

Title (en)

CONTROL DEVICE FOR INTERNAL-COMBUSTION ENGINES

Publication

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Application

EP 80103113 A 19800604

Priority

DE 2936162 A 19790907

Abstract (en)

[origin: US4359986A] A control apparatus for internal combustion engines is proposed, in which the adjustment range or the full-load position of a supply quantity adjustment member of the fuel metering apparatus is varied in accordance with the absolute pressure of the aspirated air in the suction tube of the engine in order to attain optimal combustion at the greatest possible torque. The control apparatus (FIG. 1) includes a pneumatic pressure converter and a pneumatic adjustment member. The pneumatic pressure converter, in a first pressure chamber, contains an evacuated diaphragm pressure box exposed to the aspirated air pressure (pL), which acts counter to a second diaphragm pressure box exposed in its interior to atmospheric air pressure (pA) and located in a second pressure chamber connected to a compressed air source. Both pressure boxes are connected via an actuation member supporting a valve member, and the valve member reduces the servo air pressure (pS) to a control air pressure (pSt) which is proportional to the absolute aspirated air pressure (pLK), this control air pressure actuating the diaphragm adjustment member functioning counter to a restoring spring and to atmospheric air pressure.

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