

Title (en)

Generalized analysis-by-synthesis speech coding method and apparatus.

Title (de)

Verallgemeinerte Analyse-durch-Synthese Methode und Einrichtung zur Sprachkodierung.

Title (fr)

Méthode généralisée d'analyse par synthèse et dispositif pour le codage de la parole.

Publication

EP 0539103 A2 19930428 (EN)

Application

EP 92309442 A 19921016

Priority

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Abstract (en)

A generalized analysis-by-synthesis method and apparatus are disclosed. A plurality of trial original signals are generated based on an original signal for coding. The trial original signals are constrained to be perceptually similar to the original signal. Trial original signals are coded to produce one or more parameters representative thereof. Estimates of the trial original signals are synthesized from these parameters. Errors between the trial original signals and the synthesized estimates are determined. A coded representation of the original signal is determined which comprises parameters of the trial original signal having an associated error which satisfies an error evaluation process. Trial original signals may be generated by application of time-warps or time-shifts to the original signal. Coding of a trial original signal may be performed with conventional analysis-by-synthesis coding such as code-excited linear prediction coding (CELP). A minimum square error process may serve as the error criterion. <IMAGE>

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