

Title (en)
A NEW STRUCTURED DOME-SHAPED DIAPHRAGM LOUD SPEAKER

Title (de)
NEUER STRUKTURIERTER KUPPELFÖRMIGER MEMBRANLAUTSPRECHER

Title (fr)
NOUVEAU HAUT-PARLEUR STRUCTURÉ À DIAPHRAGME EN FORME DE DÔME

Publication
EP 4333457 A1 20240306 (EN)

Application
EP 22275118 A 20220829

Priority
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Abstract (en)
The utility model discloses a dome-shaped diaphragm loudspeaker driver with a novel structure that comprises: a magnetic circuit assembly, a front plate mounted on one (top) side of the magnetic circuit assembly, a top dome-shaped diaphragm protruding from the middle of the top plate, which is being fixed between the front plate and the magnetic circuit assembly. A harmonic eliminator used to eliminate harmful soundwaves or resonances is being placed between the magnetic circuit assembly and the top diaphragm. One end of the harmonic eliminator is installed in the middle of the magnetic circuit assembly; the other (top) end of the harmonic eliminator extends to the inner side of the top diaphragm. The harmonic eliminator is designed with a structured concave-convex sound-absorbing surface for the purpose of eliminating standing waves and deviating harmful sound waves, thereby acoustic distortions. When harmful sound waves are generated behind the top diaphragm, the concave and convex-shaped surfaces on the harmonic eliminator cancel out the harmful sound waves and the remaining ones are guided and then below the harmonic eliminator, so that the harmful sound waves behind the top diaphragm will not be reflected to the top diaphragm. In this embodiment, the harmful sound waves mainly refer to standing waves.

IPC 8 full level
H04R 1/28 (2006.01); **H04R 7/12** (2006.01); **H04R 9/06** (2006.01)

CPC (source: EP)
H04R 1/288 (2013.01); **H04R 7/127** (2013.01); **H04R 9/06** (2013.01)

Citation (search report)

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