

Title (en)  
Modal beamforming

Title (de)  
Modale Strahlformung

Title (fr)  
Formation de faisceau modal

Publication  
**EP 2757811 B1 20171101 (EN)**

Application  
**EP 13152209 A 20130122**

Priority  
EP 13152209 A 20130122

Abstract (en)  
[origin: EP2757811A1] A method and system for generating an auditory scene that comprises: receiving eigenbeam outputs, the eigenbeam outputs having been generated by decomposing a plurality of audio signals, each audio signal having been generated by a different microphone of a microphone array, wherein each eigenbeam output corresponds to a different eigenbeam for the microphone array; generating the auditory scene based on the eigenbeam outputs and their corresponding eigenbeams, wherein generating the auditory scene comprises applying a weighting value to each eigenbeam output to form a steered eigenbeam output; and combining the weighted eigenbeams to generate the auditory scene, wherein generating the auditory scene further comprises applying a regularized equalizer filter to each eigenbeam output or steered eigenbeam output, the regularized equalizer filter(s) being configured to compensate for acoustic deficiencies of the microphone array and having a regularized equalization function.

IPC 8 full level  
**H04R 3/00** (2006.01)

CPC (source: EP)  
**H04R 3/005** (2013.01); **H04R 2201/401** (2013.01)

Citation (examination)  
BERTET ST PRG A(C)PHANIE ET AL: "3D Sound Field Recording with Higher Order Ambisonics - Objective Measurements and Validation of Spherical Microphone", AES CONVENTION 120; MAY 2006, AES, 60 EAST 42ND STREET, ROOM 2520 NEW YORK 10165-2520, USA, 1 May 2006 (2006-05-01), XP040507751

Cited by  
CN110139200A; CN111929665A; CN113791385A

Designated contracting state (EPC)  
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