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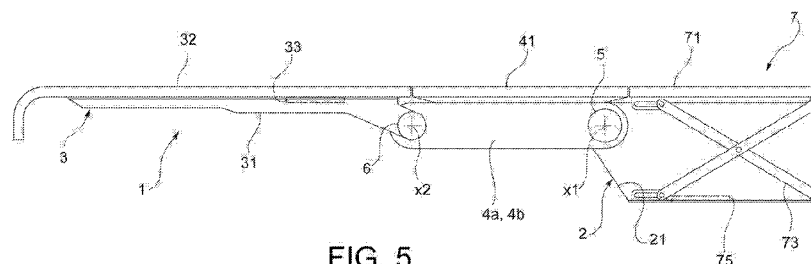


FIG. 5

(57) Abstract: Movable platform assembly (1; 101) comprising a base structure (2; 102), a platform (3; 103), and a pivotable arm (4a, 4b; 104) hinged at one end to the base structure (2; 102) and at the other end to the platform (3; 103), and rotary actuators (5, 6) for rotating the pivotable arm (4a, 4b; 104) with respect to the base structure and the platform with respect to the pivotable arm, in such a way as to cause the platform (3; 103) to maintain a constant inclination with respect to the base structure (2; 102). The platform comprises a platform support (31; 131) and a platform cover (32; 132). The pivotable arm comprises an arm cover (41; 141). There is also an auxiliary cover (71; 171; 271) that can move with respect to the base structure (2; 102). The assembly can assume an extended position in which the platform cover, arm cover and auxiliary cover are placed side-by-side to one another in such a way as to form a single material plane.

Movable platform assembly with extendable surface

The present invention relates to a movable platform assembly comprising

a base structure in which a housing recess is formed;

5 a movable platform comprising a platform support and a platform cover arranged on said platform support;

at least one pivotable arm hinged at one end to said base structure, about a first hinging axis, and at the other end to said platform support, about a second hinging axis; and

10 rotary actuating means for rotating said pivotable arm with respect to said base structure and said platform with respect to said pivotable arm, in such a way as to cause said platform to maintain a constant inclination with respect to said base structure during rotation of said pivotable arm;

wherein said movable platform assembly can assume a closed position in which said
15 pivotable arm is stored within the housing recess and said platform cover closes the housing recess.

A platform assembly of this type is known from patent WO 2009/084065 in the name of the applicant. In the case in which the known assembly is used in a boat, it is possible to
20 use the abovementioned movable platform for hauling and launching a tender or similar type of marine vehicle on board the boat, or for facilitating access to the water for swimmers. It is also possible to vary the position of the platform so as to reach jetties of different heights, allowing easy access to and from the boat.

25 The aim of the present invention is to adapt the known platform assembly for new uses, in particular to provide support or cover surfaces that are extendable as required. An example thereof is the bridge aft of a boat, which is extendable so as to provide a greater support surface available to users. Another example is a foldaway balcony, which can assume a closed position in which the balcony is retracted into a wall, and an extended position in
30 which the balcony projects from the wall.

The above aim is achieved according to the invention by a movable platform assembly like

that defined above, in which

said movable platform assembly further comprises an arm cover associated with said pivotable arm and a movable auxiliary cover for closing the housing recess in place of said platform cover;

5 wherein said rotary actuating means and movable auxiliary cover can be operatively coordinated in such a way as that said platform assembly can assume an extended position at which said platform cover, arm cover and auxiliary cover are placed side-by-side to one another in such a way as to form a single material plane.

10 Further characteristics and advantages of the assembly according to the invention will become apparent from the detailed description which follows, with reference to the accompanying drawings, which are provided purely by way of non-limiting example and in which:

 - Figures 1 to 7 are schematic views in side elevation of a movable platform
15 assembly according to the invention, in various positions of movement;

 - Figures 8 to 12 are schematic views of part of the stern of a boat fitted with the platform assembly of Figures 1 to 7, in various positions of movement, in which Figure 8 corresponds to Figure 1, Figure 9 to Figure 4, Figure 10 to Figure 5, Figure 11 to Figure 6, and Figure 12 to Figure 7;

20 - Figures 13a to 13g are schematic views in side elevation of a foldaway balcony comprising a platform assembly according to the invention, in various positions of movement;

 - Figures 14a to 14e are axonometric views of the balcony of Figures 13a to 13g, in various operating positions;

25 - Figures 15a to 15g are schematic views in side elevation of another foldaway balcony comprising a platform assembly according to the invention, in various positions of movement; and

 - Figures 16a to 16e are axonometric views of the balcony of Figures 15a to 15g, in various operating positions.

30

Figures 1 to 12 show a platform assembly 1 according to the invention, designed to be installed on an external structure or on a vehicle, for example, but not exclusively, on the

stern of a boat. The platform assembly 1 comprises a base structure 2, to which is articulated a movable platform 3, which is shown in Figures 1 and 8 in a closed position. The base structure 2 may have means (not shown) for securing the assembly 1 to the external structure or vehicle, or, in an alternative embodiment, may be incorporated into the external structure or vehicle.

The base structure 2 of said assembly has a housing recess 21 designed to accommodate the movable platform 3. The housing recess 21 is shaped in such a way that the platform 3 in the closed position is integrated completely in the overall shape of the base structure 2, as shown in Figure 8, such that the top surface of the platform 3 is flush with the top surface of the base structure 2. When the platform 3 is in the closed position it therefore closes off the housing recess 21.

A pair of pivotable arms 4a, 4b is hinged to the base structure 2, said arms being capable of rotating in a vertical plane (indicated by arrows A in Figures 3 and 7), i.e. a plane perpendicular to the general plane of the base structure 2 of the platform assembly 1. The axis of hinging of the pivotable arms 4a, 4b with respect to the base structure 2 is indicated by x1 in the figures. When the platform assembly is in the closed position, the pivotable arms are stored within the housing recess 21.

An arm cover 41 is associated with said pivotable arms 4a, 4b, said arm cover being arranged so as to be integral with said arms during a first phase of rotation thereof from the closed position. During a second phase of rotation, the arm cover 41 is arranged to be rotationally uncoupled from the pivotable arms 4a, 4b.

The platform 3 comprises a platform support 31 and a platform cover 32 slidably mounted on the platform support 31. The platform 3 comprises translation actuating means 33, for example a linear actuator operated electrically or by means of a fluid, for moving telescopically the platform cover 32 with respect to the platform support 31.

In the example shown, the platform support includes a pair of supports hinged to the distal ends of the swivel arms 4a, 4b. The axis of hinging thereof is indicated by x2 in the

figures. The platform support 31 is therefore able to rotate relative to the swivel arms 4a, 4b in the vertical plane.

5 A first rotary actuator 5 is mounted coaxially to the hinging axis x1 between the base structure 2 and the swivel arms 4a, 4b, while a second rotary actuator 6 is mounted coaxially to the hinging axis x2 between the swivel arms 4a, 4b and the platform support 31. In the example shown, the rotary actuators 5, 6 take the form of dual actuators, in that they are designed to move the two swivel arms 4a, 4b and the two supports which make up the platform support 31. Said actuators are for example compact hydraulic actuators, in
10 particular of the type comprising a piston, the axial movement of which is converted into the rotary motion of a shaft. According to alternative embodiments, the rotary actuators may be electric actuators.

The first dual rotary actuator 5 comprises a first part integral with the base structure 2, and
15 a second part which can rotate relative to the first part and is integral with the pivotable arms 4a, 4b. The first part of the first rotary actuator 5 may consist of two end shafts of the dual rotary actuator which are secured to the base structure 2. The second rotary actuator 60 comprises a first part integral with the platform support 31, and thus with the platform 3, and a second part which can rotate relative to the first part and is integral with the
20 pivotable arms 4a, 4b. The first part of the second rotary actuator 6 may consist of two end shafts of the dual rotary actuator which are secured to the platform support 31.

Sensors (not shown), in particular tilt sensors, are associated with the platform 3, and possibly also with the base structure 2, to allow a control unit (not shown) to coordinate the
25 rotation of the first and second rotary actuators 5, 6. It is thus possible to ensure that the platform 3 maintains a constant orientation with respect to the base structure 2 throughout the movement of the swivel arms 4a, 4b.

The movable platform assembly 1 further comprises an auxiliary closure unit 7 arranged
30 within the housing recess 21, for closing the housing recess 21 when the pivotable arms 4a, 4b are rotated outside of the housing recess 21, and the platform assembly assumes an extended position, as shown in Figures 5 and 10. The auxiliary closure unit 7 includes an

auxiliary cover 71, and auxiliary closure actuating means for moving the auxiliary cover 71 with respect to the base structure 2. In the example shown, the auxiliary closure actuating means comprise a scissor lift device 73 on which the auxiliary cover 71 rests, and a linear actuator 75, operated electrically or by means of a fluid, for moving the rods of the scissor mechanism so as to raise or lower the auxiliary cover 71.

A control unit (not shown) is provided to operatively coordinate the rotary actuation means 5, 6 associated with the pivotable arms 4a, 4b, the translation actuating means 33 associated with the platform 3 and the auxiliary closure actuating means 73, 75 so as to rotate the pivotable arms 4a, 4b with respect to the base structure 2, rotate the platform 3 with respect to the pivotable arms 4a, 4b, slide the platform cover 32 with respect to the platform support 31, and raise the auxiliary cover 71 so as to allow the platform assembly 1 to assume the extended position, shown in Figures 5 and 10, in which the platform cover 32, the arm cover 41 and the auxiliary cover 71 are placed side-by-side to one another in such a way as to form a single material plane. The term "single material plane" means that the covers in question form a single flat support or cover surface, being separated from each other by only the smallest gaps.

