Title (en)

THIN-LAYERED MAGNETIC FIELD SENSOR

Title (de)

DÜNNSCHICHT MAGNETFELDSENSOR

Title (fr)

CAPTEUR DE CHAMP MAGNETIQUE EN COUCHE MINCE

Publication

EP 0909391 A1 19990421 (FR)

Application

EP 97931872 A 19970704

Priority

- FR 9701205 W 19970704
- FR 9608395 A 19960705

Abstract (en)

[origin: WO9801764A1] This magnetic field sensor comprises a thin-layered planar element (1) of magnetoresistant crystalline material with specific resistance anisotropy in the plane, having a first and a second easy magnetisation axes (XX', YY'). This element has electrical connecting means (2, 2') enabling the flow of a first measuring current in the element along a first direction, and two electrical connections (3, 3') enabling a voltage measurement along a second direction transversal relative to the first direction. The two easy magnetisation axes are substantially equivalent. The device comprises an electrical conductor(6) arranged parallel to the first easy magnetisation axis insulated from the magnetoresistant material and allowing the flow of a control electric current inducing into the element a magnetic field which imposes, when the sensor is not in use, a magnetisation direction orientation of the element parallel to the second easy magnetisation axis.

IPC 1-7

G01R 33/09

IPC 8 full level

G01R 33/09 (2006.01); **H01L 43/06** (2006.01)

CPC (source: EP US)

G01R 33/09 (2013.01 - EP US)

Citation (search report)

See references of WO 9801764A1

Designated contracting state (EPC)

GB

DOCDB simple family (publication)

WO 9801764 A1 19980115; EP 0909391 A1 19990421; FR 2750769 A1 19980109; FR 2750769 B1 19981113; JP 2000514920 A 20001107; US 6191581 B1 20010220

DOCDB simple family (application)

FR 9701205 W 19970704; EP 97931872 A 19970704; FR 9608395 A 19960705; JP 50486398 A 19970704; US 14747399 A 19990105