(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
2 June 2000 (02.06.2000)

PCT

(10) International Publication Number
WO 00/031719 A3

(51) International Patent Classification[7]: G10L 19/00

(21) International Application Number: PCT/SE99/02023

(22) International Filing Date:
8 November 1999 (08.11.1999)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/109,555 23 November 1998 (23.11.1998) US
09/391,768 8 September 1999 (08.09.1999) US

(71) Applicant: **TELEFONAKTIEBOLAGET LM ERICSSON (publ)** [SE/SE]; S-126 25 Stockholm (SE).

(72) Inventors: **EKUDDEN, Erik**; Fjärilsvägen 23, S-184 38 Åkersberga (SE). **HAGEN, Roar**; c/o Bryland, Hägervägen 62, S-122 39 Enskede (SE). **JOHANSSON, Ingemar**; Regnvägen 89, S-976 32 Luleå (SE).

(74) Agent: **ERICSSON RADIO SYSTEMS AB**; Patent Support/Ericsson Research, S-164 80 Stockholm (SE).

(81) Designated States *(national)*: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, 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*

(88) Date of publication of the international search report:
20 March 2003

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.

WO 00/031719 A3

(54) Title: SPEECH CODING WITH COMFORT NOISE VARIABILITY FEATURE FOR INCREASED FIDELITY

(57) Abstract: The quality of comfort noise generated by a speech decoder (93) during non-speech periods is improved by modifying (30, 75) comfort noise parameter values (33) normally used to generate the comfort noise. The comfort noise parameter values are modified in response to variability information (43) associated with a background noise parameter. The modified comfort noise parameter values (35) are then used to generate the comfort noise.