Invention

Technical Problem

[0004] Incidentally, in a case of a cabin space including two adjacent cabins (passenger cabins), there is a possibility that a structural strengthening member may be furnished in order to improve structural strength for the cabin space. When the structural strengthening member is furnished in the cabin space, it is preferable to arrange the structural strengthening member so as not to impair comfort in the cabin, specifically so as not to interfere with a passenger moving in the cabin. In addition, when the structural strengthening member is furnished in the cabin space, it is preferable to arrange the structural strengthening member so as to maintain an equal load balance in the cabin space.

[0005] Here, the passenger ship disclosed in PTL 1 is not designed in view of furnishing the structural strengthening member inside the cabin space including the two adjacent cabins. That is, if an attempt to furnish the structural strengthening member is made in order to maintain the equal load balance in the cabin space, the structural strengthening member is arranged by disturbing the cabin space, thereby causing a possibility that the comfort in the cabin may be impaired. On the other hand, if the structural strengthening member is furnished without disturbing the cabin space in order to ensure the comfort in the cabin, it becomes difficult to arrange the cabin space so as to maintain the equal load balance. Consequently, there is a possibility that an extra structural strengthening member may be necessarily arranged.

[0006] Therefore, the present invention aims to provide a cabin structure for a vessel which can efficiently and easily arrange a structural strengthening member without impairing comfort in a cabin.

Solution to Problem

[0007] According to the present invention, there is provided a cabin structure for a vessel which includes a cabin space having two adjacent cabins. The cabin space includes a passageway-side wall that faces a passageway inside the vessel, a hull-side wall that faces the passageway-side wall by being furnished in parallel thereto, two sidewalls that are respectively furnished toward a stern side and a bow side of the vessel, a longitudinal partition wall that is furnished at a central location so as to extend parallel between the passageway-side wall and the hull-side wall, and transverse partition walls that are respectively furnished between the longitudinal partition wall and the passageway-side wall, and between the longitudinal partition wall and the hull-side wall. The longitudinal partition wall is a structural strengthening wall.

[0008] According to this configuration, the longitudinal partition wall is furnished in the middle between the passageway-side wall and the hull-side wall. Accordingly, the longitudinal partition wall functions as the structural strengthening wall. In this manner, the structural strengthening wall can support the cabin space so as to maintain an equal load balance in the cabin space while ensuring comfort in the cabin. Therefore, structural strength of the cabin space can be improved. In addition, since the structural strengthening wall is furnished, a structure body is favorably connected to upper and lower decks, thereby enabling vibrations to be suppressed. Furthermore, since the structural strengthening wall is furnished, strength requirements for decks or beams (aggregates) can be eased, and the weight of an upper structure in a vessel can be reduced. Accordingly, the hull weight can be reduced. In this case, if the weight of the upper structure is reduced, the center of gravity is lowered. Therefore, improved stability of the vessel can also be expected. In addition, if the structural strengthening wall is furnished in combination with modular panels, sound insulation is also improved.

[0009] According to the present invention, there is provided another cabin structure for a vessel which includes a cabin space having two adjacent cabins. The cabin space includes a passageway-side wall that faces a passageway inside the vessel, a hull-side wall that faces the passageway-side wall by being furnished in parallel thereto, two sidewalls that are respectively furnished toward a stern side and a bow side of the vessel, a longitudinal partition wall that is furnished at a central location so as to extend parallel between the passageway-side wall and the hull-side wall, transverse partition walls that are respectively furnished between the longitudinal partition wall and the passageway-side wall, and between the longitudinal partition wall and the hull-side wall, and

a post member that is furnished along the longitudinal partition wall. The post member is a structural strengthening wall.

[0010] According to this configuration, the longitudinal partition wall is furnished in the middle between the passageway-side wall and the hull-side wall. Then, the post member functioning as the structural strengthening wall is furnished along the longitudinal partition wall. In this manner, the structural strengthening wall can support the cabin space so as to maintain an equal load balance in the cabin space while ensuring comfort in the cabin. Therefore, structural strength of the cabin space can be improved. In addition, since the post member is furnished, a structure body is favorably connected to upper and lower decks, thereby enabling vibrations to be suppressed. Furthermore, since the post member is furnished, strength requirements for decks or beams (aggregates) can be eased, and the weight of an upper structure in a vessel can be reduced. Accordingly, the hull weight can be reduced. In this case, if the weight of the upper structure is reduced, the center of gravity is lowered. Therefore, improved stability of the vessel can also be expected.

[0011] In addition, preferably, the cabin space further includes a sliding door that is furnished on the longitudinal partition wall in order to allow access to the two cabins.

[0012] According to this configuration, since the sliding door is furnished, two cabins can be used as a single larger cabin. Therefore, it is possible to improve versatility of the cabin space.

[0013] In addition, preferably, the cabin space further includes two prefabricated baths that are respectively furnished for the two cabins, and the two prefabricated baths are furnished adjacent to each other, and are configured to include a single module.

[0014] According to this configuration, the two prefabricated baths can be configured to include the single module. Therefore, costs required for the prefabricated bath can be suppressed. In addition, it is possible to simplify installation work for the prefabricated bath.

Brief Description of Drawings

[0015]

Fig. 1 is a plan view illustrating a cabin structure for a vessel according to Embodiment 1.

Fig. 2 is a plan view illustrating a cabin structure for a vessel according to Embodiment 2.

Fig. 3 is a plan view illustrating a cabin structure for a vessel according to Embodiment 3.

Fig. 4 is a plan view illustrating a cabin structure for a vessel according to Embodiment 4.

Fig. 5 is a plan view illustrating a cabin structure for a vessel according to Embodiment 5.

Fig. 6 is a plan view illustrating a cabin structure for a vessel according to Embodiment 6.

Description of Embodiments

[0016] Hereinafter, embodiments according to the present invention will be described in detail with reference to the drawings. The present invention is not limited to the embodiments. In addition, configuration elements in the following embodiments include those which can be easily replaced by those skilled in the art, or those which are substantially identical.

Embodiment 1

[0017] Fig. 1 is a plan view illustrating a cabin structure for a vessel according to Embodiment 1. The cabin structure for a vessel 1 according to Embodiment 1 has been applied to vessels for carrying passengers, such as cargo ships, passenger ships, or research ships. Here, the vessel 1 has multiple cabins 5 arranged therein, and a passageway 6 is disposed adjacent to the respective cabins 5.

[0018] As illustrated in Fig. 1, the passageway 6 furnished inside the vessel is furnished so as to extend along a longitudinal direction of the vessel 1. The multiple cabins 5 are furnished between the passageway 6 and an outer plate 7 of the vessel 1, and are arrayed side by side in the longitudinal direction of the vessel 1. According to Embodiment 1, the multiple cabins 5 are furnished between the passageway 6 and the outer plate 7. However, when the passageway 6 is furnished side by side at multiple locations in a width direction of the vessel 1, the multiple cabins 5 may be furnished between the passageway 6 and the passageway 6. In addition, the outer plate 7 is configured to function as a strengthening member.

[0019] In the multiple cabins 5 furnished inside the vessel, two adjacent cabins 5a and 5b form a cabin space 10. The cabin space 10 has a rectangular shape in a plan view. In the cabin space 10 having the rectangular shape, four sides thereof are surrounded with a passageway-side wall 11 furnished on the passageway 6 side, an outer plate-side wall (hull-side wall) 12 furnished on the outer plate 7 side, and a pair of sidewalls (two sidewalls) 13. In addition, the cabin space 10 internally includes a partition wall 14 which partitions the cabin space 10 into two cabins 5.

[0020] The passageway-side wall 11 is furnished so as to extend in the longitudinal direction of the vessel 1, and has entrance/exit doors 21 respectively furnished in order to allow access to the two cabins 5. The outer plate-side wall 12 is furnished so as to extend in the longitudinal direction of the vessel 1. The outer plate-side wall 12 is furnished so as to face the passageway-side wall 11, and is furnished parallel to the passageway-side wall 11. The outer plate-side wall 12 has a lighting window 22 through which external light is transmitted to the cabin space 10. The lighting windows 22 are furnished at a predetermined interval in the longitudinal direction of the vessel 1. However, the lighting windows 22 are properly arranged without being furnished so as to necessarily correspond to

the multiple cabins 5.

