SUMMARY OF THE INVENTION

According to a first aspect, there is provided a support apparatus comprising: an arm assembly, the arm assembly having a first end and a second end; a support assembly, the arm assembly being moveably attached to the support assembly; a gas spring extending between the first end of the arm assembly and the second end of the arm assembly, the gas spring having a first end and a second end opposite the first end, the gas spring attached to the arm assembly such that the arm assembly is maintained in a plurality of different positions after the arm assembly is moved relative to the support assembly to any one of the positions; a mounting device attached to the arm assembly, the mounting device sized to retain a display device; a vertically adjustable attachment mechanism directly attaching the first end of the gas spring to one of: the arm assembly and the support assembly, the vertically adjustable attachment mechanism sized and shaped such that a vertical position of the first end of the gas spring is adjustable via movement of at least one component of the vertically adjustable attachment mechanism, wherein the vertically adjustable attachment mechanism is comprised of a receiving body attached to the arm assembly; and a mechanical tool; and wherein the receiving body is affixed to the first end of the arm assembly and wherein the vertically adjustable attachment mechanism further comprises a rotatable member that is attached to the receiving body, the rotatable member being rotatable in a first direction and in an opposite second direction, rotation of the rotatable member in the first direction raising a position of the first end of the gas spring, rotation of the rotatable member in the second direction lowering a position of the first end of the gas spring, the at least one component of the vertically adjustable attachment mechanism being

comprised of the rotatable member; wherein the mounting device releaseably retains the mechanical tool and wherein the mechanical tool is usable to adjust a vertical position of the first end of the gas spring via rotation of the rotatable member of the vertically adjustable attachment mechanism caused by the mechanical tool engaging the rotatable member while rotating to rotate the rotatable member; and wherein the first end of the gas spring is directly attached to the rotatable member.

According to a second aspect, there is provided a support apparatus comprising: an arm assembly, the arm assembly having a first end and a second end; a support assembly, the arm assembly being moveably attached to the support assembly; a counterbalance mechanism extending between the first end of the arm assembly and the second end of the arm assembly, the counterbalance mechanism having a first end and a second end opposite the first end, the counterbalance mechanism attached to the arm assembly such that the arm assembly is maintained in a plurality of different positions after the arm assembly is moved relative to the support assembly to any one of the positions; a mounting device attached to the arm assembly, the mounting device sized to retain a display device; a vertically adjustable attachment mechanism directly attaching the first end of the counterbalance mechanism to one of: the arm assembly and the support assembly, the vertically adjustable attachment mechanism sized and shaped such that a vertical position of the first end of the counterbalance mechanism is adjustable via movement of at least one component of the vertically adjustable attachment mechanism, wherein the vertically adjustable attachment mechanism is comprised of a receiving

body attached to the arm assembly; and a mechanical tool; and wherein the receiving body is affixed to the first end of the arm assembly and wherein the vertically adjustable attachment mechanism further comprises a rotatable member that is attached to the receiving body, the rotatable member being rotatable in a first direction and in an opposite second direction, rotation of the rotatable member in the first direction raising a position of the first end of the counterbalance mechanism, rotation of the rotatable member in the second direction lowering a position of the first end of the counterbalance mechanism, the at least one component of the vertically adjustable attachment mechanism being comprised of the rotatable member; wherein the mounting device releaseably retains the mechanical tool and wherein the mechanical tool is usable to adjust a vertical position of the first end of the counterbalance mechanism via rotation of the rotatable member of the vertically adjustable attachment mechanism caused by the mechanical tool engaging the rotatable member while rotating to rotate the rotatable member; and wherein the first end of the counterbalance mechanism is directly attached to the rotatable member.

As disclosed, a support apparatus includes a counterbalance mechanism. One end of the counterbalance mechanism may be attached to a portion of an arm assembly or a support supporting the arm assembly so that the end of the counterbalance mechanism may be vertically adjustable while attached to that element of the support apparatus. Preferably, the end of the counterbalance mechanism is vertically adjustably attached to the support or arm assembly. The arm assembly of the support apparatus may be configured to hold and maintain the position of an object such as a display device. A display device may be a monitor, television, liquid crystal display or other device configured to allow a user to view an image.

Some embodiments of the support apparatus may be configured to include a gas spring. For instance, a support apparatus may include an arm assembly attached to a support assembly. A mounting device may be attached to the arm assembly that is sized to retain at least one display device such as a monitor, television or display unit. A gas spring may extend between opposite ends of the arm assembly. The gas spring may have a first end and a second end opposite the first end of the gas spring. A vertically adjustable attachment mechanism may directly attach the first end of the gas spring to one of the arm assembly and the support assembly. The vertically adjustable attachment mechanism is sized and shaped so that a vertical position of the first end of the gas spring is adjustable via movement of at least one component of the vertically adjustable attachment mechanism.

Other embodiments of the support apparatus may be configured so that a counterbalance mechanism is attached to at least one of a support assembly and a first end of an arm assembly so that an end of the counterbalance mechanism is vertically adjustable from a first position to at least one second position that is higher or lower than the first position. The vertical adjustment