

Title (en)
DRUM WASHING MACHINE

Title (de)
TROMMELWASCHMASCHINE

Title (fr)
MACHINE A LAVER A TAMBOUR

Publication
EP 1548169 A1 20050629 (EN)

Application
EP 03765335 A 20030718

Priority
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Abstract (en)
The balance of the laundry sticking to an inner peripheral surface of a drum of a drum washing machine having a drum rotating on a substantially horizontal axis is adjusted before spin-drying. A brushless DC motor is adopted for a drum drive motor. The motor current is separated into a d-axis current and a q-axis current to carry out speed control by vector control for controlling these currents independently. Before spin-drying, the rotating speed is increased (S1) up to a speed at which the laundry sticks firmly to the inner peripheral surface of the drum. Then, the machine enters the rotating speed slow-down operation mode (S2) in which the rotating speed is gradually decreased. The balance of the laundry inside the drum is judged to be proper during the speed slow-down, the rotating speed is increased to enter a spin-drying mode (S8). The balance of the laundry inside the drum is judged on the basis of the fluctuation width of the q-axis current. <IMAGE>

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IPC 8 full level
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Cited by
CN111118813A; CN102341538A; EA019472B1; EP2063011A1; US9096964B2; US8679198B2; WO2010100030A1; US8938835B2; US7490490B2; WO2023111968A1

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