Title (en)

ROTATION RATE SENSOR FOR DETECTING A ROTATION RATE, HAVING A SUBSTRATE WHICH HAS A MAIN EXTENSION PLANE

Title (de)

DREHRATENSENSOR MIT EINEM EINE HAUPTERSTRECKUNGSEBENE AUFWEISENDEN SUBSTRAT ZUR DETEKTION EINER DREHRATE

Title (fr)

CAPTEUR DE VITESSE DE ROTATION DOTÉ D'UN SUBSTRAT POSSÉDANT UN PLAN D'EXTENSION PRINCIPALE POUR DÉTECTER UNE VITESSE DE ROTATION

Publication

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Application

EP 14724417 A 20140514

Priority

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Abstract (en)

[origin: WO2014184225A1] The invention relates to a rotation rate sensor (100) for detecting a rotation rate, having a substrate (1) which has a main extension plane. The rotation rate extends in a direction either parallel or perpendicular to the main extension plane. The rotation rate sensor comprises a primary pair of seismic masses (11, 12) and a secondary pair of seismic masses (21, 22). The primary pair of seismic masses has a first primary mass (11) and a second primary mass (12), and the secondary pair of seismic masses has a first secondary mass (21) and a second secondary mass (22). The first primary mass and the second primary mass can be moved in relation to the substrate and with respect to each other in a primary deflection direction (P) parallel to the main extension plane of the rotation rate sensor, and the first secondary mass and the second secondary mass can be moved in relation to the substrate in a secondary deflection direction (S) parallel to the main extension plane of the rotation rate sensor. The first and second primary masses on the one hand and the first and second secondary masses on the other hand can be moved either antiparallel or parallel to each other in accordance with the particular deflection direction. The rotation rate sensor is characterized in that the primary deflection direction extends substantially perpendicularly to the secondary deflection direction. The primary pair of seismic masses and/or the secondary pair of seismic masses can be driven in such a way that, when the rotation rate sensor is rotated, the Coriolis force leads to the deflection of the first primary mass and the second primary mass and/or the deflection of the first secondary mass and the second secondary mass.

IPC 8 full level

G01C 19/5747 (2012.01)

CPC (source: EP US)

G01C 19/5705 (2013.01 - US); **G01C 19/5719** (2013.01 - US); **G01C 19/574** (2013.01 - US); **G01C 19/5747** (2013.01 - EP US)

Citation (search report)

See references of WO 2014184225A1

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Designated extension state (EPC)

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