

Title (en)

APPARATUS AND METHOD FOR CIRCULATING CLEANING WATER FOR DRUM WASHING MACHINE

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ZIRKULATION VON WASCHWASSER FÜR EINE TROMMELWASCHMASCHINE

Title (fr)

APPAREIL ET PROCÉDÉ DE CIRCULATION D'EAU DE LESSIVE POUR MACHINE À LAVER À TAMBOUR

Publication

**EP 2339059 A2 20110629 (EN)**

Application

**EP 09810219 A 20090828**

Priority

- KR 2009004814 W 20090828
- KR 20080084214 A 20080828
- KR 20080084218 A 20080828

Abstract (en)

An apparatus and method for circulating cleaning water for drum washing machine is disclosed. The apparatus for circulating cleaning water includes a tub, a drain hose connected to the tub, a muddiness detecting sensor detecting a degree of muddiness of wash water being discharged through the drain hose after being used for rinsing laundry, a drain pump located in the drain hose to pump the wash water being discharged through the drain hose, a circulation hose connected to the drain hose at a discharge side of the drain pump to supply the wash water into a drum, a supply valve located at a connecting portion between the drain hose and the circulation hose to selectively supply the wash water pumped by the drain pump to the drain hose of a drain port side or to the circulation hose, and a controller controlling operations of the drain pump and the supply valve.

IPC 8 full level

**D06F 39/08** (2006.01); **D06F 33/02** (2006.01); **D06F 37/04** (2006.01); **D06F 39/00** (2006.01)

CPC (source: EP KR US)

**D06F 33/42** (2020.02 - KR); **D06F 33/46** (2020.02 - EP KR US); **D06F 34/22** (2020.02 - KR); **D06F 39/083** (2013.01 - EP KR US);  
**D06F 33/42** (2020.02 - EP US); **D06F 34/22** (2020.02 - EP US); **D06F 2103/20** (2020.02 - EP KR US); **D06F 2105/06** (2020.02 - EP KR US);  
**D06F 2105/08** (2020.02 - EP KR US)

Cited by

US11136703B2

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**US 2010223738 A1 20100909**; CN 102137968 A 20110727; CN 102137968 B 20121010; EP 2339059 A2 20110629; EP 2339059 A4 20120321;  
KR 20100027031 A 20100310; WO 2010024614 A2 20100304; WO 2010024614 A3 20100610

DOCDB simple family (application)

**US 54948509 A 20090828**; CN 200980133664 A 20090828; EP 09810219 A 20090828; KR 2009004814 W 20090828;  
KR 20090079951 A 20090827