In the extended position, the arm cover 41 is rotated 180° relative to the closed position, integrally with the pivotable arms 4a, 4b, while the auxiliary cover 71 is raised so as to be flush with the arm cover 41 and the platform cover 32. Indeed, in the extended position, the available surface area is considerably increased compared to the closed position shown in Figure 1.

Preferably, the platform assembly 1 may also assume a tilted position, shown in Figures 7 and 12, in which the pivotable arm is further rotated with respect to the extended position, and in which the arm cover 41 and the auxiliary cover 71 are placed side-by-side to one another to form a first material plane, and the platform cover 32 is arranged to form a second material plane positioned at a different height with respect to the first material plane.

The platform assembly may be moved into the tilted position for example to enable

haulage of a service vessel, or to enable swimmers to access the water.

In the transition from the extended position to the tilted position, the arm cover 41 uncouples from the pivotable arms 4a, 4b, remaining adjacent to the auxiliary cover 71.

5 Such uncoupling can be achieved for example by providing the arm cover 41 with rotary actuating means independent of those for the pivotable arms 4a, 4b, or selective locking means that, during the movement from the closed position to the extended position, keep the arm cover 41 rigidly coupled to the arms 4a, 4b and, during the movement from the extended position to the tilted position, switch so as to uncouple the arm cover 41 from the
10 pivotable arms 4a, 4b and instead make it integral with the base structure 2.

Figures 1 to 7, and the corresponding Figures 8 to 12, show a possible sequence of movements of the movable platform assembly, from the closed position of Figures 1 and 8 to the extended position of Figures 5 and 10, and then to the tilted position of Figures 7 and
15 12.

Figures 1 and 8 show the platform assembly 1 in the closed position. The pivotable arms 4a, 4b are stored within the housing recess 21 and the platform cover 3 closes said recess 21. The auxiliary cover 71 is in the position of maximum retraction, and the arm cover 41
20 is folded back on the auxiliary cover 71.

Next (Figure 2), the platform cover 32 is moved forwards with respect to the platform support 31 to a position in which the rear edge thereof is approximately vertically aligned with the hinging axis x2 between the pivotable arms 4a, 4b and the platform support 31.
25 Depending on the dimensions of the various components of the platform that are encountered in practice, it is possible that such translational movement may not be necessary, and therefore, in certain circumstances, the translation actuating means may be absent. Moreover, the translation actuating means could be placed and configured differently, for controlling translational movement of a component in a phase different to
30 that described here.

Subsequently or simultaneously (Figure 3), the pivotable arms 4a, 4b are rotated about the

hinging axis x1, while the platform 3 is rotated in the opposite direction about the hinging axis x2, thus maintaining parallelism with the base structure 2.

5 The assembly then reaches the position (Figures 4 and 9) in which the pivotable arms 4a, 4b have been rotated 180° relative to the closed position, together with the arm cover 41 which is now aligned with the platform cover 32.

10 After reaching the above position, or just before it is reached, movement of the auxiliary cover 71 is triggered so that the latter moves to close the space left open by the platform cover 32 in the housing recess 21. The assembly thus reaches the extended position in which the platform cover, arm cover and auxiliary cover are placed side-by-side to one another in such a way as to form a single material plane (Figures 5 and 10).

15 From the extended position it is possible to move the platform cover 32 further forwards relative to the platform support 31 (Figures 6 and 11).

20 Furthermore, from the extended position it is possible to further rotate the pivotable arms 4a, 4b, keeping the arm cover 41 fixed with respect to the base structure 2, into the tilted position in which the arm cover 41 and the auxiliary cover 71 are placed side-by-side to one another in such a way as to form a single material plane, and the platform cover 32 is arranged to form a second material plane positioned at a different height with respect to the first material plane, while maintaining parallelism with respect to the base structure 2.

25 Figures 13a to 13g, and 14a to 14e, show a second embodiment of a platform assembly according to the invention, incorporated in a foldaway balcony installed on an external structure or on a vehicle, for example, but not exclusively, on a boat. The figures show a wall W, for example a wall of a boat, which is fitted with the platform assembly, indicated with the reference sign 101. The platform assembly 101 includes a base structure 102, to which is articulated a movable platform 103, shown in Figures 13a and 14a in a closed position.

The base structure 102 of said assembly has a housing recess 121 designed to

accommodate the movable platform 103. The housing recess 121 is shaped such that the platform 103 in the closed position is integrated completely in the overall shape of the base structure 102, as shown in Figure 14a, such that the top surface of the platform 103 is flush with the top surface of the base structure 102. When the platform 103 is in the closed position it therefore closes off the housing recess 121.

A pair of pivotable arms 104 (only one of which is visible in the figures) is hinged to the base structure 102, said arms being capable of rotating in a vertical plane, i.e. a plane perpendicular to the general plane of the base structure 102 of the platform assembly 101. The axis of hinging of the pivotable arms 104 with respect to the base structure 102 is indicated by x1 in the figures. When the platform assembly is in the closed position, the pivotable arms are stored within the housing recess 121.

An arm cover 141 is associated with said pivotable arms 104, said arm cover being arranged so as to be integral with said arms during the rotation thereof from the closed position.

The platform 103 comprises a platform support 131 and a platform cover 132 slidably mounted on the platform support 131. The platform 103 further comprises a front parapet structure 132a integral with the platform cover 132. The arms 104 are optionally provided with translation actuating means 133, for example a linear actuator operated electrically or by means of a fluid, for extending/retracting telescopically the arms 104, the arm cover 141 being non-extendable.

The platform support is hinged to the distal ends of the swivel arms 104. The axis of hinging thereof is indicated by x2 in the figures. The platform support 131 is therefore able to rotate relative to the swivel arms 104 in the vertical plane.

A first rotary actuator (not shown) is mounted coaxially to the hinging axis x1 between the base structure 102 and the swivel arms 104, while a second rotary actuator (not shown) is mounted coaxially to the hinging axis x2 between the swivel arms 104 and the platform support 131. Said rotary actuators are configured, in terms of arrangement and control, in a

manner similar to those described with reference to the previous embodiment, so as to ensure that throughout the movement of the swivel arms 104, the platform 103 maintains a constant orientation with respect to the base structure 102.

5 The movable platform assembly 101 further comprises an auxiliary closure unit 107 arranged within the housing recess 121, for closing the housing recess 121 when the pivotable arms 104 are rotated outside of the housing recess 121, and the platform assembly assumes an extended position, shown in Figures 13g and 14e. The auxiliary closure unit 107 includes an auxiliary cover 171, and auxiliary closure actuating means for
10 moving the auxiliary cover 171 with respect to the base structure 102. In the example shown, the auxiliary closure actuating means comprise a lever lift device 173 for raising or lowering the auxiliary cover 171.

A control unit (not shown) is provided to operatively coordinate the rotary actuation means
15 associated with the pivotable arms 104, the translation actuating means 133 associated with the arms 104 and the auxiliary closure actuating means 173 so as to rotate the pivotable arms 104 with respect to the base structure 102, rotate the platform 103 with respect to the pivotable arms 104, extend the pivotable arms 104, and raise the auxiliary cover 171 so as to allow the platform assembly 101 to assume the extended position, shown in Figures 13g
20 and 14e, in which the platform cover 132, the arm cover 141 and the auxiliary cover 171 are placed side-by-side to one another in such a way as to form a single material plane. The term “single material plane” means that the covers in question form a single flat support or cover surface, being separated from each other by only the smallest gaps.

25 In the extended position, the arm cover 141 is rotated 180° relative to the closed position, integrally with the pivotable arms 104, while the auxiliary cover 171 is raised so as to be flush with the arm cover 141 and the platform cover 132. Indeed, in the extended position, the available surface area is considerably increased compared to the closed position shown in Figures 13a and 14a.

30

Preferably, the platform assembly 101 further includes a pair of side parapet structures 181, 182, which are arranged extractable from the wall W adjacent to the balcony and

positionable on opposite side edges of the material plane formed by the covers 132, 141 and 171. Said side parapet structures may be extracted and positioned manually, or actuators may be provided to move said structures in an automated manner.

- 5 In Figures 13a to 13g, and in the corresponding Figures 14a to 14e, there is illustrated a possible sequence of movements of the movable platform assembly, from the closed position of Figures 13a and 14a to the extended position of Figures 13g and 14e.

10 Figures 13a and 14a show the platform assembly 101 in the closed position. The pivotable arms 104 are stored within the housing recess 121 and the platform cover 103 closes said recess 121. The auxiliary cover 171 is in the position of maximum retraction, and the arm cover 141 is folded back on the auxiliary cover 171. As can be seen, the front parapet structure 132a is arranged substantially aligned with the wall W.

- 15 Next (Figures 13b, 13c and 14b), the pivotable arms 104 are rotated about the hinging axis x1, while the platform 103 is rotated in the opposite direction about the hinging axis x2, thus maintaining parallelism with the base structure 102.

20 Subsequently or simultaneously (Figure 13d), the pivotable arms 104 are extended so as to increase the distance between the hinging axes x1 and x2, without affecting the extension of the arm cover 141. Depending on the dimensions of the various components of the platform that are encountered in practice, it is possible that such translational movement may not be necessary, and therefore, in certain circumstances, the translation actuating means may be absent. Moreover, the translation actuating means could be placed and
25 configured differently (for example, like those in the previous embodiment), for controlling translational movement of a component in a phase different to that described here.

