

Title (en)  
ULTRASONIC TRANSDUCER COMPRISING A SELF-SUPPORTING MATCHING LAYER, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)  
ULTRASCHALLWANDLER MIT SELBSTTRAGENDER ANPASSSCHICHT SOWIE VERFAHREN ZUR HERSTELLUNG

Title (fr)  
TRANSDUCTEUR ULTRASONORE DOTE D'UNE COUCHE D'ADAPTATION AUTOPORTANTE ET PROCEDE DE FABRICATION ASSOCIE

Publication  
**EP 1963030 A2 20080903 (DE)**

Application  
**EP 06828702 A 20061218**

Priority  
• DE 2006002272 W 20061218  
• DE 102005061343 A 20051221

Abstract (en)  
[origin: DE102005061343A1] The transducer has a piezo-active transducer layer embodied as a non-self-supporting layer, contacting layers for electrically contacting the transducer layer, and a matching layer at the front for adjusting the acoustic impedance to a coupling medium. The matching layer of the ultrasonic transducer is configured as a supporting element for the transducer layer and the contacting layers making it possible to create a micro-system structure of the ultrasonic transducer which is provided with increased power output during transmission and added sensitivity during reception. An independent claim is also included for the ultrasonic transducer.

IPC 8 full level  
**B06B 1/06** (2006.01)

CPC (source: EP)  
**A61B 8/12** (2013.01); **B06B 1/0688** (2013.01); **A61B 8/445** (2013.01)

Citation (search report)  
See references of WO 2007076820A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**DE 102005061343 A1 20070705; DE 102005061343 B4 20101125; EP 1963030 A2 20080903; WO 2007076820 A2 20070712;**  
WO 2007076820 A3 20080320

DOCDB simple family (application)  
**DE 102005061343 A 20051221; DE 2006002272 W 20061218; EP 06828702 A 20061218**