

Title (en)
TIME-FREQUENCY DIRECTIONAL PROCESSING OF AUDIO SIGNALS

Title (de)
DIREKTIONALE ZEITFREQUENZVERARBEITUNG VON AUDIOSIGNALEN

Title (fr)
TRAITEMENT DIRECTIONNEL TEMPS-FRÉQUENCE DE SIGNAUX AUDIO

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Abstract (en)
[origin: WO2015048070A1] An approach to processing of acoustic signals acquired at a user's device include one or both of acquisition of parallel signals from a set of closely spaced microphones, and use of a multi-tier computing approach in which some processing is performed at the user's device and further processing is performed at one or more server computers in communication with the user's device. The acquired signals are processed using time versus frequency estimates of both energy content as well as direction of arrival. In some examples, a non-negative matrix or tensor factorization approach is used to identify multiple sources each associated with a corresponding direction of arrival of a signal from that source. In some examples, data characterizing direction of arrival information is passed from the user's device to a server computer where direction-based processing is performed.

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