

Title (en)

POWDER DETERGENT COMPOSITION FOR CLOTHES WASHING

Title (de)

PULVERFÖRMIGE REINIGUNGSMITTELZUSAMMENSETZUNG ZUM WÄSCHEWASCHEN

Title (fr)

DETERGENT EN POUDRE POUR LE NETTOYAGE DE VETEMENTS

Publication

EP 0874888 A1 19981104 (EN)

Application

EP 96938497 A 19961118

Priority

- JP 9603381 W 19961118
- JP 32799595 A 19951122

Abstract (en)

[origin: WO9719156A1] The powder detergent composition for clothes washing having a bulk density of 0.50 g/mL or more, including 5 % by weight or more of a crystalline sodium silicate represented by the general formula (1): $\text{Na}_2\text{O} \cdot x\text{SiO}_2 \cdot y\text{H}_2\text{O}$. In the formula, x and y each stands for a molar number, and x is from 1.5 to 2.2, and y is from 0 to 5. The crystalline sodium silicate has an average particle size of from 1 to 100 μm and comprises crystalline phases of a delta -phase and an alpha -phase, and at least one of a beta -phase and an NS-phase, wherein the compositional weight ratios of the alpha -phase, the beta -phase, and the delta -phase satisfy all of the following relationships: $0.05 \leq \text{alpha} / (\text{alpha} + \text{beta} + \text{delta}) \leq 0.20$; $0 \leq \text{beta} / (\text{alpha} + \text{beta} + \text{delta}) \leq 0.12$; and $0.78 \leq \text{delta} / (\text{alpha} + \text{beta} + \text{delta}) \leq 0.95$.

IPC 1-7

C11D 3/12; C11D 17/06

IPC 8 full level

C11D 3/12 (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP KR)

C11D 3/1273 (2013.01 - EP); **C11D 17/06** (2013.01 - KR); **C11D 17/065** (2013.01 - EP)

Citation (search report)

See references of WO 9719156A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 9719156 A1 19970529; CN 1109738 C 20030528; CN 1207761 A 19990210; DE 69629833 D1 20031009; DE 69629833 T2 20040715;
EP 0874888 A1 19981104; EP 0874888 B1 20030903; KR 100258495 B1 20000701; KR 19990071539 A 19990927; TW 371670 B 19991011

DOCDB simple family (application)

JP 9603381 W 19961118; CN 96199606 A 19961118; DE 69629833 T 19961118; EP 96938497 A 19961118; KR 19980703812 A 19980521;
TW 85114369 A 19961121