

Title (en)

Control device of high-pressure fuel pump of internal combustion engine

Title (de)

Steuervorrichtung für Hochdruckkraftstoffpumpe von Verbrennungsmotor

Title (fr)

Dispositif de commande de pompe à carburant haute pression de moteur à combustion interne

Publication

EP 1873382 B1 20100526 (EN)

Application

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Priority

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Abstract (en)

[origin: EP1873382A2] The invention relates to a control device of a high-pressure fuel pump (1) of an internal combustion engine (507) capable of improving stability in controlling the drive of the high-pressure fuel pump (1) by limiting the end timing of a drive signal of the high-pressure fuel pump (1) and driving an actuator (200) in a control effective range of the high-pressure fuel pump (1). The control device of the high-pressure fuel pump (1) of the internal combustion engine (507) has a fuel injection valve (54) provided on a cylinder (507b) and the high-pressure fuel pump (1) for pumping fuel to the fuel injection valve (54), wherein the high-pressure fuel pump (1) comprises a pressure chamber (12), a plunger (2) for pressurizing the fuel in the pressure chamber (12), a fuel valve (5) provided in the pressure chamber (12), and the actuator (200) for operating the fuel valve (5). The control device has means for calculating the drive signal of the actuator (200) so as to realize the variable discharge of the high-pressure fuel pump (1). The means for calculating the drive signal has means for limiting the end timing of the drive signal of the actuator (200) to a predetermined phase and/or means for limiting the output timing of the drive signal of the actuator (200) to be within a predetermined phase range.

IPC 8 full level

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