

Title (en)

MEMS SPEAKER COMPRISING A SOUND DRIVER AND A SOUND AMPLIFIER

Title (de)

MEMS-LAUTSPRECHERANORDNUNG MIT EINEM SCHALLERZEUGER UND EINEM SCHALLVERSTÄRKER

Title (fr)

MEMS HAUT-PARLEUR COMPRENANT UN GÉNÉRATEUR DE SON ET UN AMPLIFICATEUR DE SON

Publication

EP 3189674 A1 20170712 (DE)

Application

EP 15760428 A 20150901

Priority

- DE 102014112841 A 20140905
- EP 2015069900 W 20150901

Abstract (en)

[origin: WO2016034560A1] The invention relates to a MEMS loudspeaker arrangement (1) for generating sound waves in the audible wavelength spectrum, comprising a housing (2), which has a sound conduction channel (8) and a sound outlet opening (10) arranged at the end of said sound conduction channel (8), at least two MEMS loudspeakers (3) which are arranged in the housing (2) such that the sound waves generated by the MEMS loudspeakers (3) can be conducted to the common sound outlet opening (10) via the common sound conduction channel (8), and a control unit for controlling the MEMS loudspeakers (3). According to the invention, one of the two MEMS loudspeakers (3) is arranged downstream of the other in the direction of the sound outlet opening (10). The control unit is further designed such that, in order to increase the maximum sound intensity of the MEMS loudspeaker arrangement (1), the two MEMS loudspeakers (3) can be controlled such that the first of the two MEMS loudspeakers (3) is designed as a sound generator (12) for generating an initial wave (15) and the second MEMS loudspeaker (3) arranged downstream thereof as a sound amplifier (13) for amplifying said initial wave (15).

IPC 8 full level

H04R 1/40 (2006.01); **H04R 19/00** (2006.01)

CPC (source: EP KR US)

H04R 1/025 (2013.01 - US); **H04R 1/403** (2013.01 - EP KR US); **H04R 3/12** (2013.01 - US); **H04R 19/005** (2013.01 - EP KR US); **H04R 19/02** (2013.01 - US); **H04R 2201/003** (2013.01 - EP KR US); **H04R 2201/403** (2013.01 - EP KR 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)

DE 102014112841 A1 20160310; CN 106797510 A 20170531; CN 106797510 B 20190813; EP 3189674 A1 20170712; EP 3189674 B1 20191113; KR 20170055974 A 20170522; US 10097928 B2 20181009; US 2017280251 A1 20170928; WO 2016034560 A1 20160310

DOCDB simple family (application)

DE 102014112841 A 20140905; CN 201580046247 A 20150901; EP 15760428 A 20150901; EP 2015069900 W 20150901; KR 20177007571 A 20150901; US 201515507303 A 20150901