

Title (en)  
ELECTRIC AIR BLEED CONTROL SYSTEM FOR CARBURETTOR

Publication  
**EP 0209389 A3 19871125 (EN)**

Application  
**EP 86305509 A 19860717**

Priority  
JP 15884885 A 19850718

Abstract (en)  
[origin: EP0209389A2] An electric air bleed control system for a carburetor of the type which comprises a main throttle valve (25) in an induction passage, a throttle piston (24) located upstream of the throttle valve and axially displaceable to form a variable venturi, a pneumatic actuator (22) arranged to be activated by a vacuum depending on the flow of air in the induction passage for effecting axial displacement of the piston, a fuel passage (29) arranged to permit the flow of fuel from a fuel reservoir into a mixing chamber (R) between the piston and the throttle valve and being provided therein with a fuel metering jet (29e), a needle valve element (27a) integral with the piston for controlling the cross-sectional area of the fuel metering jet, and an air bleed passage (21f) arranged to permit the flow of atmospheric air into the fuel passage. The control system is arranged to determine one of plural learning regions in accordance with the axial displacement of the needle valve element, the plural learning regions corresponding with a plurality of subdivided displacement regions of the needle valve element, to learn an instantaneous air-fuel ratio of the mixture in relation to oxygen concentration in exhaust gases of the engine, to determine an optimum amount of air based on a resultant of the learning for supply of an optimum amount of fuel into the mixing chamber, and to produce an output signal indicative of the optimum amount of air and apply it to an electrically operated valve mechanism (30) disposed within the air bleed passage.

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Citation (search report)  
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