

Title (en)

PROCESS FOR PREPARING A SPRAY DRIED DETERGENT PARTICLE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES SPRÜHGETROCKNETEN WASCHMITTELPARTIKELS

Title (fr)

PROCÉDÉ DE PRÉPARATION D'UNE PARTICULE DÉTERGENTE SÉCHÉE PAR PULVÉRISATION

Publication

**EP 4341368 A1 20240327 (EN)**

Application

**EP 22729211 A 20220517**

Priority

- EP 21174575 A 20210519
- EP 2022063252 W 20220517

Abstract (en)

[origin: WO2022243276A1] The present invention relates to a process for preparing a particulate, free flowing detergent particle by a slurry making and spray drying technique. It is thus an object of the present invention to provide a process for preparing a detergent solution for a spray-dried detergent particle which provides for incorporating a carbonate builder and silicate salt at optimum levels whilst provides good cleaning performance and good powder properties. The present inventors have surprisingly found that a spray-dried detergent particle exhibits extended shelf life and demonstrates excellent powder properties without getting caked during use, when the spray dried detergent particle is prepared by a process where an in-situ silicate and/or a disilicate a salt of an alkaline earth metal is formed by reacting an alkali metal silicate with an alkaline earth metal salt, and the spray dried detergent particle also includes an alkali metal silicate salt along with optimum detergative surfactant content, filler and carbonate builder, wherein the composition preferably has no phosphate builder and zeolite builder.

IPC 8 full level

**C11D 1/02** (2006.01); **C11D 3/04** (2006.01); **C11D 3/08** (2006.01); **C11D 3/10** (2006.01); **C11D 3/12** (2006.01); **C11D 11/02** (2006.01)

CPC (source: EP)

**C11D 1/02** (2013.01); **C11D 3/046** (2013.01); **C11D 3/08** (2013.01); **C11D 3/10** (2013.01); **C11D 11/02** (2013.01); **C11D 3/122** (2013.01);  
**C11D 3/1233** (2013.01)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2022243276 A1 20221124**; BR 112023024016 A2 20240206; CN 117255848 A 20231219; EP 4341368 A1 20240327

DOCDB simple family (application)

**EP 2022063252 W 20220517**; BR 112023024016 A 20220517; CN 202280032434 A 20220517; EP 22729211 A 20220517