30 Continuing the rotational movement (Figures 13e and 14c), the assembly then reaches the position (Figures 13f and 14d) in which the pivotable arms 104 have been rotated 180° relative to the closed position, together with the arm cover 141 which is now aligned with the platform cover 132. As can be seen, the front parapet structure 132a is now at a

distance from the wall W.

After reaching the above position, or just before it is reached, movement of the auxiliary cover 171 is triggered so that the latter moves to close the space left open by the platform cover 132 in the housing recess 121. The assembly thus reaches the extended position in which the platform cover, arm cover and auxiliary cover are placed side-by-side to one another in such a way as to form a single material plane (Figures 13g and 14e). In this position, the side parapet structures 181, 182 are extracted from the wall W, and are positioned on the side edges of the material plane formed by the platform cover, arm cover and auxiliary cover.

Figures 15a to 15g, and 16a to 16e, show another embodiment of a platform assembly according to the invention, incorporated in a foldaway balcony; the same reference numerals have been used for elements corresponding to those of the previous embodiment, and these elements will not be further described.

This embodiment differs from the previous embodiment essentially in that it does not comprise an auxiliary closure unit within the housing recess 121, but does include a movable auxiliary cover 271, for closing the housing 121 as an alternative to the platform cover 132. The auxiliary cover 271 is connected to the arm cover 141 by means of a 180°-opening hinge, and is thus drivable by movement of the pivotable arms 104 that carry the arm cover 141. The movement of the auxiliary cover 271 is therefore operatively coordinated with that of the arm cover 141 because they are hinged to one another.

In Figures 15a to 15g, and in the corresponding Figures 16a to 16e, there is illustrated a possible sequence of movements of the movable platform assembly, from the closed position of Figures 15a and 16a to the extended position of Figures 15g and 16e.

Figures 15a and 16a show the platform assembly 101 in the closed position. The pivotable arms 104 are stored within the housing recess 121 and the platform cover 103 closes said recess 121. The arm cover 141 is folded back on the auxiliary cover 271, folded like a book against the latter. As can be seen, the front parapet structure 132a is arranged

substantially aligned with the wall W.

Next (Figures 15b, 15c and 16b), the pivotable arms 104 are rotated about the hinging axis x1, while the platform 103 is rotated in the opposite direction about the hinging axis x2, thus maintaining parallelism with the base structure 102.

Subsequently or simultaneously (Figure 15d), the pivotable arms 104 are extended so as to increase the distance between the hinging axes x1 and x2, without affecting the extension of the arm cover 141. Depending on the dimensions of the various components of the platform that are encountered in practice, it is possible that such translational movement may not be necessary, and therefore, in certain circumstances, the translation actuating means may be absent. Moreover, the translation actuating means could be placed and configured differently (for example, like those in the first embodiment), for controlling translational movement of a component in a phase different to that described here.

Continuing the rotational movement (Figures 15e, 15f and 16c), the assembly then reaches the position (Figures 15g and 16d) in which the pivotable arms 104 have been rotated 180° relative to the closed position, together with the arm cover 141 which is now aligned with the platform cover 132. As can be seen, the front parapet structure 132a is now at a distance from the wall W.

During the rotation of the pivotable arms 104, the auxiliary cover 271 is moved by virtue of the fact that it is hinged to the arm cover 141, near the hinging axis x1. When the position of Figure 15f is reached, because the hinge has a maximum angular opening of 180°, the auxiliary cover 271 is lifted off the bottom of the housing recess 121 so that it moves to close the space left open by the platform cover 132 in the housing recess 121. The assembly thus reaches the extended position in which the platform cover, arm cover and auxiliary cover are placed side-by-side to one another in such a way as to form a single material plane (Figures 15g and 16e). In this position, the side parapet structures 181, 182 are extracted, and are positioned on the side edges of the material plane formed by the platform cover, arm cover and auxiliary cover.

Although the platform assembly has been described in relation to a stern bridge for a boat or a foldaway balcony, it is clear that it can be used in other situations, in fixed or mobile structures or vehicles. Furthermore, it can be used in the construction of extendable roofs or coverings, and it may even be constructed, where compatible, so as to have a configuration which is inverted with respect to what is shown in the figures. Furthermore, 5 the elements described with reference to one specific embodiment may be used, where compatible, in the other embodiments.

CLAIMS

1. A movable platform assembly (1; 101) comprising
a base structure (2; 102) in which a housing recess (21; 121) is formed;
5 a movable platform (3; 103) comprising a platform support (31; 131) and a platform cover (32; 132) arranged on said platform support;
at least one pivotable arm (4a, 4b; 104) hinged at one end to said base structure (2; 102), about a first hinging axis (x1), and at the other end to said platform support, about a second hinging axis (x2); and
10 rotary actuating means (5, 6) for rotating said pivotable arm (4a, 4b; 104) with respect to said base structure and said platform with respect to said pivotable arm, in such a way as to cause said platform (3; 103) to maintain a constant inclination with respect to said base structure (2; 102) during rotation of said pivotable arm (4a, 4b; 104);
wherein said movable platform assembly can assume a closed position in which said
15 pivotable arm is stored within the housing recess (21; 121) and said platform cover closes the housing recess (21; 121);
characterized in that
said movable platform assembly further comprises an arm cover (41; 141) associated with said pivotable arm and a movable auxiliary cover (71; 171; 271) for
20 closing the housing recess (21; 121) in place of said platform cover;
wherein said rotary actuating means and movable auxiliary cover can be operatively coordinated in such a way that said platform assembly can assume an extended position in which said platform cover, arm cover and auxiliary cover are placed side-by-side to one another in such a way as to form a single material plane.
25
2. An assembly according to claim 1, wherein said auxiliary cover (271) is connected to said arm cover by means of a 180°-opening hinge and drivable by movement of said pivotable arm.
- 30 3. An assembly according to claim 1, further comprising an auxiliary closure unit (7; 107) arranged within the housing recess (21; 121), said auxiliary closure unit including the auxiliary cover (71; 171) and auxiliary closure actuating means (73, 75; 173) for moving

said auxiliary cover with respect to the base structure (2; 102).

4. An assembly according to any of the preceding claims, wherein said platform cover (32; 132) is slidably mounted on said platform support, translation actuating means (33) being provided for moving telescopically said platform cover with respect to said platform support.

5. An assembly according to any of the preceding claims, wherein said pivotable arm (104) is telescopically extendable/retractable; translation actuating means (133) being provided for extending/retracting said pivotable arm.

6. An assembly according to any of the preceding claims, wherein said platform assembly can assume a tilted position in which the pivotable arm (4a, 4b) is further rotated with respect to the extended position, in which said arm cover and auxiliary cover are placed side-by-side to one another to form a first material plane, and said platform cover is arranged to form a second material plane positioned at a different height with respect to the first material plane, and

wherein said arm cover is configured for moving integrally with said pivotable arm between the closed position and the extended position of the platform assembly, and rotationally uncoupling from the pivotable arm (4a, 4b) between the extended position and the tilted position of the platform assembly.

7. A foldaway balcony comprising a wall (W) and a platform assembly according to any of claims 1 to 5, said platform assembly having a front parapet structure (132a) integral with said platform cover, which in the closed position is arranged substantially aligned with the wall (W), and in the extended position is arranged at a distance from the wall (W), and further comprising a pair of side parapet structures (181, 182) which are arranged extractable from said wall and positionable on opposite side edges of said material plane.

