

Title (en)

SENSOR DEVICE FOR DETECTING AT LEAST ONE ROTATIONAL PROPERTY OF A ROTATING ELEMENT

Title (de)

SENSORVORRICHTUNG ZUR ERFASSUNG MINDESTENS EINER ROTATIONSEIGENSCHAFT EINES ROTIERENDEN ELEMENTS

Title (fr)

DISPOSITIF DÉTECTEUR SERVANT À DÉTECTER AU MOINS UNE PROPRIÉTÉ DE ROTATION D'UN ÉLÉMENT ROTATIF

Publication

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Application

EP 13774097 A 20130924

Priority

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- EP 2013069870 W 20130924

Abstract (en)

[origin: WO2014095107A1] The invention relates to a sensor device (10) for detecting at least one rotational property of a rotating element (42), particularly for detecting a rotational speed of a compressor wheel (42) in an exhaust gas turbocharger, wherein the sensor device (10) comprises at least one magnetic field generator (14) for generating a magnetic field at the site of the rotating element (42) and at least one magnetic sensor (18) for detecting a magnetic field generated by eddy currents of the rotating element (42), wherein the sensor device (10) comprises at least one pole pin (16). The pole pin (16) is elongated at the end thereof facing the rotating element (42) and has a section which is not enclosed by the magnetic sensor (18). A coil (18) can be used as the magnetic sensor. The sensor can be placed in a blind bore (24) in the exhaust gas turbocharger casing as a plug probe.

IPC 8 full level

F01D 17/06 (2006.01); **F02B 39/16** (2006.01); **G01P 1/02** (2006.01); **G01P 3/488** (2006.01)

CPC (source: EP US)

F01D 17/06 (2013.01 - EP US); **F02B 39/16** (2013.01 - EP US); **G01D 5/20** (2013.01 - US); **G01M 15/042** (2013.01 - US); **G01P 1/026** (2013.01 - EP US); **G01P 3/488** (2013.01 - EP US); **F05D 2220/40** (2013.01 - EP US)

Citation (search report)

See references of WO 2014095107A1

Citation (examination)

- DE 19504972 A1 19960822 - VDO SCHINDLING [DE]
- EP 2442113 A1 20120418 - BOSCH GMBH ROBERT [DE]

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