

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

(19) World Intellectual Property Organization
International Bureau



G00002



(43) International Publication Date
21 February 2002 (21.02.2002)

PCT

(10) International Publication Number
WO 02/15174 A1

(51) International Patent Classification⁷: **G11B 5/584**

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(21) International Application Number: PCT/GB01/03062

(22) International Filing Date: 6 July 2001 (06.07.2001)

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(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/639,076 16 August 2000 (16.08.2000) US

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

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(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

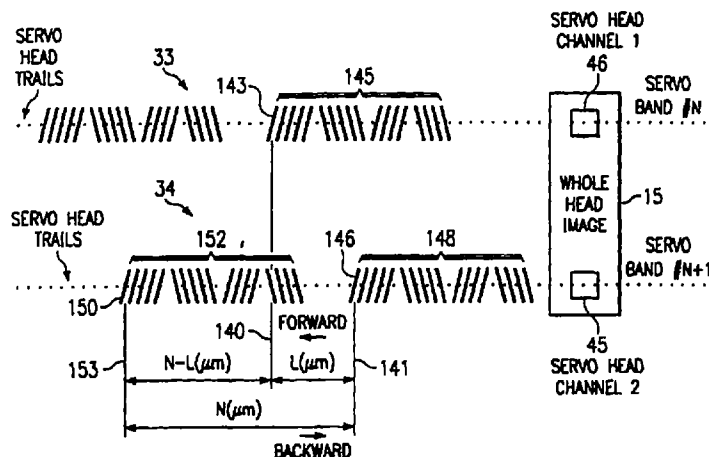
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Published:
— with international search report

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[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR RECOVERY OF LATERAL POSITION OF A SERVO SYSTEM WITH RESPECT TO LONGITUDINAL SERVO BANDS OF A MAGNETIC TAPE



(57) Abstract: A servo system and method position a head (15) laterally with respect to magnetic tape longitudinal defined servo bands (30-34) arranged in a longitudinally shifted pattern for identification, and separated by data tracks. A servo controller (27) responds to a loss of lateral position, sensing an estimated longitudinal position of the magnetic tape (36). If the estimated longitudinal position is within a predetermined distance of an end of the tape (36), the servo controller (27) operates a drive (10) to continuously move the tape (36) away from the sensed end. The servo controller (27) senses a home lateral position sensor (175) to determine whether a compound actuator (14) is within a predetermined distance of the edge of the magnetic tape (36). If so, it operates the coarse actuator portion (16) of the compound actuator (14) to move laterally away from the edge of the magnetic tape (36); else, to move toward the edge. The servo controller (27) senses a dual servo sensor (45, 46) to detect any two of the defined servo bands (45, 46); and, upon sensing any two of the defined servo bands (45, 46), detects the longitudinal shift to identify which ones of the two defined servo bands (30-34) have been detected.

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— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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