

Title (en)

ACOUSTIC TRANSDUCER ARRANGEMENT HAVING A STRUCTURED METAL LAYER AND METHOD FOR PRODUCING AN ACOUSTIC TRANSDUCER ARRANGEMENT HAVING A STRUCTURED METAL LAYER

Title (de)

SCHALLWANDLERANORDNUNG MIT STRUKTURIERTER METALLSCHICHT UND VERFAHREN ZUR HERSTELLUNG EINER SCHALLWANDLERANORDNUNG MIT STRUKTURIERTER METALLSCHICHT

Title (fr)

ENSEMBLE TRANSDUCTEUR ACOUSTIQUE COMPRENANT UNE COUCHE MÉTALLIQUE STRUCTURÉE ET PROCÉDÉ DE FABRICATION D'UN ENSEMBLE TRANSDUCTEUR ACOUSTIQUE COMPRENANT UNE COUCHE MÉTALLIQUE STRUCTURÉE

Publication

EP 3386649 A1 20181017 (DE)

Application

EP 16782063 A 20161017

Priority

- DE 102015224763 A 20151210
- EP 2016074858 W 20161017

Abstract (en)

[origin: WO2017097478A1] An acoustic transducer arrangement (100) comprising a perforated plate carrier (101) which has horizontally spaced first recesses (102) and horizontally spaced second recesses, in each case a first recess (102) and a second recess (103) being arranged adjacently above each other, wherein a horizontal extent of the second recess (103) is larger than a horizontal extent of the first recess (102) so that support surfaces (104) form within the perforated plate carrier (101); a plurality of piezoelectric elements (105); and a top layer (108), characterized in that each second recess (103) has a piezoelectric element (105) and the piezoelectric elements (105) are partially situated on the support surfaces (104), each piezoelectric element (105) having a horizontal extent that is larger than the horizontal extent of the first recess (102) and smaller than the horizontal extent of the second recess (103) so that cavities form in the horizontal direction between the perforated plate carrier (101) and the piezoelectric elements (105) and the top layer (108) is situated on the perforated plate carrier (101) and the piezoelectric elements (105), wherein the top layer (108) has a first structured metal layer (109) which is situated above the piezoelectric elements (105) and functions as a membrane.

IPC 8 full level

B06B 1/06 (2006.01); **G10K 11/00** (2006.01)

CPC (source: EP)

B06B 1/0622 (2013.01); **G10K 11/004** (2013.01)

Citation (search report)

See references of WO 2017097478A1

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 102015224763 A1 20170614; CN 108290183 A 20180717; EP 3386649 A1 20181017; WO 2017097478 A1 20170615

DOCDB simple family (application)

DE 102015224763 A 20151210; CN 201680071570 A 20161017; EP 16782063 A 20161017; EP 2016074858 W 20161017