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(54) PATIENT SUPPORT APPARATUS HAVING FOOT CONTROLS

(57) The present disclosure relates to a patient support system (100) having a head end and a foot end. The patient support system comprises: a base frame (102) comprising supporting elements (120) to support the patient support apparatus on a ground; a patient support deck (104) movable relative to the base frame (102); a controller (106) configured to control the movement of the patient support deck (104); and a control panel (110), mounted to the head end of the base frame (102), configured to receive an input from the foot of a healthcare professional and communicate the input to the controller (106). The control panel (110) is mounted such that it is positioned within the periphery of the patient support apparatus (100).

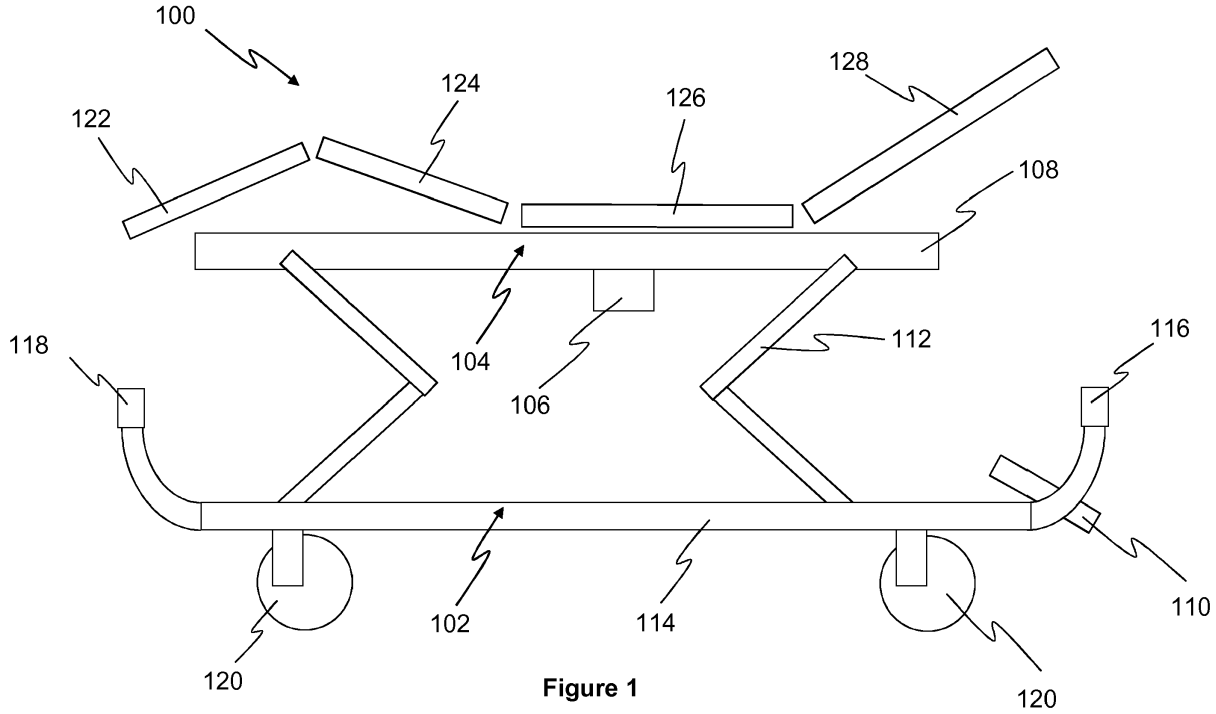

Figure 1

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Description

[0001] The present disclosure relates to a patient support apparatus having foot controls at the head-end for use by a healthcare professional. Person support apparatuses, such as beds, may be found, for example, in healthcare facilities, homes, and other locations in which care is provided. The present disclosure is particularly relevant to use in healthcare facilities.

[0002] Currently, patient support apparatuses are known which have patient support decks that are movable relative to a base frame. These known apparatuses use actuators move the patient support deck. The apparatuses have controllers which receive inputs from a user to control the actuators and thereby control the position of the patient support deck. Those controls are generally provided on a siderail of the patient support apparatus, the siderail being mounted to the patient support deck. However, in US 4,953,243 for example, controls are provided at the foot-end of the patient support apparatus, and are mounted externally to the bed frame.

[0003] It has been found that the use of controls provided on the siderail of a patient support apparatus is both inconvenient for the healthcare professional, and not hygienic because the healthcare professional must use their hands to provide the input to the controls. As such, before treating the patient, the healthcare professional either has to sterilise their hands after placing the patient support deck in the desired position, or seek assistance from another person. US 4,953,243 uses foot controls and therefore potentially overcomes the problem of the healthcare professional requiring assistance to position the deck. However, US 4,953,243 presents further problems since the controls are provided at the foot-end and thus the healthcare professional cannot position the patient support deck at the same time as attending to the patient. In addition, the controls are mounted in a position external to the bed frame, and thus may be accidentally knocked thereby unintentionally re-positioning the patient support deck. As will also be appreciated, the mounting position of the control may also present a trip hazard.

[0004] It would therefore be of benefit to provide a patient support apparatus comprising a movable patient support deck and associated controls which seeks to overcome these problems.

[0005] According to a one aspect of the present disclosure, there is provided a patient support apparatus having a head end and a foot end, comprising: a base frame comprising supporting elements to support the patient support apparatus on a ground; a patient support deck movable relative to the base frame; a controller configured to control the movement of the patient support deck; and a control panel, mounted to the head end of the base frame, configured to receive an input from the foot of a healthcare professional and communicate the input to the controller. The control panel is mounted such that it is positioned within the periphery of the patient support apparatus.

[0006] Advantageously, providing foot controls at the head-end of a patient support apparatus enables the healthcare professional to simultaneously administer care and position the patient support deck. Such a feature enables care, and especially critical care, to be provided without the need to sterilise hands after positioning the patient support deck. In addition, by mounting the control panel within the periphery of the patient support apparatus, advantageously the control panel is less susceptible to accidental activation of the inputs, and less susceptible to damage, for example during transport of the patient support apparatus around a healthcare facility.

