

Title (en)  
SONIC SENSOR ELEMENT

Title (de)  
AKUSTISCHES SENSORELEMENT

Title (fr)  
ÉLÉMENT DE DÉTECTION ACOUSTIQUE

Publication  
**EP 2163121 B1 20100929 (DE)**

Application  
**EP 08760771 A 20080610**

Priority  

- EP 2008057211 W 20080610
- DE 102007029911 A 20070628

Abstract (en)  
[origin: US8089828B2] A micromechanical acoustic sensor element, which has at least one diaphragm and at least one fixed counter element, the diaphragm being situated in a cavity between a substrate and the counter element and acting as movable electrode of a capacitor system, the counter element acting as first fixed counter electrode of this capacitor system, and at least one through hole being formed in the substrate for the application of sound pressure to the diaphragm. For fixation and strengthening purposes, the counter element is connected to the substrate via at least one support element. The support element is situated in the region of the cavity, and an opening is formed in the diaphragm for the support element.

IPC 8 full level  
**H04R 19/00** (2006.01); **H04R 19/04** (2006.01)

CPC (source: EP US)  
**H04R 19/005** (2013.01 - EP US); **H04R 19/04** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2010135123 A1 20100603; US 8089828 B2 20120103**; AT E483329 T1 20101015; DE 102007029911 A1 20090102;  
DE 502008001455 D1 20101111; EP 2163121 A1 20100317; EP 2163121 B1 20100929; JP 2010531592 A 20100924;  
WO 2009000641 A1 20081231

DOCDB simple family (application)  
**US 59899408 A 20080610**; AT 08760771 T 20080610; DE 102007029911 A 20070628; DE 502008001455 T 20080610;  
EP 08760771 A 20080610; EP 2008057211 W 20080610; JP 2010513833 A 20080610