

Title (en)

Vibration plate, speaker, acoustic system and method of manufacturing vibration plate

Title (de)

Schwingungsplatte, Lautsprecher, akustisches System und Verfahren zur Herstellung einer Schwingungsplatte

Title (fr)

Plaque vibrante, haut-parleur, système acoustique et procédé permettant de fabriquer une plaque vibrante

Publication

EP 2239959 A1 20101013 (EN)

Application

EP 09700720 A 20090107

Priority

- JP 2009050052 W 20090107
- JP 2008000345 A 20080107
- JP 2008042113 A 20080222
- JP 2008042115 A 20080222
- JP 2008042118 A 20080222
- JP 2008042122 A 20080222

Abstract (en)

A diaphragm 1 includes a vibration member 10 including a first-region and second-region portions formed integrally with each other by using an isotropic material. The vibration member 10 has, in the first-region portion, reinforcement portions 13a to 13d in which a Young's modulus is higher than in the second-region portion. The reinforcement portions 13a to 13d are obtained by press molding in which a pressure applied to the first-region portion is stronger than a pressure applied to the second-region portion.

IPC 8 full level

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CPC (source: EP)

H04R 1/403 (2013.01); **H04R 5/02** (2013.01); **H04R 7/14** (2013.01); **H04R 7/20** (2013.01); **H04R 31/003** (2013.01); **H04R 2205/022** (2013.01); **H04R 2231/001** (2013.01)

Cited by

EP2869595A1; US9398376B2; US9986339B2

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2239959 A1 20101013; **EP 2239959 A4 20110119**; **EP 2239959 B1 20130102**; CN 101919269 A 20101215; CN 101919269 B 20140903; JP 5088377 B2 20121205; JP WO2009088002 A1 20110526; WO 2009088002 A1 20090716

DOCDB simple family (application)

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