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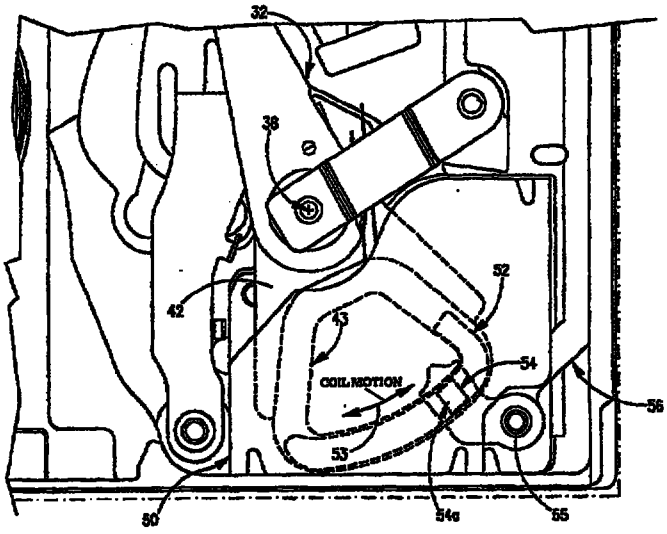
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(54) Title: VELOCITY CONTROL FOR A DISK DRIVE ACTUATOR



(57) Abstract

A data storage device (20) for reading and writing information to and from a storage medium (62, 60) and having an actuator (32) for moving a read/write head (36) over a surface of the storage medium comprises an optical sensor (54) mounted on either a surface of the data storage device (20) or a surface of the actuator (32), and a gray-scale pattern (52) provided on the other of these surfaces, opposite the optical sensor (54). The gray-scale pattern (52) provides an amount of reflected light at the optical sensor (54) that varies with the position of the actuator (32). The optical sensor (54) receives the reflected light and generates therefrom an output signal indicative of the position of the actuator (32). A control system (82) processes the position signal output from the optical sensor (54) for controlling the velocity of the actuator (32).