

Title (en)
Method and apparatus for transcoding a speech signal from a first code excited linear prediction (CELP) format to a second code excited linear prediction (CELP) format

Title (de)
Verfahren und Vorrichtung zur Transcodierung eines Sprachsignals von einem ersten CELP-Format in ein zweites CELP-Format

Title (fr)
Procédé et appareil de transcodage de signaux de parole entre deux codeurs de format CELP

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Abstract (en)
The method of the present invention comprises the following steps: receiving a first coded speech signal using the first CELP format and including at least a first pitch parameter; decoding the received first coded speech signal to a decoded pcm speech signal; detecting a voiced level of the pcm speech signal within a predetermined time window; determining, if the pcm speech signal is a voiced speech signal or an unvoiced speech signal dependent on at least a first parameter; if the pcm speech signal is voiced, performing a closed loop search process which receives at least the first pitch parameter and estimates a second pitch parameter for the second CELP format dependent on at least the first pitch parameter; and if the pcm speech signal is unvoiced, copying the first pitch parameter as the second pitch parameter for the second CELP format.

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Citation (search report)

- [A] WO 03058407 A2 20030717 - DILITHIUM NETWORKS INC [US], et al
- [Y] DALWON JANG ET AL: "A Novel Rate Selection Algorithm for Transcoding CELP-type Codec and SMV", EUROSPEECH 2003, September 2003 (2003-09-01), Geneva, CH, pages 2865, XP007007018
- [DY] JIN-KYU CHOI ET AL: "Improvement issues on transcoding algorithms : for the flexible usage to the various pairs of speech codec", IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 2004. PROCEEDINGS. (ICASSP '04)., 17 May 2004 (2004-05-17) - 21 May 2004 (2004-05-21), MONTREAL, QUEBEC, CANADA, pages 269 - 272, XP010717617, ISBN: 0-7803-8484-9
- [DA] PANKAJ K R ED - MATTHEWS M B (ED) INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS: "A novel transcoding scheme from EVRC to G.729AB", CONFERENCE RECORD OF THE 37TH. ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS, & COMPUTERS. PACIFIC GROOVE, CA, NOV. 9 - 12, 2003, ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, NEW YORK, NY : IEEE, US, vol. VOL. 1 OF 2. CONF. 37, 9 November 2003 (2003-11-09), pages 533 - 536, XP010702678, ISBN: 0-7803-8104-1
- [DA] KYUNG TAE KIM ET AL: "An efficient transcoding algorithm for G.723.1 and EVRC speech coders", VTC FALL 2001. IEEE 54TH. VEHICULAR TECHNOLOGY CONFERENCE. PROCEEDINGS. ATLANTIC CITY, NJ, OCT. 7 - 11, 2001, IEEE VEHICULAR TECHNOLOGY CONFERENCE, NEW YORK, NY : IEEE, US, vol. VOL. 1 OF 4. CONF. 54, 7 October 2001 (2001-10-07), pages 1561 - 1564, XP010562224, ISBN: 0-7803-7005-8
- [A] GHENANIA M ET AL: "TRANSCODAGE INTELLIGENT A FAIBLE COMPLEXITE EXTRE LES CODEURS UIT-T G.729 ET 3GPP NB-AMR (12.2 KBIT/S)", CORESA. COMPRESSION ET REPRESENTATION DES SIGNAUX AUDIOVISUELS, 25 May 2004 (2004-05-25), pages 85 - 88, XP001199662

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