[0007] It has been found that by providing the control panel at the head-end of the patient support apparatus, and mounting it to the base frame within the periphery of the patient support apparatus, the healthcare professional, such as a doctor or nurse, can adjust the position of the patient support deck while administering the care. This may be especially relevant when the healthcare professional is providing critical care, such as performing an intubation, cardiopulmonary resuscitation (CPR) and/or use of a manual resuscitator to provide positive pressure ventilation.

[0008] The periphery of the patient support apparatus as used herein is defined as the outer boundary of either the patient support deck, when viewed in plan, or the base frame when viewed in plan, whichever is greater. Preferably, the control panel is mounted such that it is positioned within the periphery of the base frame.

[0009] The base frame preferably comprises at least a pair of longitudinal members and a pair of transverse members fixed between the longitudinal members to form the frame. The first transverse member is provided at the head-end and may be configured to receive a head-board. The second transverse member is provided at the foot-end and may be configured to receive a foot-board. In this case, the periphery of the base frame is formed by the longitudinal members and the transverse members. The first transverse member is preferably on the periphery of the base frame. The control panel may be mounted equidistant from the longitudinal members, such that it lies on the longitudinal axis of the base frame. The control panel may be mounted such that the head-end of the control panel is between about 0 mm and about 50 mm within the periphery of the base frame, preferably between about 0 mm and about 30 mm with in the periphery of the base frame.

[0010] The base frame may comprise additional transverse members fixed between the longitudinal members. The supporting elements may be coupled directly to the longitudinal members, or to the additional transverse members. Preferably, four supporting elements are provided, each adjacent a corner of the base frame. The supporting elements may be castors to enable the patient support apparatus to be moved easily. The supporting elements may alternatively be feet.

[0011] Preferably, the control panel is mounted such that it is positioned between a portion of the base frame

and the ground. As such, the vertical height of the control panel is between ground level and a portion of the base frame. The control panel is preferably mounted between the, where provided, first transverse member and the ground.

[0012] The control panel may be mounted such that a distance of between about 20 mm and about 160 mm is provided between the ground and the control panel. Preferably, the distance between the ground and the control panel is between about 100 mm and about 140 mm, more preferably about 120 mm.

[0013] Where provided, the transverse members, at the head-end and the foot-end respectively, may be planar with the longitudinal members. Alternatively, the transverse members may be out of the plane formed by the longitudinal members. In this alternative, the transverse members are preferably positioned such that the longitudinal members are vertically between the ground and the transverse members. The control panel may be mounted such that it is at substantially the same vertical height as the longitudinal members. The control panel may be mounted to, where provided, the additional transverse member provided at the head-end of the base frame.

[0014] The control panel may be longitudinally slidably mounted to the base frame, such that the control panel is slidable from a first, retracted, position in which the control panel is wholly within the periphery of the patient support apparatus to a second, extended, position in which the control panel is at least partially without the periphery of the patient support apparatus. The movement of the control panel may be controlled by a mechanism activated a foot actuated lever, or the movement of the control panel may be controlled by an actuator, such as a linear actuator. Advantageously, slidably mounting the control panel enables the control panel to be positioned in a more ergonomic position when in use, the second, extended, position, but in a position less susceptible to accidental activation of the inputs or damage, the first, retracted, position when not in use.

[0015] The patient support deck may include a leg section, a thigh section, a seat section, and a head and torso section. The leg section and the thigh section preferably define a lower limb support section. The head and torso section preferably define an upper body support section.

[0016] The control panel preferably comprises at least one foot activated switch for receiving the input. The at least one switch may be a push-to-make switch. The or each switch preferably comprises a substantially planar front face. The front face of the or each switch is preferably continuous, such that it is more easily cleaned.

[0017] The control panel preferably comprises at least two inputs respectively corresponding to requests to move the patient support deck up, and to move the patient support down. The control panel preferably comprises a push-to-make rocker switch comprising the two inputs. In this way, the healthcare professional is prevented from activating both, mutually exclusive, inputs simultaneously. Alternatively, the or each input may comprise: a piezoelectric switch; a capacitive switch; and a membrane switch.

[0018] The control panel may comprise one or more inputs respectively corresponding to requests to move the patient support deck into at least one of: the Trendelenburg position; the reverse Trendelenburg position; the emergency flat position; and the boost position. As will be appreciated, any combination of the plurality of inputs may be provided, as required. The series of movements of the patient support deck required to position the deck are preferably pre-programmed into the controller.

[0019] As used herein, the term "emergency flat position" refers to a position of the patient support deck in which the deck is substantially planar, substantially horizontal, and where the height of the deck above the ground is substantially at the mid-point of the range of height movement. As used herein, the term "boost position" refers to a position of the patient support deck in which the deck is substantially planar, and where the height of the deck above the ground is substantially at the mid-point of the range of height movement. The boost position may further comprise the patient support deck being in the Trendelenburg position at approximately 7 degrees to the horizontal. If the patient support apparatus comprises an appropriate support surface is installed, the boost position input may activate the maximum inflate setting. The terms "Trendelenburg position", and "reverse Trendelenburg position" are well-known in the art, and so for brevity the meanings of which are not repeated here.

[0020] The control panel preferably comprises a push-to-make rocker switch comprising the input for moving the patient support deck into the Trendelenburg position, and the input for moving the patient support deck into the reverse Trendelenburg position. In this way, the healthcare professional is prevented from activating both, mutually exclusive, inputs simultaneously.

[0021] The control panel may comprise a push-to-make switch comprising the input for moving the patient support deck to the emergency flat position. The push-to-make switch may comprising the input for moving the patient support deck to the emergency flat position may be visually distinct from the remainder of the control panel. The switch may be a visually distinct colour, such as yellow. Advantageously, providing a visually distinct switch comprising the input for moving the patient support deck to the emergency flat position may enable the healthcare professional to more easily find and activate the input in an emergency situation.

