

Title (en)
ULTRASONIC TRANSDUCER

Title (de)
ULTRASCHALLWANDLER

Title (fr)
TRANSDUCTEUR ULTRASONORE

Publication
EP 0655156 B1 19960619 (DE)

Application
EP 93917707 A 19930729

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Abstract (en)
[origin: US5659220A] PCT No. PCT/EP93/02039 Sec. 371 Date Feb. 13, 1995 Sec. 102(e) Date Feb. 13, 1995 PCT Filed Jul. 29, 1993 PCT Pub. No. WO94/05004 PCT Pub. Date Mar. 3, 1994For industrial applications, there is a need for compact ultrasonic transducers which at the same time have a radiation characteristic with small side lobes. This requirement is met by an ultrasonic transducer of conventional design and having a piezoelectric transducer element (1) which is bonded over its main surface (7) to a disk-shaped lambda /4 matching element (2), it being the case according to the invention that the circumferential surface (3) of the lambda /4 matching element is profiled with a notch (4) of suitable depth (5).

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G10K 11/02

IPC 8 full level
G10K 11/02 (2006.01); **H04R 17/00** (2006.01)

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Cited by
US6104121A; DE19630350A1; DE19630350C2; WO9804361A1

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US 5659220 A 19970819; DE 59303034 D1 19960725; EP 0655156 A1 19950531; EP 0655156 B1 19960619; JP 3148242 B2 20010319; JP H08500224 A 19960109; WO 9405004 A1 19940303

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US 38198295 A 19950213; DE 59303034 T 19930729; EP 9302039 W 19930729; EP 93917707 A 19930729; JP 50582994 A 19930729