

Title (en)
SENSOR ELEMENT AND ASSOCIATED ANGLE MEASUREMENT SYSTEM

Title (de)
SENSORELEMENT UND ZUGEHÖRIGES WINKELMESSUNGSSYSTEM

Title (fr)
ELEMENT DE CAPTEUR ET SYSTEME DE MESURE ANGULAIRE ASSOCIE

Publication
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Application
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Priority
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Abstract (en)
[origin: WO2005111546A2] In order to provide at least one magnetoresistive sensor element (100, 110) which - by means of at least one supply terminal (10, 14), in particular by means of at least a first supply terminal, and - by means of at least one reference terminal (12, 16), in particular by means of at least a second supply terminal, for example at ground potential (GND; GND1, GND2) can be supplied with at least one supply voltage (VCC; VCC1, VCC2) and with at least one supply current (i; il, i2), respectively, - wherein the differential voltage (Vout; Vout1, Vout2) which is set as a function of the angle (alpha; alpha1, alpha2) - between the direction (D; D1, D2) of the drop in the supply voltage (VCC; VCC1, VCC2) or flow of the supply current (i; il, i2) - and the direction of the resulting internal magnetic field (Hres) can be tapped between at least a first, in particular positive (V+; V+1, V+2), tapping electrode (20, 24) and at least a second, in particular negative (V-; V-1, V-2), tapping electrode (22, 26) and - wherein the direction of the resulting internal magnetic field (Hres) is given by superposing the intrinsic magnetization (Ho) and at least one external magnetic field (Hext), which can be produced without a preferred magnetic orientation and in which the technologically induced offset is minimized or even completely eliminated, it is proposed that the magnetoresistive sensor element (100, 110) is designed to be flat, in particular the drop in the supply voltage (VCC; VCC 1, VCC2) is continuous.

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