AUDIO FILTERBANK WITH DECORRELATING COMPONENTS

ABSTRACT

An multi-input, multi-output audio process is implemented as a linear system for use in an audio filterbank to convert a set of frequency-domain input audio signals into a set of frequency-domain output audio signals. A transfer function from one input to one output is defined as a frequency dependent gain function. In some implementations, the transfer function includes a direct component that is substantially defined as a frequency dependent gain, and one or more decorrelated components that have frequency-varying group phase response. The transfer function is formed from a set of sub-band functions, with each sub-band function being formed from a set of corresponding component transfer functions including direct component and one or more decorrelated components.

Fig. 1