

Title (en)

PROCESS AND DEVICE FOR ASSESSING THE EFFICIENCY OF A LAMBDA CONTROL SYSTEM.

Title (de)

VERFAHREN UND VORRICHTUNG ZUM BEURTEILEN DER FUNKTIONSFÄHIGKEIT EINER LAMBDA-REGELUNG.

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT D'EVALUER LA CAPACITE A FONCTIONNER D'UNE REGULATION LAMBDA.

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Application

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Priority

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Abstract (en)

[origin: WO9316277A1] A process for assessing the efficiency of a lambda control system which emits settings FR which are to vary about a reference setting FR-SOLL, said system being supported by an adaptation device which emits adaptation values, is characterised in that a continuous calculation is made of the current value EW of a decisive value which indicates the average quantitative difference between the settings and the reference setting, the current value is compared with a decisive value threshold SW-EW, and an error signal is emitted if the current value exceeds the decisive value threshold. This process has the advantage that it can also detect errors occurring only in parts of the entire range over which an internal combustion engine can be run in which the fuel supply is set by the lambda control. If such a faulty range is entered, the setting emitted by the lambda control differs from the reference setting and as a result at least one adaptation value changes. If the faulty range is left again, the altered adaptation value no longer matches the error-free range and therefore the setting emitted by the lambda control varies from the reference setting in the other direction. As these differences are quantitatively averaged in calculating the decisive value, they affect the decisive value more strongly than the at least one adaptation value, which is immediately reduced as soon as the sign of the difference in the setting changes. It is thus possible with the aid of the decisive value to detect errors which cannot be detected using an adaptation value.

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