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(54) **POWERTRAIN, COOLANT FLOW RATE ESTIMATION METHOD, AND ELECTRIC VEHICLE**

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ABSTRACT

This application provides a powertrain, a coolant flow rate estimation method, and an electric vehicle. Coolant in a first cooling loop of the powertrain is configured to cool an inverter. An electronic pump drives the coolant to circulate in the first cooling loop. When a phase current of a motor is greater than or equal to a preset current value, a controller determines a rotation speed of the electronic pump at a first moment as a first rotation speed, and determines a coolant flow rate at the first moment based on a temperature at a first position in the first cooling loop, a temperature at a second position in the inverter, and a power loss of the inverter. In the solution of this application, data does not need to be separately calibrated for different thermal management systems. This reduces time consumed by data calibration and improves practicability.

