Title (en)

MEASURING METHOD AND MEASURING INSTRUMENT FOR INDUCTIVELY DETERMINING ANGLES AND/OR POSITIONS

Title (de

MÉSSVERFAHREN UND MESSVORRICHTUNG ZUR INDUKTIVEN WINKEL- UND/ODER POSITIONSBESTIMMUNG

Title (fr)

PROCÉDÉ DE MESURE ET DISPOSITIF DE MESURE PERMETTANT UNE DÉTERMINATION PAR INDUCTION D'UN ANGLE ET/OU D'UNE POSITION

Publication

EP 2208026 A2 20100721 (DE)

Application

EP 08847579 A 20081105

Priority

- EP 2008009313 W 20081105
- DE 102007053881 A 20071109

Abstract (en

[origin: WO2009059750A2] In a measuring method and a measuring instrument for inductively determining the angle and/or position of at least two parts (B1, B2) relative to one another, two transmission coils (11, 12) which are arranged at an angle from each other and generate a magnetic field as a result of a current are associated with one part (B1), and a reception coil (13) in which a current is induced as a result of the magnetic field generated by the transmission coils (11, 12) is associated with other part (B2). The magnetic field is generated as a result of a current that flows through the transmission coils (11, 12) and is clocked by means of a clock controller (14). A magnetic field is thus induced in the reception coil (13) and is converted into an electrical signal (41) which is then assigned to the transmission coils (11, 12). The assigned signals are fed to regulators (17, 18) to generate a comparative value (70) at the output (16c) of a comparator (16) in order to regulate the current flowing into the transmission coils (11, 12). The currents through the transmission coils are regulated such that the amplitude values (41 A, 41 B) of the electrical signal (41) become identical at the inputs (16a, 16b) of the comparator (16), said amplitude values (41 A, 41 B) being associated with the transmission coils. The ratio between the current values fed to the transmission coils (11, 12) is acquired as a measure for determining the position and/or angle of the parts (B1, B2) relative to one another.

IPC 8 full level

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Citation (search report)

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DOCDB simple family (publication)

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