

Title (en)

Omnidirectional loudspeaker with spherical diaphragm using a two-layer magnetostrictive ribbon.

Title (de)

Kugelmembran-Rundstrahl Lautsprecher mit magnetostruktivem Doppelschicht-Bändchen.

Title (fr)

Haut-parleur omnidirectionnel à membrane sphérique utilisant un ruban bilame magnétostrictif.

Publication

EP 0403378 B1 19931229 (FR)

Application

EP 90401637 A 19900613

Priority

FR 8907960 A 19890615

Abstract (en)

[origin: JPH0332200A] PURPOSE: To obtain a spherical diaphragm speaker which outputs a sufficient acoustic output with a low frequency by using a magnetic distortion strip whose at least one face is overall or partially coated with thin coating made of material such as copper or ceramics. CONSTITUTION: A speaker is provided with a spherical diaphragm including a magnetostrictive strip coil 2 spirally wound along a spherical, and those coils are maintained at each position by an elastic supporting body 1. At least one face of the strip 2 made of magnetostrictive materials is partially coated with thin coating made of hard material such as copper or ceramic, and this is provided with two terminals 3 and 4 positioned in areas faced to the diameter direction of the spherical, and connected with a controller 5 which supplies a modulated signal to a sound wave to be reproduced. Also, a DC voltage source 8 induces a permanent and continuous magnetic field to the strip. Thus, the sufficient acoustic output can be outputted with especially a low frequency related with the full range of an acoustic frequency.

IPC 1-7

H04R 15/00; G01H 11/04

IPC 8 full level

H04R 15/00 (2006.01)

CPC (source: EP US)

H04R 15/00 (2013.01 - EP US); **H01H 2037/523** (2013.01 - EP US)

Designated contracting state (EPC)

DE GB IT NL

DOCDB simple family (publication)

EP 0403378 A1 19901219; **EP 0403378 B1 19931229**; DE 69005537 D1 19940210; DE 69005537 T2 19940623; FR 2648664 A1 19901221; JP H0332200 A 19910212; US 5103483 A 19920407

DOCDB simple family (application)

EP 90401637 A 19900613; DE 69005537 T 19900613; FR 8907960 A 19890615; JP 15739690 A 19900615; US 53245590 A 19900604