

Title (en)

Ultrasound sensor for recording and/or scanning objects and corresponding manufacturing method

Title (de)

Ultraschallsensor zum Erfassen und/ oder Abtasten von Objekten und entsprechendes Herstellungsverfahren

Title (fr)

Capteur d'ultrasons destiné à la détection et/ou au balayage d'objets et méthode de fabrication correspondante

Publication

**EP 2348503 B1 20150311 (DE)**

Application

**EP 10000489 A 20100119**

Priority

EP 10000489 A 20100119

Abstract (en)

[origin: EP2348503A1] The sensor has a piezoelectric sensor unit (2) arranged in a substrate (1) and connected with the substrate, and a surface structure (4) provided in a rear side (3) of the substrate, where the structure has a set of bulges and recesses, and the rear side is turned away from the sensor unit. The structure is formed such that the structure scatters ultrasonic waves incident on the rear side from a direction of the sensor unit and/or the bulges and/or the recesses exhibit middle-lateral elongation in a range of 0.2 to 20 micrometers and/or less than or equal to wavelength of the waves. An independent claim is also included for a method for manufacturing an ultrasonic sensor.

IPC 8 full level

**G10K 11/00** (2006.01); **B06B 1/06** (2006.01)

CPC (source: EP US)

**G10K 11/002** (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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**EP 2348503 A1 20110727**; **EP 2348503 B1 20150311**; JP 2011169890 A 20110901; JP 5734673 B2 20150617; US 2012013222 A1 20120119; US 8468892 B2 20130625

DOCDB simple family (application)

**EP 10000489 A 20100119**; JP 2011004790 A 20110113; US 98751411 A 20110110