

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 December 2001 (27.12.2001)

PCT

(10) International Publication Number
WO 01/099112 A3

(51) International Patent Classification⁷: **G11B 5/012**,
5/17, 5/31, H01F 5/00

PUST, Ladislav; 5695 South Park Drive, Savage, MN 55378 (US). MACK, Anthony, M.; 4429 Xerxes Avenue South, Minneapolis, MN 55410 (US).

(21) International Application Number: PCT/US01/18971

(22) International Filing Date: 13 June 2001 (13.06.2001)

(74) Agents: BOHN, David, C. et al.; Westman, Champlin & Kelly, P.A., Suite 1600 - International Centre, 900 Second Avenue South, Minneapolis, MN 55402-3319 (US).

(25) Filing Language: English

(81) Designated States (*national*): CN, DE, GB, JP, SG.

(26) Publication Language: English

Published:

(30) Priority Data:
60/213,088 20 June 2000 (20.06.2000) US

— with international search report

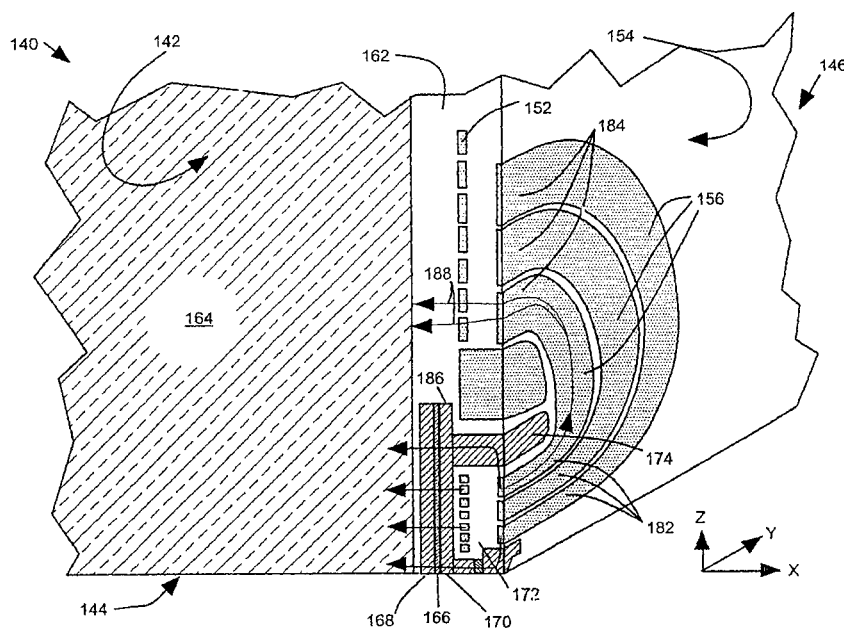
(71) Applicant: SEAGATE TECHNOLOGY LLC [US/US];
920 Disc Drive, Scotts Valley, CA 95066 (US).

(88) Date of publication of the international search report:
11 July 2002

(72) Inventors: REA, Christopher, J.; 6418 City West Parkway, Apartment 1211, Eden Prairie, MN 55344 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DISC DRIVE WITH LAYERED WRITE COIL



(57) Abstract: A disc drive (100) includes a disc (126) and a read/write head (140) accessing the disc. The head includes a thermally conductive substrate (164) and a write coil window (172) surrounded by a shared pole piece (170) thermally coupled to the substrate, a central core (174), a write pole piece (160) and a write gap (176). A bottom coil (152) adjacent the shared pole piece has multiple turns that have bottom narrowed regions (180) passing through the window. A top coil (156) adjacent the write pole piece has multiple turns that have top narrowed regions (182) passing through the window. The top turns are fewer in number and flattened relative to the bottom turns.