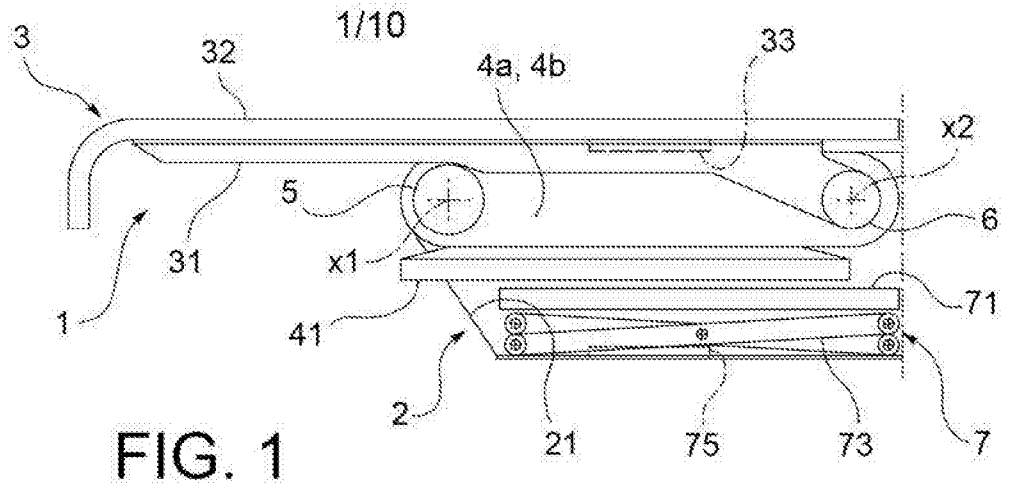


FIG. 1

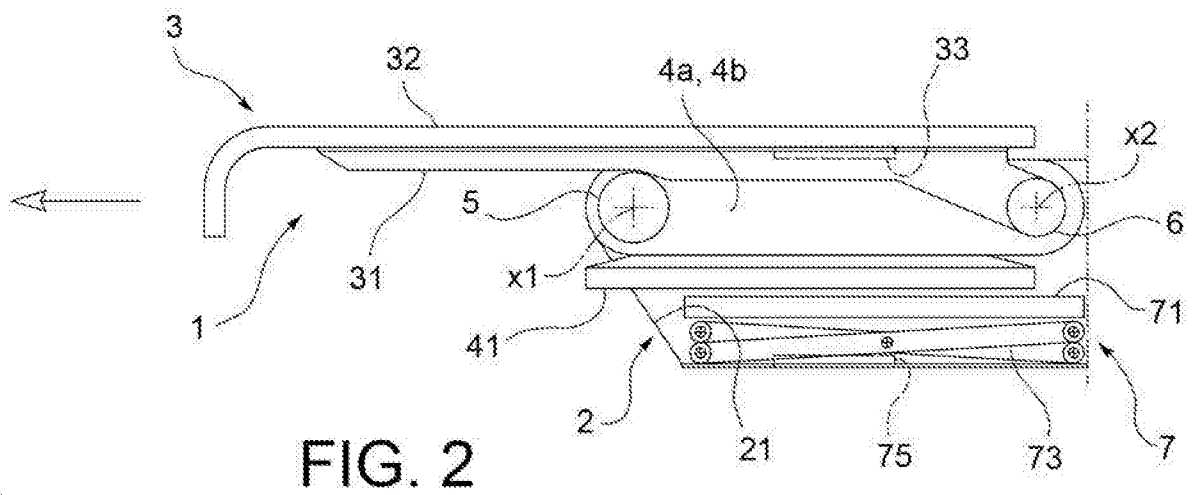


FIG. 2

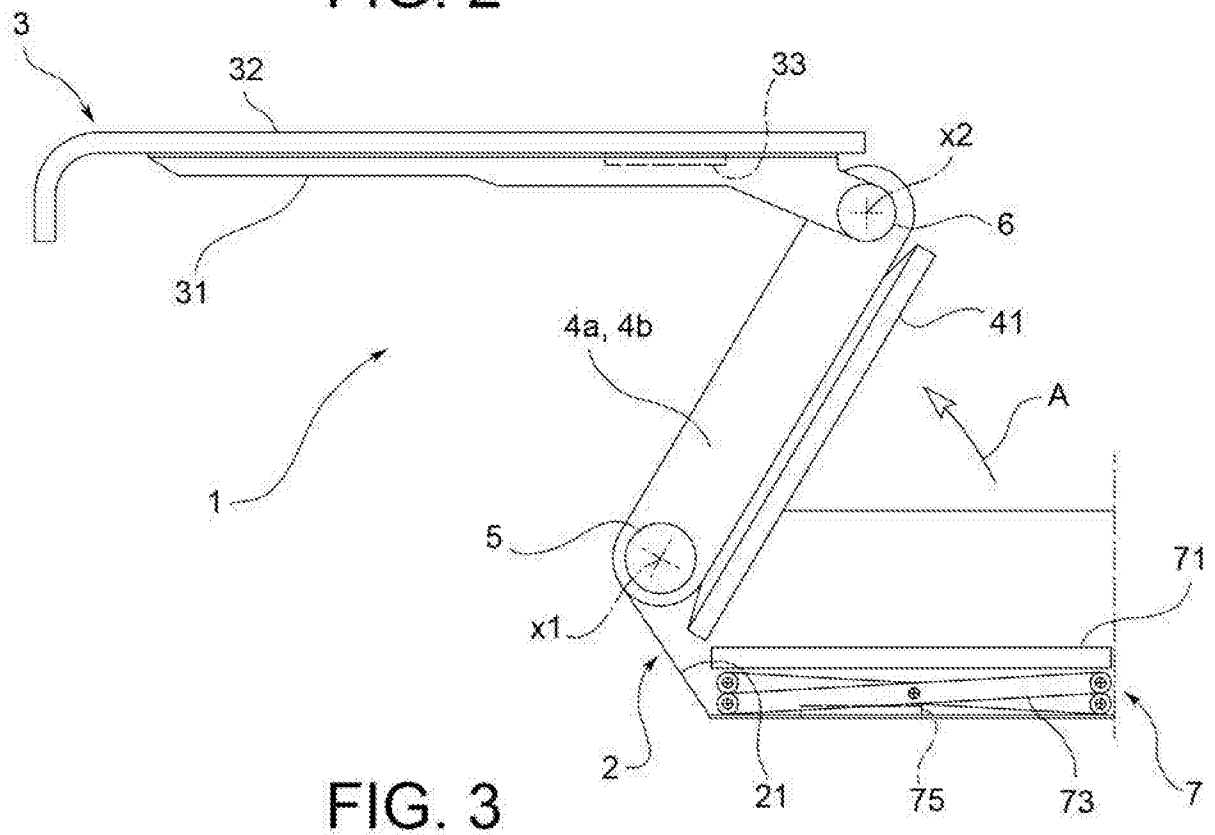


FIG. 3

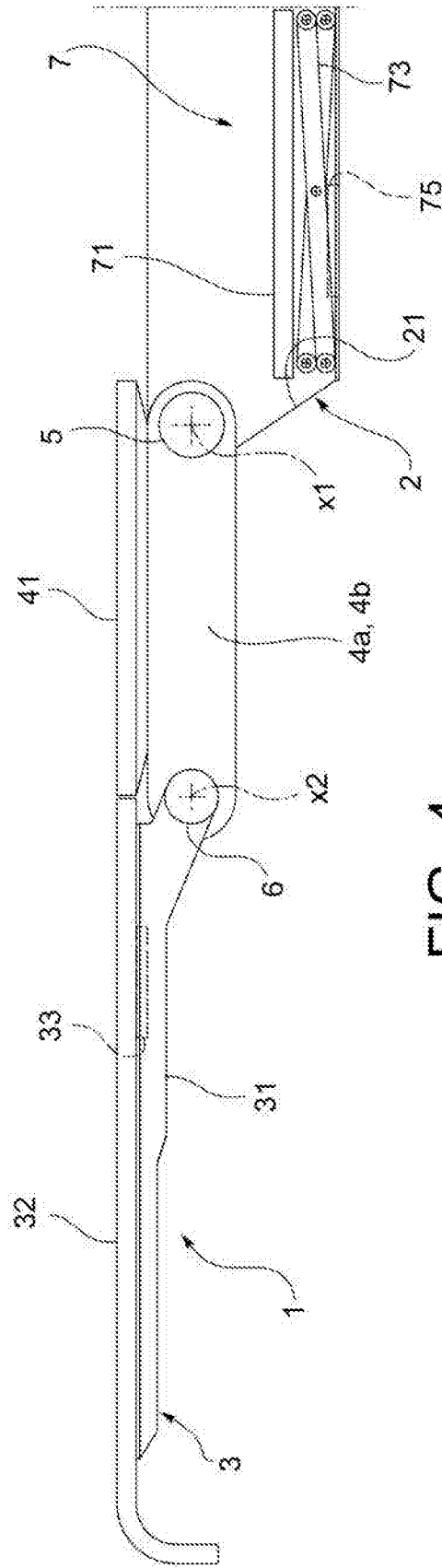


FIG. 4

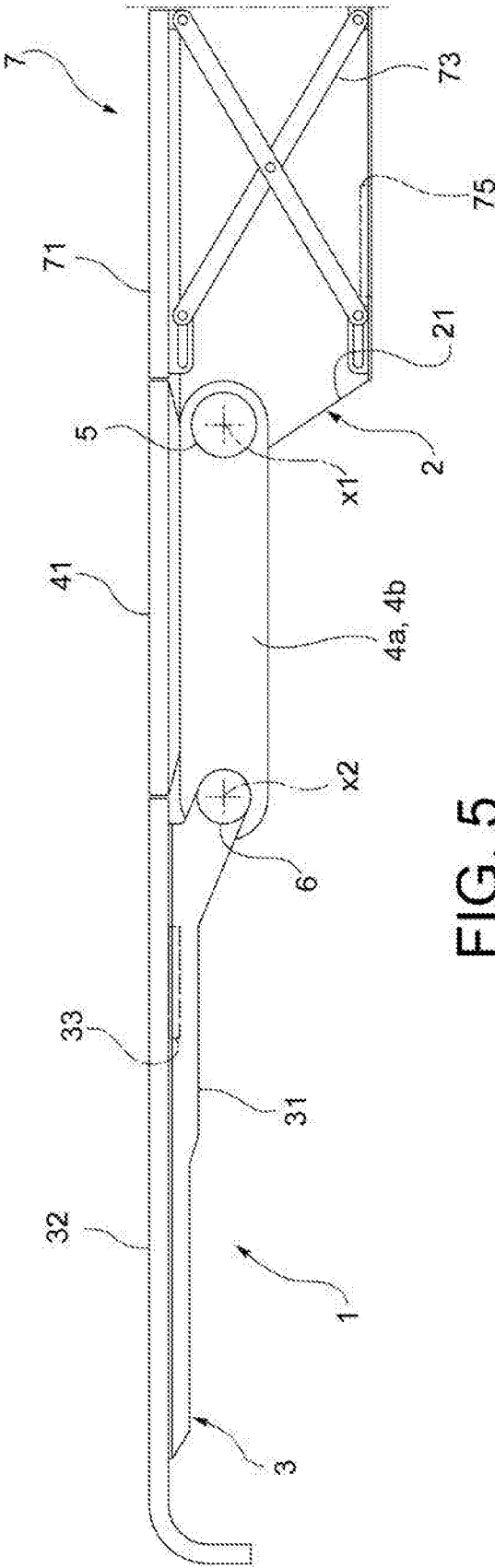
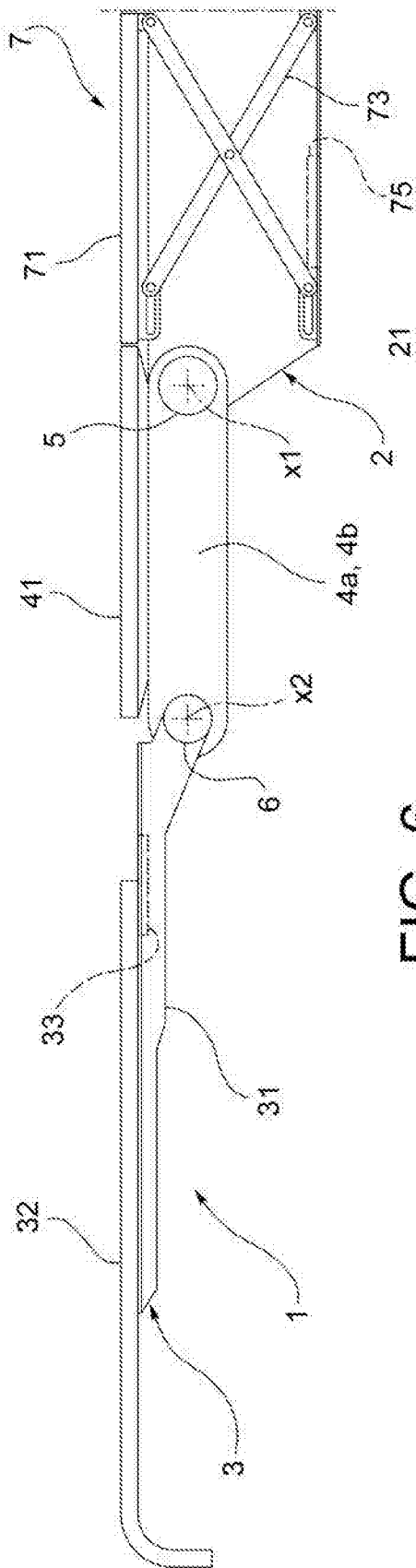


