

22104103
1003022514

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 March 2003 (06.03.2003)

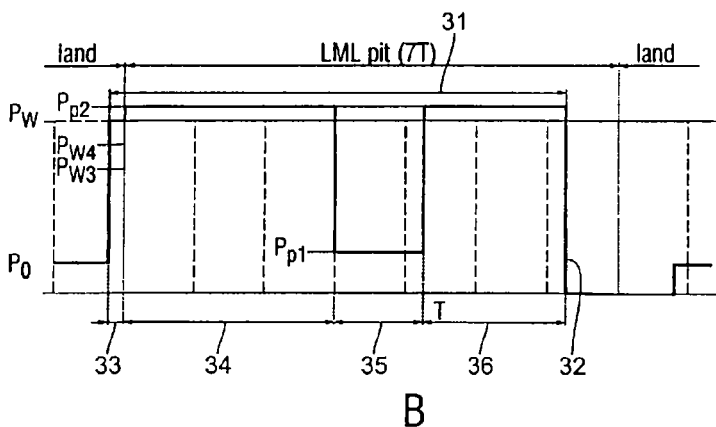
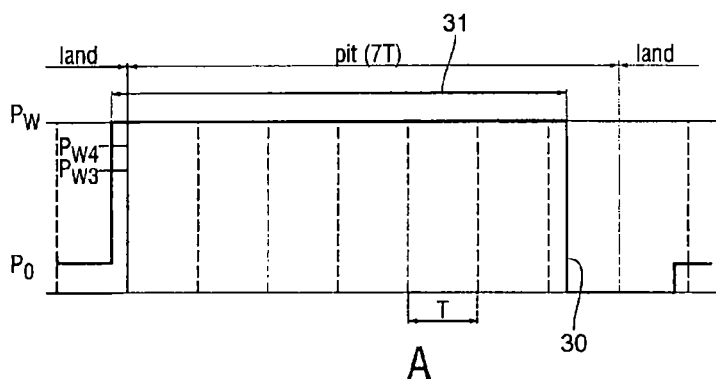
PCT

162162
(10) International Publication Number
WO 03/019542 A1

- (51) International Patent Classification⁷: G11B 7/0045, 7/125, 7/013 (74) Agent: DEGUELLE, Wilhelmus, H., G.; Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (21) International Application Number: PCT/IB02/02925 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 11 July 2002 (11.07.2002) (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CI, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 01203184.5 24 August 2001 (24.08.2001) EP
- (71) Applicant: KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors: LANGEREIS, Gerardus, R.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). TIEKE, Benno; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

[Continued on next page]

(54) Title: OPTICAL RECORD CARRIER RECORDING METHOD AND APPARATUS



(57) Abstract: The invention relates to an optical record carrier recording method for forming pits and lands by directing a radiation beam (12) onto a recording surface (21) of an optical record carrier (20). The radiation beam for each pit to be recorded is set to at least one write power level (P_w) capable of forming a pit during a write power irradiation period (31) and, for each land between the pits, to at least one bottom power level (P_0) incapable of forming a pit during a bottom power irradiation period (51). In order to embed bits of an additional LML channel in the main channel without increasing the overall jitter it is proposed according to the invention that the bottom power level (P_0) is temporarily raised to an LML land power level (P_{l1}) during an LML land irradiation period (55) for forming an LML land, the LML land power level (P_{l1}) being close to the write power level (P_w), and that the write power level (P_w) is temporarily lowered to an LML pit power level (P_{p1}) during an LML pit irradiation period (35) for forming an LML pit, the LML pit power level (P_{p1}) being close to the bottom power level (P_0).

WO 03/019542 A1



ACTION