

Title (en)
ULTRASONIC TRANSDUCER.

Title (de)
ULTRASCHALLWANDLER.

Title (fr)
TRANSDUCTEUR ULTRASONORE.

Publication
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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).

IPC 1-7
G10K 11/02

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

CPC (source: EP US)
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See references of WO 9405004A1

Cited by
US6104121A; DE19630350A1; DE19630350C2; WO9804361A1

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