

Title (en)

SOUND DEVICE PROVIDED WITH A GEOMETRIC AND ELECTRONIC RADIATION CONTROL

Title (de)

MIT EINER GEOMETRISCHEN UND ELEKTRONISCHEN SCHALLABSTRAHLSTEUERUNG AUSGESTATTETE SCHALLEINRICHTUNG

Title (fr)

DISPOSITIF DE SONORISATION A CONTRÔLE DE RAYONNEMENT GÉOMÉTRIQUE ET ÉLECTRONIQUE

Publication

EP 1728409 B1 20120926 (FR)

Application

EP 05736560 A 20050311

Priority

- FR 2005000597 W 20050311
- FR 0403052 A 20040325

Abstract (en)

[origin: WO2005104609A1] The invention relates to a sound device for carrying out a homogenous sound cover for a public addressed area comprising an electroacoustic source network (1), wherein each electroacoustic source (1) diffuses a version delayed by a delay (3), filtered by a filter (4) and amplified by the device input signal amplifier (5). The inventive device is characterised in that said network is substantially rectilinear and vertical, angles theta which are formed by the emitting axes of the electroacoustic sources (1) and a normal to the network are selected such that theta n > theta n-1, wherein n is the index of the electroacoustic sources (1) numbered in ascending order from the top of the device to the bottom thereof and the delays (3) interact with the angles theta in such a way that the device generates a wavefront (6) whose shape corresponds to the desired sound cover of the public addressed area.

IPC 8 full level

H04R 1/40 (2006.01); **H04R 5/02** (2006.01); **H04R 3/12** (2006.01)

CPC (source: EP US)

H04R 1/403 (2013.01 - EP US); **H04R 3/12** (2013.01 - EP US)

Citation (examination)

- WAL VAN DER M ET AL: "DESIGN OF LOGARITHMICALLY SPACED CONSTANT-DIRECTIVITY TRANSDUCER ARRAYS", JOURNAL OF THE AUDIO ENGINEERING SOCIETY, AUDIO ENGINEERING SOCIETY, NEW YORK, NY, US, vol. 44, no. 6, 1 June 1996 (1996-06-01), pages 497 - 507, XP000721403, ISSN: 1549-4950
- UREDA ET AL: "Analysis of Loudspeaker Line Arrays", JAES, AES, 60 EAST 42ND STREET, ROOM 2520 NEW YORK 10165-2520, USA, vol. 52, no. 5, 1 May 2004 (2004-05-01), pages 467 - 495, XP040507095
- DATABASE INSPEC [online] THE INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB; November 1997 (1997-11-01), SMITH D L: "Discrete-element line arrays-their modeling and optimization", Database accession no. 5812736 & JOURNAL OF THE AUDIO ENGINEERING SOCIETY AUDIO ENG. SOC. USA, vol. 45, no. 11, pages 949 - 964, ISSN: 0004-7554

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2868237 A1 20050930; FR 2868237 B1 20060519; CN 1965608 A 20070516; CN 1965608 B 20110817; EP 1728409 A1 20061206; EP 1728409 B1 20120926; US 2007165876 A1 20070719; US 7426278 B2 20080916; WO 2005104609 A1 20051103

DOCDB simple family (application)

FR 0403052 A 20040325; CN 200580009550 A 20050311; EP 05736560 A 20050311; FR 2005000597 W 20050311; US 59382105 A 20050311