

Title (en)
Spherical microphone array

Title (de)
Kugelförmiges Mikrofonarray

Title (fr)
Antenne microphonique sphérique

Publication
EP 2773131 A1 20140903 (EN)

Application
EP 13156983 A 20130227

Priority
EP 13156983 A 20130227

Abstract (en)
A spherical microphone array with improved frequency range for use in a modal beamformer system is disclosed that comprises a sound-diffracting structure, e.g. a rigid sphere with cavities in the perimeter of the diffracting structure and a microphone located in or at the ends of said cavities respectively, where the cavities are shaped to form both a spatial low-pass filter, e.g. exhibiting a wide opening, and a concave focusing element so that sound entering the cavities in a direction perpendicular to the perimeter of the diffracting structure converges to the microphones, e.g. by providing a parabolic surface, in order to minimize spatial aliasing.

IPC 8 full level
H04R 1/40 (2006.01)

CPC (source: EP)
H04R 1/406 (2013.01); **H04R 2201/401** (2013.01)

Citation (applicant)

- US 2007110257 A1 20070517 - DEDIEU STEPHANIE [CA], et al
- NICOLAS EPAIN AND JEROME DANIEL: "Improving Spherical Microphone Arrays", 124TH CONVENTION OF THE AUDIO ENGINEERING SOCIETY,, 17 May 2008 (2008-05-17) - 20 May 2008 (2008-05-20)

Citation (search report)

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- [XDYI] DANIEL JEROME ET AL: "Improving Spherical Microphone Arrays", AES CONVENTION 124; MAY 2008, AES, 60 EAST 42ND STREET, ROOM 2520 NEW YORK 10165-2520, USA, 1 May 2008 (2008-05-01), XP040508695
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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

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