Title (en)
CONTROL DEVICE AND CONTROL METHOD FOR FUEL PUMP

Title (de)
STEUERUNGSVORRICHTUNG UND STEUERUNGSVERFAHREN FÜR KRAFTSTOFFPUMPE

Title (fr)
DISPOSITIF DE COMMANDE ET PROCÉDÉ DE COMMANDE POUR POMPE À CARBURANT

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Application
EP 16807277 A 20160523

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Abstract (en)
A plunger (56) is caused to reciprocate by driving of a DC motor (42) to pump a pressurized fuel to an injector (16) and inject the fuel from the injector (16) in synchronization with a combustion cycle of an engine (1). An engine rotational period (Teg) and a motor rotational period (Tmt) are compared (S3), and when the periods are different, a duty ratio of a drive current to be supplied to the DC motor (42) is calculated from an operation area of the engine (1) by a normal method (S4). When the engine rotational period (Teg) and the motor rotational period (Tmt) are close to each other, the duty ratio of the drive current to be supplied to the DC motor (42) is corrected to be increased or decreased by a predetermined value (S6), and the DC motor (42) is driven and controlled based on the corrected duty ratio (S5). Thus, the motor rotational period (Tmt) is constantly set to be different from the engine rotational period (Teg) during the operation of the engine (1).

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