Title (en)

Arrangement and method for encoding speech signal using regular pulse excitation scheme.

Title (de)

Einrichtung und Verfahren zur Sprachkodierung mit Regular-Pulsanregung.

Title (fr)

Procédé et dispositif de codage de la parole utilisant une suite régulière d'impulsions d'excitation.

Publication

EP 0402947 A2 19901219 (EN)

Application

EP 90111360 A 19900615

Priority

- JP 15077089 A 19890614
- JP 25445889 A 19890929

Abstract (en)

A pre-processing circuit is provided to receive a discrete-time speech signal which are then divided into a plurality of frames. A parameter extracting circuit is coupled to a pre-processing circuit to which a discrete-time speech signal is applied and extracts a plurality of parameters therefrom. A impulse response calculating circuit is coupled to receive the plurality of parameters from the parameter extracting circuit, and generates an impulse response function signal using the plurality of parameters. An autocorrelation function circuit is coupled to receive the impulse response signal and generates an autocorrelation function signal using the signal applied. A cross-correlation function signal generates a cross-correlation function signal using the discrete-time speech signal and the autocorrelation function signal. A grid signal generator receive the output of the cross-correlation function calculating circuit, and outputs a grid signal indicative of a location of a first excitation pulse within one frame. A pulse amplitude calculating circuit receives the autocorrelation function signal, the cross-correlation function signal and the grid signal, and determines an amplitude sequence of excitation pulses within one frame.

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