Abstract: A bed featuring a motorized foot support. When the user wishes to stand up from lying down or sitting, the motorized foot support moves toward the head of the bed until it reaches the user's feet. When the user is brought into standing position, motorized foot support starts to come down so that the feet of the user are in close proximity to ground level.
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For two-letter codes and other abbreviations, refer to the “Guidance Notes on Codes and Abbreviations” appearing at the beginning of each regular issue of the PCT Gazette.
AMENDED CLAIMS

1. A multi-position support apparatus able to change its angular position comprising: a back support, a seat, at least one leg support, and at least one movable foot support; wherein, said at least one movable foot support moves approximately towards the head of said multi-position support apparatus when said user wishes to stand up from lying down or reclining or sitting, and said at least one movable foot support is approximately touching the ground when said user is standing up.

2. The multi-position support apparatus of claim 1 wherein said at least one movable foot support moves approximately towards the head of said multi-position support apparatus until it approximately reaches the user's feet, and said foot support comprises a sensor.

3. The multi-position support apparatus of claim 2 wherein said sensor is a pressure sensor, whereby said pressure sensor measures the intensity of the resistance from the user's legs.

4. The multi-position support apparatus of claim 1 wherein said multi-position support apparatus is covered by a mattress.

5. The multi-position support apparatus of claim 4 wherein said at least one movable foot support is a motorized movable foot support that is connected to an operating engine through slots in said mattress.

6. The multi-position support apparatus of claim 1 wherein said at least one movable foot support is a motorized movable foot support that is connected to an operating engine using at least one arm-like extension.

7. The multi-position support apparatus of claim 1 wherein said multi-position support apparatus further comprises:
   (a) a multi-position support apparatus base,
   (b) at least one hand support, and
   (c) an integrated toilet.

8. The multi-position support apparatus of claim 1 wherein said multi-position support apparatus comprises:
   (a) at least one engine to change said multi-position support apparatus angular position, and
   (b) at least one control system, whereby said at least one control system is controlling said at least one engine and said at least one movable foot support,
whereby said at least one control system prevents said user from getting to
an angular position from which said user is able to fall forward from said
multi-position support apparatus.

9. The multi-position support apparatus of claim 8 wherein said user controls
said multi-position support apparatus by using controlling means.

10. The multi-position support apparatus of claim 8 comprising two engines
to change said multi-position support apparatus angular position and said
control system allows said user to operate each engine separately.

11. The multi-position support apparatus of claim 8 wherein said at least one
movable foot support is at least one motorized movable foot support
which comprises a sensor placed about said at least one motorized
movable foot support, whereby said sensor detects objects and prevents
said at least one motorized movable foot support from crushing them.

12. The multi-position support apparatus of claim 8 wherein said back support
comprises a sensor placed about said back support, whereby said sensor
detects objects and prevents said back support from crushing them.

13. The multi-position support apparatus of claim 1 wherein said multi-
position support apparatus is a parallelogram-based multi-position support
apparatus.

14. The multi-position support apparatus of claim 1 wherein the length of said
multi-position support apparatus is adjusted to the height of said user.

15. The multi-position support apparatus of claim 1 wherein at least one part
of said multi-position support apparatus is a floating part, whereby the at
least one floating part enables said multi-position support apparatus to
move according to the motion of said user.

16. The multi-position support apparatus of claim 1 further comprising at least
one device for entering an emergency response operation.

17. The multi-position support apparatus of claim 1 further comprising
customized operational parameters setting and saving means.

18. The multi-position support apparatus of claim 1 wherein said multi-
position support apparatus is adjustable between lying, reclining, and
standing positions, whereby said multi-position support apparatus is
generally vertical in said standing position.

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19. The multi-position support apparatus of claim 1 wherein said multi-position support apparatus is adjustable between reclining and standing positions.

20. The multi-position support apparatus of claim 1 wherein said multi-position support apparatus is adjustable between sitting and standing positions.

21. The multi-position support apparatus of claim 1 wherein said multi-position support apparatus further comprises wheels, whereby said wheels enable said multi-position support apparatus to move.

