

Title (en)
LAUNDRY DETERGENT COMPOSITION

Title (de)
WÄSCHEWASCHMITTELZUSAMMENSETZUNG

Title (fr)
COMPOSITION DE DÉTERGENT POUR LESSIVE

Publication
EP 3339419 A1 20180627 (EN)

Application
EP 17173007 A 20170526

Priority
EP 16206503 A 20161222

Abstract (en)
The present invention relates to a solid laundry detergent composition comprising: (a) from 20wt% to 39wt% deterative surfactant selected from anionic deterative surfactant and/or non-ionic deterative surfactant; (b) from 10wt% to 40wt% inorganic salts selected from sodium carbonate, sodium sesquicarbonate, sodium bicarbonate and any mixtures thereof; (c) optionally, from 10wt% to 40wt% citric acid and/or salts thereof; (d) from 0.01wt % to 20wt% dye transfer inhibitor (DTI) polymer selected from polyamine N-oxide polymers, copolymers of N-vinylpyrrolidone and N-vinylimidazole, polyvinylpyrrolidone polymers, polyvinylloxazolidones, polyvinylimidazoles, and any combination thereof, wherein at 1wt% dilution in de-ionised water at 20°C, the composition has a pH in the range of from 7.6 to 10.0; wherein at 1wt% dilution in de-ionised water at 20°C, the composition has a reserve alkalinity to pH 7.5 of greater than 3.0, wherein the composition is in the form of a coated laundry detergent particle that is curved and has perpendicular dimensions x, y and z, wherein x is from 0.5mm to 2.0mm, wherein y is from 2.0mm to 8.0mm, and wherein z is from 2.0mm to 8.0mm, wherein the coating comprises the inorganic salt (b), and wherein the core comprises the deterative surfactant (a).

IPC 8 full level
C11D 3/10 (2006.01); **C11D 3/386** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP)
C11D 1/02 (2013.01); **C11D 1/66** (2013.01); **C11D 1/83** (2013.01); **C11D 3/0021** (2013.01); **C11D 3/10** (2013.01); **C11D 3/2086** (2013.01); **C11D 3/3769** (2013.01); **C11D 3/3776** (2013.01); **C11D 3/386** (2013.01); **C11D 17/0039** (2013.01)

Citation (applicant)
• WO 2010122050 A2 20101028 - UNILEVER PLC [GB], et al
• US 2008293610 A1 20081127 - SHAW ANDREW [US], et al
• WO 2014071410 A1 20140508 - DANISCO US INC [US]
• WO 2007044993 A2 20070419 - GENENCOR INT [US], et al
• WO 2009058661 A1 20090507 - DANISCO US INC GENENCOR DIV [US], et al
• US 2014315775 A1 20141023 - HOMMES RONALDUS W J [NL], et al
• WO 2008007320 A2 20080117 - PROCTER & GAMBLE [US], et al
• WO 2009154933 A2 20091223 - PROCTER & GAMBLE [US], et al
• US 5352604 A 19941004 - WILSON CHARLES R [US], et al
• WO 2011140316 A1 20111110 - PROCTER & GAMBLE [US], et al
• WO 2011072117 A1 20110616 - PROCTER & GAMBLE [US], et al
• WO 2006002643 A2 20060112 - NOVOZYMES AS [DK], et al
• WO 2007144857 A1 20071221 - PROCTER & GAMBLE [US], et al
• WO 2010056652 A1 20100520 - PROCTER & GAMBLE [US], et al
• WO 2006090335 A1 20060831 - PROCTER & GAMBLE [US], et al
• WO 2013116261 A2 20130808 - PROCTER & GAMBLE [US]
• WO 2013171241 A1 20131121 - NOVOZYMES AS [DK]
• WO 2011084412 A1 20110714 - DANISCO US INC [US], et al
• WO 2013033318 A1 20130307 - DANISCO US INC [US], et al
• WO 2014089386 A1 20140612 - PROCTER & GAMBLE [US]
• WO 2009069077 A2 20090604 - PROCTER & GAMBLE [US], et al
• WO 2012054835 A1 20120426 - PROCTER & GAMBLE [US], et al
• WO 2008087497 A1 20080724 - PROCTER & GAMBLE [US], et al
• WO 2012166768 A1 20121206 - PROCTER & GAMBLE [US], et al
• NEEDLEMAN; WUNSCH, J. MOL. BIOL., vol. 48, 1970, pages 443 - 453
• RICE ET AL.: "EMBOSS: The European Molecular Biology Open Software Suite", TRENDS GENET., vol. 16, 2000, pages 276 - 277, XP004200114, DOI: doi:10.1016/S0168-9525(00)02024-2

Citation (search report)
• [I] WO 2013139702 A1 20130926 - UNILEVER PLC [GB], et al
• [A] WO 2015158723 A1 20151022 - NOVOZYMES AS [DK]
• [A] WO 2016041681 A1 20160324 - BASF SE [DE]
• [A] WO 2015189371 A1 20151217 - NOVOZYMES AS [DK]
• [A] WO 2016102356 A1 20160630 - NOVOZYMES AS [DK]
• [A] WO 2016041679 A1 20160324 - UNILEVER PLC [GB], et al
• [A] WO 0040691 A1 20000713 - PROCTER & GAMBLE [US], et al
• [A] US 5776879 A 19980707 - SHIH JENN S [US], et al

Cited by
CN114174486A; WO2020247582A1

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 3339419 A1 20180627

DOCDB simple family (application)
EP 17173007 A 20170526