

Title (en)  
ACOUSTIC TRANSDUCER FOR BROAD-BAND LOUDSPEAKERS OR HEADPHONES

Title (de)  
AKUSTISCHER WANDLER FÜR BREITBAND-LAUTSPRECHER ODER KOPFHÖRER

Title (fr)  
TRANSDUCTEUR ACOUSTIQUE POUR HAUT-PARLEUR LARGE BANDE OU ECOUTEUR

Publication  
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Application  
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Abstract (en)  
[origin: US2003161494A1] The invention relates to an acoustic transducer for broad-band loudspeakers or magnet-free, electrodynamic headphones for generating sound, especially for the use in the homogenous and/or inhomogeneous magnetic field of a magnetic resonance tomograph. According to the advantages of the invention, sound having defined characteristics can be generated in such a way that said sound is provided with good quality and high effectiveness within the strong magnetic field of a magnetic resonance tomograph. In addition to music and voice, this comprises the generation of sound for actively controlling noise by generating sound by means of one or several membranes (1) that form air pockets. Said membranes (1) consist of elastic, non-magnetic or slightly magnetic material and are connected to strip conductors (2) in a two-dimensional and solid manner. A Lorentz force which is caused by the magnetic field of the magnetic resonance tomograph is exerted on said strip conductors as the driving power when current flows.

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