

Title (en)

High bulk density granular detergent compositions and process for preparing them.

Title (de)

Granulare Detergenezusammensetzungen mit hohem Schüttgewicht und Verfahren zu ihrer Herstellung.

Title (fr)

Compositions détergentes granulaires à haute densité apparente et leur procédé de préparation.

Publication

**EP 0451894 B1 19950524 (EN)**

Application

**EP 91200662 A 19910325**

Priority

GB 9008013 A 19900409

Abstract (en)

[origin: EP0451894A1] There is provided a granular detergent composition or component having a bulk density of at least 600 g/land good dispensing properties, and comprising from 10 to 70% by weight of a builder, at least 50% by weight of said builder being a non-phosphate material, and from 5 to 45% by weight of a ternary active system comprising one or more nonionic surfactants, anionic surfactants and soap, whereby the weight ratio of the anionic surfactant to the nonionic surfactant is less than 5 : 1 and the amount of soap is from 10 to 90% by weight of the active system. There is also provided a process for preparing such compositions.

IPC 1-7

**C11D 10/04**; **C11D 11/00**; **C11D 17/06**

IPC 8 full level

**C11D 3/12** (2006.01); **C11D 10/04** (2006.01); **C11D 11/00** (2006.01); **C11D 17/06** (2006.01); **C11D 1/14** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP)

**C11D 3/128** (2013.01); **C11D 10/04** (2013.01); **C11D 11/00** (2013.01); **C11D 17/065** (2013.01); **C11D 1/14** (2013.01); **C11D 1/72** (2013.01)

Cited by

US5576285A; US5723428A; US5665691A; US5733862A; US6069124A; US5739097A; US5554587A; US5665692A; US5501810A; US6046153A; US5565137A; AU688277B2; US5914307A; US5565422A; US5496487A; US5486303A; US5668099A; US5574005A; US5516448A; USH1604H; EP0544365A1; US6093690A; US5691297A; US5707959A; US5569645A; US5489392A; US6534474B1; US6191095B1; US6610645B2; US6221831B1; US6303558B1; WO9321300A1; WO9532276A1; WO9606922A1; WO9520035A1; WO9806816A1; WO9854278A1; WO9500627A1; EP0660873B2

Designated contracting state (EPC)

CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

**EP 0451894 A1 19911016**; **EP 0451894 B1 19950524**; **EP 0451894 B2 20031126**; AU 7413391 A 19911010; BR 9101403 A 19911126; DE 69109922 D1 19950629; DE 69109922 T2 19951005; DE 69109922 T3 20040429; ES 2072524 T3 19950716; ES 2072524 T5 20040701; GB 9008013 D0 19900606; JP H04227700 A 19920817; JP H0798960 B2 19951025; ZA 912621 B 19921230

DOCDB simple family (application)

**EP 91200662 A 19910325**; AU 7413391 A 19910405; BR 9101403 A 19910408; DE 69109922 T 19910325; ES 91200662 T 19910325; GB 9008013 A 19900409; JP 16408191 A 19910409; ZA 912621 A 19910409