

Title (en)

GRANULAR, FREE FLOWING DETERGENT COMPONENTS AND PROCESS FOR THEIR PREPARATION

Publication

EP 0120492 A3 19860219 (DE)

Application

EP 84103320 A 19840326

Priority

- DE 3310906 A 19830325
- DE 3344698 A 19831210
- US 54156983 A 19831013

Abstract (en)

[origin: EP0120492A2] The composition, granulated by spray drying, has a bulk density from 550 to 800 gr/liter and comprises, in addition to conventional additives, substantially non-ionic surface active agents and inorganic carrier substances. The physical aspect of the granulate obtained by spray-drying varies in general from the solidified droplet to the rod. The granulate contains from 10 to 28 % by weight of non-ionic surface active agents. The spray-drying is carried out under a pressure comprised between 16 and 30 bar, the opening diameter at the jet outlet being comprised between 3 and 5.5 mm, the viscosity values of the suspension being comprised between 2000 and 5000 mPa.s. On one hand, those products may either contain phosphates or be free of phosphates and, on the other hand, those products may be used for the suds, either directly and alone and without any other mixing agent, or in a mixture with the usual mixing agents, as a base of more complex detergent mixtures.

IPC 1-7

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

IPC 8 full level

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CPC (source: EP)

C11D 11/02 (2013.01); **C11D 17/065** (2013.01)

Citation (search report)

- [A] FR 1579247 A 19690822
- [A] DE 2724349 A1 19781207 - HENKEL KGAA
- [A] GB 2082620 A 19820310 - COLGATE PALMOLIVE CO
- [A] CHEMICAL ABSTRACTS, Band 93, Nr. 10, September 1980, Seite 117, Ref.Nr. 97309p, Columbus, Ohio, US; & JP - A - 80 62 999 (KAWAKEN FINE CHEMICALS CO. LTD.) 12.05.1980

Cited by

EP0327963A3; EP0167916A3; GB2231579A; US5767057A; EP0337330A3; EP0179264A1; EP0820762A1; WO9507339A1

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