

Title (en)

Speech analysis-synthesis method and apparatus therefor.

Title (de)

Verfahren und Einrichtung zur Analyse durch Synthetisieren von Sprache.

Title (fr)

Procédé et dispositif d'analyse par synthèse de la parole.

Publication

EP 0421360 A2 19910410 (EN)

Application

EP 90118888 A 19901002

Priority

JP 25750389 A 19891002

Abstract (en)

An impulse sequence of a pitch frequency is detected from a phase-equalized prediction residual of an input speech signal S(t), and a quasi-periodic impulse sequence is obtained by processing the impulse sequence so that a fluctuation in its pitch frequency is within an allowed limit range. The magnitudes of the quasi-periodic impulse sequence are so determined as to minimize an error between the waveform of a synthesized speech obtainable by exciting an all-pole filter (18) with the quasi-periodic impulse sequence and the waveform of a phase-equalized speech obtainable by applying the input speech signal to a phase equalizing filter (5). Preferably, the quasi-periodic impulse sequence is supplied to the all-pole filter after being applied to a zero filter (10) in which it is given features of the prediction residual of the speech. Coefficients of the zero filter are also determined so that the error of the waveforms of the synthesized speech and the phase-equalized speech is minimum.

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G10L 9/14

IPC 8 full level

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