

Title (en)
Washing machine and method for detecting unbalanced state of laundry therein

Title (de)
Waschmaschine und Verfahren zur Ermittlung der Wäscheunwucht

Title (fr)
Machine à laver et procédé pour détecter le balourd du tambour

Publication
EP 1783261 A1 20070509 (EN)

Application
EP 06008119 A 20060419

Priority
KR 20050106000 A 20051107

Abstract (en)
A washing machine (1) which determines an unbalanced state of laundry (3) using an unbalance value and a variation of the unbalance value according to time so as to reduce the generation of vibration and noise, and a method for detecting the unbalanced state of the laundry (3) therein. The washing machine (1) includes a rotary tub (2) containing laundry (3), a washing motor (45) for rotating the rotary tub (2), a motor speed detecting unit (46) detecting the speed of the washing motor (45) and outputting a motor speed signal, and a controller (42) calculating an unbalance value of the laundry (3) and a variation of the unbalance value using the motor speed signal, determining the unbalanced state of the laundry (3) in the rotary tub (2) using the unbalance value and the variation of the unbalance value, and controlling the washing motor (45) according to determination results.

IPC 8 full level
D06F 37/20 (2006.01)

CPC (source: EP KR US)
D06F 33/48 (2020.02 - EP KR US); **D06F 34/08** (2020.02 - KR); **D06F 34/16** (2020.02 - KR); **D06F 37/304** (2013.01 - KR); **D06F 2103/24** (2020.02 - KR); **D06F 2103/26** (2020.02 - EP KR US); **D06F 2105/46** (2020.02 - KR)

Citation (search report)

- [XA] EP 0732436 A1 19960918 - WHIRLPOOL EUROP [NL]
- [XA] EP 0523371 A1 19930120 - MOTOROLA SEMICONDUCTEURS [FR]
- [XA] GB 2174513 A 19861105 - HOOVER PLC
- [XA] GB 2124662 A 19840222 - TI DOMESTIC APPLIANCES LTD

Cited by
EP2330244A4; WO2009112222A1; US9222212B2

Designated contracting state (EPC)
DE FR GB

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1783261 A1 20070509; CN 1962997 A 20070516; KR 20070048918 A 20070510; US 2007101511 A1 20070510

DOCDB simple family (application)
EP 06008119 A 20060419; CN 200610077261 A 20060428; KR 20050106000 A 20051107; US 40905106 A 20060424