[0022] The control panel may comprises a plurality of switches, the push-to-make switch comprising the input for moving the patient support deck to the emergency flat position having the largest surface area of the plurality of switches on the control panel. Again, advantageously, providing the switch comprising the input for moving the patient support deck to the emergency flat position with the largest surface area of all of the switches may enables

the healthcare professional to more easily find and activate the input in an emergency situation.

[0023] The push-to-make switch comprising the input for moving the patient support deck to the emergency flat position is preferably positioned adjacent a head end of the control panel.

[0024] Where provided, the input for moving the patient support deck to the boost position comprises a push-to-make switch.

[0025] The front face of the control panel, configured to receive the input, is preferably provided at an angle of between about 20 degrees and about 45 degrees to the ground, more preferably between about 25 degrees and about 35 degrees, and in one particular embodiment about 28 degrees. Providing the control panel at such an angle positions the control panel in an ergonomic position which enables the healthcare professional to use the controls more easily. As will be appreciated, the angle that the control panel is provided at is dependent on the height above the ground that the control panel is mounted.

[0026] The controller may have two states: a locked state in which inputs are not accepted from the control panel; and an unlocked state in which inputs are accepted from the control panel, the controller switching between the locked state and the unlocked state on receipt of an unlock input. The unlock input may comprise pressing and holding an input on the control panel for a pre-determined period of time. The pre-determined period of time may be between about 1 second and about 5 seconds, preferably between about 1 second and about 3 seconds. The unlock input may be a sequence of inputs to the control panel corresponding to an unlock code. The unlock input may be an additional input provided on the control panel, or on another portion of the patient support apparatus. The unlock input may be provided on a siderail of the patient support apparatus.

[0027] The patient support apparatus may further comprise a second control panel, mounted to the patient support deck, configured to receive an input from a healthcare professional and communicate the input to the controller. The patient support apparatus may further comprise a third control panel, mounted to a longitudinal side of the base frame, configured to receive an input from a healthcare professional and communicate the input to the controller. The controller is preferably configured to prioritise inputs received from the control panel mounted to the head end of the base frame. Where the controller comprises a locked state and an unlocked state, the additional input to unlock the control panel mounted to the head-end of the base frame may be provided on the second control panel or on the third control panel.

[0028] Where a second control panel is provided, the controller may be further configured such that use of the control panel mounted to the head-end of the base frame, deactivates the second control panel for a period of time. This may ensure that the patient support deck is not moved during a critical medical intervention, such as intubating a patient. The period of time may be between about 1 minute and about 10 minutes, between about 2 minutes and about 5 minutes. Alternatively, or in addition, the second control panel may be activated by an activation code, such as pressing and holding an input for a period of time, such as 5 seconds, or inputting a sequence of inputs.

[0029] Where provided, the second control panel may comprise a plurality of inputs. The second control panel may comprise inputs corresponding to the inputs provided on the control panel mounted to the head-end of the base frame. The second control panel may comprise additional inputs. The additional inputs may be inputs corresponding to requests to: move the patient support deck to a sitting position; rotate the upper body section of the deck; and rotate the lower limb support section of the deck.

[0030] Where provided, the third control panel may comprise a plurality of inputs. The third control panel may comprise two inputs respectively corresponding to requests to move the patient support deck up and move the patient support deck down.

[0031] The person support apparatus preferably further comprises lift mechanisms coupled to the base frame and the patient support deck for moving the deck relative to the base frame. The patient support deck may comprise an upper frame, the lift mechanism being coupled to the upper frame of the deck. The lift mechanisms may be configured to raise and lower the upper frame with respect to the base frame and move the upper frame between the various positions, such as, Trendellenburg and reverse Trendellenburg.

[0032] The upper frame may include an upper frame base, the deck being coupled to the upper frame base, and a plurality of siderails. As described above, the deck may include a leg section, a thigh section, a seat section, and a head and torso section. The leg section and the thigh section preferably define a lower limb support section. The head and torso section preferably define an upper body support section. The leg section, the thigh section, and the seat section preferably define a lower body support section. At least the leg section, the thigh section, and the head and torso section are preferably movable with respect to one another and/or the upper frame base. The leg section, the thigh section, the seat section, and the head and torso section may cooperate to move the patient support deck between a substantially planar or lying down configuration, e.g. the emergency flat position, and a chair configuration. The leg section, the thigh section, the seat section, and the head and torso section may cooperate to move the patient support deck between a substantially planar or lying down configuration and an angled or reclined configuration. The head and torso section may be moved such that it is at an angle of at least about 30° with respect to a reference plane passing through the upper frame.

[0033] The siderails may be configured to move between a deployed position and a storage position, and are used to locate the perimeter of the upper frame and

assist with ingress/egress to/from the person support apparatus. The siderails may include a base, a movement mechanism movably coupled to the base, and a panel movably coupled to the movement mechanism.

[0034] The patient support deck is preferably configured to support a patient support surface, and the surface is preferably configured to support a patient thereon and move with the deck between the various configurations. The patient support surface is preferably a hospital bed mattress. The patient support surface may include a heat and moisture regulating topper positioned on the mattress. The patient support surface may include a pressure mapping mat positioned on the mattress. The patient support surface preferably includes a leg portion, a thigh portion, a seat portion, and a head and torso portion, which is supported on corresponding sections of the deck. The deck sections may help move and/or maintain the various portions of the mattress at angles α, β and y with respect to the reference plane.

[0035] The patient support surface may be a non-powered (static) surface. Alternatively, the patient support surface is a powered (dynamic) surface configured to receive fluid from a fluid supply.

[0036] The patient support surface may include a mattress cover and a mattress core enclosed by the mattress cover. The mattress core can be composed of a single type of material or a combination of materials and/or devices. In the case of a powered surface, the mattress core preferably includes at least one fluid bladder therein that receives fluid from a fluid supply to maintain the fluid pressure within the fluid bladder at a predetermined level. The powered surface may include non-powered components, such as, a foam frame that at least one fluid bladder is positioned between. Wedge shaped bladders may be mirrored laterally about the centreline of the mattress and are preferably configured to be inflated consecutively to laterally tilt the occupant, thereby relieving pressure on various portions of the occupant's body to help reduce the occurrences of pressure ulcers.

