

Title (en)

Ultrasonic transducer with asymmetric radiation characteristic.

Title (de)

Ultraschallwandler mit asymmetrischer Strahlungscharakteristik.

Title (fr)

Transducteur à ultrason ayant une caractéristique de radiation asymétrique.

Publication

EP 0678853 A3 19970521 (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

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)

Citation (search report)

- [XDY] EP 0308899 A2 19890329 - SIEMENS AG [DE]
- [YD] US 4437032 A 19840313 - GELHARD EGON [DE]
- [Y] DE 3441684 A1 19860515 - SWF AUTO ELECTRIC GMBH [DE]
- [A] DE 3941634 A1 19910620 - SIEMENS AG [DE]
- [DA] DE 3939387 A1 19910606 - SWF AUTO ELECTRIC GMBH [DE]

Cited by

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

Designated contracting state (EPC)

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DOCDB simple family (publication)

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