(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 May 2006 (26.05.2006)

PCT

(10) International Publication Number
WO 2006/054866 A1

(51) International Patent Classification:
G11B 7/007 (2006.01)

(21) International Application Number:
PCT/KR2005/003890

(22) International Filing Date:
17 November 2005 (17.11.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2004-0095909
22 November 2004 (22.11.2004) KR

(71) Applicant: **SAMSUNG ELECTORNICS CO., LTD.** [KR/KR]; 416, Maetan-dong, Yeoungtong-gu, Suwon-si, Gyeonggi-do 442-742 (KR).

(72) Inventors: **HWANG, Sung-Hee**; 150-1401 Jugong Apt., 955-1 Yeongtong-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-740 (KR). **KO, Jung-Wan**; 114-1101 Byucksan Apt., Mangpo-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-707 (KR). **SUNG, Hyo-Jin**; 301 Hwashin Villa, 602-286 Namhyun-dong, Gwanak-gu, Seoul 151-801 (KR).

(74) Agent: **Y.P.LEE, MOCK & PARTNERS**; The Cheonghwa Building, 1571-18, Seocho-dong, Seocho-gu, Seoul 137-874 (KR).

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

Published:
— *with international search report*

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:** METHOD OF DETERMINING DEFECTS IN INFORMATION STORAGE MEDIUM, RECORDING/REPRODUCING APPARATUS, AND INFORMATION STORAGE MEDIUM

420

510 FIRST STATE INFORMATION	520 PHYSICAL ADDRESS OF DEFECT BLOCK	530 SECOND STATE INFORMATION	540 PHYSICAL ADDRESS OF REPLACEMENT BLOCK
2	ⓐ	0	·
4	·	0	ⓒ
5	·	0	ⓓ
1	ⓔ	0	ⓔ'
2	ⓕ	0	·
· · ·	· · ·	· · ·	· · ·

(57) **Abstract:** A method of determining whether a defect exists on an information storage medium is provided along with a recording/reproducing apparatus using the same. Such a method comprises: seeking a defect entry whose state information indicates that a defect block or a replacement block has been re-initialized without certification from a defect list for managing an information storage medium and including state information of the defect block and state information of the replacement block, wherein the medium includes a spare area for recording the replacement block to replace the defect block occurring in a user data area on the medium; and certifying the defect block or the replacement block registered in the sought defect entry. As a result, defect information can be effectively rearranged for quick re-initialization without certification in order to improve the performance of a drive system.

WO 2006/054866 A1