[0021] The pair of sidewalls 13 are furnished so as to extend in the width direction of the vessel 1, and are arranged parallel to each other at a predetermined interval in the longitudinal direction of the vessel 1. The respective sidewalls 13 are furnished so as to be orthogonal to the passageway-side wall 11 and the outer plate-side wall 12. An end portion on the passageway 6 side is connected to the passageway-side wall 11, and an end portion on the outer plate 7 side is connected to the outer plate-side wall 12.

[0022] The partition wall 14 is furnished between the passageway-side wall 11 and the outer plate-side wall 12. The partition wall 14 has a transverse partition wall 14a on the passageway 6 side, a transverse partition wall 14b on the outer plate 7 side, and a longitudinal partition wall 14c which connects the transverse partition wall 14a and the transverse partition wall 14b to each other.

[0023] The longitudinal partition wall 14c is furnished so as to extend in the longitudinal direction of the vessel 1, and is furnished parallel to the passageway-side wall 11 and the outer plate-side wall 12. The center of the longitudinal partition wall 14c in the longitudinal direction of the vessel 1 is located at the center of a length L in the longitudinal direction between the pair of sidewalls 13. Therefore, a length La in the longitudinal direction between the center of the longitudinal partition wall 14c in the longitudinal direction and one (left side in the illustration) of the sidewalls 13 is the same as a length Lb in the longitudinal direction between the center of the longitudinal partition wall 14c in the longitudinal direction and the other one (right side in the illustration) of the sidewalls 13.

[0024] In addition, the longitudinal partition wall 14c is furnished at the center in the width direction of the vessel 1, which is a direction in which the passageway-side wall 11 and the outer plate-side wall 12 face each other. Therefore, the longitudinal partition wall 14c equally partitions a length W in the width direction between an inner surface of the passageway-side wall 11 and an inner surface of the outer plate-side wall 12. In other words, a length Wb in the width direction between the inner surface of the passageway-side wall 11 and the center of the longitudinal partition wall 14c is the same as a length Wa in the width direction between the inner surface of the outer plate-side wall 12 and the center of the longitudinal partition wall 14c.

[0025] The transverse partition wall 14a on the passageway 6 side is furnished so as to extend in the width direction of the vessel 1, and is furnished parallel to the pair of sidewalls 13. In the transverse partition wall 14a, an end portion on the passageway 6 side is connected to the passageway-side wall 11, and an end portion on the outer plate 7 side is connected to the other end portion (right side in the illustration) of the longitudinal partition wall 14c.

[0026] The transverse partition wall 14b on the outer plate 7 side is furnished so as to extend in the width di-

rection of the vessel 1, and is furnished parallel to the pair of sidewalls 13. In the transverse partition wall 14b, an end portion on the outer plate 7 side is connected to the outer plate-side wall 12, and an end portion on the passageway 6 side is connected to one end portion (left side in the illustration) of the longitudinal partition wall 14c.

[0027] Then, in the transverse partition wall 14a on the passageway 6 side and the transverse partition wall 14b on the outer plate 7 side, the longitudinal partition wall 14c is furnished at the center in the width direction. Accordingly, respective lengths of the transverse partition walls 14a and 14b in the width direction are the same as each other.

[0028] The cabin space 10 partitioned by this partition wall 14 is arranged in a state where the two cabins 5a and 5b are offset against each other (overlap each other). The two cabins 5a and 5b are mutually in a point symmetry arrangement at 180 degrees. The two cabins 5a and 5b are configured so that cabin areas thereof are equal to each other. Between the two cabins 5a and 5b, one cabin 5a (left side in the illustration) is configured so that a larger area is formed on the passageway 6 side and a smaller area is formed on the outer plate 7 side. In addition, between the two cabins 5a and 5b, the other cabin 5b (right side in the illustration) is configured so that a smaller area is formed on the passageway 6 side and a larger area is formed on the outer plate 7 side.

[0029] In each of the cabins 5a and 5b, household items such as two bunk beds 23, a wash basin 24, a wardrobe 25, an air-conditioning ventilation port 26, a table 27, chairs 28, and a television set 29 are properly arranged.

[0030] Specifically, in the cabin 5a on the left side in the illustration, the two bunk beds 23 and the wash basin 24 are arranged in the larger area on the passageway 6 side. The two bunk beds 23 are arranged close to the transverse partition wall 14a, and are arranged so that the longitudinal direction thereof becomes the longitudinal direction of the vessel 1. Then, the two bunk beds 23 are arranged side by side at a predetermined interval in the width direction of the vessel 1. One of the two bunk beds 23 is arranged close to the longitudinal partition wall 14c, and the other one of the two bunk beds 23 is arranged close to the passageway-side wall 11. The wash basin 24 is arranged close to the sidewall 13 on the left side in the illustration. In addition, in the cabin 5a on the left side in the illustration, the wardrobe 25, the air-conditioning ventilation port 26, the table 27, the chairs 28, and the television set 29 are arranged in the smaller area on the outer plate 7 side. The wardrobe 25 is arranged close to the transverse partition wall 14b, and is arranged on the passageway 6 side. The air-conditioning ventilation port 26 is arranged close to the sidewall 13 on the left side in the illustration, and is arranged on the outer plate 7 side. The table 27 and the chairs 28 are arranged close to the transverse partition wall 14b, and are arranged on the outer plate 7 side. The television set 29 is

arranged above the air-conditioning ventilation port 26.

[0031] On the other hand, in the cabin 5b on the right side in the illustration, the two bunk beds 23, the air-conditioning ventilation port 26, and the television set 29 are arranged in the larger area on the outer plate 7 side. The two bunk beds 23 are arranged close to the transverse partition wall 14b, and are arranged so that the longitudinal direction thereof becomes the longitudinal direction of the vessel 1. Then, the two bunk beds 23 are arranged side by side at a predetermined interval in the width direction of the vessel 1. One of the two bunk beds 23 is arranged close to the longitudinal partition wall 14c, and the other one of the two bunk beds 23 is arranged close to the outer plate-side wall 12. The air-conditioning ventilation port 26 is arranged close to the sidewall 13 on the right side in the illustration, and is arranged on the outer plate 7 side. The television set 29 is arranged above the air-conditioning ventilation port 26. In addition, in the cabin 5b on the right side in the illustration, the wash basin 24, the wardrobe 25, the table 27, and the chairs 28 are arranged in the smaller area on the passageway 6 side. The wash basin 24 is arranged close to the side-wall 13 on the right side in the illustration. The wardrobe 25 is arranged close to the transverse partition wall 14a, and is arranged on the passageway 6 side. The table 27 and the chairs 28 are arranged close to the transverse partition wall 14a, and are arranged on the outer plate 7 side.

[0032] Here, in the cabin space 10, a pillar (post member) 31 is furnished along the longitudinal partition wall 14c of the partition wall 14. The pillar 31 is a columnar structural strengthening member which supports a load of an upper structure such as an upper deck. The pillar 31 may be arranged at one or more locations. For example, the pillar 31 is properly arranged at the following arrangement positions. The pillar 31 is properly arranged at an arrangement position P1 adjacent to one end portion (left side in the illustration) of the longitudinal partition wall 14c in the longitudinal direction, at an arrangement position P2 adjacent to the other end portion (right side in the illustration) of the longitudinal partition wall 14c in the longitudinal direction, at an arrangement position P3 adjacent to the passageway 6 side of the center of the longitudinal partition wall 14c in the longitudinal direction, and at an arrangement position P4 adjacent to the outer plate 7 side of the center of the longitudinal partition wall 14c in the longitudinal direction.

[0033] As described above, according to Embodiment 1, the longitudinal partition wall 14c is furnished in the middle (at the center in the width direction) between the passageway-side wall 11 and the outer plate-side wall 12. Accordingly, when the post member such as the pillar 31 is furnished for the cabin space 10, the pillar 31 is arranged so as to extend along the longitudinal partition wall 14c. In this manner, the pillar 31 can support the cabin space 10 so as to maintain an equal load balance in the cabin space 10 while ensuring comfort in the cabins 5a and 5b. Therefore, structural strength of the cabin

space 10 can be improved. In addition, since the pillar 31 is furnished, a structure body is favorably connected to upper and lower decks, thereby enabling vibrations to be suppressed. Furthermore, since the pillar 31 is furnished, strength requirements for decks or beams (aggregates) can be eased, and the weight of an upper structure in the vessel can be reduced. Accordingly, the hull weight can be reduced. In this case, if the weight of the upper structure is reduced, the center of gravity is lowered. Therefore, improved stability of the vessel can also be expected. The arrangement position for the pillar 31 is not particularly limited to the above-described arrangement positions P1 to P4 as long as the pillar 31 can be furnished so as to extend along the longitudinal partition wall 14c.

