

Title (en)

ARRANGEMENT AND METHOD FOR MEASURING A FORCE OR A MOMENT, WITH AT LEAST TWO MAGNETIC SENSORS AT A DISTANCE FROM ONE ANOTHER

Title (de)

ANORDNUNG UND VERFAHREN ZUM MESSEN EINER KRAFT ODER EINES MOMENTES MIT MINDESTENS ZWEI BEABSTANDETEN MAGNETFELDESENSOREN

Title (fr)

AGENCEMENT ET PROCÉDÉ POUR MESURER UNE FORCE OU UN COUPLE AU MOYEN D'AU MOINS DEUX CAPTEURS MAGNÉTIQUES ESPACÉS

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Application

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Abstract (en)

[origin: WO2016184463A1] The invention first relates to an arrangement for measuring a force and/or a moment, using the inverse magnetostrictive effect. The invention also relates to a method for measuring a force and/or a moment, based on the inverse magnetostrictive effect. The force or the moment acts on a machine element (01) that has at least one magnetisation region (04) for magnetisation and thus forms a primary sensor for the inverse magnetostrictive effect-based measurement. The claimed arrangement comprises at least two magnetic sensors (08), for measuring a magnetic field (11) generated by the magnetisation and by the force or the moment, which are spaced apart from one another and each of which forms a secondary sensor for the inverse magnetostrictive effect-based measurement. According to the invention, the arrangement also comprises a measurement signal processing unit designed to process the measurement signals of the individual magnetic sensors (06).

IPC 8 full level

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