

Title (en)

SYSTEM FOR REGULATING THE AIR/FUEL RATIO OF AN INTERNAL COMBUSTION ENGINE

Publication

**EP 0388412 B1 19920617 (DE)**

Application

**EP 88909199 A 19881026**

Priority

DE 3738132 A 19871110

Abstract (en)

[origin: WO8904424A1] A system for regulating the air/fuel ratio in an internal combustion engine (10), an oxygen probe (Lambda probe) (13) being arranged in the exhaust fumes of said motor, comprises a regulating device (12) permitting continuous regulation. The actual value of the air index Lambda is determined by means of the measured output voltage of the probe in connection with a correlation (16), characteristic of the probe and predefined at least approximately, between the value of the output voltage of the probe and the value of the air index Lambda coupled with the latter. The difference between the theoretical value and the actual value of the air index Lambda is calculated and the air/fuel ratio is regulated on the basis of this difference. This type of regulating system is used essentially to reduce the overall emission of the major hazardous constituents of the exhaust fumes of an engine. In particular in an engine (10) fitted with a catalyser arranged in the exhaust fumes, this system ensures that the value of the air index Lambda (Lambda = 1) required for optimal performance of the catalyser is strictly maintained.

IPC 1-7

**F02D 41/14**

IPC 8 full level

**F02D 41/14** (2006.01); **F02D 45/00** (2006.01)

CPC (source: EP KR US)

**F02D 41/14** (2013.01 - KR); **F02D 41/1477** (2013.01 - EP US); **F02D 41/1441** (2013.01 - EP US); **F02D 2041/1409** (2013.01 - EP US)

Citation (examination)

- US 4200064 A 19800429 - ENGELE HORST [IT]
- DE 3231122 A1 19840223 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**WO 8904424 A1 19890518**; DE 3827978 A1 19890518; DE 3837984 A1 19890518; DE 3872249 D1 19920723; EP 0388412 A1 19900926; EP 0388412 B1 19920617; JP 2930596 B2 19990803; JP H03500565 A 19910207; KR 0135277 B1 19980423; KR 890701884 A 19891222; US 5036819 A 19910806

DOCDB simple family (application)

**DE 8800659 W 19881026**; DE 3827978 A 19880818; DE 3837984 A 19881109; DE 3872249 T 19881026; EP 88909199 A 19881026; JP 50839288 A 19881026; KR 890701293 A 19890710; US 47797690 A 19900430