

Title (en)

DEVICE FOR MODIFYING THE OPERATING PARAMETERS IN AN INTERNAL-COMBUSTION ENGINE

Publication

EP 0197315 B1 19900808 (DE)

Application

EP 86103080 A 19860307

Priority

DE 3513086 A 19850412

Abstract (en)

[origin: US4762105A] A first control unit of a multiple function control system for a motor vehicle engine controls a function, such as fuel injection, for which it is desirable to provide an engine load signal measured by the amount of air drawn or forced into the engine per unit of time, determined by what is generally known as an air quantity meter. A second control unit of the control system controls the timing of an electrical ignition system for which it has been conventional to supply an engine load signal derived from a pressure transducer. In order to dispense with the pressure transducer and to make both control units subject to adaptive correction of the air quantity signal, the output of the air quantity meter is furnished to the second control system for modification therein by the computation facilities normally included in modern ignition control systems so as to shift or expand the range of engine load signals obtained from the air quantity meter to provide the same degree of resolution as would be available from a pressure transducer. For adaptive correction, the engine-load-to-engine-speed characteristic at a predetermined position of the throttle valve at or near full load is stored, both to provide a plausibility check of the system when the engine is operating at or near full load, and to provide for a correction of the engine load signal of a kind which would minimize the difference between the actual and reference characteristic lines when the engine is operating at or near full load.

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SAE Technical Paper Series, Warrendale, Pa, USA, 22.04.1983, Russo et al:"EFI for the 80's....", S.11-17.

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