

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 July 2003 (10.07.2003)

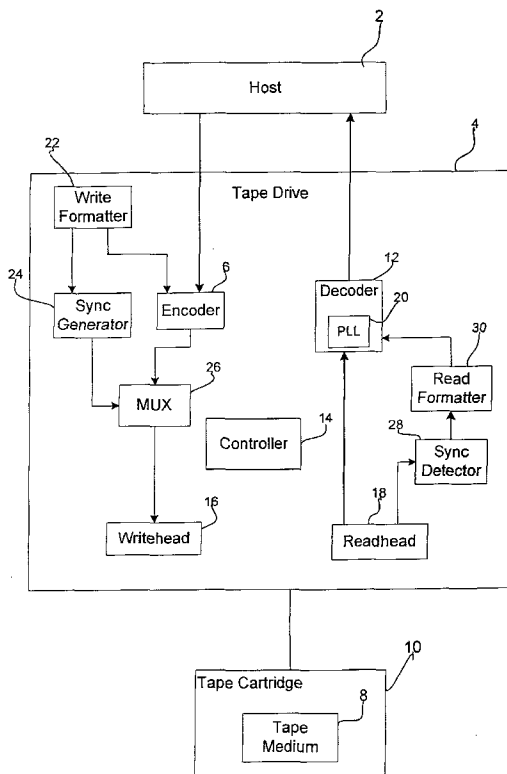
PCT

(10) International Publication Number
WO 2003/056557 A3

- (51) International Patent Classification⁷: **G11B 20/14**, 27/30, 20/18
- (21) International Application Number: PCT/EP2002/014563
- (22) International Filing Date: 19 December 2002 (19.12.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 10/038,163 2 January 2002 (02.01.2002) US
- (71) Applicant: **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, NY 10504 (US).
- (71) Applicant (for LU only): **IBM DEUTSCHLAND GMBH** [DE/DE]; Pascalstrasse 100, 70569 Stuttgart (DE).
- (72) Inventors: **BLAUM, Mario**; 341 Manila Drive, San Jose, CA 95119 (US). **JAQUETTE, Glen, Alan**; 5270 N. Rocky Ridge Place, Tucson, AZ 85750 (US). **MARCUS, Brian, Harry**; 521 S. El Monte Avenue, Los Altos, CA 94022 (US). **MELAS, Constantin, Michael**; 16281 Kennedy Road, Los Gatos, CA 95032 (US).
- (74) Agent: **KAUFFMANN, Wolfgang**; IBM Deutschland GmbH, Intellectual Property, 70548 Stuttgart (DE).
- (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, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: METHOD, SYSTEM, AND PROGRAM FOR SYNCHRONIZATION AND RESYNCHRONIZATION OF A DATA STREAM



(57) Abstract: Provided is a method, system, and program for providing synchronization in a binary data stream. A binary data stream is received. A synchronization mark having at least one isolated peak is generated into at least one point in the data stream. An encoded data stream is formed by concatenating the synchronization mark with the received binary data. During decoding, the synchronization mark is detected based on error propagation occurring adjacent to the at least one isolated peak of the synchronization mark.

WO 2003/056557 A3



(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, 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, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
4 March 2004

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.

Published:

— *with international search report*