

Title (en)
HYBRID INERTIAL/MAGNETIC SYSTEM FOR DETERMINING THE POSITION AND ORIENTATION OF A MOBILE BODY

Title (de)
HYBRIDES TRÄGHEITS-/MAGNETSYSTEM ZUR ERMITTLUNG DER POSITION UND ORIENTIERUNG EINES MOBILEN KÖRPERS

Title (fr)
SYSTÈME MAGNÉTIQUE HYBRIDÉ INERTIEL DE DÉTERMINATION DE LA POSITION ET L'ORIENTATION D'UN CORPS MOBILE

Publication
EP 3066409 A1 20160914 (FR)

Application
EP 14806025 A 20141106

Priority
• **FR 1302566 A 20131106**
• **FR 2014052843 W 20141106**

Abstract (en)
[origin: WO2015067903A1] The present invention concerns a system for contactless determination of the position and orientation of a first mobile object (M) relative to a reference mark (RP) carried by a second fixed or mobile object (P), in a disturbed electromagnetic environment comprising a transmitting antenna (E) with ferromagnetic cores (E-1) having magnetic permeability higher than 10, incorporating sensors (E-3) for measuring the magnetic field Xu actually emitted by the axes of (E-1). A means (4-4) for extracting the signal correlated with the ambient noise XBR (Tk-KbTe) – from the sensors (Sb) fixed in the platform (P), forms, with measurement Xu of the emitted magnetic induction, a complete model of the measured fields, making it possible to extract, without errors, the 6 parameters relative to the field model without disturbances.

IPC 8 full level
F41G 3/22 (2006.01); **G01B 7/00** (2006.01); **G01B 7/004** (2006.01); **G01C 21/16** (2006.01)

CPC (source: EP US)
F41G 3/225 (2013.01 - EP US); **G01C 21/1654** (2020.08 - EP US)

Citation (search report)
See references of WO 2015067903A1

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)
FR 3012888 A1 20150508; **FR 3012888 B1 20151225**; CA 2929728 A1 20150514; EP 3066409 A1 20160914; IL 245514 A0 20160630; RU 2016117589 A 20171211; US 10132636 B2 20181120; US 2016356601 A1 20161208; WO 2015067903 A1 20150514

DOCDB simple family (application)
FR 1302566 A 20131106; CA 2929728 A 20141106; EP 14806025 A 20141106; FR 2014052843 W 20141106; IL 24551416 A 20160505; RU 2016117589 A 20141106; US 201415034624 A 20141106