

Title (en)

Intake manifold throttling valve driving device for a diesel engine.

Title (de)

Betätigungsvorrichtung für eine in einer Ansaugleitung einer Dieselmotormaschine angeordneten Drosselklappe.

Title (fr)

Dispositif de commande de volet d'étranglement du collecteur d'admission d'un moteur diesel.

Publication

**EP 0418484 A1 19910327 (DE)**

Application

**EP 90112810 A 19900705**

Priority

DE 3931144 A 19890919

Abstract (en)

[origin: JPH03121220A] PURPOSE: To enhance the control accuracy by enabling a position of a throttle valve which is determined as a function of a load, to be changed within a range of play distance, in a device transmitting a movement of an accelerator pedal to a throttle valve through a mechanical adjusting and coupling mechanism having a play. CONSTITUTION: A throttle valve 2 rotatably attached in an intake pipe 1 through the intermediary of a shaft 3 is opened and closed in response to actuation of an accelerator pedal (which is not shown) by means of a mechanical adjusting and coupling mechanism 4 and a drive lever 5. The mechanism 4 has a two part 6, 7 which are telescopically coupled together so as to exhibit a play having a distance 1 in the mechanism 4. The coupling part 6 is coupled to an accelerator pedal, and the coupling part 7 is coupled to a bell crank lever 10 which is swingable around a pivot 9. In this arrangement, the drive lever 5 is coupled thereto with a vacuum actuator 15 which can change a position of the throttle valve determined as a function of a load within a range of the play distance 1.

Abstract (de)

Die Erfindung bezieht sich auf eine Betätigungsverrichtung für eine in einer Ansaugleitung in einer Dieselmotormaschine angeordneten Drosselklappe mit einem mechanischen Verstellgestänge zur lastabhängigen Verstellung der Drosselklappe, wobei das Verstellgestänge einen Leerweg aufweist. Um die Drosselklappe in Abhängigkeit mehrerer Betriebsparameter steuern zu können, wird ein hilfskraftbetätigter Stellantrieb vorgeschlagen, über den die lastabhängig vorgegebene Drosselklappenstellung innerhalb des Leerweges veränderbar ist.

IPC 1-7

**F02D 9/02**

IPC 8 full level

**F02M 25/07** (2006.01); **F02D 9/02** (2006.01); **F02D 11/04** (2006.01); **F02D 11/06** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)

**F02D 9/02** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US); **F02D 2009/0223** (2013.01 - EP US); **F02D 2009/0227** (2013.01 - EP US); **F02D 2009/023** (2013.01 - EP US); **F02D 2009/0257** (2013.01 - EP US); **F02D 2041/0022** (2013.01 - EP US)

Citation (search report)

- [A] GB 1563889 A 19800402 - CATERPILLAR TRACTOR CO
- [A] EP 0192962 A1 19860903 - HITACHI LTD [JP]
- [A] FR 1367809 A 19640724
- [A] FR 2592093 A1 19870626 - RENAULT [FR]
- [AD] DE 2939805 A1 19800424 - NISSAN MOTOR

Cited by

US11064725B2

Designated contracting state (EPC)

CH FR GB IT LI SE

DOCDB simple family (publication)

**EP 0418484 A1 19910327**; DE 3931144 A1 19910328; JP H03121220 A 19910523; US 5065719 A 19911119

DOCDB simple family (application)

**EP 90112810 A 19900705**; DE 3931144 A 19890919; JP 24286090 A 19900914; US 58479890 A 19900919