

Title (en)

Heating apparatus of washing machine and control method thereof

Title (de)

Heizvorrichtung für Waschmaschine und Steuerverfahren dafür

Title (fr)

Appareil de chauffage pour une machine à laver et méthode pour le commander

Publication

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Application

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Priority

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Abstract (en)

A heating apparatus of a washing machine comprises: a steam generator for generating steam; and a spray nozzle for spraying steam generated from the steam generator into a tub, in which a water level sensor for detecting a level of water supplied for steam generation step by step is mounted at the steam generator. According to this, an entire size of the washing machine is reduced, an amount of washing water is reduced, and a water level inside the steam generator is detected more accurately, thereby enhancing a performance of the heating apparatus. <IMAGE>

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CPC (source: EP US)

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Citation (search report)

- [Y] DE 3627988 A1 19870423 - TECH MIKROELEKTRONIK FORSCH [DD]
- [Y] EP 0877200 A1 19981111 - IMETEC SPA [IT]
- [A] EP 0816550 A1 19980107 - ESSWEIN SA [FR]
- [A] US 2003010117 A1 20030116 - SHON JONG-CHULL [KR]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 05 12 May 2003 (2003-05-12)
- [PY] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12 5 December 2003 (2003-12-05)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06 30 June 1997 (1997-06-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 08 6 August 2003 (2003-08-06)
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 449 (C - 0986) 18 September 1992 (1992-09-18)

Cited by

EP2383383A1; DE102008026114B4; EP2385165A1; WO2006129913A1; WO2006129916A1; WO2006104310A1; EP1696066A3; DE102007012135B3; EP2522768A1; AU2006253222B2; DE102010016672B3; EP1885935A4; EP2037036A3; EP2818593A1; DE112006000046B4; FR2920161A1; US8122742B2; EP2402498A1; US8209805B2; US7600402B2; EP1970480A1; US2010095716A1; AU2006250222B2; EP1859093A4; EP1883728A4; DE112007003110B4; WO2006101312A1; WO2006129912A1; US8291731B2; WO2006129915A1; US7987541B2; US8438755B2; US7913522B2; US7565822B2; US8181299B2; US8621695B2; USRE47692E; US8087266B2; US8312642B2; US8443635B2; US10844533B2; WO2008075849A3; WO2006126779A1; WO2006098572A1

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