

Title (en)  
DEVICE FOR DETERMINING MOTION PARAMETERS

Title (de)  
VORRICHTUNG ZUR ERMITTLUNG VON BEWEGUNGSPARAMETERN

Title (fr)  
DISPOSITIF DE DÉTERMINATION DE PARAMÈTRES DE MOUVEMENT

Publication  
**EP 2734812 A1 20140528 (DE)**

Application  
**EP 12729372 A 20120522**

Priority  
• DE 102011079631 A 20110722  
• EP 2012059459 W 20120522

Abstract (en)  
[origin: WO2013013855A1] The invention relates to a device (1) for determining motion parameters, comprising a magnetic multipole (20) that generates an alternating magnetic field, at least one magnetic sensor (10a, 10b, 10b') for measuring the magnetic field of the magnetic multipole (20), and an evaluation and control unit (30) for evaluating the signals (SA, SB, SB') from the at least one magnetic sensor (10a, 10b, 10b'), wherein a relative movement between the magnetic multipole (20) and the at least one magnetic sensor (10a, 10b, 10b') can be evaluated. According to the invention, the at least one magnetic sensor (10a, 10b, 10b') comprises a core that can be magnetized, a drive coil and a measuring coil. The evaluation and control unit (30) charges the drive coil with a periodic drive signal (ST) in order to bring about a periodic magnetic reversal of the core, and by way of the measuring coil detects the points in time at which the magnetic reversals occur in the core (16). Based on the points in time at which the magnetic reversals occur, the evaluation and control unit (30) determines a current value of the effective magnetic field of the magnetic multipole (20) within a defined measuring range representing a range around a zero crossing of the magnetic field of the magnetic multipole (20).

IPC 8 full level  
**G01D 5/20** (2006.01)

CPC (source: EP US)  
**G01D 5/20** (2013.01 - US); **G01D 5/204** (2013.01 - EP US)

Citation (search report)  
See references of WO 2013013855A1

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

DOCDB simple family (publication)  
**DE 102011079631 A1 20130124**; BR 112014001186 A2 20170221; CN 103718003 A 20140409; CN 103718003 B 20170811; EP 2734812 A1 20140528; JP 2014521109 A 20140825; US 2014184206 A1 20140703; US 9612135 B2 20170404; WO 2013013855 A1 20130131

DOCDB simple family (application)  
**DE 102011079631 A 20110722**; BR 112014001186 A 20120522; CN 201280035760 A 20120522; EP 12729372 A 20120522; EP 2012059459 W 20120522; JP 2014522003 A 20120522; US 201214234240 A 20120522