

Title (en)

METHOD AND DEVICE FOR CONTROLLING THE AIRFLOW SUPPLIED TO AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STEUERUNG DER LUFTZUFUHR EINER BRENNKRAFTMASCHINE

Title (fr)

PROCEDE ET DISPOSITIF DE GESTION DU DEBIT D'AIR ALIMENTANT UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1627142 A1 20060222 (FR)

Application

EP 04730494 A 20040430

Priority

- EP 2004004592 W 20040430
- FR 0305487 A 20030506

Abstract (en)

[origin: WO2004099594A1] The invention relates to a turbocharged internal combustion engine comprising an electrically controlled butterfly valve. The turbocharger is fitted with an outflow valve for regulating the pressure thereof. The position of the butterfly valve and the opening of the outflow valve are controlled according to two separate operating modes. In the first operating mode, the position of the butterfly valve is pre-determined according to engine control and operation parameters and the position of the outflow valve ensures the regulation of the airflow. In the second operating mode, the opening of the outflow valve is pre-determined according to engine control and operation parameters and the position of the butterfly valve ensures the regulation of the airflow. The two operating modes are controlled by an electronic device which selects the operating mode to be used according to stored pre-determined conditions.

IPC 1-7

F02D 41/00; **F02D 41/24**

IPC 8 full level

F02B 37/00 (2006.01); **F02B 37/18** (2006.01); **F02D 23/02** (2006.01); **F02D 41/00** (2006.01); **F02D 41/10** (2006.01)

CPC (source: EP KR US)

F02B 37/00 (2013.01 - EP US); **F02B 37/18** (2013.01 - EP US); **F02D 23/02** (2013.01 - EP US); **F02D 41/00** (2013.01 - KR); **F02D 41/0007** (2013.01 - EP US); **F02D 41/24** (2013.01 - KR); **F02D 41/10** (2013.01 - EP US); **F02D 2200/606** (2013.01 - EP US); **F02D 2250/22** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Designated contracting state (EPC)

DE GB IT SE

DOCDB simple family (publication)

FR 2854658 A1 20041112; **FR 2854658 B1 20070209**; EP 1627142 A1 20060222; JP 2006525463 A 20061109; KR 101146776 B1 20120521; KR 20060013387 A 20060209; MX PA05011882 A 20060330; US 2007022752 A1 20070201; US 7426828 B2 20080923; WO 2004099594 A1 20041118

DOCDB simple family (application)

FR 0305487 A 20030506; EP 04730494 A 20040430; EP 2004004592 W 20040430; JP 2006505335 A 20040430; KR 20057021153 A 20040430; MX PA05011882 A 20040430; US 55531804 A 20040430