

Title (en)
TILT-TOLERANT DISPLACEMENT SENSOR

Title (de)
KIPPTOLERANTER WEGSENSOR

Title (fr)
CAPTEUR DE DÉPLACEMENT TOLÉRANT AU BASCULEMENT

Publication
EP 3427010 A1 20190116 (DE)

Application
EP 17700556 A 20170118

Priority
• DE 102016204016 A 20160311
• EP 2017050988 W 20170118

Abstract (en)
[origin: WO2017153074A1] The invention relates to a displacement sensor (10) comprising an induction element (14) having at least one electrically conductive measurement track element (20a, 20b), which extends along a measurement path (M); a sensor element (12), which can be moved relative to the induction element (14) along the at least one measurement track element (20a, 20b); wherein the sensor element (12) comprises at least one measurement coil (24a, 24b), which is arranged over the at least one measurement track element (20a, 20b); wherein an overlap of the at least one measurement coil (24a, 24b) and the at least one measurement track element (20a, 20b) along the measurement path (M) changes in such a way that an induction of the at least one measurement coil (24a, 24b) depends on a position (y) of the measurement coil (24a, 24b) on the measurement path (M); wherein the induction element (14) has two electrically conductive correction track elements (20c, 20d), which are arranged adjacent to each other with respect to the measurement path (M); and wherein the sensor element (12) has two correction coils (24c, 24d), which are arranged adjacent to each other with respect to the measurement path (M) and each over one of the two correction track elements (20c, 20d) and the overlap of which with the correction track elements (20c, 20d) along the measurement path (M) is constant.

IPC 8 full level
G01D 5/20 (2006.01)

CPC (source: EP US)
G01D 5/202 (2013.01 - EP US)

Citation (search report)
See references of WO 2017153074A1

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 2017153074 A1 20170914; CN 108779991 A 20181109; CN 108779991 B 20210528; DE 102016204016 A1 20170914;
EP 3427010 A1 20190116; JP 2019507884 A 20190322; JP 6714716 B2 20200624; US 11118940 B2 20210914; US 2020292355 A1 20200917

DOCDB simple family (application)
EP 2017050988 W 20170118; CN 201780016002 A 20170118; DE 102016204016 A 20160311; EP 17700556 A 20170118;
JP 2018547881 A 20170118; US 201716084178 A 20170118