

Title (en)

METHOD FOR CONTROLLING A MICROPHONE ARRAY AND DEVICE FOR CONTROLLING A MICROPHONE ARRAY

Title (de)

VERFAHREN ZUR STEUERUNG EINES MIKROFONARRAYS UND VORRICHTUNG ZUR STEUERUNG EINES MIKROFONARRAYS

Title (fr)

PROCÉDÉ DE COMMANDE D'UN RÉSEAU DE MICROPHONES ET DISPOSITIF DE COMMANDE D'UN RÉSEAU DE MICROPHONE

Publication

EP 3843419 B1 20221228 (DE)

Application

EP 20209487 A 20201124

Priority

DE 102019134541 A 20191216

Abstract (en)

[origin: US2021185433A1] In order for a microphone array to capture sound emanating from a moving object whose exact position is unknown at the time of arrival of the sound signal, a method for controlling the microphone array comprises steps of receiving position information that includes a position (pTR) and a velocity of the moving object from a tracking system, receiving a plurality of microphone signals that comprise sound of a sound event emanating from the moving object from a plurality of microphone capsules, calculating a directional characteristic from the plurality of microphone signals, wherein the directional characteristic is based on beamforming according to the position information and wherein an audio output signal is generated that includes the sound from a preferred direction of high sensitivity, and providing the audio output signal at an output. A beam width or opening angle (α) of the directional characteristic varies over time and depends on the velocity of the moving object, wherein a higher velocity of the moving object results in a larger beam width or larger opening angle respectively.

IPC 8 full level

H04R 1/00 (2006.01); **H04R 1/32** (2006.01); **H04R 1/40** (2006.01); **H04R 3/00** (2006.01)

CPC (source: EP US)

H04R 1/20 (2013.01 - US); **H04R 1/326** (2013.01 - EP); **H04R 1/406** (2013.01 - EP US); **H04R 3/005** (2013.01 - EP US);
H04R 2430/20 (2013.01 - EP US); **H04R 2430/23** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3843419 A1 20210630; **EP 3843419 B1 20221228**; DE 102019134541 A1 20210617; US 11303997 B2 20220412;
US 2021185433 A1 20210617

DOCDB simple family (application)

EP 20209487 A 20201124; DE 102019134541 A 20191216; US 202017121833 A 20201215