

Title (en)
SYSTEM AND METHOD FOR DETERMINING PARAMETERS REPRESENTING ORIENTATION OF A SOLID IN MOVEMENT SUBJECT TO TWO VECTOR FIELDS

Title (de)
SYSTEM UND VERFAHREN ZUR BESTIMMUNG VON PARAMETERN MIT AUSRICHTUNG AUF EIN FESTES, SICH BEWEGENDES SUBJEKT MIT ZWEI VEKTORFELDERN

Title (fr)
SYSTEME ET PROCEDE DE DETERMINATION DE PARAMETRES REPRESENTATIFS DE L'ORIENTATION D'UN SOLIDE EN MOUVEMENT SOUMIS A DEUX CHAMPS VECTORIELS

Publication
EP 2268999 A1 20110105 (FR)

Application
EP 09732406 A 20090408

Priority
• EP 2009054185 W 20090408
• FR 0802172 A 20080418

Abstract (en)
[origin: WO2009127561A1] The system for determining parameters representing the orientation of a solid in movement subject to a first vector field (A) and a second vector field (M) includes a first triaxial sensor (CAPT1) and a second triaxial sensor (CAPT2) secured to said solid to measure the components of said respective vector fields (A, M) according to the axes of said sensors, and a determining means (DETROT) for determining the rotation matrix (ROT) for the solid. Said determining means (DETROT) for determining said rotation matrix (ROT) includes: a correction means (CORR) for correcting the influence of an additional vector field of the same nature as said measured vector field; and a first calculation means (CALC1) for calculating a third vector (U) not coplanar to the plane formed by the two vectors (App, M) delivered by said correction means (CORR), and realized such that the angles of the axis system formed by the third vector (U) and the two vectors (App, M) delivered by said correction means (CORR) remain constant.

IPC 8 full level
G01C 17/38 (2006.01); **G01C 21/16** (2006.01); **G01C 25/00** (2006.01)

CPC (source: EP US)
G01C 17/38 (2013.01 - EP US); **G01C 21/1654** (2020.08 - EP US); **G01C 25/005** (2013.01 - EP US)

Citation (search report)
See references of WO 2009127561A1

Designated contracting state (EPC)
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 SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
WO 2009127561 A1 20091022; EP 2268999 A1 20110105; FR 2930335 A1 20091023; FR 2930335 B1 20100813; US 2011035172 A1 20110210; US 9297660 B2 20160329

DOCDB simple family (application)
EP 2009054185 W 20090408; EP 09732406 A 20090408; FR 0802172 A 20080418; US 93779709 A 20090408