

Title (en)

MAGNETIC SENSOR FOR DETERMINING THE RELATIVE POSITION BETWEEN A MAGNETIZED TARGET AND A MEASUREMENT SYSTEM

Title (de)

MAGNETSENSOR ZUR BESTIMMUNG DER RELATIVEN POSITION ZWISCHEN EINEM MAGNETISIERTEN ZIEL UND EINEM MESSSYSTEM

Title (fr)

CAPTEUR MAGNETIQUE POUR DETERMINER LA POSITION RELATIVE ENTRE UNE CIBLE AIMANTEE ET UN SYSTEME DE MESURE

Publication

EP 3111173 A1 20170104 (FR)

Application

EP 15713542 A 20150227

Priority

- FR 1451622 A 20140228
- FR 2015050474 W 20150227

Abstract (en)

[origin: WO2015128592A1] The invention relates to a magnetic sensor for determining the position along a displacement trajectory (T), between a target (2) and a measurement system (3) for measuring the amplitude of the magnetic field created or modified by the target. The sensor comprises: - a system for creating a magnetic field according to a direction (M) perpendicular to the displacement trajectory (T) and with an intensity varying according to a parabolic law, - a measurement system (3) comprising at least two measurement elements (3a), (3b) spatially offset from one another and sensitive to the amplitude of the magnetic field along a given direction, - a processing circuit able to carry out a differential processing of the signals delivered by the measurement elements so as to obtain a linear variation signal giving the position of the target along the displacement trajectory.

IPC 8 full level

G01D 5/14 (2006.01)

CPC (source: EP US)

G01D 5/14 (2013.01 - US); **G01D 5/145** (2013.01 - EP US)

Citation (search report)

See references of WO 2015128592A1

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 2015128592 A1 20150903; CN 106062518 A 20161026; EP 3111173 A1 20170104; FR 3018113 A1 20150904; FR 3018113 B1 20170901; MX 2016011178 A 20161216; US 2016349080 A1 20161201

DOCDB simple family (application)

FR 2015050474 W 20150227; CN 201580011063 A 20150227; EP 15713542 A 20150227; FR 1451622 A 20140228; MX 2016011178 A 20150227; US 201515117547 A 20150227