[0034] According to Embodiment 1, the pillar 31 is furnished as the post member. However, a configuration may be adopted in which the longitudinal partition wall 14c functions as a structural strengthening wall by omitting the pillar 31. According to this configuration, the longitudinal partition wall 14c itself can function as a structural strengthening member. Therefore, the structural strength of the cabin space 10 can be improved without impairing comfort in the cabins 5a and 5b. In addition, if the structural strengthening wall is furnished in combination with modular panels, sound insulation is also improved.

[0035] In addition, Embodiment 1 employs the bunk bed. However, a single stage-type bed may be employed without any particular limitation.

Embodiment 2

[0036] Next, a cabin structure for the vessel 1 according to Embodiment 2 will be described with reference to Fig. 2. Fig. 2 is a plan view illustrating the cabin structure of the vessel according to Embodiment 2. In Embodiment 2, in order to avoid repeated description compared to Embodiment 1, only elements different from those in Embodiment 1 will be described. The same reference numerals are given to configuration elements which are the same as those in Embodiment 1.

[0037] In the respective cabins 5a and 5b furnished for the cabin space 10 according to Embodiment 2, a prefabricated bath 35 and a night table 36 are furnished in addition to the household items furnished for the respective cabins 5a and 5b according to Embodiment 1. Similarly to Embodiment 1, in the two adjacent cabins 5a and 5b, the cabin space 10 is partitioned by the partition wall 14 including the transverse partition wall 14a on the passageway 6 side, the transverse partition wall 14b on the outer plate 7 side, and the longitudinal partition wall 14c. Therefore, since the partition wall 14 has the same configuration as that according to Embodiment 1, description thereof will be omitted.

[0038] In the respective cabins 5a and 5b, household items such as the two beds 23, the wash basin 24, the wardrobe 25, the air-conditioning ventilation port 26, the

table 27, the chairs 28, the television set 29, the prefabricated bath 35, and the night table 36 are properly arranged.

[0039] Specifically, in the cabin 5a on the left side in the illustration, the prefabricated bath 35 is arranged in a smaller area on the passageway 6 side. The prefabricated bath 35 is arranged close to the sidewall 13 on the right side in the illustration, and is arranged so that the longitudinal direction thereof becomes the width direction of the vessel 1. In addition, in the cabin 5a on the left side in the illustration, the two beds 23, the wash basin 24, the wardrobe 25, the air-conditioning ventilation port 26, the table 27, the chairs 28, the television set 29, and the night table 36 are arranged in a larger area on the outer plate 7 side. The two beds 23 are arranged close to the transverse partition wall 14b, and are arranged so that the longitudinal direction thereof becomes the longitudinal direction of the vessel 1. Then, the two beds 23 are arranged side by side at a predetermined interval in the width direction of the vessel 1. One of the beds 23 is arranged close to the outer plate-side wall 12, and the other one of the beds 23 is arranged on the passageway 6 side by interposing the night table 36 between the two beds 23. The wash basin 24 is arranged close to the sidewall 13 on the left side in the illustration, and is arranged adjacent to the prefabricated bath 36. The wardrobe 25 is arranged close to the sidewall 13 on the left side in the illustration, and is arranged close to the outer plate-side wall 12. The air-conditioning ventilation port 26 is arranged close to the sidewall 13 on the left side in the illustration, and is arranged adjacent to the wardrobe 25. The table 27 and the chairs 28 are arranged between the wardrobe 25 and one of the beds 23. The television set 29 is arranged above the air-conditioning ventilation port 26.

[0040] On the other hand, in the cabin 5b on the right side in the illustration, the two beds 23, the prefabricated bath 35, and the night table 36 are arranged in a larger area on the passageway 6 side. The two beds 23 are arranged close to the transverse partition wall 14a, and are arranged so that the longitudinal direction thereof becomes the longitudinal direction of the vessel 1. Then, the two beds 23 are arranged side by side at a predetermined interval in the width direction of the vessel 1. One of the beds 23 is arranged close to the longitudinal partition wall 14c, and the other one of the beds 23 is arranged on the passageway 6 side by interposing the night table 36 between the two beds 23. The prefabricated bath 35 is arranged close to the sidewall 13 on the left side in the illustration, and is arranged so that the longitudinal direction thereof becomes the width direction of the vessel 1. In addition, in the cabin 5b on the right side in the illustration, the wash basin 24, the wardrobe 25, the air-conditioning ventilation port 26, the table 27, the chairs 28, and the television set 29 are arranged in a smaller area on the outer plate 7 side. The wash basin 24 is arranged close to the sidewall 13 on the right side in the illustration, and is arranged adjacent to the prefab-

ricated bath 36. The wardrobe 25 is arranged close to the sidewall 13 on the right side in the illustration, and is arranged close to the outer plate 7 side. The air-conditioning ventilation port 26 is arranged close to the sidewall 13 on the left side in the illustration, and is arranged adjacent to the wardrobe 25. The table 27 and the chairs 28 are arranged close to the transverse partition wall 14b, and are arranged on the outer plate 7 side. The television set 29 is arranged above the air-conditioning ventilation port 26.

[0041] In addition, in the cabin space 10, similarly to Embodiment 1, the pillar 31 is furnished along the longitudinal partition wall 14c of the partition wall 14. Since the arrangement of the pillar 31 is the same as that according to Embodiment 1, description thereof will be omitted.

[0042] As described above, according to Embodiment 2, even when the prefabricated bath 35 is furnished, the longitudinal partition wall 14c can be furnished in the middle (at the center in the width direction) between the passageway-side wall 11 and the outer plate-side wall 12. Therefore, similar to Embodiment 1, when a post member such as the pillar 31 is furnished for the cabin space 10, the pillar 31 is arranged along the longitudinal partition wall 14c. In this manner, the pillar 31 can support the cabin space 10 so as to maintain an equal load balance in the cabin space 10 while ensuring comfort in the cabins 5a and 5b. Therefore, structural strength of the cabin space 10 can be improved.

Embodiment 3

[0043] Next, a cabin structure for the vessel 1 according to Embodiment 3 will be described with reference to Fig. 3. Fig. 3 is a plan view illustrating the cabin structure of the vessel according to Embodiment 3. In Embodiment 3, in order to avoid repeated description compared to Embodiment 2, only elements different from those in Embodiment 2 will be described. The same reference numerals are given to configuration elements which are the same as those in Embodiment 2.

[0044] In the cabin space 10 according to Embodiment 3, a sliding door 41 is furnished on the longitudinal partition wall 14c of the partition wall 14 according to Embodiment 2. The sliding door 41 functions as a door which allows access to the two cabins 5a and 5b furnished in the cabin space 10. When the sliding door 41 is furnished on the longitudinal partition wall 14c, it is preferable to arrange the two beds 23 arranged in the cabin 5b on the right side in the illustration so as to be close to the passageway-side wall 11.

[0045] As described above, according to Embodiment 3, since the sliding door 41 is furnished, the two cabins 5a and 5b can be used as a single larger cabin. Therefore, it is possible to improve versatility of the cabin space 10.

Embodiment 4

[0046] Next, a cabin structure for the vessel 1 according to Embodiment 4 will be described with reference to Fig. 4. Fig. 4 is a plan view illustrating the cabin structure of the vessel according to Embodiment 4. In Embodiment 4, in order to avoid repeated description compared to Embodiments 1 to 3, only elements different from those in Embodiments 1 to 3 will be described. The same reference numerals are given to configuration elements which are the same as those in Embodiments 1 to 3.

[0047] According to Embodiment 4, the two adjacent cabins 5a and 5b furnished for the cabin space 10 are partitioned by a partition wall 51. In addition, the two prefabricated baths 35 furnished for the respective cabins 5a and 5b are furnished adjacent to each other, and are configured to include a single prefabricated bath module 52.

