

Title (en)
ACOUSTIC WAVE TRANSDUCER AND SONAR ANTENNA WITH IMPROVED DIRECTIVITY

Title (de)
SCHALLWELLENWANDLER UND SONARANTENNE MIT VERBESSERTER AUSRICHTUNG

Title (fr)
TRANSDUCTEUR D'ONDES ACOUSTIQUES ET ANTENNE SONAR DE DIRECTIVITE AMELIOREE

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Application
EP 09805787 A 20091223

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• FR 0859015 A 20081223

Abstract (en)
[origin: WO2010072984A1] The invention relates to an acoustic wave transducer that includes at least one electroacoustic motor (1, 21), a flare (4, 24) having an inner wall and an outer wall, a counterweight (5), and a hollow housing (8, 28) having an inner wall and an outer wall and at least one acoustic opening. The electroacoustic motor is connected to the flare (4, 24) as well as to the counterweight (5) along an axis (7), and said electroacoustic motor (1, 21) is capable of exciting the flare at about at least one resonance frequency f. The housing (8, 28) is connected to the counterweight (5) and surrounds the motor (1, 21) and the flare (4, 24), the outer wall of the flare being arranged opposite an acoustic opening of the housing, and the space between the inner wall of the housing and the inner wall of the flare defines a cavity that contains a fluid. According to the invention, said transducer includes acoustic attenuation means connected to the outer wall of the housing in order to attenuate the transmission and/or reception acoustic waves at the frequency f at least in a direction transverse to the transmission/reception axis. The invention also relates to a sonar antenna that comprises at least one transducer according to the invention.

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