Problematika difusního šumu ve struktuře LCB.

The diffuse noise in the LCB structure.

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Abstrakt

Za nejzávažnější problém vícekanálových systémů zvýrazňováni řeči lze označit závislost míry potlačení rušení na typu vstupního rušení. Podrobnou analýzou struktury „Linearly Constrained Beamformer with Adaptive Constraint Values"(LCB), skládající se z beamformeru s adaptivní postfiltrací (BAP) a alternativní realizace adaptivního bamformeru zvané „generalised sidelobe canceler"(GSC), byla nalezena možná cesta k řešení tohoto problému — kombinace LCB struktury s koherenční filtrací (CF). Vhodnost navrženého řešení byla posouzena kritériem míry potlačení šumu (NR). Na základě provedených rozborů byly navrženy cíle další práce.

Summary

The most important problem of the multi-channel speech enhancement systems is the systems dependence on the input noise type. The detail analysis of the linearly constrained beamformer with adaptive constraint values (LCB), combination of the beamformer with adaptive postfiltering (BAP) and the alternative realisation of the adaptive beamformer called the generalised sidelobe canceler (GSC), was performed. The potential way of the problem solution — combination of the LCB and coherence filtering (CF), was proposed using the analysis results. The proposed solution was evaluated by the objective criterion called noise reduction (NR). The goals of the next work was marked out considering the results of the performed analyses.

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