[0048] The prefabricated bath module 52 is arranged close to the passageway-side wall 11, and is arranged at the center in the longitudinal direction of the vessel 1.

[0049] The partition wall 51 which partitions the cabin space 10 is furnished between the prefabricated bath module 52 and the outer plate-side wall 12. The partition wall 51 has a transverse partition wall 51a on the prefabricated bath module 52 side, a transverse partition wall 51b on the outer plate 7 side, a transverse partition wall 51c between the transverse partition wall 51a and the transverse partition wall 51b, a longitudinal partition wall 51d which connects the transverse partition wall 51a and the transverse partition wall 51c to each other, and a longitudinal partition wall 51e which connects the transverse partition wall 51b and the transverse partition wall 51c to each other.

[0050] Similarly to the longitudinal partition wall 14c according to Embodiment 1, the longitudinal partition wall 51d is furnished so as to extend in the longitudinal direction of the vessel 1, and is furnished parallel to the passageway-side wall 11 and the outer plate-side wall 12. In the longitudinal partition wall 51d, the center in the longitudinal direction of the vessel 1 is located at the center of a length L in the longitudinal direction between the pair of sidewalls 13. Therefore, a length La in the longitudinal direction between the center of the longitudinal partition wall 51d in the longitudinal direction and one (left side in the illustration) of the sidewalls 13 is the same as a length Lb in the longitudinal direction between the center of the longitudinal partition wall 51d in the longitudinal direction and the other one (right side in the illustration) of the sidewalls 13.

[0051] In addition, the longitudinal partition wall 51d is furnished at the center in the width direction of the vessel 1, which is a direction in which the passageway-side wall 11 and the outer plate-side wall 12 face each other. Therefore, the longitudinal partition wall 51d equally partitions a length W in the width direction between an inner surface of the passageway-side wall 11 and an inner surface of the outer plate-side wall 12. In other words, a

length Wb in the width direction between the inner surface of the passageway-side wall 11 and the center of the longitudinal partition wall 51d is the same as a length Wa in the width direction between the inner surface of the outer plate-side wall 12 and the center of the longitudinal partition wall 51d.

[0052] The transverse partition wall 51a on the passageway 6 side is furnished so as to extend in the width direction of the vessel 1, and is furnished parallel to the pair of sidewalls 13. In the transverse partition wall 51a, an end portion on the passageway 6 side is connected to the prefabricated bath module 52, and an end portion on the outer plate 7 side is connected to the other end portion (right side in the illustration) of the longitudinal partition wall 51d.

[0053] The transverse partition wall 51b on the outer plate 7 side is furnished so as to extend in the width direction of the vessel 1, and is furnished parallel to the pair of sidewalls 13. The transverse partition wall 51b is arranged at the center in the longitudinal direction of the vessel 1. In the transverse partition wall 51b, an end portion on the outer plate 7 side is connected to the outer plate-side wall 12, and an end portion on the passageway 6 side is connected to the other end portion (right side in the illustration) of the longitudinal partition wall 51e.

[0054] The transverse partition wall 51c which connects the transverse partition wall 51a and the transverse partition wall 51b to each other is furnished so as to extend in the width direction of the vessel 1, and is furnished parallel to the pair of sidewalls 13. In the transverse partition wall 51c, an end portion on the passageway 6 side is connected to one end portion (left side in the illustration) of the longitudinal partition wall 51d, and an end portion on outer plate 7 side is connected to one end portion (left side in the illustration) of the longitudinal partition wall 51e.

[0055] The longitudinal partition wall 51e which connects the transverse partition wall 51b and the transverse partition wall 51c to each other is furnished so as to extend in the longitudinal direction of the vessel 1, and is furnished parallel to the passageway-side wall 11 and the outer plate-side wall 12. In the longitudinal partition wall 51e, one end portion (left side in the illustration) is connected to an end portion on the outer plate 7 side of the transverse partition wall 51c, and the other end portion (right side in the illustration) is connected to an end portion on the passageway 6 side of the transverse partition wall 51b.

[0056] In the cabin space 10 partitioned by this partition wall 51, the two cabins 5a and 5b are arranged in a state of being partially offset against (overlapping) each other. The two cabins 5a and 5b are configured so that cabin areas thereof are equal to each other. In the respective cabins 5a and 5b, the prefabricated bath 35 configured to include the above-described prefabricated bath module 52 is arranged in addition to the household items such as the two bunk beds 23, the wash basin 24, the wardrobe 25, the air-conditioning ventilation port 26, the table 27,

the chairs 28, and the television set 29.

[0057] In addition, in the cabin space 10, similarly to Embodiment 1, the pillar 31 is furnished along the longitudinal partition wall 51d of the partition wall 51. Since the arrangement of the pillar 31 is the same as that according to Embodiment 1, description thereof will be omitted.

[0058] As described above, according to Embodiment 4, even when the prefabricated bath module 52 is furnished, the longitudinal partition wall 14c can be furnished in the middle (at the center in the width direction) between the passageway-side wall 11 and the outer plate-side wall 12. Therefore, similar to Embodiment 1, when a post member such as the pillar 31 is furnished for the cabin space 10, the pillar 31 is arranged along the longitudinal partition wall 14c. In this manner, the pillar 31 can support the cabin space 10 so as to maintain an equal load balance in the cabin space 10 while ensuring comfort in the cabins 5a and 5b. Therefore, structural strength of the cabin space 10 can be improved.

[0059] In addition, according to Embodiment 4, the two prefabricated baths 35 can be configured to include the single module 52. Therefore, costs required for the prefabricated bath 35 can be suppressed. In addition, it is possible to simplify installation work for the prefabricated bath 35.

Embodiment 5

[0060] Next, a cabin structure for the vessel 1 according to Embodiment 5 will be described with reference to Fig. 5. Fig. 5 is a plan view illustrating the cabin structure of the vessel according to Embodiment 5. In Embodiment 5, in order to avoid repeated description compared to Embodiments 1 to 4, only elements different from those in Embodiments 1 to 4 will be described. The same reference numerals are given to configuration elements which are the same as those in Embodiments 1 to 4.

[0061] According to Embodiment 5, a veranda 61 is furnished outside on the outer plate 7 side of the cabin space 10. That is, the cabin space 10 and the veranda 61 are differently partitioned. The veranda 61 is partitioned into two verandas 61a and 61b corresponding to the two cabins 5a and 5b by a veranda partition wall 62. The veranda partition wall 62 is furnished so as to extend in the width direction of the vessel 1. The veranda partition wall 62 is located at the center of a length L in the longitudinal direction between the pair of sidewalls 13.

[0062] Similarly to Embodiment 2, the two adjacent cabins 5a and 5b furnished for the cabin space 10 are partitioned by the partition wall 14 including the transverse partition wall 14a on the passageway 6 side, the transverse partition wall 14b on the outer plate 7 side, and the longitudinal partition wall 14c. Therefore, since the partition wall 14 has the same configuration as that according to Embodiment 2, description thereof will be omitted.

[0063] The two cabins 5a and 5b are configured so that

cabin areas thereof are equal to each other. In the respective cabins 5a and 5b, the household items such as the two beds 23, the wardrobe 25, the air-conditioning ventilation port 26, the table 27, the chairs (sofas) 28, the television set 29, and the prefabricated bath 35 are arranged.

[0064] In addition, in the cabin space 10, similarly to Embodiment 1, the pillar 31 is furnished along the longitudinal partition wall 14c of the partition wall 14. Since the arrangement of the pillar 31 is the same as that according to Embodiment 1, description thereof will be omitted.

[0065] As described above, according to Embodiment 5, even when the veranda 61 is furnished outside the cabin space 10, the longitudinal partition wall 14c can be furnished in the middle (at the center in the width direction) between the passageway-side wall 11 and the outer plate-side wall 12. Therefore, similar to Embodiment 1, when a post member such as the pillar 31 is furnished for the cabin space 10, the pillar 31 is arranged along the longitudinal partition wall 14c. In this manner, the pillar 31 can support the cabin space 10 so as to maintain an equal load balance in the cabin space 10 while ensuring comfort in the cabins 5a and 5b. Therefore, structural strength of the cabin space 10 can be improved.

