

Title (en)  
WASHING MACHINE

Title (de)  
WASCHMASCHINE

Title (fr)  
MACHINE À LAVER

Publication  
**EP 3428339 A4 20190327 (EN)**

Application  
**EP 16893385 A 20161021**

Priority  
• JP 2016046418 A 20160310  
• JP 2016004652 W 20161021

Abstract (en)  
[origin: EP3428339A1] A washing machine according to the present disclosure includes: an outer tank elastically supported in a chassis; a washing tub rotatably provided in the outer tank; a motor that rotationally drives the washing tub; a centrifugal separator that centrifugally separates foreign substances contained in washing water in the outer tank; a water supply passage that returns the washing water in the outer tank into the outer tank through the centrifugal separator; a pump that circulates the washing water in the outer tank through the centrifugal separator provided on the water supply passage; and a controller that performs a washing operation by sequentially controlling each of a washing step, a rinsing step, and a spin-drying step. In the washing step, the controller causes the centrifugal separator to start centrifugal separation after hardness of washing water in the outer tank has decreased.

IPC 8 full level  
**D06F 33/36** (2020.01); **D06F 34/22** (2020.01); **D06F 39/08** (2006.01); **D06F 39/10** (2006.01)

CPC (source: EP US)  
**D06F 33/36** (2020.02 - EP US); **D06F 34/22** (2020.02 - EP US); **D06F 39/083** (2013.01 - EP US); **D06F 39/10** (2013.01 - EP US); **D06F 2103/20** (2020.02 - EP US); **D06F 2103/38** (2020.02 - EP US); **D06F 2105/02** (2020.02 - EP US); **D06F 2105/06** (2020.02 - EP US); **D06F 2105/48** (2020.02 - EP US); **D06F 2105/54** (2020.02 - EP US); **D06F 2105/58** (2020.02 - EP US)

Citation (search report)  
• [YA] CN 104862926 A 20150826 - HAIER GROUP TECH R & D CT, et al  
• [A] EP 2455529 A1 20120523 - PANASONIC CORP [JP]  
• [Y] JP 2005152212 A 20050616 - TOSHIBA CORP, et al  
• See references of WO 2017154053A1

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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3428339 A1 20190116; EP 3428339 A4 20190327**; CN 108699755 A 20181023; CN 108699755 B 20201110; JP 2017158817 A 20170914; JP 6634598 B2 20200122; WO 2017154053 A1 20170914

DOCDB simple family (application)  
**EP 16893385 A 20161021**; CN 201680083228 A 20161021; JP 2016004652 W 20161021; JP 2016046418 A 20160310