

Title (en)

Method and device for regulating the air/fuel ratio of an internal combustion engine

Title (de)

Verfahren und Vorrichtung zur Regelung des Kraftstoff/Luft-Verhältnisses eines Verbrennungsprozesses

Title (fr)

Procédé et dispositif pour régler le rapport air-carburant d'un moteur à combustion

Publication

EP 1336728 B1 20120321 (DE)

Application

EP 02020196 A 20020910

Priority

DE 10205817 A 20020213

Abstract (en)

[origin: EP1336728A2] In an internal combustion engine (ICE) (10), an airflow sensor (14) signals to an electronic controller (18) to calculate a fuel proportion signal and trigger a fuel apportioning device (16) in an ICE intake pipe (12). Oxygen introduced/emitted in a preset time assumes a preset value so that combustion operates with rich/lean oxygen mixtures until an oxygen-sensitive Nernst sensor is triggered. An Independent claim is also included for a control device for carrying out the method of the present invention.

IPC 8 full level

F02D 41/14 (2006.01); **F02D 41/02** (2006.01); **F01N 13/02** (2010.01)

CPC (source: EP US)

F01N 13/009 (2014.06 - EP US); **F01N 13/0097** (2014.06 - EP US); **F02D 41/0295** (2013.01 - EP US); **F02D 41/1441** (2013.01 - EP US); **F01N 2430/06** (2013.01 - EP US); **F01N 2570/16** (2013.01 - EP US); **F02D 41/1454** (2013.01 - EP US); **F02D 2041/1418** (2013.01 - EP US); **F02D 2041/1422** (2013.01 - EP US); **F02D 2250/36** (2013.01 - EP US)

Cited by

DE102006062516A1; DE102015222022B4; DE102008005110B4; DE102004055231B3; EP3680472A1; CN111502844A; DE102006059587A1; DE102015222022A1; FR2910935A1; DE102005044729A1; WO2016120190A1; WO2005124128A1; DE102008005110A1; DE102013201734A1

Designated contracting state (EPC)

DE FR IT SE

DOCDB simple family (publication)

EP 1336728 A2 20030820; **EP 1336728 A3 20060405**; **EP 1336728 B1 20120321**; DE 10205817 A1 20030814; US 2003150209 A1 20030814; US 2010212291 A1 20100826; US 8141345 B2 20120327

DOCDB simple family (application)

EP 02020196 A 20020910; DE 10205817 A 20020213; US 36425503 A 20030211; US 64771709 A 20091228