

**METHOD AND AUDIO PROCESSING SYSTEM FOR BLIND SOURCE
SEPARATION WITHOUT SAMPLING RATE MISMATCH ESTIMATION AND
COMPENSATION**

ABSTRACT OF THE DISCLOSURE

A method for blind source separation for an audio processing system including multiple devices is provided. Each of the devices includes multiple microphones. A measure of dissimilarity between the signal vector sensed by each device and a column of a mixing matrix is computed. The measure of dissimilarity is used to establish an objective function and an optimization algorithm is performed to compute the mixing matrix. Estimates of the original signals are computed according to the mixing matrix and the signal vector without estimating a sampling rate mismatch between the devices. Therefore, compensation of sampling rate mismatch is not required.

FIG. 1