Embodiment 6

[0066] Next, a cabin structure for the vessel 1 according to Embodiment 6 will be described with reference to Fig. 6. Fig. 6 is a plan view illustrating the cabin structure of the vessel according to Embodiment 6. In Embodiment 6, in order to avoid repeated description compared to Embodiments 1 to 5, only elements different from those in Embodiments 1 to 5 will be described. The same reference numerals are given to configuration elements which are the same as those in Embodiments 1 to 5.

[0067] According to Embodiment 6, the veranda 61 is furnished inside on the outer plate 7 side of the cabin space 10. That is, the veranda 61 is furnished inside the cabin space 10. The veranda 61 is partitioned into two verandas 61a and 61b corresponding to the two cabins 5a and 5b by the veranda partition wall 62. In addition, the two cabins 5a and 5b and the two verandas 61a and 61b are partitioned by an interior/exterior partition wall 63.

[0068] The veranda partition wall 62 is furnished so as to extend in the width direction of the vessel 1. The veranda partition wall 62 is located at the center in a length L in the longitudinal direction between the pair of sidewalls 13. The interior/exterior partition wall 63 is furnished so as to extend in the longitudinal direction of the vessel 1, and both ends thereof are respectively connected to the pair of sidewalls 13.

[0069] In addition, the two prefabricated baths 35 furnished for the respective cabins 5a and 5b are furnished adjacent to each other, and are configured to include the single prefabricated bath module 52. The prefabricated bath module 52 is arranged close to the passageway-

side wall 11, and is arranged at the center in the longitudinal direction of the vessel 1.

[0070] Similarly to Embodiment 1, the cabin space 10 has a rectangular shape in a plan view. Four sides of the cabin space 10 are surrounded with the passageway-side wall 11 furnished on the passageway 6 side, the outer plate-side wall (hull-side wall) 12 furnished on the outer plate 7 side, and the pair of sidewalls (two sidewalls) 13. In this case, an external opening (not illustrated) through which the outside of the vessel and the veranda 61 communicate with each other is formed on the outer plate-side wall 12.

[0071] A partition wall 71 which partitions the cabin space 10 is furnished between the prefabricated bath module 52 and the outer plate-side wall 12. The partition wall 71 has a transverse partition wall 71a on the prefabricated bath module 52 side, the veranda partition wall 62 on the outer plate 7 side, a transverse partition wall 71c between the transverse partition wall 71a and the veranda partition wall 62, the longitudinal partition wall 51d which connects the transverse partition wall 51a and the transverse partition wall 51c to each other, and the interior/exterior partition wall 63 which connects the veranda partition wall 62 and the transverse partition wall 51c to each other.

[0072] The longitudinal partition wall 71d is the same as the longitudinal partition wall 51d according to Embodiment 4, the transverse partition wall 71a on the passageway 6 side is the same as the transverse partition wall 51a according to Embodiment 4, and the transverse partition wall 71c is the same as the transverse partition wall 51c according to Embodiment 4. Accordingly, description thereof will be omitted.

[0073] In addition, the veranda partition wall 62 is the same as the transverse partition wall 51b according to Embodiment 4. An end portion thereof on the outer plate 7 side is connected to the outer plate-side wall 12, and an end portion thereof on the passageway 6 side is connected to the interior/exterior partition wall 63. Furthermore, the interior/exterior partition wall 63 is substantially the same as the longitudinal partition wall 51e according to Embodiment 4. One end portion (left side in the illustration) is connected to one of the sidewalls 13, and the other end portion (right side in the illustration) is connected to the other one of the sidewalls 13.

[0074] The two cabins 5a and 5b are configured so that cabin areas thereof are equal to each other. Similarly to Embodiment 5, in the respective cabins 5a and 5b, the household items such as the beds 23, the wardrobe 25, the air-conditioning ventilation port 26, the table 27, the chairs (sofas) 28, the television set 29, and the prefabricated bath 35 are arranged.

[0075] In addition, in the cabin space 10, similarly to Embodiment 1, the pillar 31 is furnished along the longitudinal partition wall 71d of the partition wall 71. Since the arrangement of the pillar 31 is the same as that according to Embodiment 1, description thereof will be omitted.

[0076] As described above, according to Embodiment 6, even when the veranda 61 is furnished inside the cabin space 10, the longitudinal partition wall 71d can be furnished in the middle (at the center in the width direction) between the passageway-side wall 11 and the outer plate-side wall 12. Therefore, similar to Embodiment 1, when a post member such as the pillar 31 is furnished for the cabin space 10, the pillar 31 is arranged along the longitudinal partition wall 71d. In this manner, the pillar 31 can support the cabin space 10 so as to maintain an equal load balance in the cabin space 10 while ensuring comfort in the cabins 5a and 5b. Therefore, structural strength of the cabin space 10 can be improved.

[0077] Embodiments 2 to 6 employ the prefabricated bath 35, but may employ a shower bathing unit without any particular limitation.

Reference Signs List

[0078]

1	VESSEL
5	CABIN
6	PASSAGEWAY
7	OUTER PLATE
10	CABIN SPACE
11	PASSAGEWAY-SIDE WALL
12	OUTER PLATE-SIDE WALL (HULL-SIDE WALL)
13	SIDEWALL
14	PARTITION WALL
14a	TRANSVERSE PARTITION WALL
14b	TRANSVERSE PARTITION WALL
14c	LONGITUDINAL PARTITION WALL
31	PILLAR
35	PREFABRICATED BATH
36	NIGHT TABLE
41	SLIDING DOOR
51	PARTITION WALL
51a	TRANSVERSE PARTITION WALL
51b	TRANSVERSE PARTITION WALL
51c	TRANSVERSE PARTITION WALL
51d	LONGITUDINAL PARTITION WALL
51e	LONGITUDINAL PARTITION WALL
52	PREFABRICATED BATH MODULE
61	VERANDA
62	VERANDA PARTITION WALL
63	INTERIOR/EXTERIOR PARTITION WALL
71	PARTITION WALL
71a	TRANSVERSE PARTITION WALL
71c	TRANSVERSE PARTITION WALL
71d	LONGITUDINAL PARTITION WALL

Claims

1. A cabin structure for a vessel which includes a cabin space having two adjacent cabins,

wherein the cabin space includes:

a passageway-side wall that faces a passage-
way inside the vessel;
a hull-side wall that faces the passageway-side 5
wall by being furnished in parallel thereto;
two sidewalls that are respectively furnished to-
ward a stern side and a bow side of the vessel;
a longitudinal partition wall that is furnished at a 10
central location so as to extend parallel between
the passageway-side wall and the hull-side wall;
and
transverse partition walls that are respectively
furnished between the longitudinal partition wall 15
and the passageway-side wall, and between the
longitudinal partition wall and the hull-side wall,
and
wherein the longitudinal partition wall is a struc-
tural strengthening wall.

20

2. A cabin structure for a vessel which includes a cabin
space having two adjacent cabins,
wherein the cabin space includes:

a passageway-side wall that faces a passage- 25
way inside the vessel;
a hull-side wall that faces the passageway-side
wall by being furnished in parallel thereto;
two sidewalls that are respectively furnished to-
ward a stern side and a bow side of the vessel; 30
a longitudinal partition wall that is furnished at a
central location so as to extend parallel between
the passageway-side wall and the hull-side wall;
transverse partition walls that are respectively
furnished between the longitudinal partition wall 35
and the passageway-side wall, and between the
longitudinal partition wall and the hull-side wall;
and
a post member that is furnished along the lon-
gitudinal partition wall, and 40
wherein the post member is a structural
strengthening wall.

3. The cabin structure for a vessel according to Claim 45
1 or 2,
wherein the cabin space further includes a sliding
door that is furnished on the longitudinal partition wall
in order to allow access to the two cabins.
4. The cabin structure for a vessel according to any one 50
of Claims 1 to 3,
wherein the cabin space further includes two prefab-
ricated baths that are respectively furnished for the
two cabins, and
wherein the two prefabricated baths are furnished 55
adjacent to each other, and are configured to include
a single module.

