Title (en)

DEVICE FOR MEASURING THE ANGLE AND/OR THE ANGULAR VELOCITY OF A ROTATABLE BODY AND/OR THE TORQUE ACTING UPON SAID BODY

Title (de)

VORRICHTUNG ZUR MESSUNG DES WINKELS UND/ODER DER WINKELGESCHWINDIGKEIT EINES DREHBAREN KÖRPERS UND/ODER DES AUF IHN WIRKENDEN DREHMOMENTS

Title (fr)

DISPOSITIF POUR MESURER UN ANGLE ET/OU LA VITESSE ANGULAIRE D'UN CORPS ROTATIF ET/OU LE COUPLE DE ROTATION APPLIQUE A CE DERNIER

Publication

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Application

EP 00993336 A 20001205

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Abstract (en)

[origin: WO0142753A1] The invention relates to a device for measuring an angle and/or a torque on a rotatable body. The angle of rotation is detected by means of magnetic or optical sensors. In a preferred embodiment, two devices (7, 8) are provided that are provided with two optically readable code traces respectively. The two code traces (1a, 1b or 2a, 2b) of a device (7 or 8) are embodied in the same way and are arranged in such a way that said devices are offset against each other so that allocated sensors (4) output a digital signal. The angle of rotation is calculated from the offset of the two digital signals. In another embodiment, a torsional element (5) having a known torsional stiffness is arranged between the two devices (7, 8). A torque that is transmitted by the rotatable body (3) can thus by calculated from the difference angle of the two devices (7, 8). The inventive device is preferably used in the steering axle of a motor vehicle.

IPC 1-7

G01L 3/12; G01B 7/30

IPC 8 full level

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Citation (search report)

See references of WO 0142753A1

Citation (examination)

- DE 19506938 A1 19960829 - BOSCH GMBH ROBERT [DE]
- JP H08304113 A 19961122 - YOKOGAWA ELECTRIC CORP
- DE 2811809 B1 19790802 - MANNESMANN AG

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DOCDB simple family (publication)

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