

Title (en)
COLOURED PARTICLES FOR DETERGENTS AND PRODUCTION PROCESS THEREOF

Title (de)
GEFÄRBTE PARTIKEL FÜR WASCHMITTEL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
PARTICULES COLORÉES POUR DÉTERGENTS ET LEUR PROCÉDÉ DE PRODUCTION

Publication
EP 3318622 A1 20180509 (EN)

Application
EP 16020434 A 20161104

Priority
EP 16020434 A 20161104

Abstract (en)
Coloured particles for detergents and the process for obtaining them, that is the subject matter of this invention, comprising coloured particles of bentonite for detergents, preferably of a light colour or white, as the binding agent, sodium sulfate, water as the binder and pigment or liquid dye as the colouring agent and employing a characteristic production process, which comprises a phase of mixing the solids, a phase of metering the water and/or additives and a granulating phase. The product presented affords the advantages being faster-dissolving, having a better apparent density, a better colouring quality and a lower cost. Its production process simplifies the equipment to be used and reduces the number of phases, resulting in a more efficient process and a product of greater quality and better characteristics.

IPC 8 full level
C11D 3/12 (2006.01); **C11D 3/40** (2006.01); **C11D 11/00** (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP)
C11D 3/046 (2013.01); **C11D 3/40** (2013.01); **C11D 11/0082** (2013.01); **C11D 17/06** (2013.01)

Citation (applicant)
• US 711796 A 19021021 - TARBOX ALFRED B [US]
• GB 2172311 A 19860917 - COLGATE PALMOLIVE CO
• ES 2056643 T3 19941001 - HENKEL KGAA
• US 4609473 A 19860902 - RAMACHANDRAN PALLASSANA N [US], et al
• EP 2216389 A1 20100811 - KAO CORP [JP]
• ES 2416281 T3 20130731 - MINERA CATALANO ARAGONESA SAMCA SA [ES]
• EP 2009086 B1 20130327 - MINERA CATALANO ARAGONESA SAMCA SA [ES]

Citation (search report)
• [YD] EP 2216389 A1 20100811 - KAO CORP [JP]
• [YD] EP 2009086 A1 20081231 - MINERA CATALANO ARAGONESA SAMC [ES]
• [A] US 2011053823 A1 20110303 - FERNANDES GREGORY [US], et al
• [XY] DATABASE WPI Week 201263, Derwent World Patents Index; AN 2012-J52220, XP002770067
• [Y] CHRISTINA KLEIN: "Granulation", 7 January 2012 (2012-01-07), Hardheim, pages 1 - 19, XP055371718, Retrieved from the Internet <URL:www.eirichusa.com/images/downloads/downloads-page/Technical Docs_White Papers/Granulation Paper_C_Klein_2012.pdf> [retrieved on 20170511]
• [Y] SRINIVASAN SHANMUGAM: "Granulation techniques and technologies: recent progresses", BIOIMFACTS, vol. 5, no. 1, 1 February 2015 (2015-02-01), IR, pages 55 - 63, XP055298809, ISSN: 2228-5652, DOI: 10.15171/bi.2015.04

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 3318622 A1 20180509; EP 3318622 B1 20230705; ES 2953916 T3 20231117

DOCDB simple family (application)
EP 16020434 A 20161104; ES 16020434 T 20161104