

Title (en)

Speech coder employing analysis-by-synthesis techniques with a pulse excitation.

Title (de)

Sprachkodierer mit Analyse-durch Synthese-Technik und Pulsanregung.

Title (fr)

Codeur de langage utilisant des techniques d'analyse par synthèse avec excitation d'impulsion.

Publication

EP 0619574 A1 19941012 (EN)

Application

EP 94105438 A 19940407

Priority

IT TO930244 A 19930409

Abstract (en)

In an analysis-by-synthesis coder, the original speech signal undergoes small time shifts to match in time the signal to be coded with the replica produced by the long term synthesis filter. The shift is determined at each subframe by an exhaustive search within a range of possible values so as to minimize the error signal energy. Once the optimal shift has been determined, the optimal excitation is searched for. The excitation is chosen in a codebook containing words with very few pulses arranged in a deterministic structure, which words are all obtained from a limited number of key words. The deterministic codebook structure allows a fast search for the optimal excitation, without need of storing the codebook and actually performing the synthesis filterings of the candidate excitations. <IMAGE>

IPC 1-7

G10L 9/14; **G10L 9/00**; **G10L 9/18**

IPC 8 full level

G10L 19/10 (2013.01); **G10L 19/12** (2013.01)

CPC (source: EP)

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Citation (search report)

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- [A] US 4890328 A 19891226 - PREZAS DIMITRIOS P [US], et al
- [A] EP 0195487 A1 19860924 - KONINKL PHILIPS ELECTRONICS NV [NL]

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DOCDB simple family (application)

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