

Title (en)

ULTRASOUND TRANSDUCER FOR USING IN A FLUID MEDIUM

Title (de)

ULTRASCHALLWANDLER ZUM EINSATZ IN EINEM FLUIDEN MEDIUM

Title (fr)

TRANSDUCTEUR ULTRASONORE DESTINÉ À ÊTRE UTILISÉ DANS UN MILIEU FLUIDE

Publication

**EP 2494317 A1 20120905 (DE)**

Application

**EP 10749886 A 20100909**

Priority

- DE 102009046146 A 20091029
- EP 2010063236 W 20100909

Abstract (en)

[origin: WO2011051040A1] The invention relates to an ultrasound transducer (110) for using in a fluid medium (116). The ultrasound transducer (110) comprises at least one transducer core (118) with at least one acoustic-electric transducer element (112), especially a piezoelectric transducer element (112). The ultrasound transducer (110) comprises at least one housing (120), at least one housing opening (122) being at least partially sealed from the fluid medium (116) by a sealing film (130) connected to the transducer core (118). The sealing film (130) comprises at least one expansion deformation (134) designed to enable a relative movement between the transducer core (118) and the housing (120).

IPC 8 full level

**G01F 1/66** (2006.01); **G01P 5/24** (2006.01)

CPC (source: EP KR US)

**G01F 1/662** (2013.01 - EP KR US); **G01F 23/296** (2013.01 - KR); **G01F 23/2968** (2013.01 - KR); **G01P 5/24** (2013.01 - EP US); **G01S 7/521** (2013.01 - EP US); **G10K 9/13** (2013.01 - KR); **G10K 9/22** (2013.01 - KR); **G10K 11/004** (2013.01 - EP US); **Y10T 29/42** (2015.01 - EP US)

Citation (search report)

See references of WO 2011051040A1

Citation (examination)

- DE 3721209 A1 19890105 - VEGA GRIESHABER GMBH & CO [DE]
- US 5239223 A 19930824 - MIYOSHI TAKAYUKI [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**WO 2011051040 A1 20110505**; CN 102597714 A 20120718; DE 102009046146 A1 20110512; EP 2494317 A1 20120905; JP 2013509121 A 20130307; JP 5496349 B2 20140521; KR 20120093906 A 20120823; RU 2012121917 A 20131210; RU 2554606 C2 20150627; US 2012260742 A1 20121018; US 9239337 B2 20160119

DOCDB simple family (application)

**EP 2010063236 W 20100909**; CN 201080048788 A 20100909; DE 102009046146 A 20091029; EP 10749886 A 20100909; JP 2012535708 A 20100909; KR 20127011011 A 20100909; RU 2012121917 A 20100909; US 201013501675 A 20100909