

Title (en)

ARRANGEMENT INCORPORATING AN INTERNAL-COMBUSTION ENGINE CONTROL

Publication

EP 0222081 A3 19890830 (DE)

Application

EP 86111615 A 19860822

Priority

DE 3539012 A 19851102

Abstract (en)

[origin: US4719891A] In a system having an electronic controller for internal combustion engines, particularly injection engines in which the controller is functionally connected to a plurality of sensors and at least one actuator, the controller is part of an assembly which furthermore comprises a throttle-valve arrangement, an air-mass sensor and a throttle-valve position sensor. In systems with central injection, the injection valve can also be arranged within the assembly. By the compact structural unit thus obtained, cable connections are reduced to a minimum, so that, in their turn, reliability is increased and expense is saved. Furthermore, the arrangement facilitates maintenance and repair.

IPC 1-7

F02M 51/02; **F02D 41/32**; **F02M 69/00**; **F02D 41/30**

IPC 8 full level

F02D 9/02 (2006.01); **F02D 31/00** (2006.01); **F02D 41/30** (2006.01); **F02M 51/02** (2006.01); **F02M 69/46** (2006.01); **F02B 1/04** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

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Citation (search report)

- [A] US 4539963 A 19850910 - BRISBANE ROGER M [US], et al
- [A] WO 7900979 A1 19791129 - AUTOTRONIC CONTROLS CORP [US]
- [A] FR 2157453 A5 19730601 - PORSCHE KG
- [A] DE 3338653 A1 19850502 - VOLKSWAGENWERK AG [DE]
- [A] US 3996914 A 19761214 - CRALL FREDERICK WILLIAM, et al
- [A] PATENT ABSTRACTS OF JAPAN, Band 8, Nr. 20 (M-271)[1457], 27. Januar 1984; & JP-A-58 178 862 (MITSUBISHI DENKI K.K.), 19-10-1983
- [A] PATENT ABSTRACTS OF JAPAN, Band 4, Nr. 80 (M-15)[562], 10. Juni 1980; & JP-A-55 040 224 (HITACHI SEISAKUSHO K.K.), 21-03-1980

Cited by

EP0508891A1; FR2674908A1; FR2697585A1; US5482019A; WO9410434A1

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