

Title (en)
ULTRASONIC TRANSDUCER

Publication
EP 0142178 B1 19900103 (FR)

Application
EP 84201200 A 19840820

Priority
FR 8313986 A 19830831

Abstract (en)
[origin: US4771205A] An ultrasound transducer, comprising a substrate (10) which forms a backing medium, a layer of piezoelectric material (20), and one or more matching layers (30, 40) whose acoustic impedance has a value between that of the piezoelectric material and that of a foremost, propagation medium (50). The matching layer (layers) is (are) provided exclusively between the piezoelectric material (20) and the foremost, propagation medium (50). The acoustic impedance of the backing medium (10) is sufficiently high with respect to the acoustic impedance of the piezoelectric material for the backing medium to be considered to be rigid, the thickness of the layer of piezoelectric material (20) being equal to one quarter of the wavelength associated with the resonant frequency of the transducer.

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G10K 11/02

IPC 8 full level
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CPC (source: EP US)
G10K 11/02 (2013.01 - EP US)

Cited by
EP0369127A3; EP0142318A3; EP0212695A1; US4712037A; EP0404154A3; US5212671A; EP2819418A1; EP2775730A1; WO2014135826A1; EP2775731A1; WO2014135827A1; EP1003185B2

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