

CURRENT LIMITING IN HIGH PERFORMANCE FILES

ABSTRACT

In a disk drive system a servo controller (50) determines values for servo parameters during sampling intervals, and updates a spindle and an actuator command signal (54) for controlling seeking operations for positioning a head (30) at a target track. The controller (50) further limits the current drawn by a supply (28) during deceleration. The spindle command signal (52) adjusts a spindle current (I_s) to a reduced value during a spindle energy deferring period while an actuator current (I_c) exceeds a predetermined threshold value. In each sampling interval during the spindle energy deferring period: a deferred spindle current value, is determined; to develop a measure of deferred spindle energy. The spindle command signal (52) is subsequently regulated to adjust the spindle current (I_s) during a spindle energy compensating period.

FIG 1



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