9901885-5

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G11B 5/60 — A1

(11) International Publication Number: WO 98/25264

(43) International Publication Date: 11 June 1998 (11.06.98)

(21) International Application Number: PCT/US97/19816

(22) International Filing Date: 30 October 1997 (30.10.97)

(30) Priority Data:

60/032,348	4 December 1996 (04.12.96)	US
60/031,578	5 December 1996 (05.12.96)	US
60/041,194	25 March 1997 (25.03.97)	US
08/852,087	7 May 1997 (07.05.97)	US
08/852,225	7 May 1997 (07.05.97)	US

(81) Designated States: CN, DE, GB, JP, KR, SG, US.

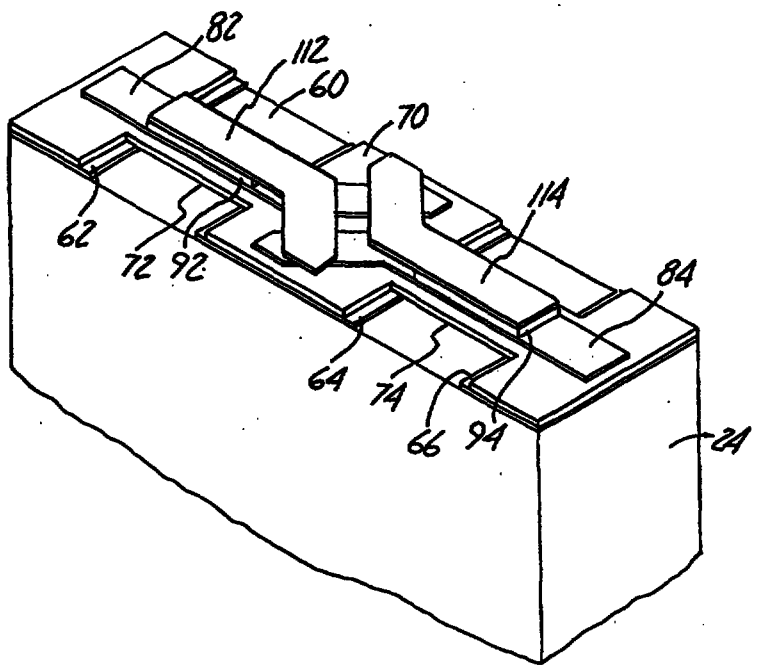
Published
With international search report.

(71) Applicant *(for all designated States except US)*: SEAGATE TECHNOLOGY, INC. [US/US]; 920 Disc Drive, Scotts Valley, CA 95067–0360 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: BERG, Lowell, J. [US/US]; 12815 Melody Lane, Minnetonka, MN 55305 (US). BOUTAGHOU, Zine-Eddine [US/US]; 307 Lily Pond Lane, Vadnais Heights, MN 55127 (US).

(74) Agents: ANGUS, Robert, M.; Kinney & Lange, P.A., Suite 1500, 625 Fourth Avenue South, Minneapolis, MN 55415–1659 (US) et al.

(54) Title: LEADING EDGE SLIDER MICROACTUATOR



(57) Abstract

A disc drive (10) having an actuator arm (16) to support a slider (24) carrying a transducing head (56) adjacent a selected data track (34) of a disc (30) having a plurality of concentric data tracks (34) includes a microactuator (54) on a leading edge surface (60) of the slider (24) to effect fine positioning of the transducing head (56) with respect to the selected track (34). The microactuator (54) includes a spatial region (63, 65) on the leading edge surface (60) of the slider (24). A microactuator element (72, 74, 92, 94, 142, 172) spans the spatial region (63, 65) and is responsive to a voltage to selectively expand and contract, thereby bending to alter the position of the slider (24) and the transducing head (56).