22. The multi-position support apparatus of claim 1 wherein said multi-position support apparatus further comprises a foldable tray attached to said multi-position support apparatus.

23. A multi-position support apparatus able to change its angular position comprising: a motorized foot support; and, a muscle tonus monitoring device; whereby, said motorized foot support is able to move towards the head of said multi-position support apparatus and to move in an perpendicular direction.

24. The multi-position support apparatus of claim 23 further comprising motorized protective barriers.

25. The multi-position support apparatus of claim 23 wherein said motorized foot support comprises a pressure sensor, whereby said pressure sensor measures the intensity of the resistance from said user's legs.

26. The multi-position support apparatus of claim 23 wherein said multi-position support apparatus is covered by a mattress.

27. The multi-position support apparatus of claim 26 wherein said motorized foot support is connected to an operating engine through slots in said mattress.

28. The multi-position support apparatus of claim 23 wherein said motorized foot support is connected to an operating engine using at least one arm-like extension.

29. A method comprising: providing a multi-position support apparatus accepting a user in a standing position; moving said user into a predefined reclining position; providing a movable foot support; moving said movable foot support towards the head of said multi-position support apparatus.
apparatus; returning said user to a standing position; and, moving said movable foot support towards the floor.

30. The method of claim 29 wherein said reclining position is a lying position.

31. The method of claim 29 wherein said moving of said user into a predefined reclining position comprises leaning said user backwards, and upon achieving a predefined intermediate reclined angle, moving said user into said predefined reclining position; and said returning of said user to a standing position comprises moving said user into a predefined intermediate reclined angle, and upon achieving said predefined reclining position moving said user into said standing position.

32. The method of claim 29 wherein said returning of said user to said standing position comprises detecting objects and preventing said multi-position support apparatus from crushing them.

33. The method of claim 29 wherein said moving of said user into said predefined reclining position comprises detecting objects and preventing said multi-position support apparatus from crushing them.

34. The method of claim 47 wherein said reaching of said user's feet comprises measuring a minimum predefined intensity of resistance from said user's legs.

35. A method comprising: providing a multi-position support apparatus accepting a user in a standing position; moving said user into a predefined reclining position; providing a movable foot support; returning said user to a standing position; recognizing muscle tonus decrease; and, preventing said user from falling.

36. The method of claim 35 wherein said preventing of said user from falling further comprises bringing said user back to a safe reclining position.

37. The method of claim 35 wherein said preventing of said user from falling further comprises upbringing motorized protective barriers.

38. The method of claim 35 wherein said movable foot support is a motorized movable foot support and preventing of said user from falling comprises pushing said user's feet forward.

39. The method of claim 35 wherein said preventing of said user from falling comprises pushing said user's knees forward.

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40. The method of claim 35 further comprising returning said multi-position support apparatus to reclining position.

41. The method of claim 35 further comprising:
   (a) moving said movable foot support towards the head of said multi-position support apparatus until it is reaching said user's feet, and
   (b) moving said movable foot support towards the floor.

42. The method of claim 35 wherein said reclining position is a lying position.

43. The method of claim 35 wherein said moving of said user into a predefined reclining position comprises leaning said user backwards, and upon achieving a predefined intermediate reclined angle, moving said user into said predefined reclining position; and said returning of said user to a standing position comprising moving said user into a predefined intermediate reclined angle, and upon achieving said predefined reclining position moving said user into said standing position.

44. The method of claim 35 wherein said returning of said user to said standing position comprises detecting objects and preventing said multi-position support apparatus from crushing them.

45. The method of claim 35 wherein said moving of said user into said predefined reclining position comprises detecting objects and preventing said multi-position support apparatus from crushing them.

46. The method of claim 41 wherein said movable foot support is a motorized movable foot support and moving said motorized movable foot support towards said head of said multi-position support apparatus until it is reaching said user's feet further comprises measuring a minimum predefined intensity of resistance from said user's legs.

47. The method of claim 29 wherein said movable foot support is a motorized movable foot support that is moving until it is reaching said user's feet.

48. The method of claim 35 wherein said movable foot support is a motorized movable foot support.

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