FIG. 5



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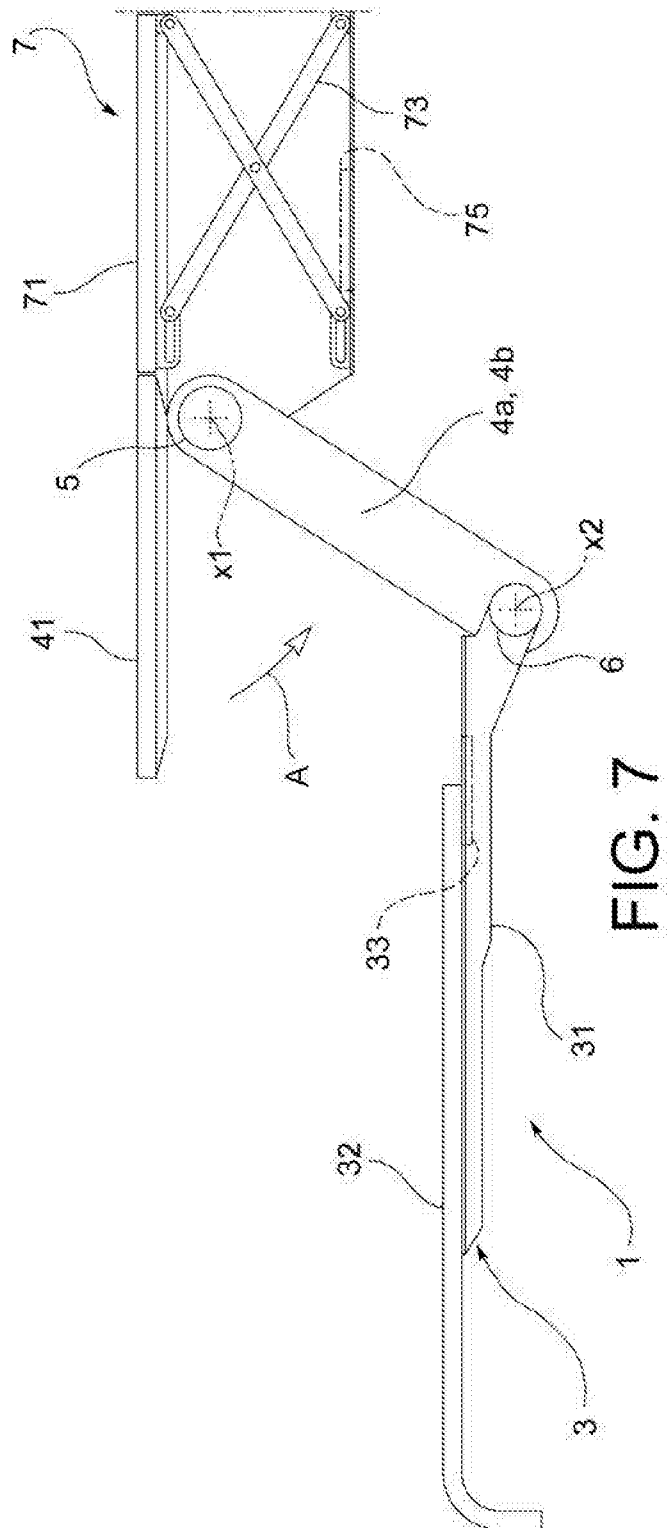


FIG. 7

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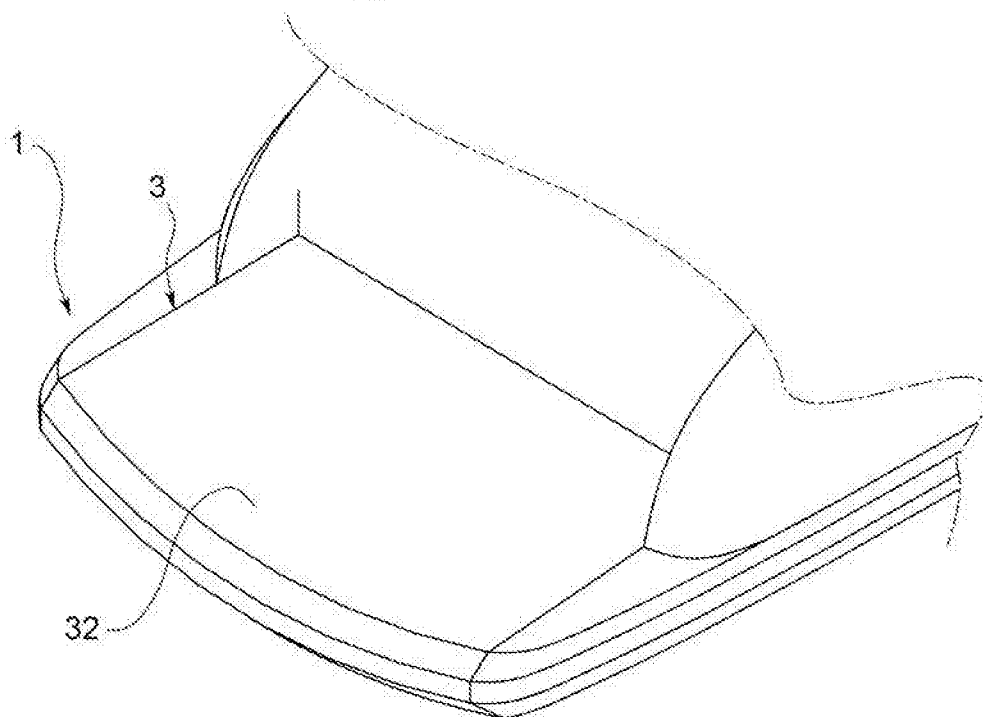


