Title (en)
CODING METHOD AND LINEAR PREDICTION SPEECH CODER

Publication
EP 0347307 A3 19901227 (FR)

Application
EP 89401644 A 19890613

Priority
FR 8807846 A 19880613

Abstract (en)
[origin: EP0347307A2] The method, usable in particular for low-rate speech transmission, uses vector excitation. A signal frame is represented, on the one hand, by prediction parameters, and on the other hand, by a succession of excitation vectors contained in a dictionary (20) and by amplification gains (Gk) of these vectors, the vectors adopted being determined by searching for the minimum energy of an error signal obtained by subtraction of each vector in its turn, after having submitted to a filtering, from the frame of the speech signal. Before subtraction: each frame of the speech signal is subjected to a short-term analysis filtering and to a weighted synthesis filtering, with coefficients possibly fixed in time, and the amplified vector is subjected to a long-term predictive filtering and to the same perceptual weighted synthesis filtering as the speech signal. <IMAGE>

IPC 1-7
G10L 9/14

IPC 8 full level
G10L 19/005 (2013.01); **G10L 19/113** (2013.01); G10L 25/06 (2013.01)

CPC (source: EP)
G10L 19/005 (2013.01); **G10L 19/113** (2013.01); G10L 25/06 (2013.01); G10L 2019/0003 (2013.01); G10L 2019/0014 (2013.01)

Citation (search report)
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- [XP] ELECTRONICS LETTERS, vol. 25, no. 6, 16 mars 1989, pages 401-403, Stevenage GB; R.A. SALAMI: "Binary code excited linear prediction (BCELP): new approach to CELP coding of speech without codebooks"
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- [A] ICASSP'86 PROCEEDINGS - IEEE-IECEJ-ASJ INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSNG, 7-11 avril 1986, Tokyo, vol. 4, pages 3055-3058, IEEE, New York, US; G. DAVIDSON et al.: "Complexity reduction methods for vector excitation coding"
- [A] ICASSP'85 PROCEEDINGS - IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 26-29 mars 1985, Tampa, Florida, vol. 3, pages 965-968, IEEE, New York, US; E.F. DEPRETTERE et al.: "Regular excitation reduction for effective and efficient LP-coding of speech"

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