Title (en)
Method for estimating speech quality

Title (de)
Verfahren zur Schätzung der Sprachqualität

Title (fr)
Procédé d'évaluation de la qualité vocale

Publication
EP 2388779 A1 20111123 (EN)

Application
EP 10005327 A 20100521

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Abstract (en)
The invention relates to a method for estimating speech quality, wherein a reference speech signal (101) with a reference speech spectrum (X) enters a telecommunication network resulting in a test speech signal (102) with a test speech spectrum (Y), the method comprising the steps of identifying a number of perceptually dominant frequency sub-bands (bi) in one of the reference speech spectrum (X) and the test speech spectrum (Y), computing an intensity scaling factor (c_i) for each identified sub-band (bi) by minimizing a measure of the intensity difference between those parts of the reference speech spectrum (X) and of the test speech spectrum (Y) that correspond to the respective sub-band (b_i), multiplying the test speech spectrum (Y) with each intensity scaling factor (c_i) thereby generating a number of scaled test speech spectra (Y_i), selecting one scaled test speech spectrum, and computing the difference between the selected scaled test speech spectrum (Y_{sel}) and the reference speech spectrum (X), the difference being indicative of the speech quality of the test speech signal (102). The invention furthermore relates to a method for estimating speech quality in which the reference and the test speech signal are aligned and to a method for estimating speech quality that deals with interruptions and speech loss.

IPC 8 full level
G10L 19/00 (2006.01); **G10L 25/69** (2013.01)

CPC (source: EP)
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