FIG. 8

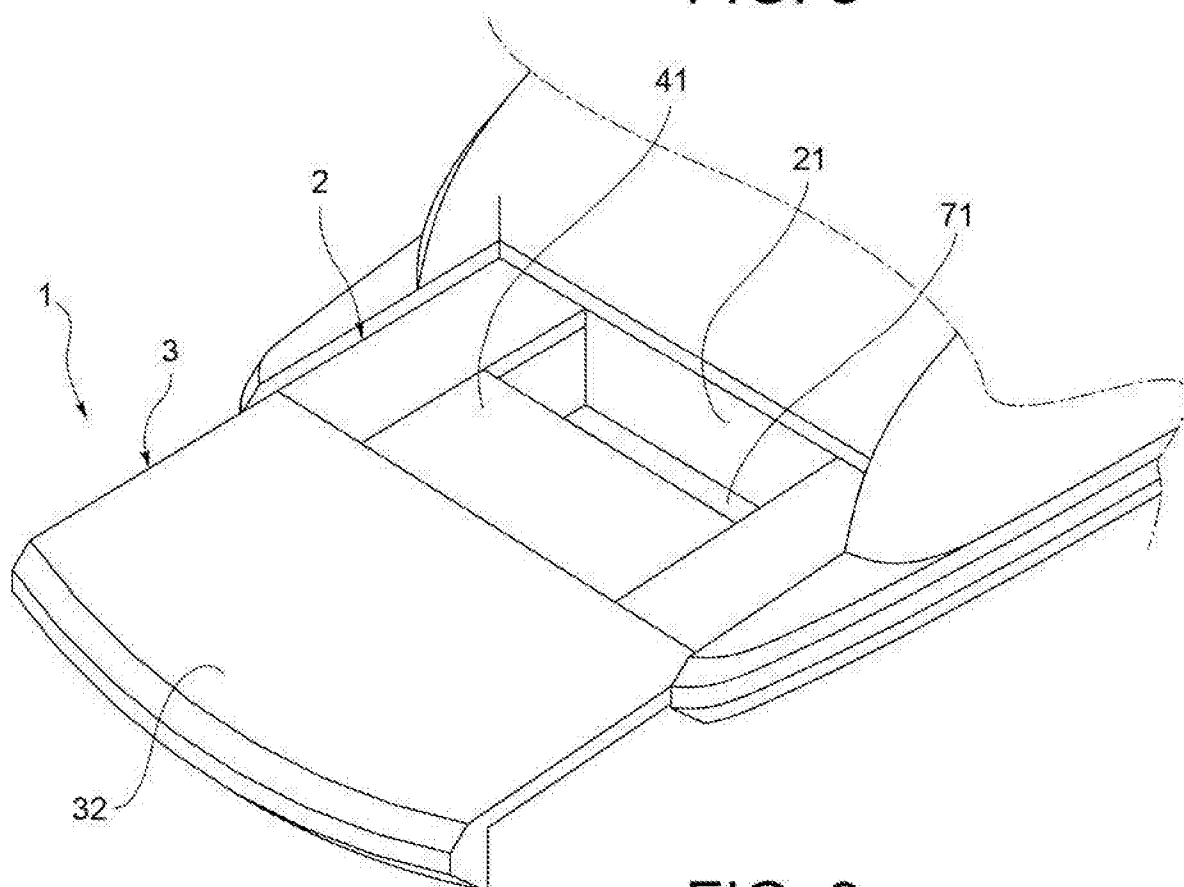
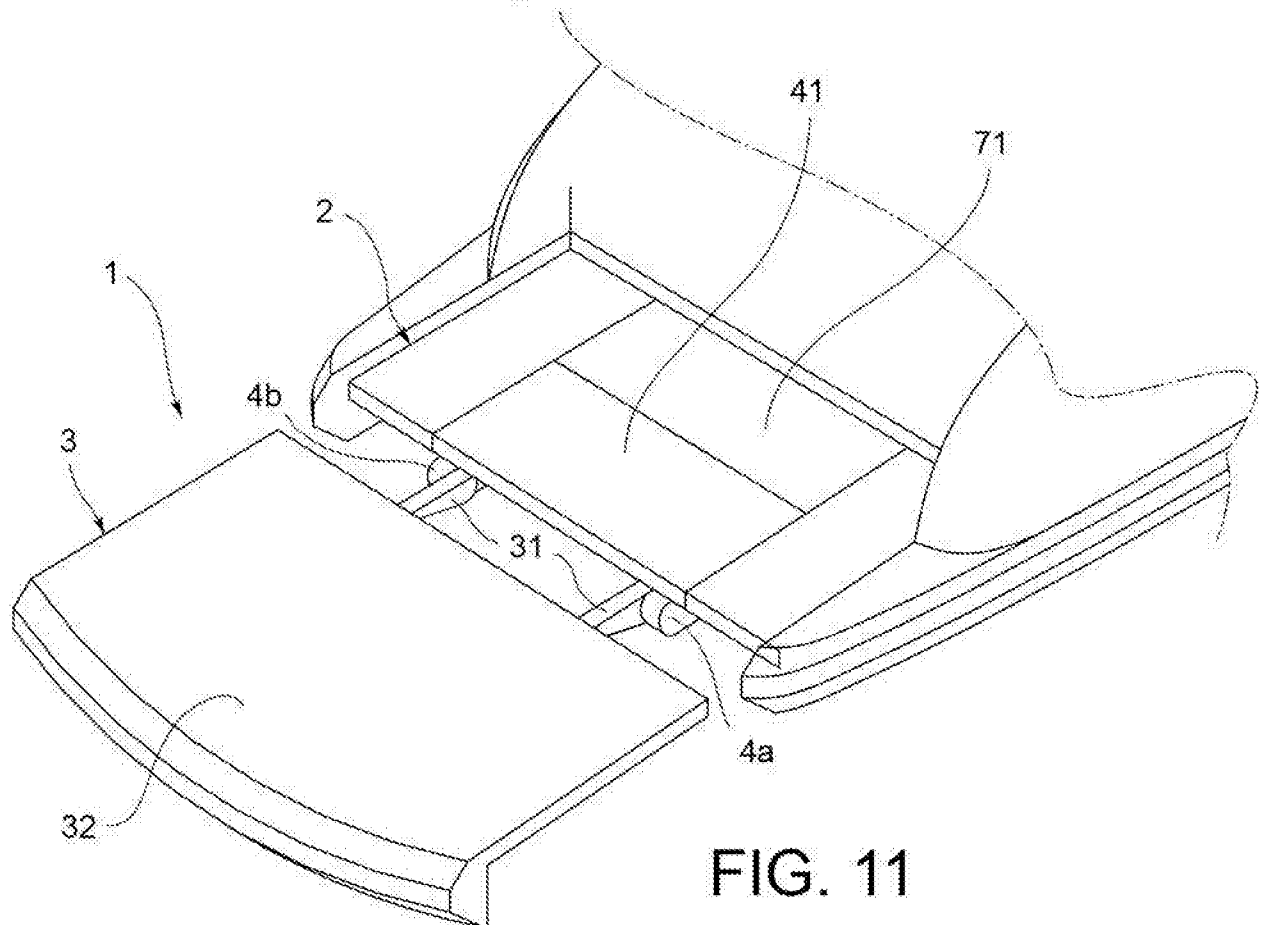
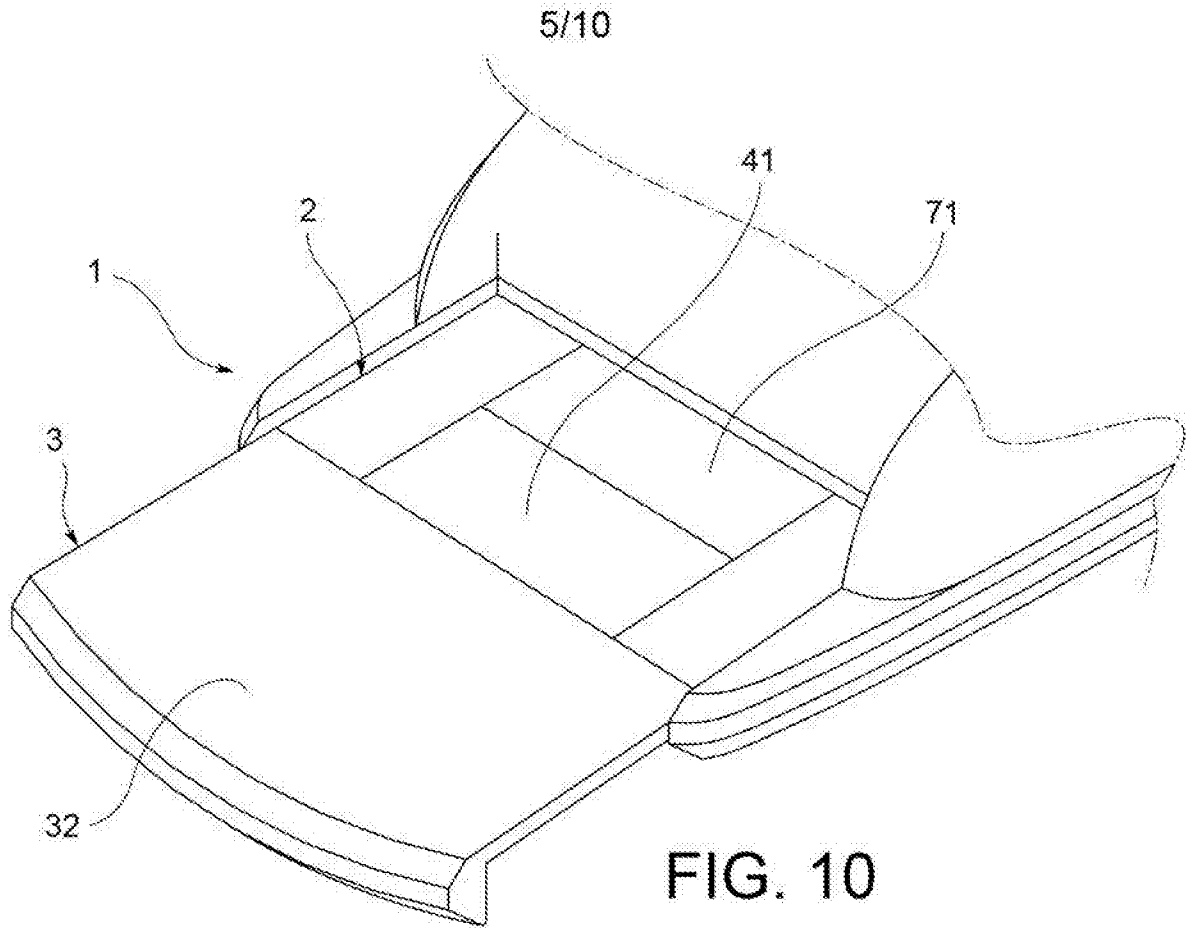


