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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G11B 5/55, 21/08

A1

(11) International Publication Number: **WO 97/18555**

(43) International Publication Date: 22 May 1997 (22.05.97)

(21) International Application Number: PCT/US96/18178

(22) International Filing Date: 17 September 1996 (17.09.96)

(30) Priority Data:
08/557,662 13 November 1995 (13.11.95) US

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(81) Designated States: JP, KR, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
With international search report.

(54) Title: HEAD TILTING MECHANISM FOR DRIVES

(57) Abstract

A magnetic tape head tilting mechanism (20) for tilting the magnetic head (33) to a desired azimuth and adjusting the zenith of the magnetic head (33). The azimuth tilting mechanism uses a worm gear (40) and worm (17), driven by a stepper motor (28), to provide very fine angular resolution for the magnetic head (33). The fine angular resolution enables writing very high track densities and providing strong read signals. The zenith adjustment mechanism eliminates the cumulative tolerances inherent in the components of mechanisms of the prior art. The zenith adjustment mechanism utilizes a single adjustment screw (44) to align the magnetic head (33) such that the face is in parallel alignment relative to the tape path, along the transverse direction.

