

Title (en)

DEVICE FOR CONTROLLING THE PRIMARY THROTTLE OF A CARBURETTOR OR AN INJECTION SYSTEM

Publication

**EP 0237837 A3 19881102 (DE)**

Application

**EP 87102606 A 19870224**

Priority

DE 3607315 A 19860306

Abstract (en)

[origin: EP0237837A2] In the case of a device for controlling the primary throttle of a carburettor or an injection system of internal combustion engines by means of a transmission element connecting the primary throttle to an accelerator pedal, the transmission element having an aneroid capsule, connected to the engine intake pipe downstream from the primary throttle, which shortens the effective length of the transmission element in the event of an increase in the intake vacuum, the invention provides for fixed mounting of the aneroid capsule of the transmission element, which element is subject to tensile stressing when the primary throttle opens, and for the capsule to have two opposing diaphragms which can move in the axial direction of the capsule as far as a mutual bearing contact, one such diaphragm being preloaded, in particular spring preloaded, in the closing direction of the primary throttle and at the same time connected to the accelerator pedal and the other diaphragm being connected to the primary throttle preloaded, in particular spring preloaded, in the closing direction, and for the admission of the intake vacuum to the intermediate chamber between the diaphragms and of atmospheric pressure to the two adjacent diaphragm chambers each defined by a diaphragm. This device makes it possible, in particular, to prevent extreme opening of the primary throttle when the engine is adequately filled and/or to open the primary throttle in full load operation as a function of the rate of air flow. In a further embodiment the rate of opening of the primary throttle can also be limited as a function of the engine speed and the position of the primary throttle controlled or regulated over part or all of the opening range. <IMAGE>

IPC 1-7

**F02D 11/08**

IPC 8 full level

**F02D 11/08** (2006.01)

CPC (source: EP)

**F02D 11/08** (2013.01)

Citation (search report)

- [X] DE 2723360 A1 19771208 - BUTCHER DAVID H
- [A] US 3982510 A 19760928 - VAN OSTROM DAVID L
- [A] US 3659499 A 19720502 - WOODWARD GARY F
- [A] FR 2462741 A1 19810213 - SCHMELZER CORP [US]
- [A] US 4354465 A 19821019 - TAKEUCHI KOICHI, et al
- [A] US 4452203 A 19840605 - OSHIKA SUMIO [JP], et al
- [A] US 4077370 A 19780307 - SPANGENBERG HAROLD E
- [A] DE 3337579 A1 19850425 - ATLAS FAHRZEUGTECHNIK GMBH [DE]
- [AD] DE 2952452 A1 19810903 - DUNLOP AG [DE]

Cited by

GB2242230A; FR2660015A1

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

**EP 0237837 A2 19870923; EP 0237837 A3 19881102; EP 0237837 B1 19901219;** DE 3607315 A1 19870910; DE 3766729 D1 19910131

DOCDB simple family (application)

**EP 87102606 A 19870224;** DE 3607315 A 19860306; DE 3766729 T 19870224