

Title (en)

INERTIAL SENSOR USING SLIDING PLANE PROXIMITY SWITCHES

Title (de)

TRÄGHEITSSENSOR MIT GLEITEBENEN-NÄHERUNGSSCHALTERN

Title (fr)

CAPTEUR INERTIEL UTILISANT DES COMMUTATEURS DE PROXIMITÉ À PLAN DE GLISSEMENT

Publication

EP 2976597 A1 20160127 (EN)

Application

EP 13879155 A 20131120

Priority

- US 201313847539 A 20130320
- US 2013071076 W 20131120

Abstract (en)

[origin: WO2014149085A1] A time-domain inertial sensor comprising: a support structure having an electrode plane parallel to an x-y plane of an x-y-z mutually orthogonal coordinate system, wherein the support structure's largest dimension lies within the x-y plane; a proof mass having a first surface parallel to the x-y plane; wherein the proof mass is springedly coupled to the support structure such that the first surface is separated from the electrode plane by a gap; a driver configured to drive the proof mass to oscillate with respect to the support structure in approximately only the x-direction such that, while oscillating, the gap does not vary significantly; and a first, time-domain, proximity switch disposed to switch from an open state to a closed state each time the proof mass is in a first reference position with respect to the support structure.

IPC 8 full level

G01P 15/08 (2006.01); **G01C 19/5621** (2012.01); **G01C 19/5656** (2012.01); **G01P 15/093** (2006.01); **G01P 15/125** (2006.01)

CPC (source: EP)

G01C 19/5621 (2013.01); **G01C 19/5656** (2013.01); **G01P 15/097** (2013.01); **G01P 15/135** (2013.01); **G01P 2015/0817** (2013.01)

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)

WO 2014149085 A1 20140925; CN 105723184 A 20160629; EP 2976597 A1 20160127; EP 2976597 A4 20161116; JP 2016520811 A 20160714; TW 201437607 A 20141001; TW 201631298 A 20160901; TW I528020 B 20160401

DOCDB simple family (application)

US 2013071076 W 20131120; CN 201380074890 A 20131120; EP 13879155 A 20131120; JP 2016504286 A 20131120; TW 102142691 A 20131122; TW 105100962 A 20131122