

Title (en)

ULTRASONIC TRANSDUCER AND METHOD FOR MAKING SAME

Title (de)

ULTRASCHALLWANDLER UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

TRANSDUCTEUR ULTRASONORE ET PROCEDE DE FABRICATION D'UN TEL TRANSDUCTEUR

Publication

**EP 0765590 A1 19970402 (FR)**

Application

**EP 95922584 A 19950608**

Priority

- FR 9500753 W 19950608
- FR 9407488 A 19940617

Abstract (en)

[origin: WO9535642A1] An ultrasonic transducer (38) including a 0.1-0.5  $\mu$ m-thick silicon nitride membrane (4a) with an intrinsic mechanical stress of 100 MPa to 1.3 GPa, and a fixed electrode (15) made of a non-metallic rigid material and provided with a plurality of holes (25) with a small average diameter, said fixed electrode defining with said membrane an inner space 1-5  $\mu$ m thick. A method for making said ultrasonic transducer is also disclosed.

IPC 1-7

**H04R 19/00**; G01H 11/06; B06B 1/02; B06B 1/06

IPC 8 full level

**B06B 1/02** (2006.01); **G01H 11/06** (2006.01)

CPC (source: EP)

**B06B 1/0292** (2013.01); **G01H 11/06** (2013.01)

Citation (search report)

See references of WO 9535642A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

**WO 9535642 A1 19951228**; AU 2742795 A 19960115; EP 0765590 A1 19970402; FR 2721471 A1 19951222; FR 2721471 B1 19960802

DOCDB simple family (application)

**FR 9500753 W 19950608**; AU 2742795 A 19950608; EP 95922584 A 19950608; FR 9407488 A 19940617