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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G11B

A2

(11) International Publication Number: **WO 98/29868**

(43) International Publication Date: 9 July 1998 (09.07.98)

(21) International Application Number: PCT/US97/24199

(22) International Filing Date: 30 December 1997 (30.12.97)

(30) Priority Data:
08/777,236 30 December 1996 (30.12.96) US

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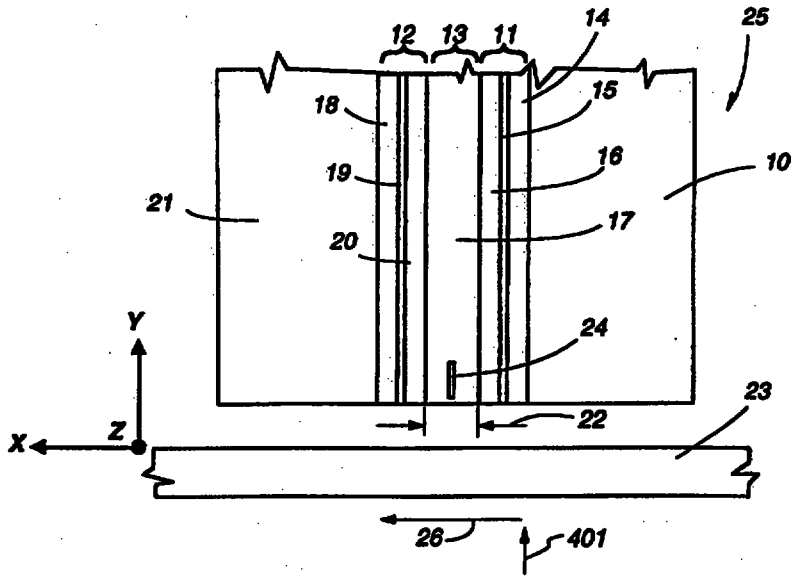
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(81) Designated States: AU, CA, CN, JP, KR, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: LAMINATED PLATED POLE PIECES FOR THIN FILM MAGNETIC TRANSDUCERS



(57) Abstract

The pole pieces of a thin film head are formed by two thin film layers of the magnetic metal NiFe, each NiFe layer being about 20.000 angstroms thick. These two NiFe layers are separated by an electrically insulating layer of alumina (Al_2O_3). Ceramic or NiFe oxide that is about 100 angstroms thick. In one embodiment, a hard-baked photoresist layer is formed only around the edges of the first NiFe layer, the electrically insulating layer is deposited over the top surface of the first NiFe layer and over the hard-baked photoresist layer, and the second NiFe layer is then deposited, thus providing a three-layer metal/insulator/metal pole piece wherein the hard baked photoresist blocks edge short circuiting between the two thin film NiFe layers. In another embodiment, edge short circuiting is minimized by allowing a small filament(s) of a high electrical resistance plating seed layer of NiFe to extend between the two NiFe thin film layers, the high resistance of these long and thin NiFe filaments being much greater than the resistance of the two NiFe thin film layers.