

## Title (en)

IDLE SPEED CONTROL DEVICE FOR A SPARK IGNITION ENGINE, ESPECIALLY FOR A MOTOR VEHICLE

## Publication

**EP 0208222 A3 19870429 (DE)**

## Application

**EP 86108866 A 19860630**

## Priority

DE 3524911 A 19850712

## Abstract (en)

[origin: US4668440A] The device is provided in an intake pipe 9 in connection with a throttle valve 2 which is displaceable by a gas pedal 7 and acted against by a return spring 8. To this throttle valve there is connected a rotary element 9 on which there is developed at least one rotary stop 10 which limits an angular range of the idling aspiration regulation. The rotary element is coupled to an actuator 16. The throttle valve 2 serves as closure member which determines the idling air throughput. A swingably mounted regulating lever 5 is connected to the gas pedal 7 and the return spring 8, by which the lever can be moved back against a fixed regulating lever stop 12. The rotary element 9 to which the throttle valve is fastened is carried along by the regulating lever 5 as a result of actuation of the gas pedal only when the regulating lever rests against the rotary stop 10 of the rotary element 9. On the other hand, the rotary element 9 is decoupled from the return spring 8 when the rotary stop 10 is moved away from the regulating lever 5 by the actuator 16 which acts on the rotary element 9. In this way, a sensitive idling admission regulation can be obtained with little structural expense or expense for energy although the return spring of the entire device is made strong for reasons of safety.

## IPC 1-7

**F02M 3/07**

## IPC 8 full level

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## CPC (source: EP US)

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## Citation (search report)

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- [A] US 4181103 A 19800101 - STURDY HARRY D [US]
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- [A] US 4378768 A 19830405 - ITOH HIROSHI [JP], et al
- [AD] EP 0050707 A1 19820505 - VDO SCHINDLING [DE]
- [Y] PATENTS ABSTRACTS OF JAPAN, Band 9, nr. 162 (M-34)[1885], 6. Juli 1985; & JP-A-60 036 763 (NIHON KIKAKI SEISAKUSHO) 25-02-1985

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