

Title (en)

METHOD FOR SIMULATING THE OPERATING BEHAVIOUR OF A CORIOLIS GYROSCOPE

Title (de)

SIMULATIONSVERFAHREN FÜR DAS BETRIEBSVERHALTEN EINES CORIOLISKREISELS

Title (fr)

PROCÉDÉ DE SIMULATION POUR LE COMPORTEMENT DE FONCTIONNEMENT D'UN GYROSCOPE DE CORIOLIS

Publication

EP 2350563 A1 20110803 (DE)

Application

EP 09752300 A 20091112

Priority

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Abstract (en)

[origin: WO2010054814A1] Method for characterizing Coriolis gyroscopes, in which the interaction of the system comprising force transmitters, a mechanical resonator and excitation/read oscillation taps is represented as a discretized coupled system of differential equations, wherein the variables of the system of equations represent the force signals passed from the force transmitters to the mechanical resonator and the read signals read from the excitation/read oscillation taps, and the coefficients of the system of equations contain information relating to the linear transformation which maps the force signals to the read signals, the coefficients are determined by measuring force signal values and read signal values at different times and are inserted into the system of equations, and the system of equations is numerically resolved according to the coefficients, and the coefficients are used to infer undesirable bias properties of the Coriolis gyroscope which distort the rate of rotation of the Coriolis gyroscope.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2010054814A1

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