[0037] In the case of a non-powered surface, the mattress core is preferably composed of a cellular engineered material, such as, single density foam. The mattress core may include at least one bladder, such as, a static air bladder or a static air bladder with foam contained there within, a metal spring and/or other non-powered support elements or combinations thereof. The mattress core may include multiple zones with different support characteristics configured to enhance pressure redistribution as a function of the proportional differences of a person's body. Also, in some embodiments, the mattress core includes various layers and/or sections of foam having different impression load deflection (ILD) characteristics, such as, in the NP100 Prevention Surface, AccuMax Quantum™ VPC Therapy Surface, and NP200 Wound Surfaces sold by Hill-Rom®.

[0038] As used herein, healthcare professional refers to a nurse, doctor, carer or other such type of person.

[0039] Any feature in one aspect of the disclosure may be applied to other aspects of the disclosure, in any appropriate combination. In particular, method aspects may be applied to apparatus aspects, and vice versa. Furthermore, any, some or all features in one aspect can be applied to any, some or all features in any other aspect, in any appropriate combination.

[0040] It should also be appreciated that particular combinations of the various features described and defined in any aspects of the disclosure can be implemented and/or supplied and/or used independently.

[0041] The disclosure extends to apparatus substantially as herein described with reference to the accompanying drawings. As such, the disclosure will be further described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 shows a side view of a schematic representation of a patient support apparatus according to the present disclosure;

Figure 2 shows a plan view of a schematic representation of the patient support apparatus shown in Figure 1;

Figure 3 shows a perspective view of a patient support apparatus according to the present disclosure ;

Figure 4 shows a detailed view of a control panel of a patient support apparatus according to the present disclosure; and

Figure 5 shows a further detailed view of the control panel shown in Figure 4.

[0042] Figure 1 shows a patient support apparatus 100 comprising a base frame 102, a patient support deck 104 movable relative to the base frame 102, a controller 106, and a control panel 110 for receiving inputs from a healthcare professional. The patient support apparatus further comprises a lift mechanism 112 coupled to the base frame and the patient support deck 104, the deck being movably supported above the base frame 102 by the lift mechanism. The base frame 102 comprises longitudinal members 114, a head-end transverse member 116 and a foot-end transverse member 118. The base frame 102 is supported on the ground by casters 120. The lift mechanisms 112 are configured to raise and lower the patient support deck with respect to the base frame 102 and to move the patient support deck 104 between various orientations, such as, Trendelenburg and reverse Trendelenburg.

[0043] The patient support deck 104 comprises an upper frame base 108, a plurality of siderails (not shown), and a plurality of sections, including a leg section 122, a thigh section 124, a seat section 126, and a head and torso section 128. The leg section 122 and the thigh section 124 define a lower limb support section. The head and torso section 128 define an upper body support section. The leg section 122, the thigh section 124, and the seat section 126 define a lower body support section.

[0044] The controller 106 is configured to receive inputs from the control panel 110. The inputs received from

the control panel may relate to raising or lowering the patient support deck 104, or to pre-configured orientations of the patient support deck, such as the Trendelenburg position, reverse Trendelenburg position, emergency flat position, or Boost position. The emergency flat position refers to a position of the patient support deck in which the deck is substantially flat, substantially horizontal relative to the ground, and where the height of the deck above the ground is substantially at the mid-point of the range of height movement. The Boost position refers to a position of the patient support deck in which the deck is substantially flat, and where the height of the deck above the ground is substantially at the mid-point of the range of height movement. The boost position may further comprise moving the patient support deck to the Trendelenburg position at approximately 7 degrees to the horizontal. Such a movement to the Trendelenburg position may only occur once the healthcare professional has held the input for between about 1 second and about 3 seconds. Where the patient support apparatus has an appropriate support surface installed, the boost position input will activate the maximum inflate setting. The controller is further configured to control the lift mechanisms, in dependence on the input, to move the patient support deck to the required position.

[0045] The control panel 110 is mounted to the base frame 102 such that it is within the periphery of the base frame. In this way, the base frame provides protection to the control panel 110 from accidental activation of the inputs, or from damage caused by the control panel impacting external objects, e.g. walls during transport of the patient support apparatus around a healthcare facility. In particular, the control panel is mounted between the head-end transverse member 116 and the ground. Mounting the control panel 110 at the head-end of the patient support apparatus enables a healthcare professional, such as a doctor or nurse, to easily position the patient support apparatus in a required position without having to move, or re-sterilise hands. Advantageously, during critical medical interventions, such as intubations, the healthcare professional may provide care quicker and more effectively because of this ability to control the position of the apparatus.

[0046] As can bee seen in Figure 1, the control panel is mounted such that its front face is at an angle of about 28 degrees to the ground. As will be appreciated, the control panel is configured to receive inputs from a healthcare professional's foot, and so providing the control panel at such an angle enables the healthcare professional to more easily access the controls and provide the input.

[0047] Referring now to Figure 2, further details of the control panel 110 and the mounting position of the control panel are provided. In Figure 2, the patient support deck 104 is shown in dashed lines for ease of representation of the underlying structure. As can be seen, the base frame 102 comprises two further transverse members 200 and 202, each coupled to the longitudinal members 114. In this example, the control panel is mounted to the transverse member 200 via a mounting arm 204. As described above, the control panel is mounted such that it is within the periphery of the base frame. In one example, the control panel is mounted such that the edge of the control panel adjacent the head-end of the patient support apparatus is about 50 mm within the periphery of the base frame, and such that the edge adjacent the ground is about 120 mm from the ground. Providing the control panel at this height above the ground prevents the healthcare professional's feet from being trapped or pinched by the control panel, for example when the patient support apparatus is being moved.