FIG. 9



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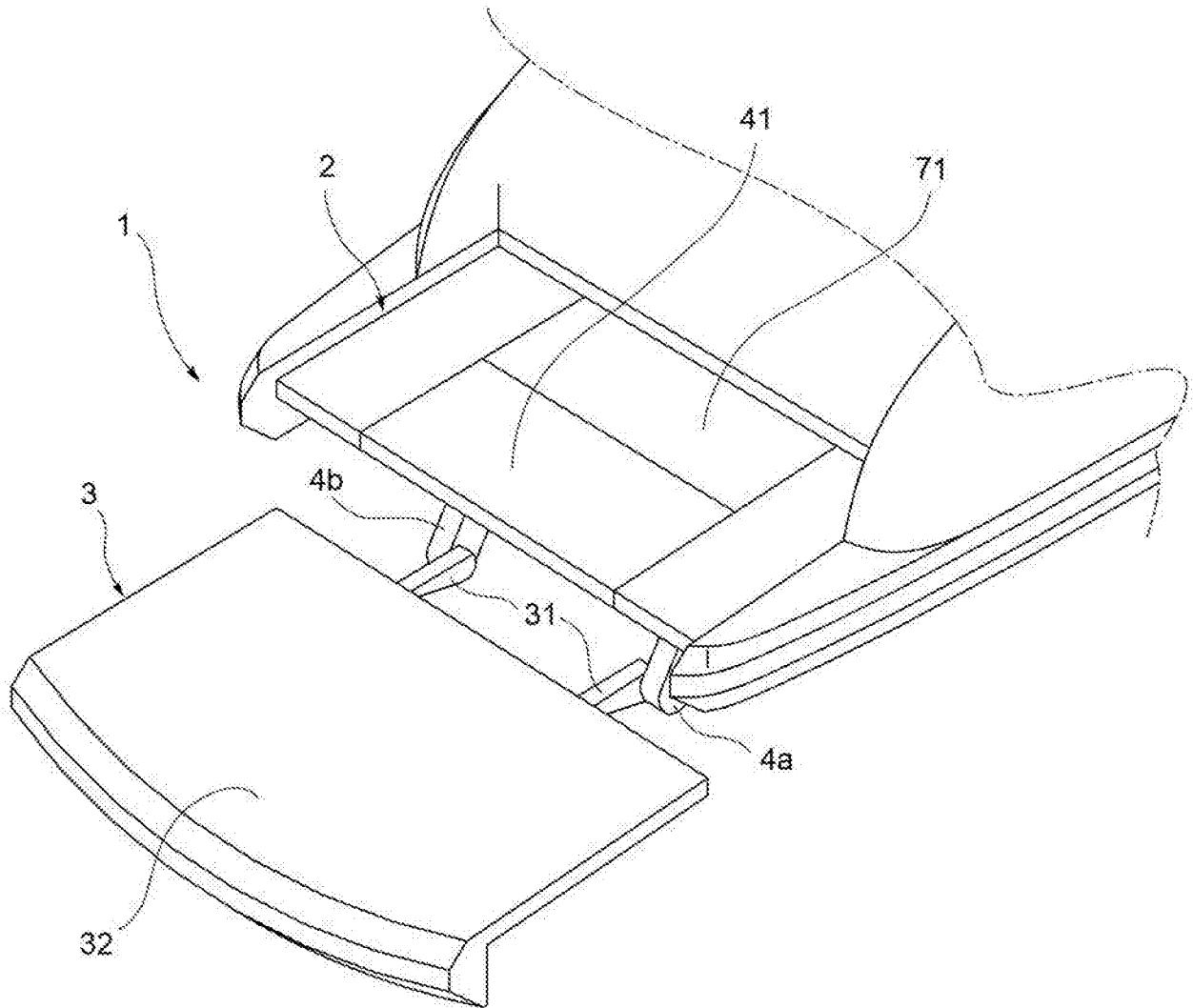


