Title (en)

CONTROL AND REGULATING SYSTEM FOR INTERNAL COMBUSTION ENGINES

Publication

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Application

EP 88909290 A 19881103

Priority

DE 3741527 A 19871208

Abstract (en)

[origin: WO8905397A1] A control and regulating system for adjusting the air/fuel mixture of an internal combustion engine (12) comprises an oxygen probe (lambda probe) (14) exposed to the exhaust hums of the engine (12) which emits an output signal which is an index for the air coefficient lambda . A basic memory (10) stores the fuel dosing times which are used for a preliminary control of the internal combustion engine (12) until a predetermined air coefficient lambda is obtained. A target value memory (18) stores target values of the air coefficient and a regulating device (20) corrects the fuel dosing times read in a basic memory (10) in function of the output signal measured by the lambda probe (14) and a corresponding target value read in a target value memory (18). The reciprocal of the air coefficient lambda is stored in a target value memory (18). Each fuel dosing time in a basic memory (10) is linked by multiplication to the corresponding reciprocal of the air coefficient lambda read in a target value memory (18). A conversion device (16) converts the output signal to a corresponding reciprocal of the air coefficient lambda by means of a relation characteristic of the probe and known at least approximately between the output signal of the lambda probe (14) and the air coefficent lambda . By taking into account the linear relation between the reciprocal of the air coefficent lambda and the quantity of fuel (fuel dosing time), rapid and precise regulation is achieved by means of a simple linear regulating device.

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