

Title (en)
Improved water-softening device

Title (de)
Verbesserte Wasserenthärtervorrichtung

Title (fr)
Dispositif adoucisseur amélioré

Publication
EP 2561790 A1 20130227 (EN)

Application
EP 12181443 A 20120823

Priority
IT TO20110775 A 20110825

Abstract (en)

The water-softening device for electrical household appliances comprises: a first tank (24) for containing substances with water-softening properties, having at least one inlet opening (26) for water to be softened and an outlet opening (28) for softened water; a second salt-containing tank (30), having at least one water inlet opening (32) and an outlet opening (34) for a regenerating brine formed following the dissolution of the salt in the water; a line (36) connecting the second tank (30) to the first tank (24) so that the brine formed in the second tank (30) can flow out towards the first tank (24); a water supply line (10) having a branch-off point (18) into a first branch (20) supplying the first tank (24) and into a second branch (22) which leads to the inlet opening (32) of the second tank (30); and a switching valve (38) with a shutter adapted to cause the water to flow into the first or second branch (20, 22). The valve (38) further comprises a passage (42) which puts into communication the water supply line (10) and the first branch (20) independently of the position of the shutter.

IPC 8 full level
A47L 15/42 (2006.01); **D06F 39/00** (2006.01)

CPC (source: EP US)
A47L 15/4229 (2013.01 - EP US); **D06F 39/007** (2013.01 - EP US)

Citation (applicant)

- WO 2005060817 A1 20050707 - BSH BOSCH SIEMENS HAUSGERAETE [DE], et al
- EP 1844693 A1 20071017 - BITRON SPA [IT]

Citation (search report)

- [AD] WO 2005060817 A1 20050707 - BSH BOSCH SIEMENS HAUSGERAETE [DE], et al
- [AD] EP 1844693 A1 20071017 - BITRON SPA [IT]
- [A] DE 3710511 A1 19881020 - BAUKNECHT HAUSGERAETE [DE]
- [A] DE 8511185 U1 19850523

Cited by

WO2014174451A1; WO2014174452A1; ITTO20130338A1; ITTO20130339A1; EP3756527A1; IT201900010461A1; DE202015007584U1; US10646098B2

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 2561790 A1 20130227; EP 2561790 B1 20141224; CN 102976500 A 20130320; CN 102976500 B 20160120; ES 2533302 T3 20150409;
IT TO20110775 A1 20130226; PL 2561790 T3 20150630

DOCDB simple family (application)

EP 12181443 A 20120823; CN 201210303604 A 20120823; ES 12181443 T 20120823; IT TO20110775 A 20110825; PL 12181443 T 20120823