FIG. 1

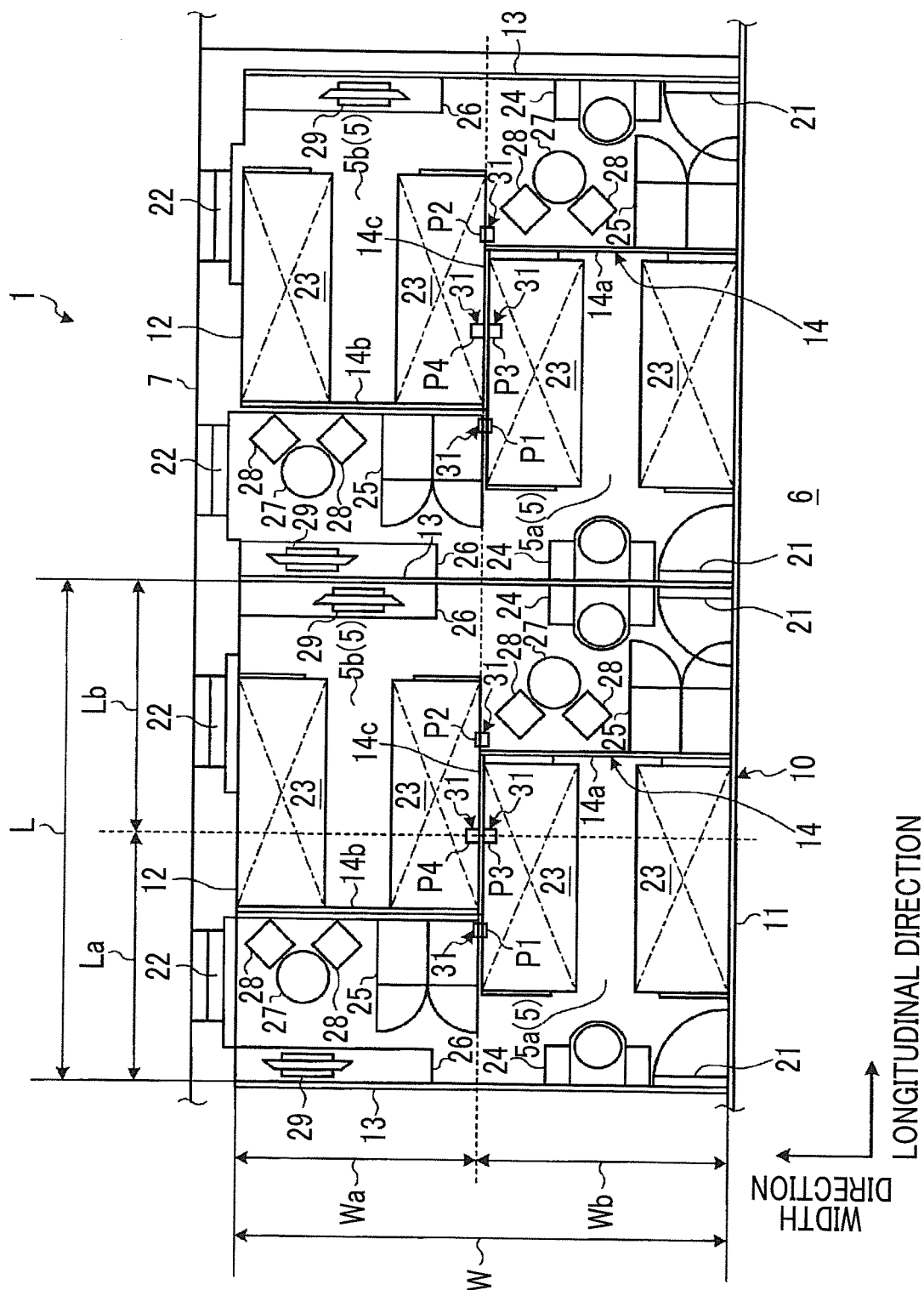


FIG. 2

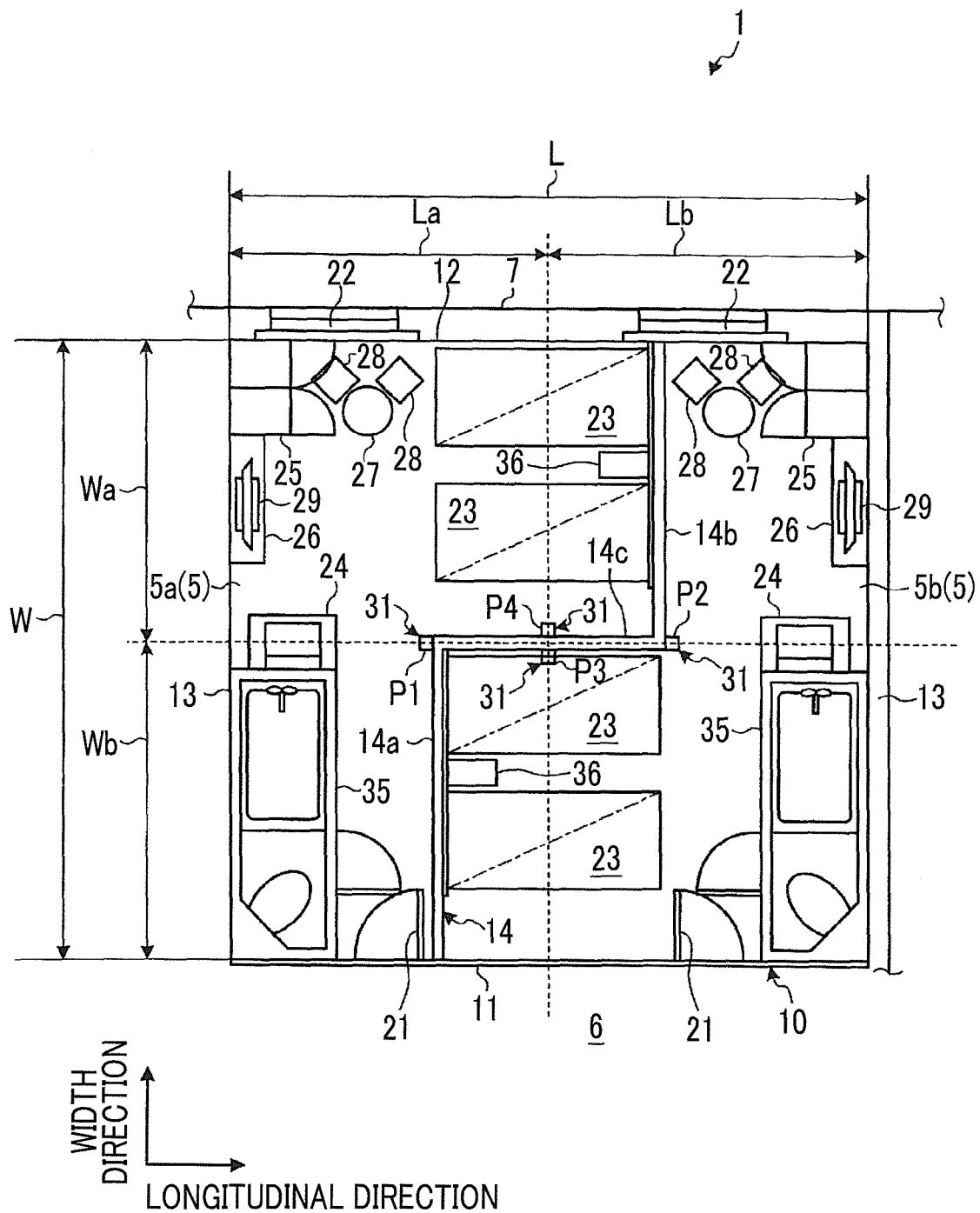
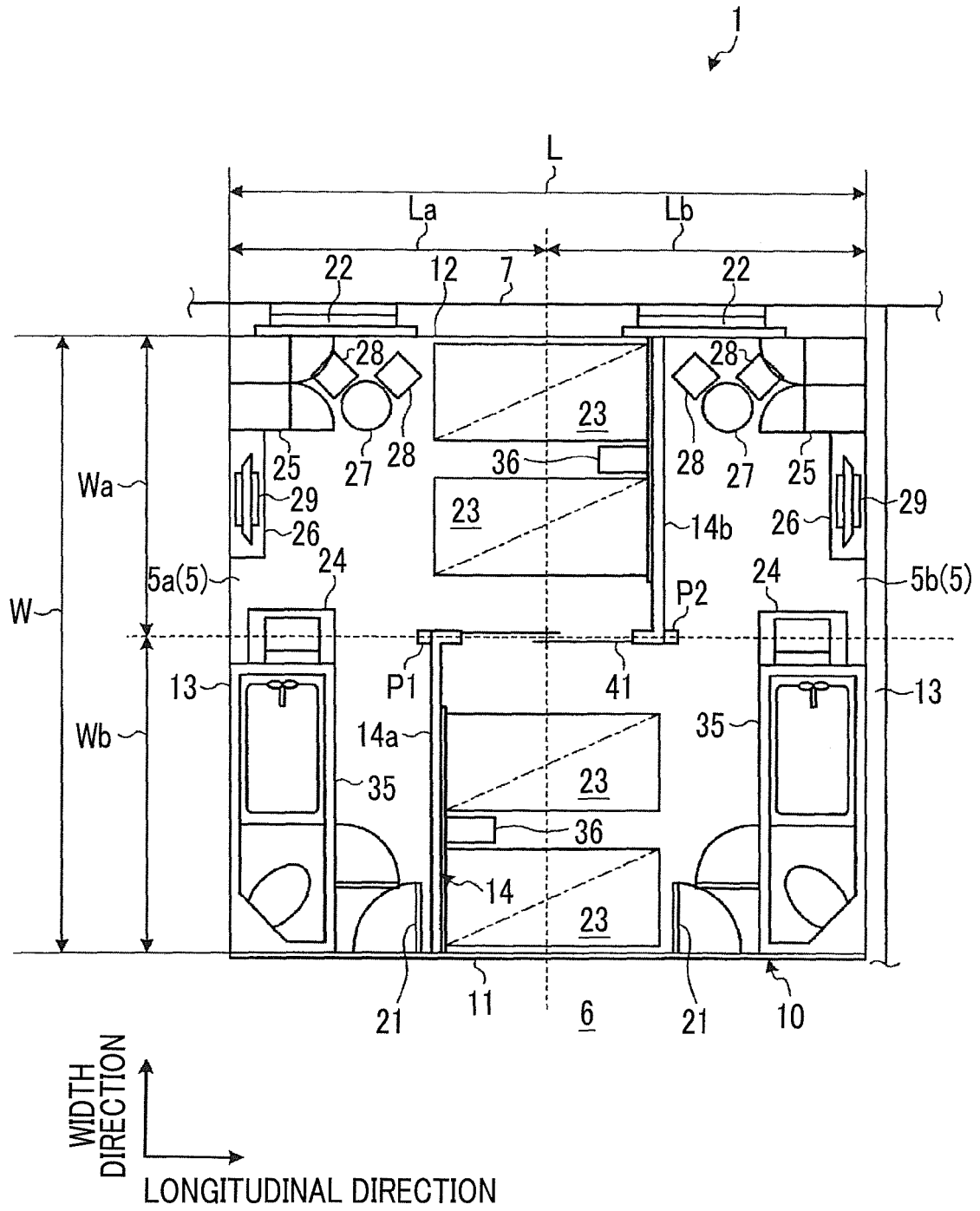


