METHOD AND APPARATUS FOR ACCURATELY MEASURING A BACK-EMF VOLTAGE ON AN ACTUATOR COIL

ABSTRACT OF THE DISCLOSURE

An actuator (12) has a movable member (20), and has a coil (26) which can be controlled to urge the member to move. In a particular mode of operation, a driver circuit (70) is periodically uncoupled from the coil so that the current through the coil goes to zero, after which the back-emf voltage of the coil is applied to a capacitor (94). Then, the driver circuit is recoupled to the coil, and the voltage held by the capacitor is used to effect feedback control of the driver circuit for the coil.

Figure 1