

Title (en)

APPARATUS AND METHOD FOR SENSING DISK-DRIVE HEAD-ARM SPEED DURING HEAD LOADING

Title (de)

GERÄT UND VERFAHREN ZUR DETECTION DER GESCHWINDIGKEIT EINER KOPF-ARM-VORRICHTUNG WÄHREND DER KOPFLADUNG IN EINER PLATTENLAUFWERK

Title (fr)

APPAREIL ET PROCEDE DE DETECTION DE LA VITESSE DU BRAS DE LA TETE D'UNE UNITE DE DISQUES PENDANT LE CHARGEMENT DE LA TETE

Publication

EP 0974143 A1 20000126 (EN)

Application

EP 99906777 A 19990205

Priority

- US 9902596 W 19990205
- US 1984098 A 19980206

Abstract (en)

[origin: WO9940585A1] Apparatus for estimating the speed of a disk drive's head arm during loading of the drive's read/write head onto a disk platter. The speed is estimated by a model of the head-arm actuator plant. The model is implemented by a digital state machine that tracks the head-arm's velocity, friction and voice-coil motor (VCM) current using a readily available sense voltage which is based on the VCM current. The apparatus of the invention is particularly advantageous because it allows a head-arm control system to have sufficient control over the head arm's movements so as to prevent the drive's read/write head from crashing into and damaging the drive's data recording surface.

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