

Title (en)

Manufacture of detergent granules by dry neutralisation

Title (de)

Herstellung von Waschmittelgranulat durch Trockenneutralisierung

Title (fr)

Fabrication de granules de détergent par neutralisation sèche

Publication

EP 2123744 A1 20091125 (EN)

Application

EP 08156714 A 20080522

Priority

EP 08156714 A 20080522

Abstract (en)

A process for the manufacture of detergent granules comprising anionic non-soap surfactant the process comprising the dry neutralisation of surfactant acid with habit modified Sodium Carbonate. A high active detergent granule comprising greater than 30 wt% anionic surfactant, the surfactant comprising a major part of non-soap anionic surfactant, habit modified Sodium Carbonate, and less than 10 wt% preferably zero, zeolite, is obtainable by the process.

IPC 8 full level

C11D 3/10 (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP)

C11D 3/10 (2013.01); **C11D 11/0088** (2013.01); **C11D 17/06** (2013.01)

Citation (applicant)

- GB 1369269 A 19741002 - COLGATE PALMOLIVE CO
- GB 2221695 A 19900214 - UNILEVER PLC [GB]
- WO 0228454 A2 20020411 - INSULET CORP [US]
- US 7053038 B2 20060530 - GROOT ANDREAS THEODORUS [NL], et al
- EP 1534812 A1 20050601 - KAO CORP [JP]
- EP 0221776 A2 19870513 - UNILEVER PLC [GB], et al
- WO 2006081930 A1 20060810 - UNILEVER PLC [GB], et al
- WO 2006081930 A1 20060810 - UNILEVER PLC [GB], et al
- J. AM. CHEM. SOC., vol. 60, 1938, pages 309

Citation (search report)

- [DA] WO 2006081930 A1 20060810 - UNILEVER PLC [GB], et al
- [DA] GB 1369269 A 19741002 - COLGATE PALMOLIVE CO
- [DA] EP 1534812 A1 20050601 - KAO CORP [JP]
- [DA] EP 0221776 A2 19870513 - UNILEVER PLC [GB], et al
- [A] WO 0017304 A1 20000330 - PROCTER & GAMBLE [US], et al
- [A] WO 9820104 A1 19980514 - PROCTER & GAMBLE [US]
- [A] EP 0936269 A1 19990818 - KAO CORP [JP]
- [A] WO 9206170 A1 19920416 - PROCTER & GAMBLE [US]

Cited by

WO2016041418A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2123744 A1 20091125; EP 2123744 B1 20100512; AR 071866 A1 20100721; AT E467674 T1 20100515; CN 101688158 A 20100331;
CN 101688158 B 20120530; DE 602008001252 D1 20100624; MX 2009012388 A 20100430; WO 2009141203 A1 20091126

DOCDB simple family (application)

EP 08156714 A 20080522; AR P090101826 A 20090521; AT 08156714 T 20080522; CN 200980000504 A 20090421;
DE 602008001252 T 20080522; EP 2009054757 W 20090421; MX 2009012388 A 20090421