



(43) International Publication Date
8 May 2014 (08.05.2014)

(10) International Publication Number
WO 2014/069977 A1

(51) International Patent Classification:
G11B 5/84 (2006.01)

(21) International Application Number:
PCT/MY2012/000266

(22) International Filing Date:
29 October 2012 (29.10.2012)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant: FUJI ELECTRIC (MALAYSIA) SDN BHD
[MY/MY]; Lot No. 5, Industrial Zone Phase 1, Kulim Hi-
Tech Industrial Park, 09000 Kulim, Kedah Darul Aman
(MY).

(72) Inventor: NAGATA, Naruhisa; FUJI ELECTRIC
(MALAYSIA) SDN BHD, Lot No. 5, Industrial Zone
Phase 1, Kulim Hi-Tech Industrial Park, 09000 Kulim, Ke-
dah Darul Aman (MY).

(74) Agents: OON, Yen Yen et al.; Henry Goh & Co Sdn Bhd,
217, Jalan Imbi, 55100 Kuala Lumpur (MY).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
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 (Art. 21(3))

(54) Title: METHOD FOR PRODUCING MAGNETIC RECORDING MEDIUM AND PROTECTIVE FILM THEREOF

(57) Abstract: The present invention provides a method for producing a protective film, which can be used for producing a magnetic recording medium, the method comprising the steps of: (a) providing a magnetic layer formed on a substrate; and (b) forming a protective film on the magnetic layer by means of a plasma CVD method using mixed gas of specific lower saturated hydrocarbon gas and specific lower unsaturated hydrocarbon gas as source gas, wherein the step (b) includes a step (b-1) of forming a first protective film on the magnetic layer and a step (b-2) of forming a second protective film on the first protective film, the step (b-1) being performed by the plasma CVD method using a source gas in which a gas mixture ratio is adjusted such that the average number of hydrogen atoms per carbon atom in the source gas becomes greater than 2.5 but less than 3.0, and the step (b-2) being performed by the plasma CVD method using a source gas in which a gas mixture ratio is adjusted such that the average number of hydrogen atoms per carbon atom in the source gas becomes greater than 2.0 but less than 2.5.



WO 2014/069977 A1