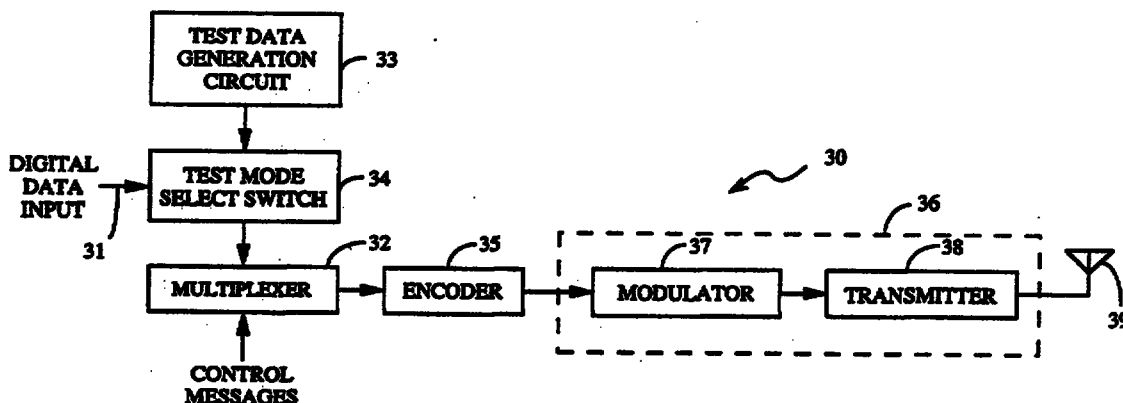




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04L 1/24, 1/12		A1	(11) International Publication Number: WO 96/17454
			(43) International Publication Date: 6 June 1996 (06.06.96)
(21) International Application Number: PCT/US95/15534 (22) International Filing Date: 29 November 1995 (29.11.95) (30) Priority Data: 347,526 30 November 1994 (30.11.94) US (71) Applicant: QUALCOMM INCORPORATED [US/US]; 6455 Lusk Boulevard, San Diego, CA 92121 (US). (72) Inventors: TIEDEMANN, Edward, G., Jr.; 4350 Bromfield Avenue, San Diego, CA 92122 (US). JOU, Yu-Cheun; 9979 Riverhead Drive, San Diego, CA 92129 (US). WEAVER, Lindsay, A., Jr.; 1162 Cherryvale Road, Boulder, CO 80303 (US). BAYLEY, Gwain; 5124 Hilda Road, San Diego, CA 92110 (US). (74) Agent: MILLER, Russell, B.; Qualcomm Incorporated, 6455 Lusk Boulevard, San Diego, CA 92121 (US).		(81) Designated States: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, LS, MW, SD, SZ, UG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> RTMP copy	

(54) Title: **METHOD AND APPARATUS FOR TESTING A DIGITAL COMMUNICATION CHANNEL AT VARIABLE OR FIXED DATA RATES**



(57) Abstract

The invention provides a system and method for testing signal transmission quality within a digital communication system and may be incorporated within a digital cellular communication system in which information is exchanged over spread spectrum communication channels. A test sequence of digital data transmitted over the communication channel is received at a receiving station, within which is also generated a replica of the test sequence of digital data. The accuracy of transmission over the communication channel is then determined by comparing the replica of the test sequence of digital data to the test sequence of data received over the communication channel. The invention allows the test sequence of digital data to be transmitted at one of a set of known data rates, with the receiving station being disposed to identify the data rate associated with each test sequence of digital data. In order to simulate the transmission of, for example, voice data, the system may be configured such that each test sequence of digital data is generated in accordance with a pseudorandom process.