

Title (en)

GRANULAR, FREE FLOWING DETERGENT COMPONENTS AND PROCESS FOR THEIR PREPARATION

Publication

EP 0120492 B1 19880713 (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

C11D 1/72 (2006.01); **C11D 11/02** (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP)

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

Cited by

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

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0120492 A2 19841003; **EP 0120492 A3 19860219**; **EP 0120492 B1 19880713**; BR 8406459 A 19850312; DE 3472682 D1 19880818; DK 161842 B 19910819; DK 161842 C 19920127; DK 553084 A 19841121; DK 553084 D0 19841121; WO 8403708 A1 19840927

DOCDB simple family (application)

EP 84103320 A 19840326; BR 8406459 A 19840326; DE 3472682 T 19840326; DK 553084 A 19841121; EP 8400085 W 19840326