Title (en)

ELECTRODYNAMIC TRANSDUCER, IN PARTICULAR OF THE LOUDSPEAKER TYPE WITH FERROFLUID SUSPENSION AND RELATED DEVICES

Title (de)

ELEKTRODYNAMISCHER WANDLER, INSBESONDERE NACH ART EINES LAUTSPRECHERS MIT EINER FERROFLUID-AUFHÄNGUNG UND ENTSPRECHENDE VORRICHTUNGEN

Title (fr)

TRANSDUCTEUR ELECTRODYNAMIQUE, NOTAMMENT DU TYPE HAUT-PARLEUR, A SUSPENSION FERROFLUIDE ET DISPOSITIFS ASSOCIES

Publication

EP 2177047 B1 20170705 (FR)

Application

EP 08827304 A 20080807

Priority

- FR 2008051478 W 20080807
- FR 0757017 A 20070809

Abstract (en)

[origin: WO2009022085A1] The invention relates to an electrodynamic transducer (1) with a membrane (2) including an electrodynamic motor in a carcass (7) and in which a coil (6) held by a mandrel (3) connected to the membrane is capable of movement, the mandrel having a shape generated by an essentially linear generatrix, the coil being arranged in an air gap of a vertical free space where it is capable of movement and defined, towards the centre of the transducer, by an inner magnetic structure (4) and, towards the periphery of the transducer, by an outer magnetic structure (5), at least one of the magnetic structures generating a static magnetic field, wherein the transducer does not include any peripheral nor inner suspension and the guiding of the mobile equipment and the pneumatic tightness between the front and rear faces of the membrane being ensured by a ferrofluid. The transducer is characterised in that the mandrel is maintained in the air gap by the ferrofluid applied on at least one of the two faces of the mandrel and entirely filling the air gap. Fluidic return/braking and ferrofluid-retaining means can also be used. The motor can be a Foucault-current one.

IPC 8 full level

H04R 9/02 (2006.01); **H04R 7/24** (2006.01)

CPC (source: EP US)

H04R 9/027 (2013.01 - EP US); H04R 7/24 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2919978 A1 20090213; **FR 2919978 B1 20110429**; EP 2177047 A1 20100421; EP 2177047 B1 20170705; US 2011188698 A1 20110804; US 8280096 B2 20121002; WO 2009022085 A1 20090219

DOCDB simple family (application)

FR 0757017 A 20070809; EP 08827304 A 20080807; FR 2008051478 W 20080807; US 67292608 A 20080807