

Title (en)  
IDLE RUNNING ROTARY ACTUATOR.

Title (de)  
LEERLAUFDREHSTELLER.

Title (fr)  
ACTUATEUR ROTATIF POUR RALENTI.

Publication  
**EP 0487554 B1 19940420**

Application  
**EP 90911413 A 19900803**

Priority  
• DE 3926910 A 19890816  
• DE 9000593 W 19900803

Abstract (en)  
[origin: WO9102893A1] In order to simplify the structure and mounting of an idle running rotary actuator (1) having a rotary valve (3) that controls the throttle cross-section of the bypass line (4) in an internal combustion engine, the field coils (8) of the servomotor (2) are exclusively arranged on a stator (7) surrounded by a permanently excited bowl-shaped rotor (9). A rotary valve (3) is directly secured on the shaft (11) of the rotor (9). In order to determine the angular position of the shaft (11) or of the rotary valve (3), the rotating actuator (1) has a sensor (27), the signals of which are used by an electronic engine controller.

IPC 1-7  
**F02M 3/00**; **F16K 31/04**; **H02K 21/22**

IPC 8 full level  
**F02D 9/02** (2006.01); **F02D 9/08** (2006.01); **F02D 9/10** (2006.01); **F02D 9/16** (2006.01); **F02M 3/00** (2006.01); **F02M 3/07** (2006.01); **F02M 69/32** (2006.01); **F16K 31/04** (2006.01); **H02K 21/22** (2006.01); **F02D 41/08** (2006.01); **F02M 3/06** (2006.01)

CPC (source: EP KR US)  
**F02D 9/16** (2013.01 - EP US); **F02M 3/00** (2013.01 - KR); **F02M 3/07** (2013.01 - EP US); **F02M 2003/067** (2013.01 - EP US)

Cited by  
CN112412565A; WO2020207573A1

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**WO 9102893 A1 19910307**; AU 6044690 A 19910403; AU 639247 B2 19930722; BR 9007596 A 19920630; CS 356790 A2 19911217; DE 3926910 A1 19910221; DE 59005472 D1 19940526; EP 0487554 A1 19920603; EP 0487554 B1 19940420; ES 2052264 T3 19940701; JP H05500094 A 19930114; KR 0167355 B1 19981215; KR 920703987 A 19921218; RU 2070647 C1 19961220; US 5239961 A 19930831

DOCDB simple family (application)  
**DE 9000593 W 19900803**; AU 6044690 A 19900803; BR 9007596 A 19900803; CS 356790 A 19900718; DE 3926910 A 19890816; DE 59005472 T 19900803; EP 90911413 A 19900803; ES 90911413 T 19900803; JP 51049190 A 19900803; KR 920700341 A 19920215; SU 5011318 A 19900803; US 83428092 A 19920212