Claims

1. A height accessible working platform comprising:

a frame attachable to a lifting system for being moveable along the vertical axis and suspended thereto;

a cradle;

a counterweight mechanism mounting at one lateral side of the frame opposing to the cradle, the counterweight mechanism being configured to balance the working platform corresponding to the displacement of the cradle along the first axis,

a first arm structure having a proximal end terminated to the frame and an distal end attached to the cradle, characterized by the first arm structure being extendable and retractable to displace the cradle respectively away from and closer towards one of lateral sides of the frame along a first axis substantially perpendicular to the vertical axis

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2. The working platform of claim 1 further comprising

a first guide located on the frame; and

a cable being routed through the first guide for attaching onto the distal end of the first arm structure to impart a tension force to the first arm structure.

3. The working platform of claim 1, characterized in that the first guide is located at a position on the frame relatively higher than the first arm structure such that the routed cable form an acute angle with the first arm structure at the distal end.

4. The working platform of claim 1, characterized by further comprising:

a first guide located on the frame and a second guide secured to the first arm structure; and

a cable being routed through the first guide and second guide for attaching onto the distal end of the first arm structure to constantly impart a tension force to the first arm structure, the portion of cable running between the first and second guides forming an acute angle in relation to the first axis, the portion of cable located between the second guide and the distal end of the first arm structure extending in a fashion

parallel to the first axis.

5. The working platform of claim 1, characterized by further comprising a powered hoist carried by the frame to actuate the first arm structure to extend or retract in relation to the frame.

6. The working platform of claim 1, characterized in that the counterweight mechanism comprises:

a counter load;

a second arm structure having a proximal end terminated to the frame and an distal end attached to the counter load, the second arm structure being extendable and retractable to displace the counter load respectively away from and closer towards the frame along a first axis substantially perpendicular to the vertical axis, the second arm structure being configured to displace the counter load along the first axis at a second distance corresponding to a load at the cradle and/or a relative first distance of the cradle away from the frame in manner to free the platform from tilting.

7. The working platform of claim 6, characterized in that the counter load has adjustable weight.

8. The working platform of claim 6, characterized in that the second arm structure is extendable

scissors arm.

9. The working platform of claim 1, characterized in that the first arm structure is extendable scissors arm.

10. The working platform of claim 1, characterized in that the counterweight mechanism comprises:

a powered winch mounted to the frame;

a roller guide located away from the frame and the winch;

a rope, at least partly housed in the winch, having one fixed end secured to the winch and a free end stretching away from the winch to route through the roller guide

to be fastened to an anchorage point, the rope being tightened to generate a tension force thereto by the winch to free the platform from tilting, and that the tension force generated corresponds to a load at the cradle and/or a relative first distance of the cradle away from the frame.

11. The working platform of claim 1, characterized in that the counterweight mechanism comprises

a powered winch mounted to the frame;

a roller guide located away from the frame and the winch;

a rope, at least partly housed in the winch, having one fixed end secured to the winch and a free end stretching away from the winch to route through the roller guide to be fastened to counter load, the counter load being displaceable from the frame by the winch at a second distance to generate a tension force thereto to free the platform from tilting that the tension force generated corresponds to a load at the cradle and/or a relative first distance of the cradle away from the frame.

12. The working platform of claim 1, characterized in that the frame comprises a plurality roller wheels for gliding the platform on a substantially even surface.

13. The working platform of claim 1, characterized by further comprising a control panel installed at the cradle for controlling displacement of the cradle along the first axis.

14. A height accessible system for a building comprising:

a powered hoisting assembly installed around rooftop of the building;

a working platform comprising:

a frame attached to the hoisting assembly for being moveable along the vertical axis and suspended thereto in front of façade of the building;

a cradle;

a first arm structure having a proximal end terminated to the frame and an distal end attached to the cradle, characterized by the first arm structure being extendable and retractable to displace the cradle respectively away from and closer towards one of lateral sides of the frame along a first axis substantially perpendicular to the vertical axis;

a counterweight mechanism mounting at one lateral side of the frame opposing to the cradle, the counterweight mechanism being configured to balance the working platform corresponding to displacement of the cradle along the first axis;

a first guide located on the frame; and

a cable being routed through the first guide for attaching onto the distal end of the first arm structure to impart a tension force to the first arm structure.

15. The height accessible system of claim 14, characterized in that the counterweight mechanism comprises:

a counter load;

a second arm structure having a proximal end terminated to the frame and an distal end attached to the counter load, the second arm structure being extendable and retractable to displace the counter load respectively away from and closer towards the frame along a first axis substantially perpendicular to the vertical axis, the second arm structure being configured to displace the counter load along the first axis at a second distance corresponding to a load at the cradle and/or a relative first distance of the cradle away from the frame in manner to free the platform from tilting.