[0048] In the example shown in Figure 2, the control panel 110 comprises a plurality of inputs, 206, 208, 210 and 212. The inputs are push-to-make switches. Input 206 corresponds to a request to move the patient support apparatus to the emergency flat position. Input 208 corresponds to a request to move the patient support apparatus to the boost position. Input 210 is a rocker switch comprising an input corresponding to a request to raise the height of the patient support deck and an input corresponding to a request to lower the height of the patient support deck. Input 212 is also a rocker switch, and comprises an input corresponding to a request to position the patient support apparatus in the Trendelenburg position, and an input corresponding to a request to position the patient support apparatus in the reverse-Trendelenburg position. Rocker switches are provided to ensure that the mutually exclusive inputs cannot be activated at the same time.

[0049] In another example, the mounting arm 204 may be slidably extendable to enable the control panel to be moved without the periphery of the base frame during use.

[0050] Figure 3 shows a perspective view of the patient support apparatus 100. In addition to the features of the patient support apparatus described with reference to Figures 1 and 2, Figure 3 shows a patient support surface 300 provided on the patient support deck 104, siderails 302, and 304, and a foot-board 306. The patient support apparatus also comprises a head-board (not shown), which would be coupled to the head-end transverse member 116. The foot-board 306 is coupled to the foot-end transverse member 118.

[0051] As can be seen, in this particular example, the patient support surface 300 is a mattress. The patient support surface is configured to support a patient thereon and move with the deck between the various configurations. The patient support surface can include a heat and moisture regulating topper positioned on the mattress. The patient support surface may include a pressure mapping mat positioned on the mattress. The person support surface preferably includes a leg portion, a thigh portion, a seat portion, and a head and torso portion, which is supported on corresponding sections of the deck.

[0052] The siderails 302 and 304 are configured to move between a deployed position (the position of head-end siderail 302) and a storage position (the position of

foot-end siderail 304), and are used to locate the perimeter of the upper frame and assist with ingress/egress to/from the person support apparatus. In addition, a second control panel 308 is provided on siderail 302. The second control panel 308 comprises at least all of the inputs provided in control panel 110. The second control panel 308 may also comprise additional inputs such as inputs corresponding to a request to position the patient support deck in an egress position, or to rotate the upper body section. The controller 106 is configured such that the inputs received by the control panel 110 are prioritised over the inputs received by the second control panel 308. The controller 106 may be configured such that use of the control panel 110 deactivates the second control panel 308 for a period of time to ensure that the patient support deck is not moved during a critical medical intervention, such as intubating a patient. Further controls may be provided on other siderails.

[0053] Figure 4 shows a detailed view of the control panel 110. As described above, the control panel 110 comprises inputs 206, 208, 210 and 212. As can be seen, the input 206 corresponding to a request to move the patient support apparatus to the emergency flat position is the largest input, and is also visually distinct from the other inputs. This enables the healthcare professional to more easily locate and activate this input with their foot in an emergency situation. The input 210 is a rocker switch, which when rocked in one direction activates switch 400 to raise the patient support deck, and when rocked in the other direction activates switch 402 to lower the patient support deck. The input 212 is also a rocker switch, and when rocked in one direction activates switch 404 to request the patient support deck is positioned in the Trendelenburg position, and when rocked in the other direction activates switch 406 to request the patient support deck is positioned in the reverse-Trendelenburg position.

[0054] Figure 5 shows a further detailed view of the front face of control panel 110. As can be seen, indicia are provided on each input to enable the healthcare professional to more easily select the required function and move the patient support deck to the required position.

[0055] Other inputs may be provided on the control panel 110 as required for the particular application.

[0056] The disclosure has been exemplified above by reference to Figures 1 to 4, where the patient support apparatus is a hospital bed. However, it will be appreciated that the patient support apparatus may be any suitable apparatus, and according to the disclosure may comprise other forms of support apparatus.

Claims

1. A patient support apparatus having a head end and a foot end, comprising:

a base frame comprising supporting elements to support the patient support apparatus on a ground;

a patient support deck movable relative to the base frame;

a controller configured to control the movement of the patient support deck; and

a control panel, mounted to the head end of the base frame, configured to receive an input from the foot of a healthcare professional and communicate the input to the controller, wherein said control panel is mounted such that it is positioned within the periphery of the patient support apparatus.

2. A patient support apparatus according to Claim 1, the control panel being mounted such that it is positioned between a portion of the base frame and the ground.

3. A patient support apparatus according to any of Claims 1 or 2, the control panel comprising at least one foot activated switch for receiving the input.

4. A patient support apparatus according to any of the preceding claims, wherein a front face of the control panel, configured to receive the input, is provided at an angle of between about 20 degrees and 45 degrees to the ground.

5. A patient support apparatus according to any of the preceding claims, wherein the control panel comprises at least two inputs respectively corresponding to requests to move the patient support deck up, and to move the patient support down.

6. A patient support apparatus according to Claim 5, wherein the control panel comprises a push-to-make rocker switch comprising the two inputs.

7. A patient support apparatus according to any of the preceding claims, wherein the control panel comprises one or more inputs respectively corresponding to requests to move the patient support deck into at least one of: the Trendelenburg position; the reverse Trendelenburg position; the emergency flat position; and the boost position.

8. A patient support apparatus according to Claim 8, wherein the control panel comprises a push-to-make rocker switch comprising the input for moving the patient support deck into the Trendelenburg position, and the input for moving the patient support deck into the reverse Trendelenburg position.

9. A patient support apparatus according to Claim 7 or 8, wherein the control panel comprises a push-to-make switch comprising the input for moving the patient support deck to the emergency flat position.

10. A patient support apparatus according to Claim 9, the push-to-make switch comprising the input for moving the patient support deck to the emergency flat position being visually distinct from the remainder of the control panel.

11. A patient support apparatus according to Claim 9 or 10, where the control panel comprises a plurality of switches, the push-to-make switch comprising the input for moving the patient support deck to the emergency flat position having the largest surface area of the plurality of switches on the control panel.

12. A patient support apparatus according to Claim 9, 10 or 11, the push-to-make switch comprising the input for moving the patient support deck to the emergency flat position being positioned adjacent a head end of the control panel.

13. A patient support apparatus according to any of Claims 7 to 12, wherein the control panel comprises a push-to-make switch comprising the input for moving the patient support deck to the boost position.

