

Title (en)

PROCESS FOR THE PREPARATION OF A SPRAY-DRIED NON-IONIC DETERGENT ADDITIVE

Publication

EP 0167916 A3 19870701 (DE)

Application

EP 85107820 A 19850624

Priority

DE 3424299 A 19840702

Abstract (en)

[origin: US4661281A] A free-flowing washing powder of low specific gravity (powder density 300 to 500 g/l) and containing large quantities of nonionic surfactants is produced by spray-drying an aqueous suspension containing on the spray-dried basis (A) from 15 to 30% by weight of nonionic tensides, (B) from 8 to 18% by weight of sodium silicate, (C) from 25 to 55% by weight of finely crystalline zeolite, (D) from 0 to 25% by weight of sodium tripolyphosphate, (E) no more than 3% by weight of soap and synthetic anionic tensides, and from 35 to 50% by weight of water. The suspension, which has a temperature of from 75 DEG C. to 90 DEG C., is sprayed through nozzles into a drying zone under a pressure of from 35 to 100 bar. The drying gas flowing in countercurrent has an entry temperature of from 160 DEG C. to 240 DEG C. and an exit temperature of from 80 DEG C. to 95 DEG C. The spray-dried product contains from 9 to 16% by weight of water which is removable at a drying temperature of 130 DEG C.

IPC 1-7

C11D 11/02; **C11D 1/72**; **C11D 3/12**

IPC 8 full level

C11D 1/72 (2006.01); **C11D 3/12** (2006.01); **C11D 11/02** (2006.01)

CPC (source: EP US)

C11D 1/72 (2013.01 - EP US); **C11D 3/128** (2013.01 - EP US); **C11D 11/02** (2013.01 - EP US)

Citation (search report)

- [X] DE 2724349 A1 19781207 - HENKEL KGAA
- [Y] EP 0036162 A1 19810923 - HENKEL KGAA [DE]
- [A] FR 2340984 A1 19770909 - UNILEVER NV [NL]
- [A] EP 0061226 A1 19820929 - PROCTER & GAMBLE [US]
- [XP] EP 0120492 A2 19841003 - HENKEL KGAA [DE]

Designated contracting state (EPC)

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