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(54) Title: SPECTRAL SUBTRACTION NOISE SUPPRESSION METHOD

(57) Abstract

A spectral subtraction noise suppression method in a frame based digital communication system is described. Each frame includes a predetermined number N of audio samples, thereby giving each frame N degrees of freedom. The method is performed by a spectral subtraction (150) function $\hat{H}(\omega)$ which is based on an estimate (140) $\hat{\Phi}_N(\omega)$ of the power spectral density of background noise of non-speech frames and an estimate (130) $\hat{\Phi}_s(\omega)$ of the power spectral density of speech frames. Each speech frame is approximated (120) by a parametric model that reduces the number of degrees of freedom to less than N . The estimate $\hat{\Phi}_s(\omega)$ of the power spectral density of each speech frame is estimated (130) from the approximative parametric model.

