

Title (en)

Ultrasonic transducer with asymmetric radiation characteristic

Title (de)

Ultraschallwandler mit asymmetrischer Strahlungscharakteristik

Title (fr)

Transducteur à ultrasons ayant une caractéristique de radiation asymétrique

Publication

**EP 0678853 B1 20010718 (DE)**

Application

**EP 95105504 A 19950412**

Priority

DE 4413894 A 19940421

Abstract (en)

[origin: EP0678853A2] The transducer is used as an electroacoustic flexure transducer, with a membrane of a piezoelectrically inactive material, coupled to a piezoelectric plate, arranged centrally on the inside face of the membrane. The opposing radiating surface of the membrane has at least one circular segment recess (7, 8) as its peripheral edge. Pref the membrane is cap shaped with a cylindrical sidewall incorporating a peripheral groove (2) and a radiating front face with a pair of circular segment recesses at diametrically opposite points, with a depth which is sufficient to reach the level of the peripheral groove. <IMAGE>

IPC 1-7

**G10K 9/12; G10K 13/00; G10K 9/122**

IPC 8 full level

**G10K 9/12 (2006.01); G10K 9/122 (2006.01); G10K 13/00 (2006.01)**

CPC (source: EP)

**G10K 9/122 (2013.01)**

Cited by

EP1906383A1; CN102113047A; US6322532B1; EP1096469A3; EP1443342A1; US8671762B2; US10136224B2; WO9901234A3; WO9726646A1; WO2010012533A1; WO2016046412A1; US7009326B1; US6465935B1; JP2011529652A

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 0678853 A2 19951025; EP 0678853 A3 19970521; EP 0678853 B1 20010718; DE 4413894 A1 19951026; DE 4413894 C2 20021212; DE 59509415 D1 20010823; ES 2158008 T3 20010901**

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