

Title (en)

MAGNETIC FIELD SENSOR COMPOSED OF A MAGNETIC REVERSAL CONDUCTOR AND ONE OR SEVERAL MAGNETORESISTIVE RESISTANCES.

Title (de)

MAGNETFELDSSENSOR, AUFGEBAUT AUS EINER UMMAGNETISIERUNGSLEITUNG UND EINEM ODER MEHREREN MAGNETORESISTIVEN WIDERSTÄNDEN.

Title (fr)

CAPTEUR DE CHAMPS MAGNETIQUES CONSTITUE D'UN CONDUCTEUR D'INVERSION MAGNETIQUE ET D'UNE OU PLUSIEURS RESISTANCES MAGNETORESISTIVES.

Publication

EP 0654145 A1 19950524 (DE)

Application

EP 94920425 A 19940531

Priority

- DE 4319146 A 19930609
- EP 9401789 W 19940531

Abstract (en)

[origin: WO9429740A1] A sensor based on the magnetoresistive effect contains a meander-shaped magnetic reversal conductor (6) integrated into the thin layer arrangement. The magnetoresistive layer strips are provided with areas (1) with alternatively positive and negative, inclined barber pole structures (3) adapted to the meandrous structure of the conductor. The current required to reverse the magnetisation of the areas (1) is particularly weak. By periodically reversing the magnetisation of the areas (1), a drift-free alternating voltage is obtained as output signal of the sensor. This freedom from drift is a precondition for using the magnetic field sensor to accurately measure weak magnetic fields.

IPC 1-7

G01R 33/06

IPC 8 full level

G01R 33/022 (2006.01); **G01R 17/12** (2006.01); **G01R 33/09** (2006.01); **H01L 43/08** (2006.01)

CPC (source: EP US)

G01R 33/09 (2013.01 - EP US); **G01R 33/096** (2013.01 - EP US)

Citation (search report)

See references of WO 9429740A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

DE 4319146 A1 19941215; **DE 4319146 C2 19990204**; EP 0654145 A1 19950524; JP 3465059 B2 20031110; JP H08503778 A 19960423; US 5521501 A 19960528; WO 9429740 A1 19941222

DOCDB simple family (application)

DE 4319146 A 19930609; EP 9401789 W 19940531; EP 94920425 A 19940531; JP 50127195 A 19940531; US 37479595 A 19950131