

Title (en)
SONIC OR ULTRASONIC TRANSDUCER

Title (de)
SCHALL- ODER ULTRASCHALLWANDLER

Title (fr)
TRANSDUCTEUR ACOUSTIQUE OU ULTRASONIQUE

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Application
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Abstract (en)
[origin: WO2005031274A2] The invention relates to a sonic or ultrasonic transducer (1) that is configured as a radial oscillator. In order to be able to use said sonic or ultrasonic transducer at high temperatures, the conditioning layer (4) located between the radial oscillator and the atmosphere into which the ultrasonic signals are emitted is made of a material that is provided with a thermal non-deformability up to a temperature exceeding the temperature at the assembly point of the sonic or ultrasonic transducer (1). Furthermore, the conditioning layer is selected such that the material-specific expansion coefficient thereof is greater than the expansion coefficient of the materials of the piezoelectric unit (2) and/or the coupling ring while the elastic modulus of the material of the conditioning layer (4) is smaller by at least one order of magnitude than the elastic modulus of the piezoelectric unit (2) and/or the coupling ring (3).

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