

ABSTRACT

[0066] An unmanned robot system for a tethered robot, for example, a tethered aircraft, is disclosed. The unmanned system, in one embodiment, includes an unmanned aircraft tethered to a ground station by a tether cable. In one embodiment, an aerial winch and cable unit is provided on the aircraft to manage cable release. Alternatively, winch and cable units may be provided on both the aircraft and ground station. As the aircraft is now able to freely operate cable release to overcome any disturbances along the cable length, the operational effectiveness of the aircraft is greatly improved.

Fig. 1a