



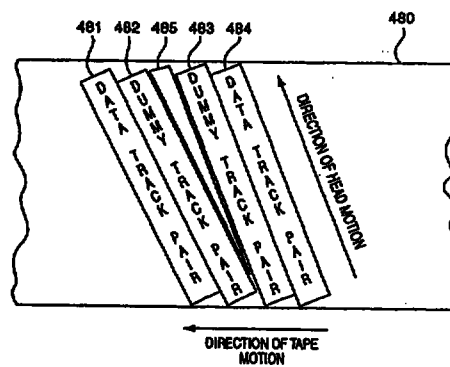
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(21) International Application Number: PCT/US99/24652 (22) International Filing Date: 20 October 1999 (20.10.99) (30) Priority Data: 09/176,079 20 October 1998 (20.10.98) US (71) Applicant: ECRIX CORPORATION [US/US]; Craig Lamborn, 5525 Central Avenue, Boulder, CO 80301 (US). (72) Inventors: BEAVERS, Kelly, J.; 450 College Avenue, Boul- der, CO 80302 (US). BLATCHLEY, Michael, A.; 2839 Shoal Circle, Longmont, CO 80503 (US). DETRO, David, L.; 13676 Vermillion Trail, Longmont, CO 80501 (US). TURNER, Christopher, J.; 6176 Misty Way, Longmont, CO 80503 (US). ZACZEK, Thomas, E.; 952 Cleveland Court, Louisville, CO 80027 (US). (74) Agents: FISHMAN, Daniel, N. et al.; Lee & Fishman, LLP, 1900 15th Street, Suite A, Boulder, CO 80302 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, 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), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>

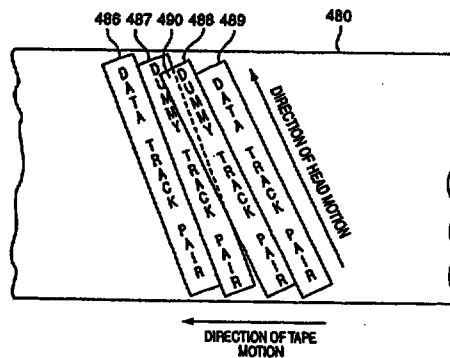
(54) Title: VARIABLE SPEED RECORDING METHOD AND APPARATUS FOR A MAGNETIC TAPE DRIVE

(57) Abstract

A method and apparatus for varying track recording speed to maximize host-to-tape data transfer rates is presented. Variable data transfer rates of host systems and networks are accommodated by continually adjusting the tape speed to match the tape drive to the host's actual transfer rate. The speed of the tape is adjusted according to both the level of data present in the tape drive data buffer and whether the current mode of the drive is write mode or read mode. In the preferred embodiment, when the tape speed is accelerated or decelerated while writing a number of data track pairs to tape, a predetermined number of dummy track pairs are first written to tape at the current speed. On the next write head phase after the speed is increased or decreased as appropriate while the read heads are over the track, a predetermined number of dummy track pairs followed by more data track pairs are written to the tape at the new speed.



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