14. A patient support apparatus according to any of the preceding claims, wherein the controller has two states: a locked state in which inputs are not accepted from the control panel; and an unlocked state in which inputs are accepted from the control panel, the controller switching between the locked state and the unlocked state on receipt of an unlock input.

15. A patient support apparatus according to any of the preceding claims, further comprising a second control panel, mounted to the patient support deck, configured to receive an input from the healthcare professional and communicate the input to the controller, wherein the controller is configured to prioritise inputs received from the control panel mounted to the head end of the base frame.

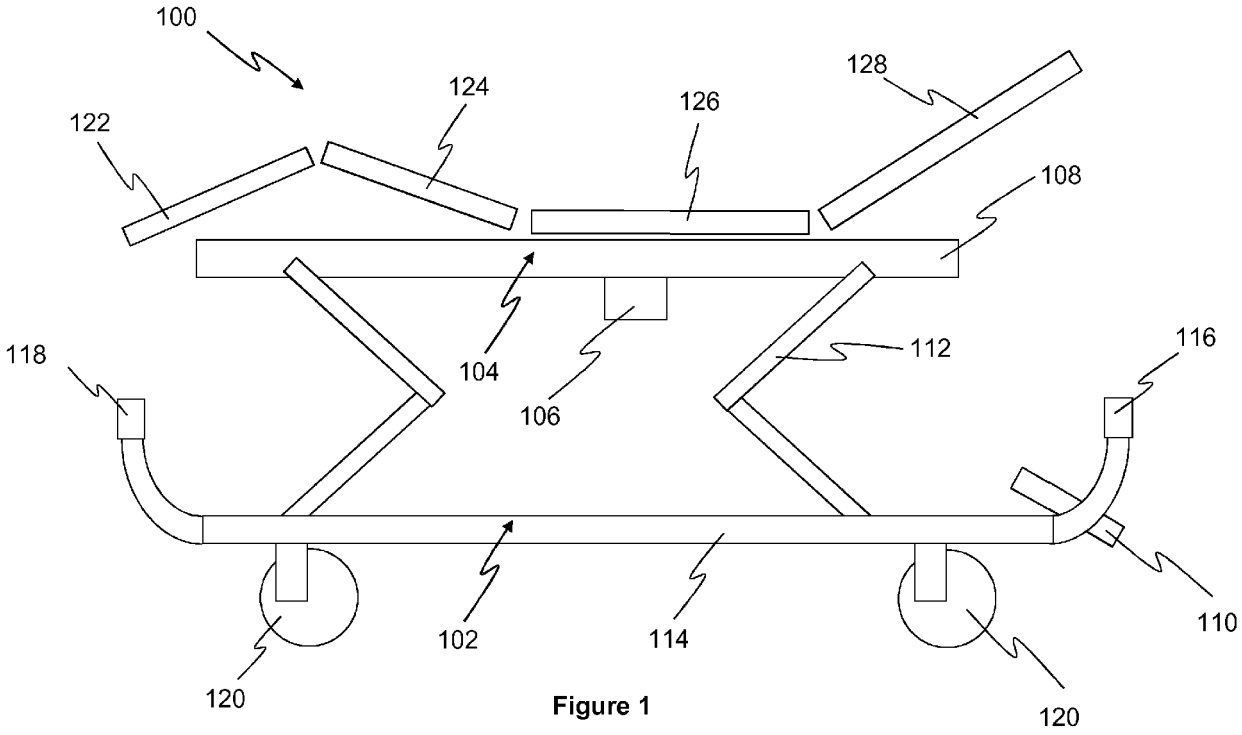

Figure 1

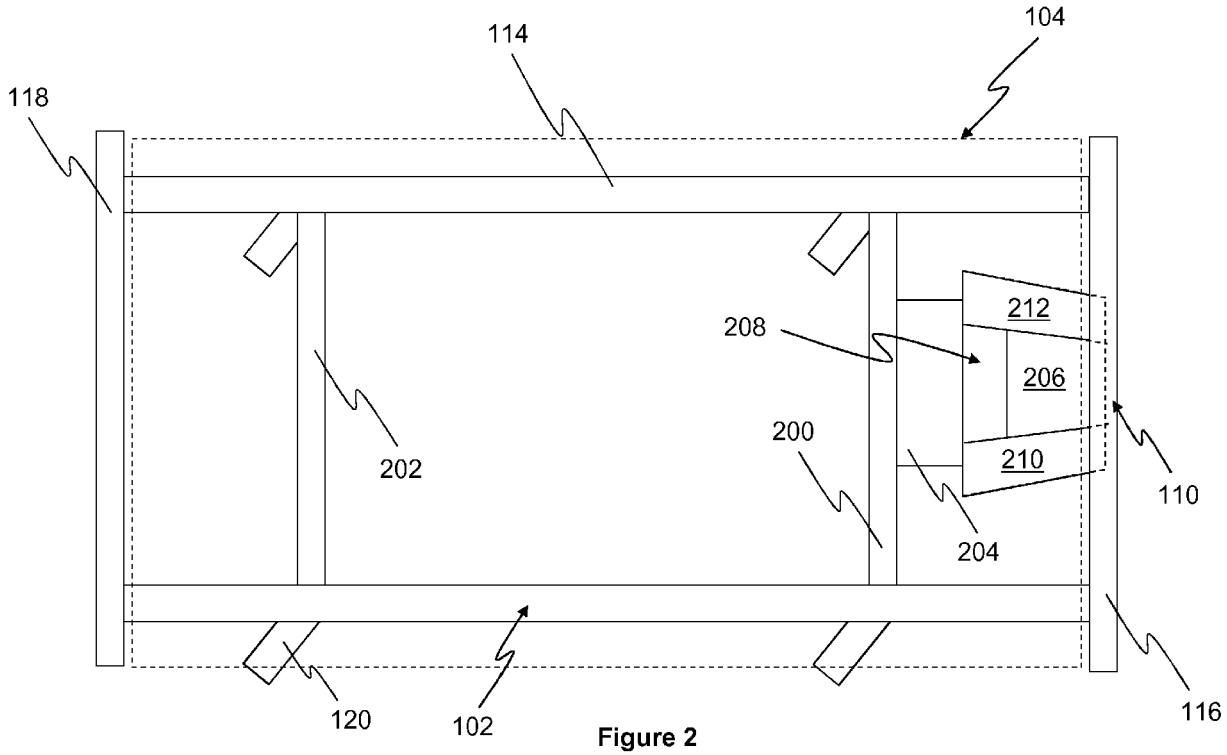

Figure 2

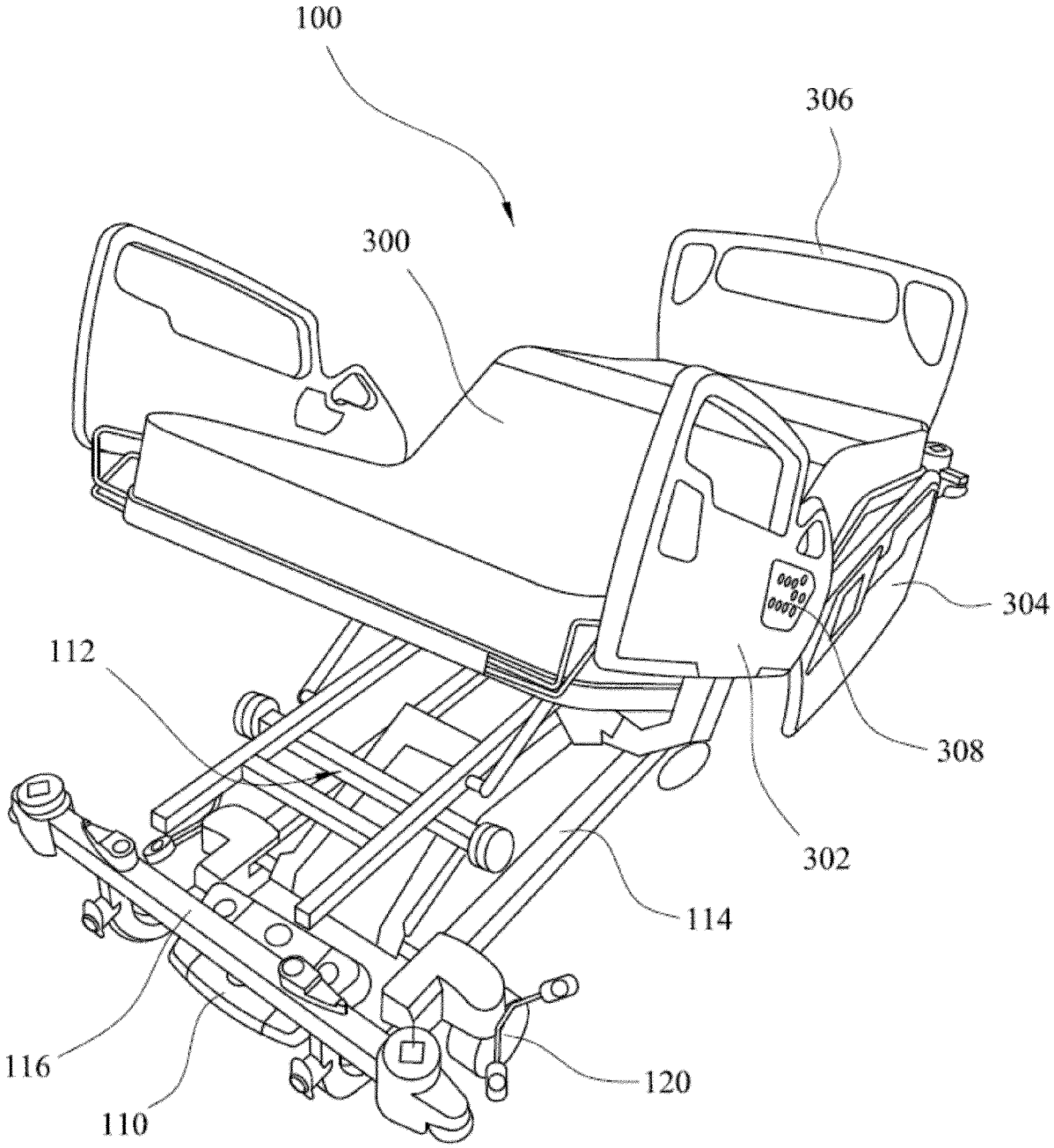

