


200005514-5
H04M 9/08

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04M 9/08, 11/04	A1	(11) International Publication Number: WO 99/59320 (43) International Publication Date: 18 November 1999 (18.11.99)
(21) International Application Number: PCT/US99/10023 (22) International Filing Date: 7 May 1999 (07.05.99) (30) Priority Data: 60/085,000 11 May 1998 (11.05.98) US (71) Applicant: TELCORDIA TECHNOLOGIES, INC. [US/US]; 445 South Street, Morristown, NJ 07960-6438 (US). (72) Inventor: PIETROWICZ, Stanley; 65 Country View Drive, Freehold, NJ 07728 (US). (74) Agents: GIORDANO, Joseph et al.; International Coordi- nator, Rm. 1G112R, 445 South Street, Morristown, NJ 07960-6438 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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 With international search report.

(54) Title: A METHOD AND SYSTEM FOR SCALEABLE NEAR-END SPEECH CANCELLATION FOR TIP AND RING TONE SIGNAL DETECTORS

(57) Abstract

A method and system (10) for providing suppression of near-end speech energy for tone signal detectors (27) or FSK demodulator (28). In accordance with the invention a system or device (100) is connected between the tip and ring on a subscriber loop (12), the subscriber loop (12) being connected to office equipment (11) and that subscriber's station set (13). The system (100) includes a receive interface that is connected to either a tone signal detector (26) or a frequency shift keying modulator (28). The system (100) achieves speech cancellation by forming a Wheatstone bridge with a mirror circuit possessing a scaled image of the loop and office equipment impedance. In one embodiment of the invention the Wheatstone bridge is formed using the combined impedance of the loop (12) and office equipment (11) as the impedance that is to be matched by a set of balanced networks included within the system.

