

Title (en)
Loudspeaker diaphragm

Title (de)
Lautsprecher-membran

Title (fr)
Membrane de haut-parleur

Publication
EP 1841280 A1 20071003 (EN)

Application
EP 06300298 A 20060329

Priority
EP 06300298 A 20060329

Abstract (en)
A loudspeaker diaphragm includes an upper flat skin and a lower flat skin that are substantially parallel to a transversal axis, and an enhancement core sandwiched between the upper flat skin and the lower flat skin. The enhancement core comprises a multiple ribs extending in different inclined angles alternately between the upper and lower flat skins, and arranged with a configuration so as to form a triangle-shaped or trapezoid-shaped cross section including a series of triangles or trapezoids between the upper and lower flat skins, whereby the transversal movement or vertical movement, e.g. the spring back effect (expansion and contraction) applying on the diaphragm are resisted. The inventive diaphragm is designed with a light weight whereas a sufficient rigidity, advantageously less break modes is also achieved so as to eliminate distortion in the sound reproducing. Furthermore, the inventive diaphragm can be integrally manufactured so as to reduce the cost.

IPC 8 full level
H04R 7/06 (2006.01)

CPC (source: EP)
H04R 7/10 (2013.01); **H04R 31/006** (2013.01)

Citation (search report)
• [XY] PATENT ABSTRACTS OF JAPAN vol. 008, no. 021 (E - 224) 28 January 1984 (1984-01-28)
• [X] PATENT ABSTRACTS OF JAPAN vol. 009, no. 069 (E - 305) 29 March 1985 (1985-03-29)
• [X] PATENT ABSTRACTS OF JAPAN vol. 010, no. 016 (E - 375) 22 January 1986 (1986-01-22)
• [X] PATENT ABSTRACTS OF JAPAN vol. 009, no. 004 (E - 288) 10 January 1985 (1985-01-10)
• [X] PATENT ABSTRACTS OF JAPAN vol. 005, no. 163 (E - 078) 20 October 1981 (1981-10-20)
• [Y] PATENT ABSTRACTS OF JAPAN vol. 008, no. 099 (E - 243) 10 May 1984 (1984-05-10)

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GB2479941A; US8942407B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
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