Title (en)

SOLID-STATE LASER GYRO OPTICALLY ACTIVE THROUGH ALTERNATIVE BIAS

Title (de)

DURCH ALTERNATIVE VORSPANNUNG OPTISCH AKTIVER HALBLEITERLASER-KREISEL

Title (fr)

GYROLASER A ETAT SOLIDE ACTIVE OPTIQUEMENT PAR BIAIS ALTERNATIF

Publication

EP 1960738 A1 20080827 (FR)

Application

EP 06819925 A 20061207

Priority

- EP 2006069440 W 20061207
- FR 0512608 A 20051213

Abstract (en)

[origin: WO2007068652A1] The invention concerns solid-state laser gyros used for measuring relative rotational speeds or angular positions. This type of equipment is used in particular for aeronautical applications. The invention aims at completing the optical devices required for controlling the instability of lasers through specific optical devices enabling the blind zone and the population reversal networks present in the amplifying medium to be eliminated. Thus an all-optical solid-state laser without mobile parts, stable and free of blind zone is obtained. Therefor, the inventive gyro laser comprises in particular: an optical assembly (5) enabling an optical phase shift non-reciprocal between the counter-propagating modes to be introduced; control means (6) enabling the amplitude of the phase shift to be periodically varied around a very substantially null average value.

IPC 8 full level

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See references of WO 2007068652A1

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