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(71) Applicant: INTERNATIONAL BUSINESS MACHINES CORPORATION [US/US]; New Orchard Road, Armonk, New York, NY 10504 (US).

(71) Applicant *(for MC only)*: IBM UNITED KINGDOM LIMITED [GB/GB]; North Harbour, P.O. Box 41, Portsmouth, Hampshire PO6 3AU (GB).

(72) Inventors: CHANG, Henry; 1161 Hollow Park Court, San Jose, CA 95120 (US). SCHWENKER, Robert, Otto; 6359 Gondola Way, San Jose, CA 95120 (US). HWANG, Cherngye; 6687 Dorene Place, San Jose, CA 95120 (US).

(74) Agent: WILLIAMS, Julian, David; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester, Hampshire SO21 2JN (GB).

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(54) Title: READ HEAD WITH READ TRACK WIDTH DEFINING LAYER THAT PLANARIZES THE WRITE GAP LAYER OF A WRITE HEAD

(57) Abstract

A read track width defining layer (306, 310) is employed for defining first (322) and second side edges of a read sensor. The read track width defining layer (310) preferably remains in the head to planarize the read head at first (330) and second (332) hard bias and lead layers so as to overcome a problem of write gap curvature in an accompanying write head. The read track width defining layer is defined by a subtractive process about a bilayer photoresist layer (308). The subtractive process is selective to the read track width defining layer over a read sensor material layer (304) therebelow. Ion milling is then employed for defining first and second side edges of a read sensor layer employing the read track width defining layer as a mask. First and second hard bias and lead layers are then deposited which make contiguous junctions with the first and second side edges of each of the read sensor and read track width defining layers. The photoresist is then removed and the remainder of the read head is completed.