FIG. 12

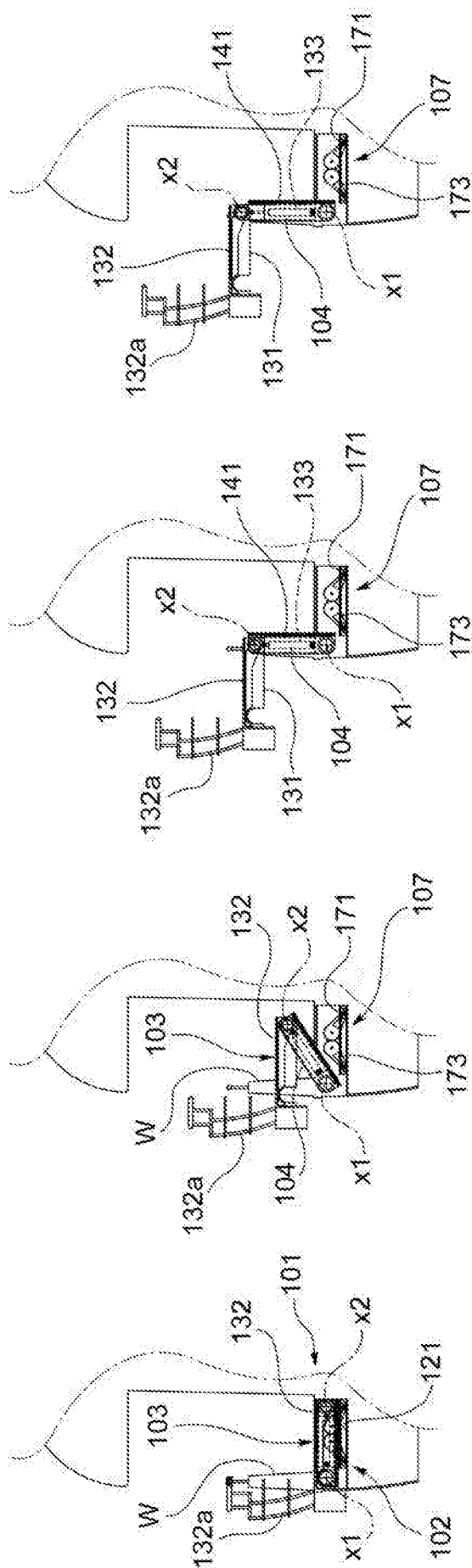


FIG. 13d

FIG. 13c

FIG. 13b

FIG. 13a

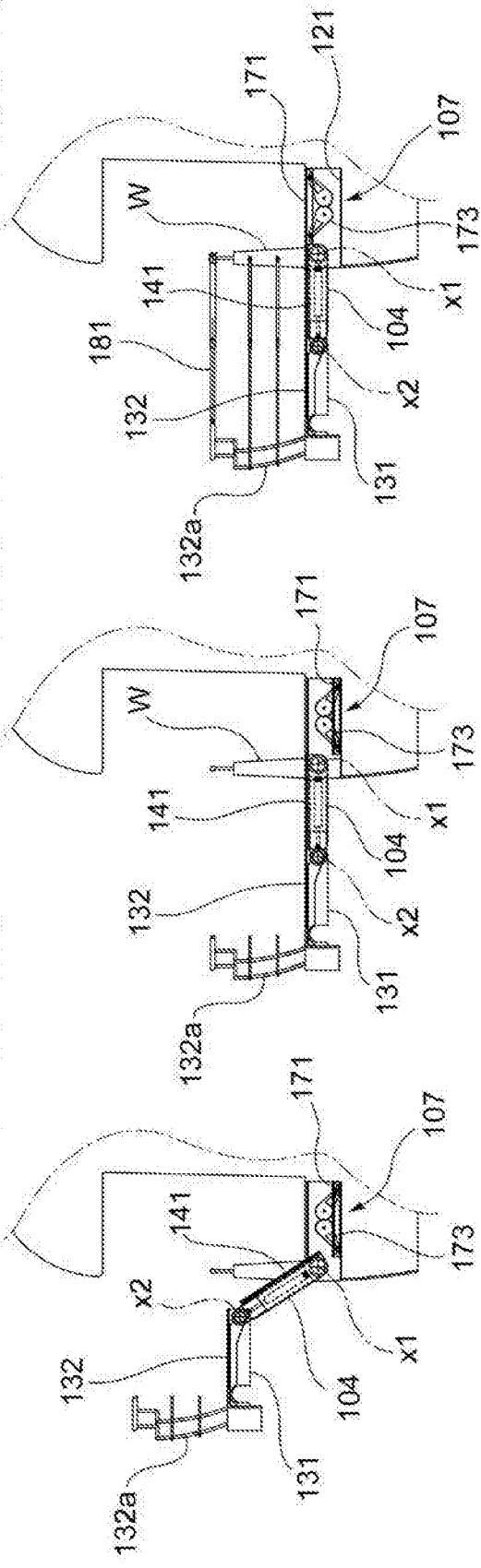
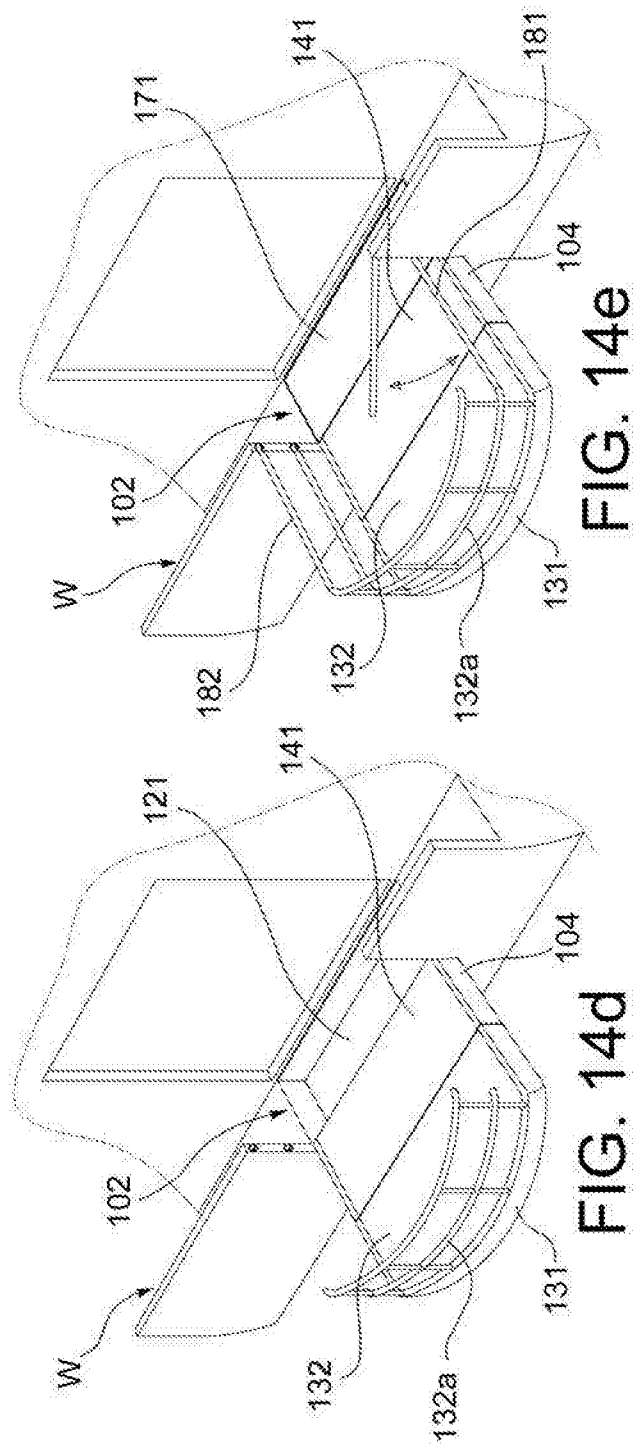
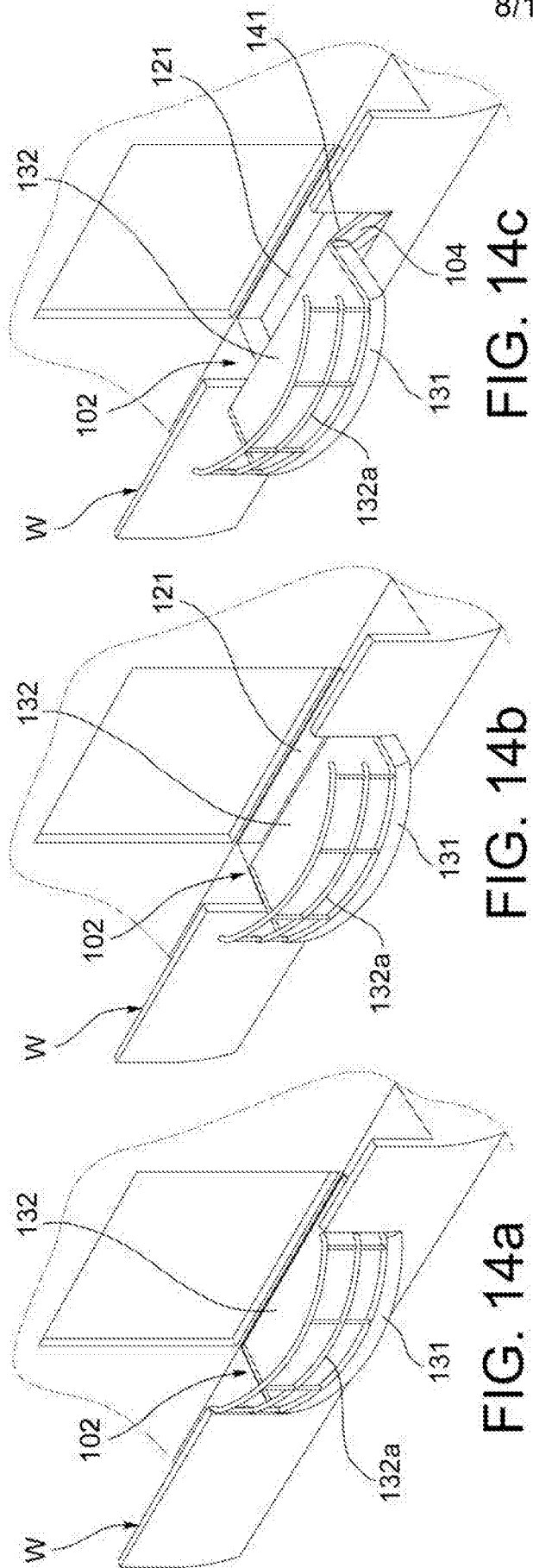


FIG. 13g

FIG. 13f

FIG. 13e

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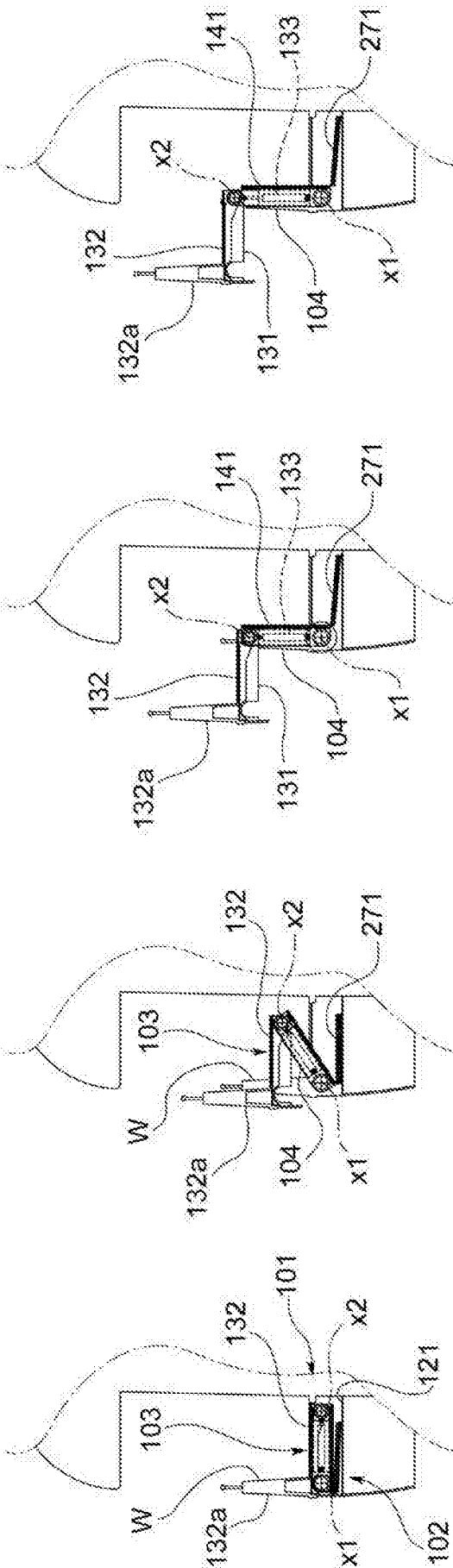


FIG. 15a

FIG. 15b

FIG. 15c

FIG. 15d

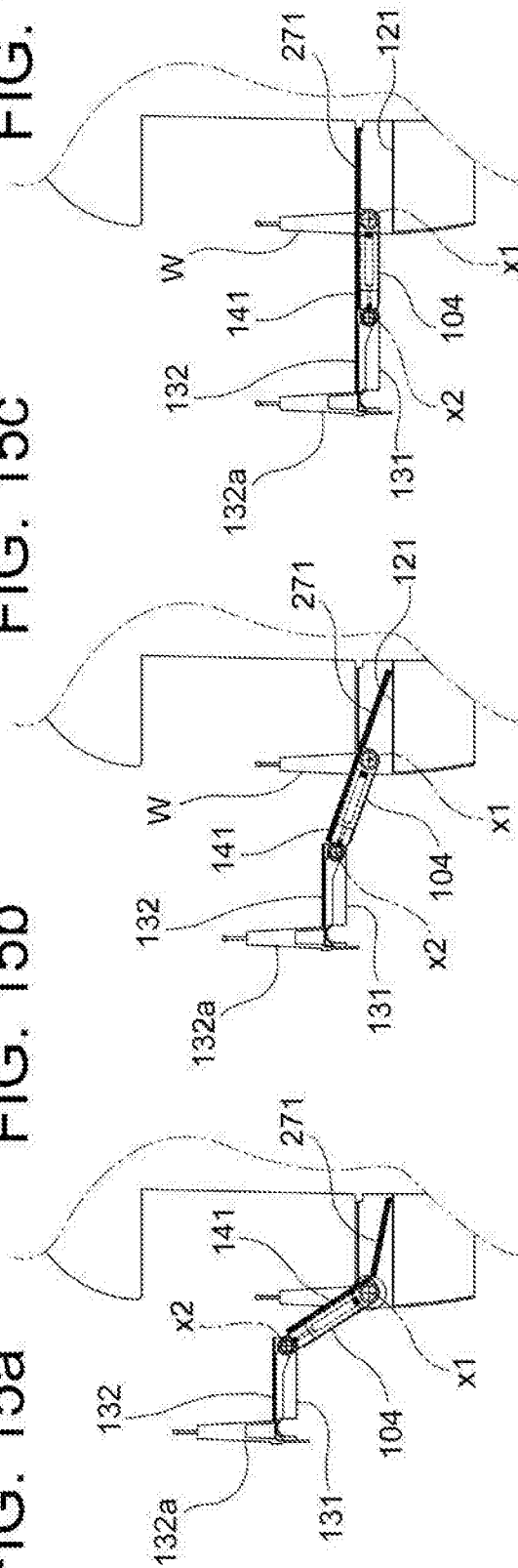


FIG. 15e

FIG. 15f

FIG. 15g

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