

Title (en)

PROCESS FOR PRODUCING LOW-IN-WATER TO WATER-FREE LIQUID DETERGENT OR CLEANING AGENTS

Title (de)

VERFAHREN ZUR HERSTELLUNG WASSERARMER BIS WASSERFREIER FLÜSSIGER WASCH- ODER REINIGUNGSMITTEL

Title (fr)

PROCÉDÉ POUR LA PRÉPARATION DE DÉTERGENTS OU DE PRODUITS DE NETTOYAGE LIQUIDES, PAUVRES EN EAU À EXEMPTS D'EAU

Publication

EP 2929001 B1 20180131 (DE)

Application

EP 13732542 A 20130701

Priority

- DE 10201222266 A 20121205
- EP 2013063772 W 20130701

Abstract (en)

[origin: WO2014086504A1] The invention relates to a process for producing liquid, low-in-water to water-free detergents or cleaning agents, in particular a machine dishwashing detergent, which contain at least one sulfopolymer and at least one builder component, wherein, during the production, the at least one sulfopolymer is used in the form of an aqueous solution and the at least one builder component is used in solid form. The invention further relates to detergents and cleaning agents produced using said process and the use thereof.

IPC 8 full level

C11D 3/06 (2006.01); **C11D 3/33** (2006.01); **C11D 3/37** (2006.01); **C11D 11/00** (2006.01); **C11D 17/04** (2006.01)

CPC (source: EP US)

C11D 1/12 (2013.01 - US); **C11D 3/06** (2013.01 - EP US); **C11D 3/1226** (2013.01 - US); **C11D 3/33** (2013.01 - EP US); **C11D 3/378** (2013.01 - EP US); **C11D 11/0094** (2013.01 - EP US); **C11D 17/0004** (2013.01 - US); **C11D 17/043** (2013.01 - EP US)

Citation (opposition)

Opponent : Akzo Nobel Chemicals International B.V.

- US 2009227484 A1 20090910 - PREUSCHEN JUDITH [DE], et al
- WO 2010024468 A1 20100304 - PROCTER & GAMBLE [US], et al
- WO 2013120550 A1 20130822 - HENKEL AG & CO KGAA [DE]
- US 2010125046 A1 20100520 - DENOME FRANK WILLIAM [US], et al
- WO 03006594 A1 20030123 - HENKEL KGAA [DE], et al
- WO 2010063690 A1 20100610 - HENKEL AG & CO KGAA [DE], et al
- "Trilon M brochure", BASF TECHNICAL COMPANY, May 2007 (2007-05-01), pages 1 - 14
- "Acusol 588 datasheet", ROHMIHAAS, August 2004 (2004-08-01), pages 1 - 2

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)

DE 10201222266 A1 20140605; EP 2929001 A1 20151014; EP 2929001 B1 20180131; EP 2929001 B2 20211215; ES 2660245 T3 20180321; ES 2660245 T5 20220330; KR 20150096434 A 20150824; PL 2929001 T3 20180731; PL 2929001 T5 20220314; US 2015267153 A1 20150924; WO 2014086504 A1 20140612

DOCDB simple family (application)

DE 10201222266 A 20121205; EP 13732542 A 20130701; EP 2013063772 W 20130701; ES 13732542 T 20130701; KR 20157017620 A 20130701; PL 13732542 T 20130701; US 201514729221 A 20150603