

Title (en)

Ultrasound sensor with a holding element and a membrane, wherein the membrane is embedded into the holding element

Title (de)

Ultraschallsensor mit einem Trägerelement und einer Membran, wobei die Membran in das Trägerelement eingebettet ist

Title (fr)

Capteur à ultrasons doté d'un élément de support et d'une membrane, la membrane étant installée dans l'élément de support

Publication

EP 2031580 B1 20100929 (DE)

Application

EP 08104810 A 20080721

Priority

DE 102007041850 A 20070903

Abstract (en)

[origin: EP2031580A1] The sensor (1) has a carrier element (2), a diaphragm (3) and an actuator (8) that is connected to the diaphragm. A thinner section (4) is provided between the carrier element and the diaphragm for vibrating the diaphragm. The diaphragm is embedded in the carrier element. The actuator has a coil (9) with a ferromagnetic core (10), which stays in effective connection with the diaphragm such that movement of the core causes the movement of the diaphragm. The core is connected to the diaphragm via a metal plate (11). An independent claim is also included for a method for measuring distance to objects.

IPC 8 full level

G10K 11/00 (2006.01)

CPC (source: EP)

G10K 9/20 (2013.01)

Cited by

DE102010049820A1; DE102018105268B3; DE102010049818A1; WO2012055713A1

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DOCDB simple family (publication)

EP 2031580 A1 20090304; EP 2031580 B1 20100929; CN 101384101 A 20090311; CN 101384101 B 20140430;
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DOCDB simple family (application)

EP 08104810 A 20080721; CN 200810214862 A 20080903; DE 102007041850 A 20070903; DE 502008001428 T 20080721