

Title (en)

DEVICE FOR DETERMINING MOTION PARAMETERS

Title (de)

VORRICHTUNG ZUR ERMITTLUNG VON BEWEGUNGSPARAMETERN

Title (fr)

DISPOSITIF DE DÉTERMINATION DE PARAMÈTRES DE MOUVEMENT

Publication

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Application

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Abstract (en)

[origin: WO2013013855A1] The invention relates to a device (1) for determining motion parameters, comprising a magnetic multipole (20) that generates an alternating magnetic field, at least one magnetic sensor (10a, 10b, 10b') for measuring the magnetic field of the magnetic multipole (20), and an evaluation and control unit (30) for evaluating the signals (SA, SB, SB') from the at least one magnetic sensor (10a, 10b, 10b'), wherein a relative movement between the magnetic multipole (20) and the at least one magnetic sensor (10a, 10b, 10b') can be evaluated. According to the invention, the at least one magnetic sensor (10a, 10b, 10b') comprises a core that can be magnetized, a drive coil and a measuring coil. The evaluation and control unit (30) charges the drive coil with a periodic drive signal (ST) in order to bring about a periodic magnetic reversal of the core, and by way of the measuring coil detects the points in time at which the magnetic reversals occur in the core (16). Based on the points in time at which the magnetic reversals occur, the evaluation and control unit (30) determines a current value of the effective magnetic field of the magnetic multipole (20) within a defined measuring range representing a range around a zero crossing of the magnetic field of the magnetic multipole (20).

IPC 8 full level

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