

Title (en)  
METHOD FOR OPERATING AN ULTRASONIC SENSOR

Title (de)  
VERFAHREN ZUM BETRIEB EINES ULTRASCHALLSENSORS

Title (fr)  
PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UN CAPTEUR À ULTRASONS

Publication  
**EP 3555662 A1 20191023 (DE)**

Application  
**EP 17798180 A 20171108**

Priority  
• DE 102016224932 A 20161214  
• EP 2017078553 W 20171108

Abstract (en)  
[origin: WO2018108388A1] The invention relates to a method for operating an ultrasonic sensor, in which a plurality of measuring cycles are run in succession. In each measuring cycle: - an electroacoustic transducer of said ultrasonic sensor is excited, by means of an exciting pulse, to mechanically vibrate, as a result of which a measurement signal is sent by the transducer; - an echo signal is received by the transducer; and - an item of object information is determined from said echo signal. The frequency response curve of the exciting pulse is differentiated, according to the invention, into measuring cycles run in temporal succession, wherein the frequency response curve of an exciting pulse is selected, in each measuring cycle, from a group of predetermined frequency response curves, either at random or according to a predetermined sequence.

IPC 8 full level  
**G01S 7/52** (2006.01); **G01S 7/527** (2006.01); **G01S 15/10** (2006.01); **G01S 15/32** (2006.01); **G01S 15/87** (2006.01); **G01S 15/931** (2020.01)

CPC (source: EP US)  
**G01S 7/527** (2013.01 - EP US); **G01S 15/101** (2013.01 - US); **G01S 15/104** (2013.01 - EP US); **G01S 15/107** (2013.01 - EP); **G01S 15/32** (2013.01 - US); **G01S 15/325** (2013.01 - EP); **G01S 15/87** (2013.01 - EP); **G01S 15/931** (2013.01 - EP US); **G01S 7/52001** (2013.01 - EP)

Citation (search report)  
See references of WO 2018108388A1

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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**DE 102016224932 A1 20180614**; CN 110073242 A 20190730; CN 110073242 B 20230505; EP 3555662 A1 20191023; JP 2020502500 A 20200123; JP 6840241 B2 20210310; US 2020072973 A1 20200305; WO 2018108388 A1 20180621

DOCDB simple family (application)  
**DE 102016224932 A 20161214**; CN 201780077526 A 20171108; EP 17798180 A 20171108; EP 2017078553 W 20171108; JP 2019528674 A 20171108; US 201716468160 A 20171108