

Title (en)

MULTI-LAYERED MEMBRANES CONSISTING OF A PLURALITY OF MATERIALS, FOR THE LOUDSPEAKER OF A HIGH FIDELITY LOUDSPEAKER CABINET

Title (de)

MEMBRAN AUS MEHREREN LAGEN VERSCHIEDENER MATERIALIEN FÜR EINEN LAUTSPRECHER EINER HIFI LAUTSPRECHERBOX

Title (fr)

MEMBRANES POUR HAUT-PARLEUR D'ENCEINTE ACOUSTIQUE HAUTE FIDELITE, MULTICOUCHES, MULTIMATERIAUX

Publication

EP 1616457 A1 20060118 (FR)

Application

EP 04720899 A 20040316

Priority

- FR 2004000642 W 20040316
- FR 0304420 A 20030409

Abstract (en)

[origin: FR2853803A1] Loudspeaker diaphragm comprises a core, an outer skin and optionally an inner skin, where the core comprises a cut and hot-molded structural foam and the outer and inner skins comprise one or more layers of resin-impregnated woven or nonwoven fibers. Independent claims are also included for: (1) production of the diaphragm by polymerizing a sandwich material either by compression between a mold and counter mold or a molding under vacuum at a temperature such that the resin is polymerized and a mechanically homogeneous structure is produced; (2) loudspeaker comprising a diaphragm as above; (3) speaker unit equipped with at least one loudspeaker as above.

IPC 1-7

H04R 7/12; H04R 31/00

IPC 8 full level

H04R 7/12 (2006.01); H04R 31/00 (2006.01)

CPC (source: EP KR US)

H04R 7/125 (2013.01 - EP KR US); H04R 31/003 (2013.01 - EP KR US); H04R 2307/023 (2013.01 - KR); H04R 2307/025 (2013.01 - KR); H04R 2307/029 (2013.01 - KR); Y10T 29/49005 (2015.01 - EP US)

Citation (search report)

See references of WO 2004095882A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2853803 A1 20041015; FR 2853803 B1 20050603; AU 2004231965 A1 20041104; CA 2521785 A1 20041104; CN 1771756 A 20060510; EP 1616457 A1 20060118; JP 2006523053 A 20061005; KR 20060008875 A 20060127; RU 2005134664 A 20070527; US 2006222201 A1 20061005; US 2009060255 A1 20090305; WO 2004095882 A1 20041104

DOCDB simple family (application)

FR 0304420 A 20030409; AU 2004231965 A 20040316; CA 2521785 A 20040316; CN 200480009522 A 20040316; EP 04720899 A 20040316; FR 2004000642 W 20040316; JP 2006505732 A 20040316; KR 20057019201 A 20051008; RU 2005134664 A 20040316; US 14690208 A 20080626; US 55195505 A 20051006