FIG. 3



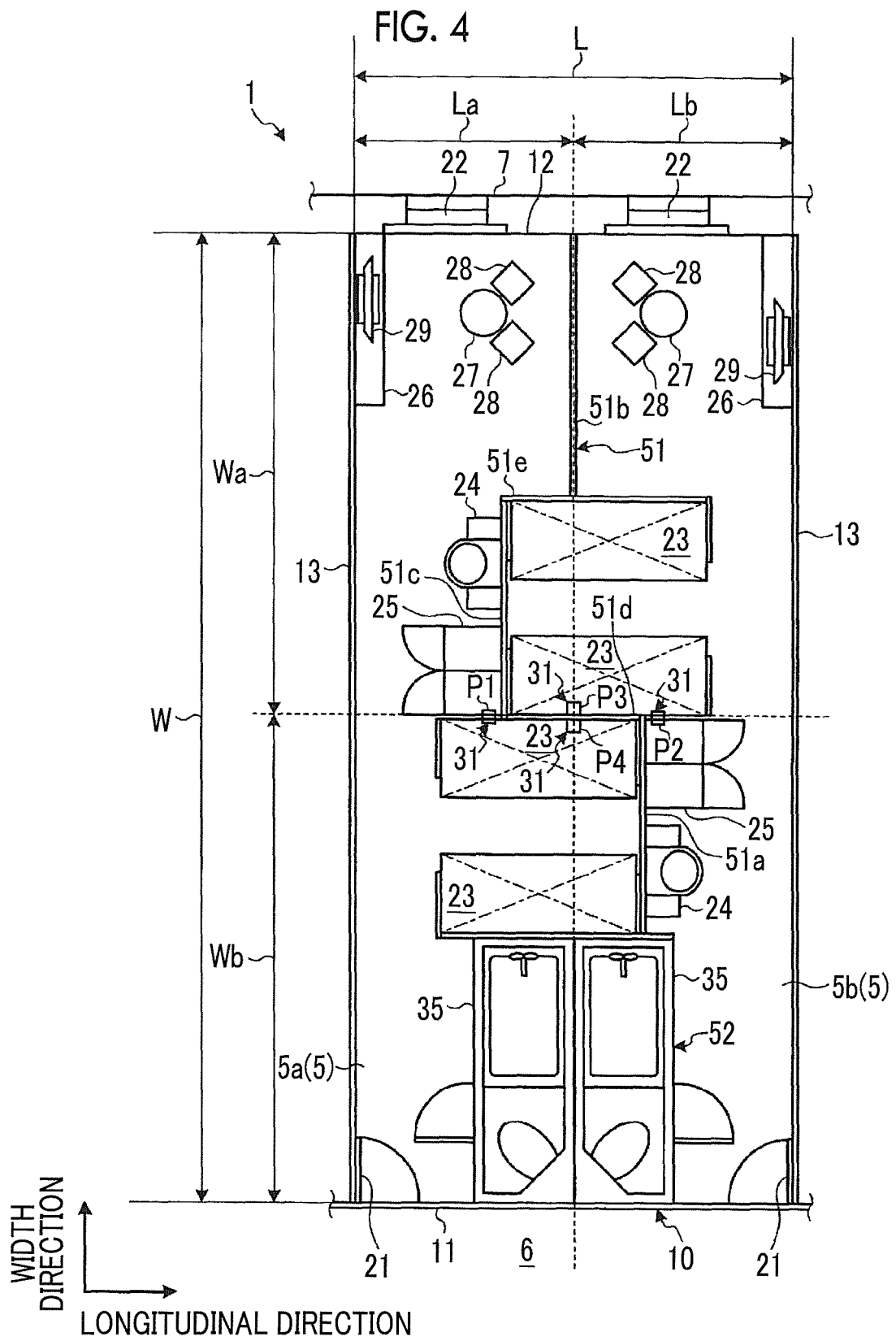


FIG. 5

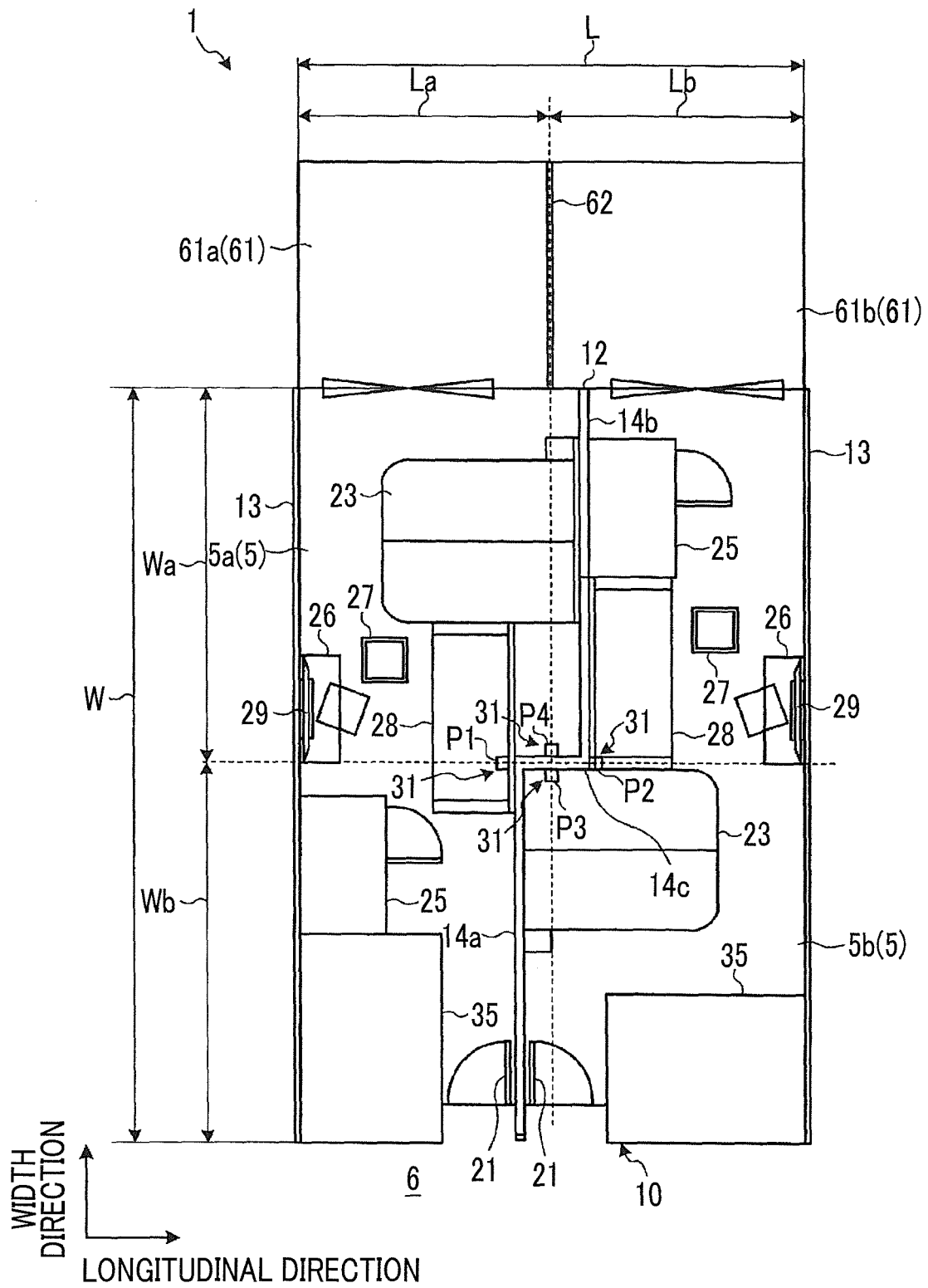
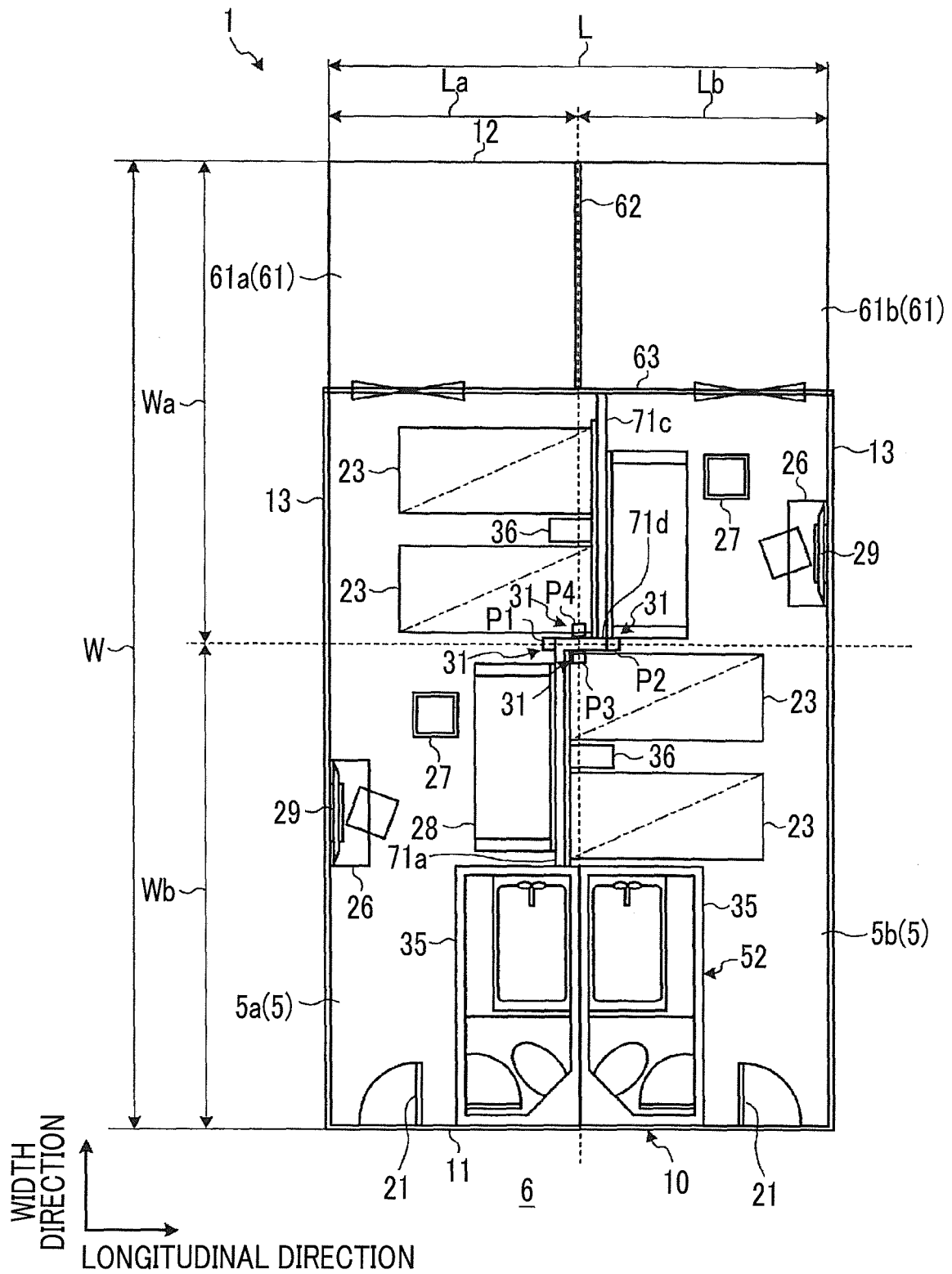


FIG. 6



INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2014/064877

A. CLASSIFICATION OF SUBJECT MATTER

B63B29/02(2006.01)i, B63B11/02(2006.01)i, B63B19/00(2006.01)i, B63B29/04(2006.01)i

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)

B63B29/02, B63B11/02, B63B19/00, B63B29/04

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

Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2014

Kokai Jitsuyo Shinan Koho 1971-2014 Toroku Jitsuyo Shinan Koho 1994-2014

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2007-204030 A (Centro per gli Studi di Tecnica Navale S.p.A.), 16 August 2007 (16.08.2007), entire text; all drawings & JP 2012-96791 A & EP 1816067 A2 & KR 10-2007-0079897 A & AT 518742 T	1-4
Y	JP 2010-95114 A (Taiko Sangyo Co., Ltd.), 30 April 2010 (30.04.2010), paragraph [0002] (Family: none)	1, 3-4

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

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Date of the actual completion of the international search

11 August, 2014 (11.08.14)

Date of mailing of the international search report

26 August, 2014 (26.08.14)

Name and mailing address of the ISA/
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2014/064877

C (Continuation).	DOCUMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.
Category*	Citation of document, with indication, where appropriate, of the relevant passages	
Y	JP 50-82817 A (Adolf Berg), 04 July 1975 (04.07.1975), entire text; all drawings & US 4027444 A & GB 1482007 A & DE 2352444 A1 & FR 2248190 A1 & BE 820838 A & NL 7413710 A & NO 743693 A & SE 7413005 A & ES 431189 A & FI 305074 A & DD 115078 A & DK 537974 A & IT 1027586 A	2-4
A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 169996/1975 (Laid-open No. 83418/1977) (NKK Corp.), 22 June 1977 (22.06.1977), entire text; all drawings (Family: none)	2
A	FR 2834687 A1 (LAMING DENIS), 18 July 2003 (18.07.2003), fig. 11 (Family: none)	1-4

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REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2007204030 A [0003]