Title (en)

HOLLOW MAGNETIC BODY FOR DETECTING THE ROTATION OF A SHAFT

Title (de)

HOHLER MAGNETKÖRPER ZUM ERFASSEN EINER DREHUNG EINER WELLE

Title (fr)

CORPS MAGNETIQUE CREUX POUR DETECTER LA ROTATION D'UN ARBRE

Publication

EP 1000360 A1 20000517 (DE)

Application

EP 99926263 A 19990417

Priority

- DE 9901157 W 19990417
- DE 19823640 A 19980527

Abstract (en)

[origin: DE19823640A1] The hollow magnetic body comprising shafts for detecting the rotation of shafts are known in prior art. Said magnetic bodies have a rotationally symmetrical configuration and are permanently magnetized so that they may have at lest one north pole and a south pole for generating signal tensions in the sensors, for instance Hall sensors. According to the invention, a hollow magnetic body (2a) is combined with an annular auxiliary body (9a) and produced as a composite component in an injection molding process. The inner diameter of the annular auxiliary body (9a) is larger than the diameter of the allocated shaft (3) so that a tubular section (10) extends from the material of the hollow magnetic body (2a) between said shaft (3) and the annular auxiliary body (9a) with the purpose of forming a press fit. The annular metal auxiliary body (9a) provides most of the compressive forces required to counteract the risk of cracking of the hollow magnetic body (2a).

IPC 1-7

G01P 3/487; H01F 7/02; H02K 1/27; H02K 11/00; F16B 21/20

IPC 8 full level

G01D 11/00 (2006.01); **H02K 11/215** (2016.01)

CPC (source: EP KR US)

G01D 5/2033 (2013.01 - KR); **G01D 11/00** (2013.01 - EP US); **G01P 3/487** (2013.01 - KR); **H02K 7/1166** (2013.01 - KR); **H02K 11/215** (2016.01 - EP US)

Citation (search report)

See references of WO 9961921A1

Designated contracting state (EPC)

DE ES FR GB SE

DOCDB simple family (publication)

DE 19823640 A1 19991202; BR 9906508 A 20000919; EP 1000360 A1 20000517; KR 20010021799 A 20010315; US 6373365 B1 20020416; WO 9961921 A1 19991202; WO 9961921 A8 20000106

DOCDB simple family (application)

DE 19823640 A 19980527; BR 9906508 A 19990417; DE 9901157 W 19990417; EP 99926263 A 19990417; KR 20007000363 A 20000113; US 46348100 A 20000410