

Title (en)

ELECTRONIC APPARATUS FOR CONTROLLING THE FUEL AMOUNT IN AN INTERNAL COMBUSTION ENGINE

Publication

EP 0140065 B1 19881207 (DE)

Application

EP 84110673 A 19840907

Priority

DE 3336028 A 19831004

Abstract (en)

[origin: US4688535A] The invention is directed to an apparatus for influencing control quantities of an internal combustion engine by means of which vibrations of the entire vehicle in the lower engine speed range, particularly at idling, are to be eliminated. This is accomplished by allocating to each cylinder a regulating unit which regulates the control quantities influencing the respective cylinder, such as fuel metering, exhaust gas recirculation, start of injection, duration of injection, air/fuel ratio, ignition time point, et cetera, for the smoothest possible running condition.

IPC 1-7

F02D 41/16; F02D 43/00

IPC 8 full level

F02D 45/00 (2006.01); **F02D 21/08** (2006.01); **F02D 41/14** (2006.01); **F02D 41/16** (2006.01); **F02D 41/40** (2006.01); **F02D 43/00** (2006.01); **F02M 25/07** (2006.01); **F02P 5/145** (2006.01)

CPC (source: EP US)

F02D 41/1498 (2013.01 - EP US); **F02D 2200/1015** (2013.01 - EP US)

Citation (examination)

- US 4179922 A 19791225 - BOUVERIE WILLIAM M [US], et al
- FR 2301691 A1 19760917 - BOSCH GMBH ROBERT [DE]

Cited by

WO0159282A1; WO0163111A1; US4742462A; EP0448603A4; EP0406765A1; EP0354497A1; EP0629775A1; EP0353216A1; EP0353217A1; DE102004044808B4; FR2787511A1; DE102011004068B3; DE10009065A1; DE3821740A1; GB2185132A; GB2185132B; WO9111599A1; WO9100956A1; WO8705074A1; WO2012034656A1; WO2010133415A1; US6941930B2; US6694960B2; WO9967525A1

Designated contracting state (EPC)

AT DE FR GB

DOCDB simple family (publication)

EP 0140065 A1 19850508; **EP 0140065 B1 19881207**; AT E39163 T1 19881215; DE 3336028 A1 19850418; DE 3336028 C2 19920604; DE 3336028 C3 19970403; DE 3475549 D1 19890112; JP H0633723 B2 19940502; JP S6081450 A 19850509; US 4688535 A 19870825

DOCDB simple family (application)

EP 84110673 A 19840907; AT 84110673 T 19840907; DE 3336028 A 19831004; DE 3475549 T 19840907; JP 18899284 A 19840911; US 65721284 A 19841003