

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 March 2009 (19.03.2009)

PCT

(10) International Publication Number
WO 2009/035411 A1

(51) International Patent Classification:
G11B 5/016 (2006.01)

(21) International Application Number:
PCT/SG2007/000309

(22) International Filing Date:
12 September 2007 (12.09.2007)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US):
AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 20 Biopolis Way, #07-01 Centros, Singapore 138668 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PIRA-MANAYAGAM, S., N.** [SG/SG]; Block 373, Clementi Avenue 4, #11-192, Singapore 120373 (SG). **SRINIVASAN, Kumar** [IN/SG]; Block 257, Jurong East Street 24, #10-417, Singapore 600257 (SG).

(74) Agent: **ALBAN TAY MAHTANI & DE SILVA**; 39 Robinson Road, #07-01 Robinson Point, Singapore 068911 (SG).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

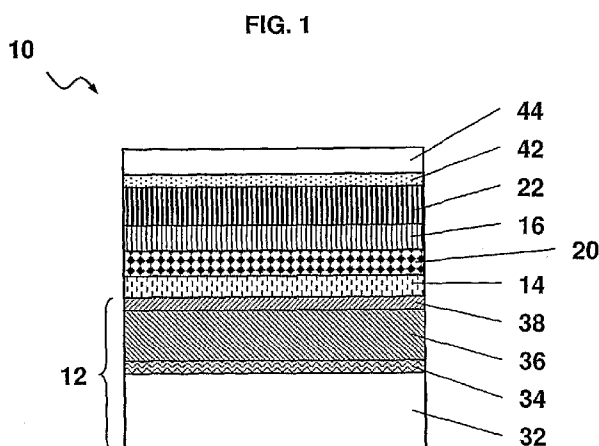
Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report

(54) Title: MAGNETIC RECORDING MEDIA WITH A SYNTHETIC NUCLEATION LAYER AND METHOD OF MANUFACTURE



(57) Abstract: A magnetic recording medium and a method of making a magnetic recording medium are disclosed. The magnetic recording medium comprises a nucleation layer formed over a base structure and a magnetic recording layer formed over the nucleation layer. The carbon based nucleation layer forms nucleation sites for the magnetic layer for obtaining evenly distributed and dimensioned crystalline grains.

WO 2009/035411 A1