

Title (en)
CIRCULATING DRAINAGE APPARATUS AND HOUSEHOLD APPLIANCE

Title (de)
ZIRKULIERENDE DRAINAGEVORRICHTUNG UND HAUSHALTSGERÄT

Title (fr)
APPAREIL DE DRAINAGE CIRCULANT ET APPAREIL MÉNAGER

Publication
EP 3026166 A1 20160601 (EN)

Application
EP 15196023 A 20151124

Priority
CN 201410706798 A 20141127

Abstract (en)

The present invention provides a circulating drainage apparatus comprising a shell (1), the shell (1) being provided with a filter chamber (2), a circulation pump chamber (3), and a drain pump chamber (4), and the filter chamber (2) being provided with a water flow inlet (21), a first outlet (22), and a second outlet (23), wherein the first outlet (22) is in communication with the drain pump chamber (4), and the second outlet (23) is in communication with the circulation pump chamber (3); a circulation drive motor (5), connected to the circulation pump chamber (3); a drain drive motor (6), connected to the drain pump chamber (4); and characterized in that, the filter chamber (2) is provided with a separating wall (71), to separate a space in the filter chamber (2) into a first chamber (24) that connects the water flow inlet (21) and the first outlet (22) and a second chamber (25) connected to the second outlet (23), the separating wall (71) is provided with filter pores, and the first chamber (24) is in fluid communication with the second chamber (25) via the filter pores. In a process of circulating water, a water stream flowing in from outside first enters the first chamber and then passes through the filter pores on the separating wall (71) to enter the second chamber, and after that, the water stream again enters the circulation pump chamber (3) via the second outlet (23). That is, the water stream entering the circulation pump chamber (3) must be first filtered by the separating wall (71), so that foreign substances in the water stream are collected on the separating wall (71). In a process of draining water, an external water stream washes the filtering wall (71) to carry the foreign substances into the drain pump chamber (4), so as to discharge the same from the washing machine, thereby implementing the function of automatically cleaning the separating wall (71). In this way, the user does not need to clean the filtered foreign substances in the circulating drainage apparatus manually.

IPC 8 full level
D06F 39/08 (2006.01); **D06F 39/10** (2006.01)

CPC (source: EP US)
D06F 39/083 (2013.01 - EP US); **D06F 39/10** (2013.01 - EP US)

Citation (applicant)
CN 202559120 U 20121128 - SAMSUNG ELECTRONICS CO LTD

Citation (search report)

- [X] US 2014014595 A1 20140116 - KOO RAJAN [AU], et al
- [XI] WO 2014089651 A1 20140619 - ELECTROLUX DO BRASIL SA [BR]
- [A] US 3727435 A 19730417 - MENK M
- [A] DE 1191781 B 19650429 - SIEMENS ELEKTROGERAETE GMBH
- [A] DE 10046349 A1 20020328 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
- [A] US 2012186306 A1 20120726 - KIM JIN DOO [KR], et al
- [A] KR 20080093493 A 20081022 - SAMSUNG ELECTRONICS CO LTD [KR]

Cited by
EP4086385A1; CN110123231A; EP3741904A1; EP3258002A1; EP3699348A1

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 3026166 A1 20160601; **EP 3026166 B1 20170531**; CN 105624989 A 20160601; CN 105624989 B 20190813; PL 3026166 T3 20171031

DOCDB simple family (application)
EP 15196023 A 20151124; CN 201410706798 A 20141127; PL 15196023 T 20151124