

Title (en)

Process and transducer for emitting very low frequency acoustic waves with high power

Title (de)

Verfahren und Wandler zum Aussenden von sehr niederfrequenten akustischen Wellen mit grosser Leistung

Title (fr)

Procédé d'émission d'ondes acoustiques très basses fréquences à forte puissance et transducteurs correspondants

Publication

EP 0657868 B1 19990811 (FR)

Application

EP 94402749 A 19941201

Priority

FR 9314503 A 19931203

Abstract (en)

[origin: EP0657868A1] The subject matter of the present invention is a method for emitting very-low frequency acoustic waves with high power, and corresponding transducers. The technical field of the invention is that of producing electro-acoustic transducers for emitting acoustic waves in immersion in a liquid. A transducer according to the invention includes one or more electro-acoustic motors (1) placed in one and the same plane, inside or at a peripheral ring of a flexible casing (5), to which they are secured by at least one of their ends using any assembly device (2), and to which they transmit their vibrations, which flexible casing is in contact with the said liquid (4) constituting the acoustic-wave emission surface, and has a shape such that the amplitude of these vibrations is amplified in a very low frequency range; the said casing (5) includes at least some opening (6) allowing the said liquid (4) to penetrate the entire internal cavity (7) defined by the said casing (5); a baffle (15) made of cellular material which withstands the immersion pressure occupies the majority of the volume of the cavity (7), the external surface of which is at a constant distance (14) from that of the casing (5) and is secured to the assembly device (2, 8) of the acoustic motors (1). <IMAGE>

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