

Title (en)

METHOD FOR INTERPOLATING A SOUND FIELD AND CORRESPONDING COMPUTER PROGRAM PRODUCT AND DEVICE

Title (de)

VERFAHREN ZUR INTERPOLATION EINES SCHALLFELDES UND ZUGEHÖRIGES COMPUTERPROGRAMMPRODUKT UND VORRICHTUNG

Title (fr)

PROCÉDÉ D'INTERPOLATION D'UN CHAMP SONORE, PRODUIT PROGRAMME D'ORDINATEUR ET DISPOSITIF CORRESPONDANTS

Publication

**EP 3895446 A1 20211020 (FR)**

Application

**EP 19816809 A 20191213**

Priority

- FR 1872951 A 20181214
- EP 2019085175 W 20191213

Abstract (en)

[origin: WO2020120772A1] The invention relates to a method for interpolating a sound field sensed by a plurality of N microphones each delivering the sound field encoded in a form comprising at least one sensed pressure and an associated pressure gradient vector. Such a method comprises interpolating the sound field at an interpolation position delivering an interpolated encoded sound field expressed as a linear combination of the N encoded sound fields each weighted by a corresponding weighting factor. The interpolation comprises estimating the N weighting factors from at least: - the interpolation position; - a position of each of the N microphones; - the N pressures sensed by the N microphones; and - an estimated strength of the sound field at the interpolation position.

IPC 8 full level

**H04R 3/00** (2006.01)

CPC (source: EP US)

**H04R 3/005** (2013.01 - EP); **H04S 7/301** (2013.01 - US); **H04S 7/304** (2013.01 - US); **H04S 2400/15** (2013.01 - EP US);  
**H04S 2420/11** (2013.01 - EP 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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2020120772 A1 20200618**; EP 3895446 A1 20211020; EP 3895446 B1 20230125; FR 3090179 A1 20200619; FR 3090179 B1 20210409;  
US 11736882 B2 20230822; US 2022132262 A1 20220428

DOCDB simple family (application)

**EP 2019085175 W 20191213**; EP 19816809 A 20191213; FR 1872951 A 20181214; US 201917413229 A 20191213