

ABSTRACT

LINEAR ACTUATOR COMPRISING VELOCITY SENSOR

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A linear actuator for a motion system is provided with a velocity sensor for monitoring a velocity of an actuation arm that it is driving. The linear actuator comprises a magnetic field, a first coil that is controllably movable within the magnetic field by adjusting a current flowing through the first coil whereby to drive the actuation arm and a second coil that is movable with the first coil and configured such that a voltage is inducible in the second coil that is proportional to its velocity. A controller device is connected to the second coil for receiving feedback indicating the voltage induced in the second coil whereby a velocity of the actuation arm is determinable, wherein the controller device is further connected to the first coil and is operative to adjust the current flowing in the first coil based upon said feedback for controllably driving the actuation arm.

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(FIG. 3)