

Title (en)

METHOD AND SYSTEM FOR CONTROLLING ELECTRONIC WATER PUMP OF ENGINE

Title (de)

VERFAHREN UND SYSTEM ZUR STEUERUNG EINER ELEKTRONISCHEN WASSERPUMPE EINES MOTORS

Title (fr)

PROCÉDÉ ET SYSTÈME POUR COMMANDER UNE POMPE À EAU ÉLECTRONIQUE D'UN MOTEUR

Publication

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Application

EP 20744840 A 20200115

Priority

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Abstract (en)

[origin: EP3916208A1] The present invention provides a method for controlling an electronic water pump of an engine. The method includes: acquiring a target temperature of a water outlet of the engine and a basic pump speed of the electronic water pump; acquiring a PID control correction coefficient based on the target temperature of the water outlet of the engine and the measured temperature of the water outlet of the engine; acquiring an environment temperature correction coefficient, and acquiring a target revolving speed of the electronic water pump based on the basic pump speed of the electronic water pump, the PID control correction coefficient, and the environment temperature correction coefficient; and controlling the electronic water pump of the engine by using the target revolving speed of the electronic water pump. The present invention also provides a system for controlling an electronic water pump of an engine. According to the present invention, the control of a target revolving speed of the electronic water pump is performed in two steps. Step 1, the target revolving speed of an electronic fan and a basic pump speed are output to realize the pre-control, thereby improving the system responsiveness. Step 2, the basic pump speed is corrected according to PID and an environment temperature together such that the control precision is improved.

IPC 8 full level

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Citation (search report)

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