

Title (en)

DIRECT ELECTROMAGNETIC DRIVE FOR A THROTTLE VALVE SHAFT IN A THROTTLE VALVE MANIFOLD

Title (de)

ELEKTROMAGNETISCHER DIREKTANTRIEB FÜR EINE DROSSELKLAPPENWELLE IN EINEM DROSSELKLAPPENSTUTZEN

Title (fr)

ENTRAÎNEMENT ELECTROMAGNETIQUE DIRECT DESTINE A UN ARBRE DE CLAPET D'ETRANGLEMENT DANS UNE TUBULURE DE CLAPET D'ETRANGLEMENT

Publication

EP 1518045 B1 20060802 (DE)

Application

EP 03761406 A 20030528

Priority

- DE 0301756 W 20030528
- DE 10228856 A 20020627

Abstract (en)

[origin: WO2004003363A1] The direct drive for a throttle valve shaft (7) in a throttle valve manifold (8) comprises a coil (1) and a rotor (2) arranged directly adjacent to the coil (1). The rotor (2) is made from a steel ring (3) inside which a first inner magnetic shell (5a) and a second inner magnetic shell (5b) lie opposite each other. The steel ring (3) has a first outer magnetic shell (4a) and a second outer magnetic shell (4b) lying opposite each other on the outside thereof. The steel ring (3) is connected to the throttle valve shaft (7) on the end (3') thereof facing the throttle valve (9). A sensor (10) for position recognition of the throttle valve (9) is arranged in the middle of that region (6) of the end (3") of the steel ring (3) facing away from the throttle valve (9).

IPC 8 full level

F02D 11/10 (2006.01); **F02D 9/00** (2006.01); **F02D 9/02** (2006.01); **F02D 35/00** (2006.01); **H02K 33/16** (2006.01)

CPC (source: EP US)

F02D 11/10 (2013.01 - EP US); **F02D 11/106** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

WO 2004003363 A1 20040108; DE 10228856 A1 20040122; DE 50304486 D1 20060914; EP 1518045 A1 20050330; EP 1518045 B1 20060802; JP 2005534846 A 20051117; JP 4012541 B2 20071121; US 2005098153 A1 20050512; US 7100568 B2 20060905

DOCDB simple family (application)

DE 0301756 W 20030528; DE 10228856 A 20020627; DE 50304486 T 20030528; EP 03761406 A 20030528; JP 2004516463 A 20030528; US 1499204 A 20041220