

Title (en)
DEVICE FOR DETECTING ACTIVATION MOVEMENT FOR LASER GYROSCOPE

Title (de)
ZITTERBEWEGUNGSDETEKTIONSVORRICHTUNG FÜR LASERKREISEL

Title (fr)
DISPOSITIF DE DETECTION DE MOUVEMENT D'ACTIVATION POUR GYROLASER

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Application
EP 00906431 A 20000218

Priority
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Abstract (en)
[origin: FR2790082A1] Device for measurement of amplitudes of rotating oscillations imposed on a laser gyroscope to compensate for its lack of sensitivity at slow rotating speeds. The oscillatory rotating motion is provided by mounting the laser gyroscope in its frame case, using wheel shaped fixing rings centered on the activation axis with flexible spokes to provide flexibility with regard to the rotating torque.- DETAILED DESCRIPTION - The measurement device comprises several torque sensors (17-19) having a piezoelectric wafer positioned in different orientations on the spokes (in fact flexible blades) of a fixing ring. The sensor output electrodes (Ea, Eb) are connected in parallel or in opposition to a common output so as to generate, in response to spoke deformation due to rotating movements along the activation axis, electric loads of same polarity which sum at the output. Deformations arising from other movements generate electric loads which cancel each other out and therefore do not give any aggregate sum at the common output. Hence the response to activation movements is increased, while the response to deformations arising from other sources is reduced

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