

Title (en)

METHOD AND APPARATUS FOR SUPPRESSING NOISE IN A DIGITAL SPEECH SIGNAL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR RAUSCHUNTERDRÜCKUNG EINES DIGITALEN SPRACHSIGNALS

Title (fr)

PROCEDE ET DISPOSITIF DE DEBRUITAGE D'UN SIGNAL DE PAROLE NUMERIQUE

Publication

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Application

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Priority

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Abstract (en)

[origin: FR2768547A1] The speech signal is divided into spectral component and estimated noise signals subtracted to provide noise-reduced output. The procedure comprises a spectral subtraction including a first subtraction stage in which note is taken of increased estimations ($B_{n,i}$) of spectral noise components. This allows production of spectral component ($S_{2n,f}$) of a first noise-reduced signal. The process further includes the calculation of a masking curve ($M_{n,q}$) by applying an auditory perception model w.r.t. the spectral components of the first noise-reduced signal. A second subtraction stage starts with each spectral component of the speech signal in the frame. From each is subtracted a quantity which is dependent on parameters including a difference between the increased estimation of the spectral component corresponding to the noise and the calculated masking curve. The result of this is subject to a transformation into the time domain in order to construct a noise reduced speech signal.

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