

Title (en)
PHOSPHATE-FREE POLYMER DETERGENT COMPOSITION

Title (de)
PHOSPHATFREIE POLYMERREINIGUNGSZUSAMMENSETZUNG

Title (fr)
COMPOSITION DÉTERGENTE POLYMÉRIQUE SANS PHOSPHATE

Publication
EP 3469053 B1 20220525 (FR)

Application
EP 17812816 A 20170609

Priority
• FR 1655433 A 20160613
• FR 2017051457 W 20170609

Abstract (en)
[origin: CA3026011A1] The invention relates to the field of detergent compositions and, in particular, detergent compositions for automatic washing, especially for automatic dishwashers. The invention provides a phosphate-free detergent composition comprising at least one non-sulphonated, non-ionic surfactant compound, and one non-sulphonated water-soluble copolymer produced, in particular, by means of a polymerisation reaction of: acrylic or methacrylic acid; an ester of an acrylic or methacrylic acid, itaconic acid or maleic acid; and a compound of formula (I). The invention also relates to the use of said non-sulphonated, water-soluble copolymer as a scale inhibitor or water spot prevention agent, as well as to a cleaning method.

IPC 8 full level
C11D 3/37 (2006.01)

CPC (source: EP KR RU US)
A47L 15/0002 (2013.01 - KR RU); **C11D 1/66** (2013.01 - KR RU); **C11D 3/2075** (2013.01 - KR RU); **C11D 3/37** (2013.01 - RU); **C11D 3/3757** (2013.01 - EP KR US)

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

DOCDB simple family (publication)
FR 3052461 A1 20171215; FR 3052461 B1 20200110; BR 112018074038 A2 20190226; BR 112018074038 B1 20221116; CA 3026011 A1 20171221; CN 109312269 A 20190205; CN 109312269 B 20210302; EP 3469053 A2 20190417; EP 3469053 B1 20220525; ES 2924803 T3 20221011; KR 102377150 B1 20220322; KR 20190017759 A 20190220; MX 2018014307 A 20190225; PL 3469053 T3 20221114; RU 2019100429 A 20200715; RU 2019100429 A3 20200811; RU 2742092 C2 20210202; US 10865365 B2 20201215; US 2019177663 A1 20190613; WO 2017216452 A2 20171221; WO 2017216452 A3 20181129; ZA 201807741 B 20200527

DOCDB simple family (application)
FR 1655433 A 20160613; BR 112018074038 A 20170609; CA 3026011 A 20170609; CN 201780035924 A 20170609; EP 17812816 A 20170609; ES 17812816 T 20170609; FR 2017051457 W 20170609; KR 20187034584 A 20170609; MX 2018014307 A 20170609; PL 17812816 T 20170609; RU 2019100429 A 20170609; US 201716306630 A 20170609; ZA 201807741 A 20181116