

Title (en)

DEVICE FOR ADJUSTING AN OPERATING POINT OF A MAGNETIC FIELD SENSOR

Title (de)

VORRICHTUNG ZUM EINSTELLEN EINES ARBEITSPUNKTES EINES MAGNETFELDENSORS

Title (fr)

DISPOSITIF POUR LE REGLAGE D'UN POINT DE FONCTIONNEMENT D'UN CAPTEUR DE CHAMP MAGNETIQUE

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Application

EP 02796208 A 20020807

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Abstract (en)

[origin: WO03019214A2] The invention relates to a device for adjusting an operating point of a magnetic field sensor having a periodic characteristic line, especially a device for detecting a magnetic field and/or flux. The inventive device comprises a SQUID as the magnetic field sensor and a control unit mounted downstream of the SQUID and having a control time constant (t) with a feedback loop that acts upon the SQUID. Said feedback loop is adapted to be effective around one operating point among a plurality of operating points associated with the SQUID. Flux quantum pump means are associated with the SQUID and are provided with a signal producing unit that produces a control and/or regulation signal for the SQUID. The flux quantum pump means are designed in such a manner that for pumping at least one flux quantum into or out of the SQUID a signal form of the control or regulation signal produced by the signal producing unit is different and, with respect to an ascending and a descending side of a signal form, is asymmetric, only one side of a signal form at a time being short in relation to the control time constant.

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