

Title (en)

MAGNETIC STRUCTURE FOR THE IRON-FREE MOTOR OF ELECTRODYNAMIC LOUDSPEAKER, MOTORS AND LOUDSPEAKERS

Title (de)

MAGNETISCHE STRUKTUR FÜR DEN EISENFREIEN MOTOR EINES ELEKTRODYNAMISCHEN LAUTSPRECHERS SOWIE  
ENTSPRECHENDE MOTOREN UND LAUTSPRECHER

Title (fr)

STRUCTURE MAGNETIQUE POUR MOTEUR SANS FER DE HAUT-PARLEUR ELECTRODYNAMIQUE, MOTEURS ET HAUT-PARLEURS

Publication

**EP 2204048 B1 20150722 (FR)**

Application

**EP 08836843 A 20080918**

Priority

- FR 2008051678 W 20080918
- FR 0757657 A 20070918

Abstract (en)

[origin: WO2009047455A2] The invention relates to a magnetic structure (5, 5', 5", 10) generating a magnetic field for the iron-free motor of an electrodynamic loudspeaker (1) having a mobile coil (2), the magnetic structure generating a magnetic field in an air gap in which the coil is provided, said magnetic structure being formed of a stack of three magnets corresponding to an intermediate magnet (8, 8', 8") and two upper and lower covering magnets (7, 9) (7', 9') (7", 9") (11, 12), said magnets defining a straight air gap edge and being contiguous, the intermediate magnet having a radial magnetic bias and the covering magnets having the same magnetic bias and remanent magnetisations. According to the invention, the covering magnets have a radial (7,9) (7',9') (7",9") or axial (11,12) magnetic bias and when the magnetic bias of the covering magnets is radial, the remanent magnetisation of each covering magnet is higher than the remanent magnetisation of the intermediate magnet, while when the magnetic bias of the covering magnets is axial, the remanent magnetisation of each covering magnet is lower than the remanent magnetisation of the intermediate magnet. The invention also relates to motors.

IPC 8 full level

**H04R 9/06** (2006.01); **H04R 9/02** (2006.01)

CPC (source: EP US)

**H04R 9/025** (2013.01 - EP US); **H04R 9/06** (2013.01 - EP US); **H04R 2209/022** (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 2921224 A1 20090320; FR 2921224 B1 20091204;** AU 2008309455 A1 20090416; AU 2008309455 B2 20130530; CA 2700031 A1 20090416;  
CA 2700031 C 20170502; CN 101828408 A 20100908; EP 2204048 A2 20100707; EP 2204048 B1 20150722; JP 2010539883 A 20101216;  
JP 5535917 B2 20140702; US 2010172534 A1 20100708; US 8055010 B2 20111108; WO 2009047455 A2 20090416;  
WO 2009047455 A3 20090611

DOCDB simple family (application)

**FR 0757657 A 20070918;** AU 2008309455 A 20080918; CA 2700031 A 20080918; CN 200880112019 A 20080918; EP 08836843 A 20080918;  
FR 2008051678 W 20080918; JP 2010525406 A 20080918; US 30088308 A 20080918