Figure 3

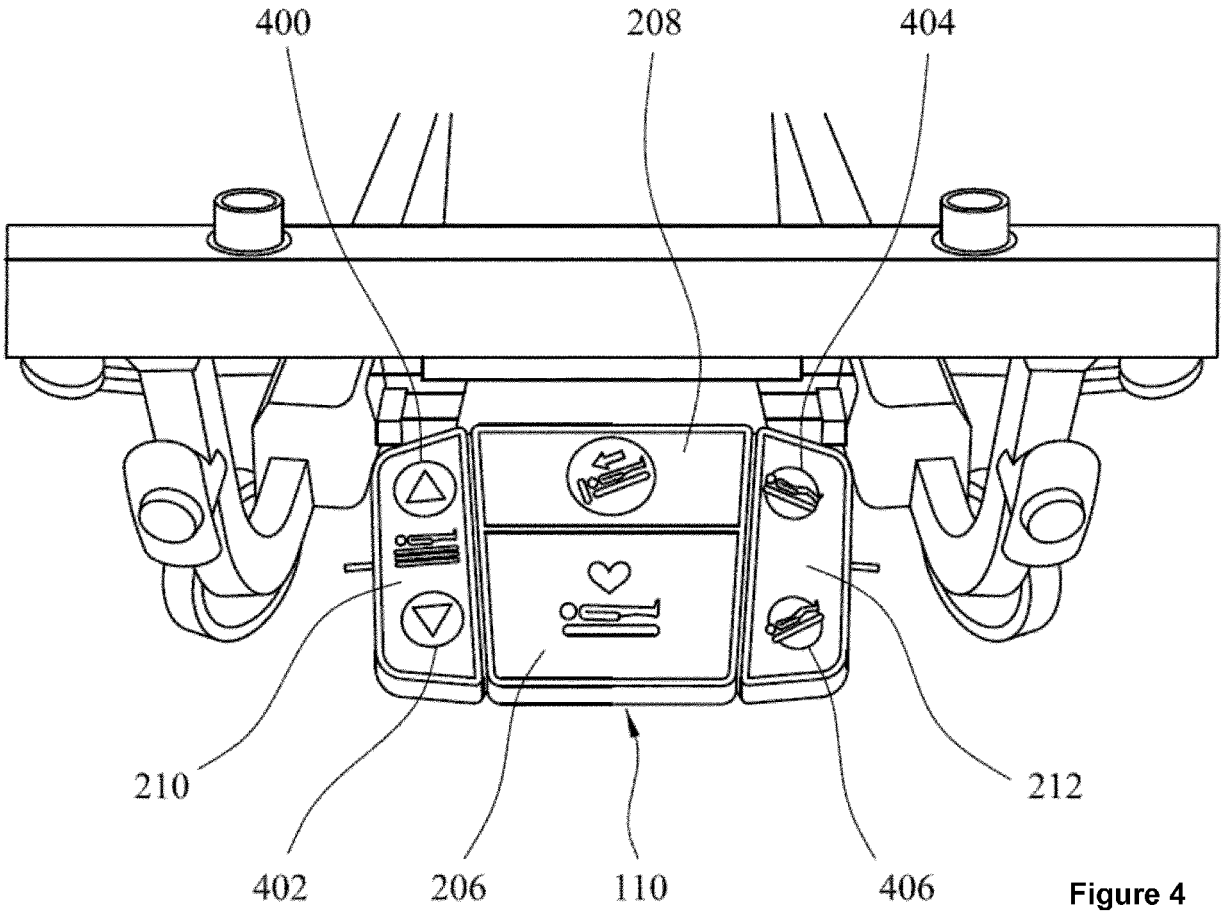

Figure 4

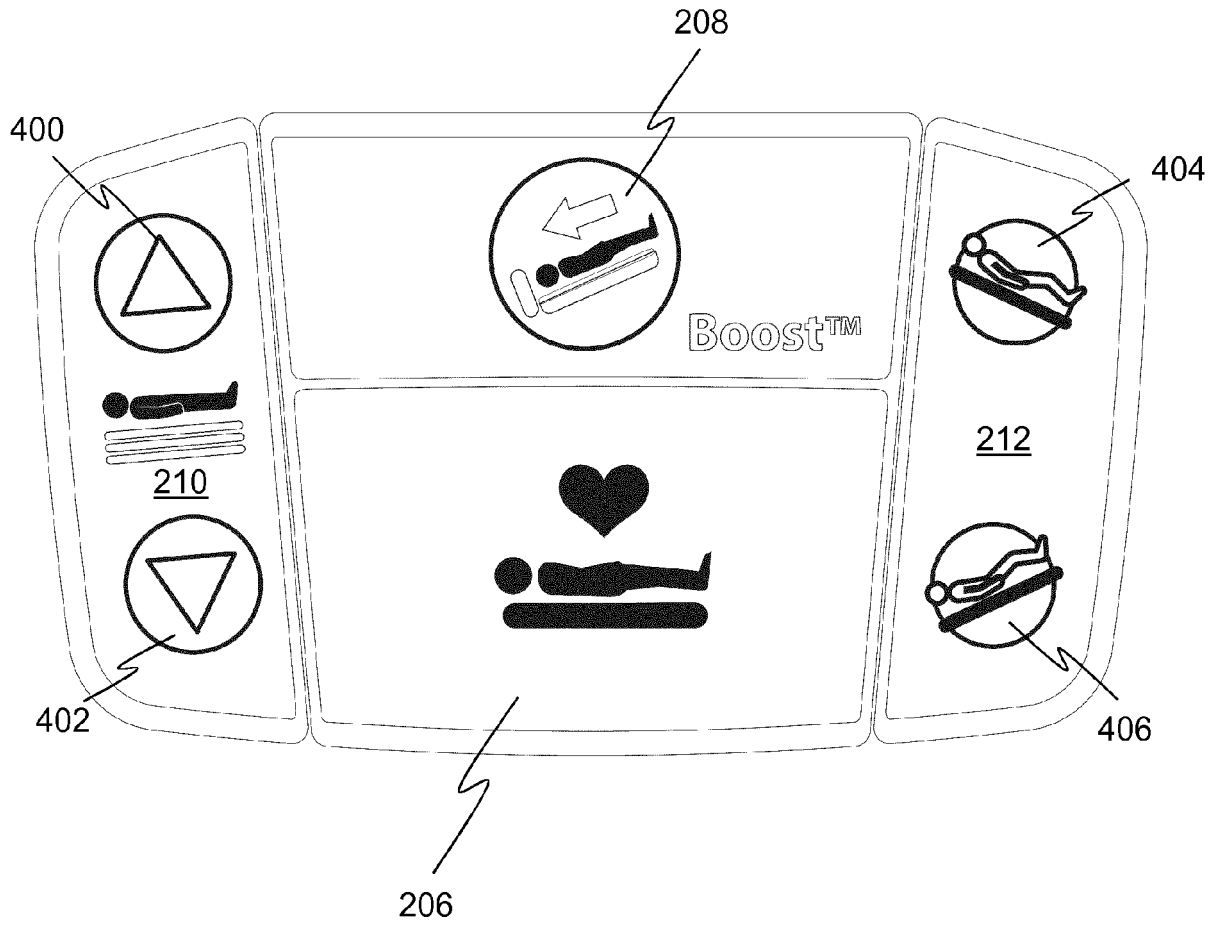

Figure 5

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EUROPEAN SEARCH REPORT

Application Number
EP 15 30 7045

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Place of search	Date of completion of the search	Examiner
The Hague	3 June 2016	Edlauer, Martin

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