

WASHING MACHINE

ABSTRACT

A washing machine according to the present disclosure includes impeller (1) rotatable in washing and spin-drying tub (2), electric motor (4) including a permanent magnet and a winding, a power supply circuit that supplies a current to electric motor (4), and a current detection unit that detects a current in electric motor (4). The washing machine further includes transmission mechanism (5, 6, 31, and 32) that transmits torque of the electric motor to the impeller, a rotational speed control unit that controls electric motor (4) to obtain a specified rotational speed, and a control unit that performs a set of controls on electric motor (4) a predetermined number of times, the set of controls including at least one of acceleration control, constant-speed control, and pause control which are performed one after another in sequence, the set of controls being performed alternately for clockwise rotation and counterclockwise rotation of the impeller. The control unit includes a clothing quantity detection unit that detects a quantity of laundry from an average current value in a period of the constant-speed control or a rotation angle in a period of the pause control.

[FIG. 1]