IMPROVEMENTS TO RADIAL SELF-PROPAGATION PATTERN GENERATION FOR DISK FILE SERVOWRITING

ABSTRACT

An improved self-servowriting system and method whereby errors introduced into the written servo information are reduced or eliminated for greater servowriting accuracy. Accuracy is enhanced by one or more of the following improvements: 1) optimizing write current and write frequency to minimize write width modulation; 2) optimizing the RPM of the storage medium to minimize random mechanical vibration; and 3) providing a clip level check to eliminate the introduction of large errors in product servopattern. The proposed improvements provide substantial rejection of, for example, mechanical and magnetic disturbances, ensuring a robust servowriting process.

Fig. 1.