

Title (en)

CONTROL AND REGULATION METHOD FOR AN INTERNAL COMBUSTION ENGINE HAVING A COMMON RAIL SYSTEM

Title (de)

STEUERUNGS- UND REGELUNGSVERFAHREN FÜR EINE BRENNKRAFTMASCHINE MIT EINEM COMMON-RAILSYSTEM

Title (fr)

PROCÉDÉ DE COMMANDE ET DE RÉGULATION D'UN MOTEUR À COMBUSTION INTERNE ÉQUIPÉ D'UN SYSTÈME À RAMPE COMMUNE

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Application

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Abstract (en)

[origin: WO2010057588A1] The invention relates to a control and regulation method for an internal combustion engine having a common rail system, wherein a rail pressure is regulated in normal operation in that a first actual rail pressure is determined via a first filter from the rail pressure, an offset is calculated from a target rail pressure and the first actual rail pressure, a variable is calculated via a pressure regulator from the offset and a PWM signal having a first PWM frequency (f1) for activation of a control process is determined in dependence on the variable. A second actual rail pressure (pCR2(IST)) is determined via a second filter, a load rejection is recognized if the second actual rail pressure (pCR2(IST)) exceeds a first threshold value (GW1), upon exceeding the first threshold value (GW1) the PWM signal switches over from the first PWM frequency (f1) to a second PWM frequency (f2) and the rail pressure is controlled upon exceeding a second threshold value in that the PWM signal is temporarily set to a PWM value that is higher than that of normal operation.

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