

Title (en)

GMR SENSOR ELEMENT AND USE THEREOF

Title (de)

GMR-SENSORELEMENT UND DESSEN VERWENDUNG

Title (fr)

ELEMENT CAPTEUR GMR ET SON UTILISATION

Publication

**EP 1527352 A1 20050504 (DE)**

Application

**EP 03787612 A 20030627**

Priority

- DE 0302145 W 20030627
- DE 10234347 A 20020726
- DE 10257253 A 20021207

Abstract (en)

[origin: WO2004017086A1] Disclosed is a GMR sensor element comprising a rotationally symmetrical arrangement of eight GMR resistor elements in particular which are interconnected to form two Wheatston full bridges. Said GMR sensor element is particularly suitable for use in an angle sensor for detection of the absolute position of the camshaft or crankschaft in a motor vehicle, especially in a camshaft-free engine with electric or electrohydraulic valve control, a motor position of an electrically commutated motor or detection of a windscreen wiper position or in a steering angle sensor system in motor vehicles.

IPC 1-7

**G01R 33/09; G01B 7/30**

IPC 8 full level

**F01L 1/00 (2006.01); F02D 45/00 (2006.01); G01R 33/09 (2006.01); H01L 43/08 (2006.01)**

CPC (source: EP US)

**B82Y 25/00 (2013.01 - EP US); F01L 1/00 (2013.01 - EP US); G01R 33/093 (2013.01 - EP US); F01L 2301/00 (2020.05 - EP US); F01L 2820/041 (2013.01 - EP US)**

Citation (search report)

See references of WO 2004017086A1

Designated contracting state (EPC)

CZ DE FR GB

DOCDB simple family (publication)

**WO 2004017086 A1 20040226; AU 2003250275 A1 20040303; AU 2003250275 B2 20080131; EP 1527352 A1 20050504; JP 2005534199 A 20051110; RU 2004115639 A 20060110; RU 2328015 C2 20080627; US 2006103381 A1 20060518; US 7312609 B2 20071225**

DOCDB simple family (application)

**DE 0302145 W 20030627; AU 2003250275 A 20030627; EP 03787612 A 20030627; JP 2005502011 A 20030627; RU 2004115639 A 20030627; US 52325205 A 20051006**