

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number
WO 2004/097576 A3

(51) International Patent Classification⁷: H03M 13/01

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(21) International Application Number:
PCT/US2004/012918

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(22) International Filing Date: 26 April 2004 (26.04.2004)

(25) Filing Language: English

(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, KP, KR, KZ, LC, LK, LR, LS, IT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:
10/422,456 24 April 2003 (24.04.2003) US

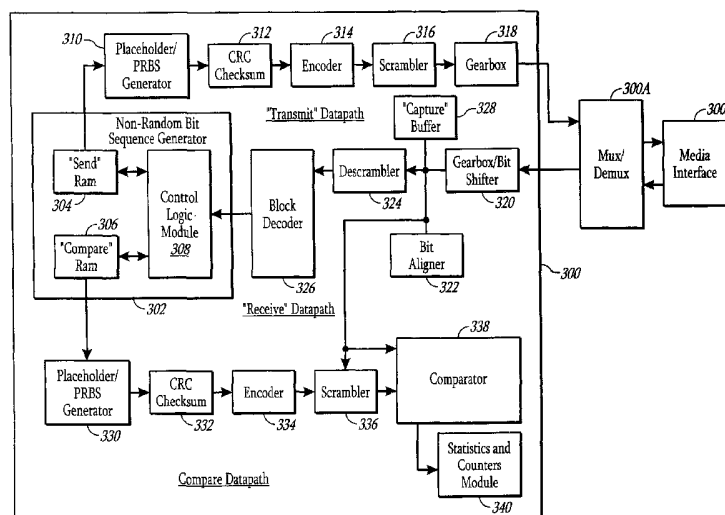
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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR NETWORK ERROR RATE TESTING



(57) Abstract: A bit error rate tester (100) for use in connection with a high speed networks. The bit error rate tester (100) includes transmit and receive ports (102, 104, 106 and 108), as well as a sequence generator (302), memory (112), synchronizer (322), sequence start detect module (326), and comparator (338). The sequence generator (302) generates a bit sequence for transmission through a network path. The bit sequence returns to the bit error rate tester (100) by way of the receive port (102, 104, 106 or 108). The synchronizer (322) then bit-aligns the received bit sequence to compensate for idles/fill words added/dropped as the bit sequence transited the network. The synchronized bit sequence is passed to the start word detector (326) which detects start and end words in the bit sequence and instructs the comparator (338) to compare only data between the start and end words. The comparator (338) compares the received bit sequence with a copy of the transmitted bit sequence regenerated from the memory (112), and calculates a bit error rate.

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SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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

(88) Date of publication of the international search report:

23 December 2004

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/12918

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H03M 13/01
 US CL : 714/704, 715-716

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 714/704

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 IPC: H03M 13/01

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 EPO; JPO; DERWENT; IBM_TDB, IEEEXPLORE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, E	US 2004/0107391 A1 (Bauman, Donald R) 03 June 2004 (03.06.2004), entire document.	1-22
A	US 5459731 A (Brief et al.) 17 October 1995 (17.10.1995), entire document.	1-22

Further documents are listed in the continuation of Box C.

See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

26 October 2004 (26.10.2004)

Date of mailing of the international search report

15 NOV 2004

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