

Title (en)
DIODE-PUMPED SOLID-STATE RING LASER GYROSCOPE

Title (de)
DIODENGEPUMPFTER FESTKÖRPER-RINGLASERKREISEL

Title (fr)
GYROSCOPE A LASER ANNULAIRE A SOLIDE ET POMPAGE PAR DIODES

Publication
EP 0764354 A1 19970326 (DE)

Application
EP 96904015 A 19960208

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• EP 9600517 W 19960208

Abstract (en)
[origin: DE19504373A1] The invention concerns a diode-pumped solid-state ring laser gyroscope consisting of a diode-pumped solid-state laser made from a doped crystal or glass in the form of a square or cube for monoaxial or triaxial measurements; limitation and stabilisation of the laser mode is achieved by precise matching of the pumping radiation to the mode volume of the ring laser. Outcoupling of the laser radiation is done by making the light tunnel through a slit to a dielectric plate which is moved by an actuator. Frequency modulation of the signal is done as required by coupling an acoustic wave into the laser medium or by precise spatial modulation of the diode excitation.

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