SELF-SERVOWRITING SYSTEM WITH DYNAMIC ERROR PROPAGATION REDUCTION

ABSTRACT

A self-servowriting system and method for implementation in a storage device such as a disk drive (20) are described. Greater resistance to mechanical disturbances and reduction in error growth are achieved, in part, by adjusting a step amplification factor, S, at the initiation of servowriting to within desired parameters. However, S is known to vary with movement of the head in a direction transverse to the direction of the tracks. This problem is addressed by the present invention, wherein S is determined at a plurality of transverse transducer positions. Determination of S is scheduled to occur at predefined intervals. The intervals may be fixed or adjusted adaptively based upon the measured variation of S with transducer position.

Fig. 1

This Sheet Has Been Replaced

