

Title (en)

PROCESS FOR MANUFACTURING A POWDER WASHING OR CLEANING AGENT

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES PULVERFÖRMIGEN WASCH- ODER REINIGUNGSMITTELS

Title (fr)

PROCEDE DE FABRICATION D'UN DETERGENT OU NETTOYANT EN POUDRE

Publication

**EP 0815196 A1 19980107 (DE)**

Application

**EP 96906756 A 19960308**

Priority

- DE 19509752 A 19950317
- EP 9600994 W 19960308
- EP 9504950 W 19951214

Abstract (en)

[origin: WO9629389A1] The invention concerns the production of compressed washing or cleaning agents of high apparent density: a pre-mixture of washing agent components containing anionic surfactants, non-ionic surfactants, builders, and (optionally) alkalisation agents is produced and compressed; more than 50 wt.% of the non-ionic surfactants are fatty acid alkylester alkoxylates of formula (I):  $R_{<1>-}CO_2-(AO)_m-R_{<2>-}$ , (II):  $R_{<2>-}CO_2-(AO)_m-R_{<1>-}$  or (III), in which:  $R_{<1>-}$  stands for a branched or straight-chain, saturated or unsaturated alkyl group with 5-21 carbon atoms;  $R_{<2>-}$  stands for hydrogen or a straight-chain or branched alkyl group with 1-6 carbon atoms;  $R_{<3>-}$ ,  $R_{<4>-}$  and  $R_{<5>-}$  can be identical or different and can stand for hydrogen or the group (a) shown, in which  $R_{<6>-}$  can be a branched or straight-chain, saturated or unsaturated alkyl group with 5-21 carbon atoms; (a condition is that  $R_{<3>-}$ ,  $R_{<4>-}$  and  $R_{<5>-}$  may not all be hydrogen); AO stands for a C2-C4 alkylene oxide unit; m, n, o and p can be identical or different and stand for a number between 1 and 60, preferably 1 and 30, in particular 3 and 12. The process yields washing and cleaning agents of high pouring density and good solubility, without any deterioration in washing power.

IPC 1-7

**C11D 17/06**; **C11D 17/00**; **C11D 1/74**

IPC 8 full level

**C11D 1/74** (2006.01); **C11D 1/83** (2006.01); **C11D 17/00** (2006.01); **C11D 17/06** (2006.01); **C11D 1/14** (2006.01); **C11D 1/22** (2006.01); **C11D 1/52** (2006.01); **C11D 1/66** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP)

**C11D 1/74** (2013.01); **C11D 1/83** (2013.01); **C11D 17/0086** (2013.01); **C11D 17/065** (2013.01); **C11D 1/146** (2013.01); **C11D 1/22** (2013.01); **C11D 1/525** (2013.01); **C11D 1/662** (2013.01); **C11D 1/72** (2013.01)

Citation (search report)

See references of WO 9629389A1

Cited by

WO2013056898A1

Designated contracting state (EPC)

AT BE DE ES FR GB IT NL

DOCDB simple family (publication)

**WO 9629389 A1 19960926**; AT E183230 T1 19990815; DE 19509752 A1 19960919; DE 59602716 D1 19990916; EP 0815196 A1 19980107; EP 0815196 B1 19990811; ES 2136391 T3 19991116

DOCDB simple family (application)

**EP 9600994 W 19960308**; AT 96906756 T 19960308; DE 19509752 A 19950317; DE 59602716 T 19960308; EP 96906756 A 19960308; ES 96906756 T 19960308