

Title (en)

METHOD OF AND DEVICE FOR SPEECH SIGNAL CODING AND DECODING BY MEANS OF A MULTIPULSE EXCITATION

Publication

**EP 0361432 A3 19900926 (EN)**

Application

**EP 89117837 A 19890927**

Priority

IT 6786888 A 19880928

Abstract (en)

[origin: EP0361432A2] A coding-decoding method using a multipulse analysis-by-synthesis excitation technique comprises, in the decoding phase, cascaded long-term and short-term synthesis filterings. The lag and gain of the long-term synthesis and the excitation pulses are determined during the coding phase within the analysis-by-synthesis procedure in two subsequent steps, in the first of which the lag and the gain are determined, while in the second the positions and the amplitudes of the excitation pulses are determined. The invention concerns also the device performing the method.

IPC 1-7

**G10L 9/14**

IPC 8 full level

**G10L 19/10** (2013.01)

CPC (source: EP)

**G10L 19/10** (2013.01)

Citation (search report)

- [A] ICASSP 86, IEEE-ICEJ-ASJ INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, Tokyo, 7th - 11th April 1986, vol. 4, pages 3067-3070, IEEE, New York, US; G. OHYAMA et al.: "A novel approach to estimating excitation code in code-excited linear prediction coding"
- [A] ICASSP 86, IEEE-ICEJ-ASJ INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, Tokyo, 7th - 11th April 1986, vol. 3, pages 1689-1692, IEEE, New York, US; K. OZAWA et al.: "High quality multi-pulse speech coder with pitch prediction"
- [A] ICASSP 84, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, San Diego, California, 19th - 21st March 1984, vol. 1, pages 10.4.1 - 10.4.4, IEEE, New York, US; P. KROON et al.: "Experimental evaluation of different approaches to the multi-pulse coder"
- [A] ICASSP 87, INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, Dallas, Texas, 6th - 9th April 1987, vol. 3, pages 1649-1652, IEEE, New York, US; P. KROON et al.: "Quantization procedures for the excitation in celp coders"
- [A] ELECTRONICS LETTERS, vol. 23, no. 24, 19th November 1987, pages 1286-1288, Hitchin, GB; A. KONDOZ et al.: "Vector-quantised transform coder for speech coding at 9.6kb/s and below"

Cited by

ES2042410A2; US5761635A; EP0910064A3; US5327519A; EP0599569A3; AU665283B2; US5596677A; WO9529480A3

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