Title (en)

Speech coding method applying noise reduction by modifying the codebook gain

Title (de)

Verfahren zur Sprachkodierung mit Geräuschunterdrückung durch Modifizierung der Kodebuchverstärkung

Title (fr)

Procédé de codage de la parole avec réduction de bruit au moyen de la modification du gain du livre de code

Publication

EP 1521242 A1 20050406 (EN)

Application

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Priority

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Abstract (en)

The invention refers to a method for encoding an acoustic signal (y(n)) containing a speech component and a noise component by using an analysis through synthesis method, wherein for encoding the acoustic signal a synthesised signal is compared with the acoustic signal for a time interval, said synthesised signal being described by using a fixed codebook and an associated fixed gain, comprising the steps: Extracting an estimated fixed gain (g/< ANd> n) of the noise component from the acoustic signal (y(n)) for the time interval; Representing the noise component for the time interval by its fixed gain (g/< ANd> n); Estimating a signal to noise ratio of the speech component to the noise component for the time interval based on the signal to noise ratio of an earlier time interval and a ratio of the acoustic signal (y(n)) to the noise component in the time interval; Determining a modification factor (gamma c) based on the estimate of the signal to noise ratio; Deriving an estimate of a fixed gain (g/< ANd> s(m)) of the speech component by modifying said fixed gain of the speech component with a modification factor (gamma c). <IMAGE>

IPC 1-7

G10L 19/14; G10L 21/02

IPC 8 full level

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CPC (source: EP)

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