

Title (en)

Contactless position sensor with displacement transmission structure and displacement transmission structure therefor

Title (de)

Berührungsloser Positionssensor mit Bewegungsübertragungsstruktur und Bewegungsübertragungsstruktur dafür

Title (fr)

Détecteur de position sans contact avec structure de transmission de mouvement et sa structure de transmission de mouvement

Publication

**EP 2161460 A1 20100310 (EN)**

Application

**EP 08382034 A 20080909**

Priority

EP 08382034 A 20080909

Abstract (en)

The present invention relates to a position sensor (4) for detecting the position of an actuator piston adjusting, for example, a variable geometric turbo charger or an exhaust gas recirculation valve, comprising a displacement transmission structure, as well as a kit (1,4) for an actuator (1) comprising said position sensor (4), and a method for determining the position of an actuator piston. In order to facilitate the detection of the position of the actuator piston of an pneumatic actuator (1), even if the piston is tilted with respect to the actuator box, the displacement transmission structure comprises a slider (39), to be lineally displaced in the position sensor (4), with at least one marker (40'), of which the translational position can be detected by the sensor (4), a transmission element (38) for interconnecting the actuator piston and the slider (39), a first connection means (41) adapted to connect the slider (39) and the transmission element (38) translationally rigid and pivotable on at least two rotation axes that are perpendicular to each other and a second connection means (42) adapted to connect the transmission element (38) and the actuator piston translationally rigid and pivotable on at least two rotation axes that are perpendicular to each other, and the sensor (4) further comprises a sensor body with a reception (44') adapted for guiding the slider (39), and at least one sensor element (68) adapted to generate an output signal indicating the position of the marker (40') in the reception (44').

IPC 8 full level

**F15B 15/10** (2006.01); **F15B 15/28** (2006.01)

CPC (source: EP)

**F15B 15/10** (2013.01); **F15B 15/28** (2013.01)

Citation (applicant)

- DE 102005029904 A1 20070104 - MURRPLASTIK SYSTEMTECHNIK GMBH [DE]
- US 6273631 B1 20010814 - TAKAHASHI KUNIHISA [JP], et al
- DE 3623677 C1 19870416 - DAIMLER BENZ AG

Citation (search report)

- [XY] DE 102005029904 A1 20070104 - MURRPLASTIK SYSTEMTECHNIK GMBH [DE]
- [Y] US 6273631 B1 20010814 - TAKAHASHI KUNIHISA [JP], et al
- [A] DE 3623677 C1 19870416 - DAIMLER BENZ AG
- [AD] EP 1852588 A2 20071107 - SMK SYSTEME METALL KUNSTSTOFF [DE]

Citation (examination)

JP 2004012393 A 20040115 - KOMATSU MFG CO LTD

Cited by

EP2199565A1; DE102012006564B3; US2013232970A1; US8991173B2; GB2468779A; GB2468779B

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2161460 A1 20100310**

DOCDB simple family (application)

**EP 08382034 A 20080909**