

Title (en)
INERTIAL NAVIGATION SYSTEM WITH IMPROVED ACCURACY

Title (de)
TRÄGHEITSNAVIGATIONSSYSTEM MIT VERBESSERTER GENAUIGKEIT

Title (fr)
SYSTEME DE NAVIGATION INERTIELLE A PRECISION AMELIOREE

Publication
EP 3384241 A1 20181010 (FR)

Application
EP 16806008 A 20161128

Priority

- FR 1561888 A 20151204
- EP 2016078957 W 20161128

Abstract (en)
[origin: WO2017093166A1] The invention relates to an inertial navigation system for a carrier comprising a core comprising gyroscopic sensors making it possible to determine the angular velocity thereof according to three axes which define a reference trihedron, two of the axes defining a reference plane and the third axis being perpendicular to said plane. The device comprises command and control means making it possible to rotate the core about the third axis and to determine the direction of the geographic north from the information supplied by the gyroscopic sensors and by an accelerometer placed in the reference plane; the rotation of the core being carried out at a period (T0) for which the value of the Allan variance of the stability error of the gyroscopic sensors is lower than a given value (PG) guaranteeing the accuracy with which the direction of the geographic north can be known.

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