

**METHOD AND CIRCUIT FOR OPERATING A VOICE COIL
ACTUATOR OF A MASS DATA STORAGE DEVICE**

ABSTRACT OF THE DISCLOSURE

A circuit (90) and method are presented to accurately determine a BEMF voltage of a VCM coil (20) after termination of a driving current in a first current direction in the coil (20). The circuit includes a circuit for activating selected VCM coil driver transistors (44-47) to apply a current to the coil (20) in a direction opposite the first current direction to generate a magnetic field to oppose eddy currents established in structures adjacent the coil (20) by the driving current. The time that the eddy current opposing current may be applied may be determined, for example, by determining a magnitude of the original current command, a time that the coil spends in flyback, or a magnitude of the original driving current, and adjusting the time of application of the eddy current opposing current accordingly.

Figure 1.