



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY

(51) International Patent Classification ⁶ : G10L 5/00		A1	(11) International Publication Number: WO 98/15946
			(43) International Publication Date: 16 April 1998 (1)
(21) International Application Number: PCT/US97/18153		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, 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).	
(22) International Filing Date: 7 October 1997 (07.10.97)			
(30) Priority Data: 08/728,159 9 October 1996 (09.10.96) US			
(71) Applicant: ERICSSON, INC. [US/US]; 7001 Development Drive, P.O. Box 13969, Research Triangle Park, NC 27709 (US).			
(72) Inventors: HASSAM, Amer; 12623 N.E. 10th Place, Kirkland, WA 98033 (US); WAN, Yongbing; 33 Vetrina, Irvine, CA 92606 (US); KARABINIS, Peter, D.; 101 Chalon Drive, Cary, NC 92606 (US).			
(74) Agents: MEEKS, Robert, M. et al.; Myers, Bigel, Sibley & Sajovec, L.L.P., P.O. Box 37428, Raleigh, NC 27627 (US).			
		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>	

(54) Title: **SYSTEMS AND METHODS FOR COMMUNICATING DESIRED AUDIO INFORMATION OVER A COMMUNICATIONS MEDIUM**

(57) Abstract

Desired audio information intermittently present in a first audio signal is communicated over a communications medium by generating a first communications signal in the communications medium when the desired audio information is present in the first audio signal, the first communications signal representing the first audio signal encoded as blocks of communications data according to a predetermined code. A second communications signal is received from the communications medium. The received second communications signal is processed to produce processed blocks of communications data. A metric representing the validity of a plurality of the processed blocks of communications data is then determined, and a second audio

signal is generated from the plurality of processed blocks of communications data when the metric is within a predetermined range. A filler audio signal such as comfort noise is generated, preferably from predetermined audio data derived from a previously received communications signal, when the metric is outside of the predetermined range. Preferably, generation of the first communications signal is discontinued when the desired audio information is absent from the audio signal, without generating an explicit discontinuity message. The discontinuous transmission function may be implemented using a separate cyclic redundancy coding (CRC) scheme, or may be implemented using a combined decoding metric derived from a forward error correction coding scheme.

