

Title (en)

DEVICE FOR MEASURING A FORCE OR A TORQUE AT A HOLLOW CYLINDRICAL MACHINE ELEMENT

Title (de)

ANORDNUNG ZUM MESSEN EINER KRAFT ODER EINES DREHMOMENTES AN EINEM HOHLZYLINDERFÖRMIGEN MASCHINENELEMENT

Title (fr)

DISPOSITIF POUR MESURER UNE FORCE OU UN COUPLE DANS UN ÉLÉMENT DE MACHINE CYLINDRIQUE CREUX

Publication

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Application

EP 14827716 A 20141205

Priority

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Abstract (en)

[origin: WO2015131863A1] The present invention relates to an arrangement for measuring a force and/or moment on a hollow-cylindrical machine element, using the inverse magnetostrictive effect. The machine element extends in an axis (01) and has a sensor region of hollow cylinder-type basic shape. Said sensor region has a permanent magnetization (08) or the arrangement comprises magnetizing elements for magnetizing the sensor region. The arrangement further comprises at least one magnetic field sensor which is designed to measure at least one component of a magnetic field brought about by the magnetization (08) of the sensor region and by the magnetic field caused by the force to be measured and/or by the moment to be measured. According to the invention, the machine element, in the hollow space defined by the hollow cylinder-type basic shape, has a wall-type longitudinal structure (03).

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

See references of WO 2015131863A1

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