

Title (en)
HIGH-DENSITY GRANULATED DETERGENT COMPOSITION

Title (de)
GRANULIERTE WASCHMITTELZUSAMMENSETZUNG MIT HOHER DICHTE

Title (fr)
COMPOSITION DE DETERGENT GRANULEE HAUTE DENSITE

Publication
EP 0877080 A4 19990915 (EN)

Application
EP 97900466 A 19970121

Priority

- JP 9700112 W 19970121
- JP 856196 A 19960122
- JP 3378996 A 19960221

Abstract (en)
[origin: WO9727283A1] A high-density granulated detergent composition having a bulk density of 0.6 to 1.2 g/ml which comprises 0.5 to 30 wt.% of an aspartic acid-N,N-diacetic acid salt (a), 5 to 45 wt.% of a nonionic surfactant (b) having an HLB value of 10.5 to 15.0, 0.5 to 15 wt.% of an anionic surfactant (c), and 1 to 30 wt.% of an aluminosilicate (d), each percentage being based on the total weight of the composition, and in which the weight ratio of the component (b) to the component (c) is between 99:1 and 70:30. This composition contains an organic builder excellent in biodegradability together with an inorganic builder and exhibits high detergency.

IPC 1-7
C11D 17/06; C11D 3/33; C11D 3/37; C11D 10/02

IPC 8 full level
C11D 1/68 (2006.01); **C11D 1/72** (2006.01); **C11D 1/74** (2006.01); **C11D 3/12** (2006.01); **C11D 3/33** (2006.01); **C11D 3/37** (2006.01); **C11D 10/02** (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP)
C11D 3/128 (2013.01); **C11D 3/33** (2013.01); **C11D 17/065** (2013.01)

Citation (search report)

- [A] EP 0509382 A2 19921021 - GRACE W R & CO [US]
- [A] WO 9429421 A1 19941222 - BASF AG [DE], et al
- [A] DE 3739610 A1 19890601 - BASF AG [DE]
- [A] DATABASE WPI Section Ch Week 9316, Derwent World Patents Index; Class D25, AN 93-131475, XP002106828 & CHEMICAL ABSTRACTS, vol. 119, no. 18, 1 November 1993, Columbus, Ohio, US; abstract no. 183398, XP002106915
- See references of WO 9727283A1

Cited by
EP0999264A4

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 9727283 A1 19970731; DE 69709850 D1 20020228; DE 69709850 T2 20020822; EP 0877080 A1 19981111; EP 0877080 A4 19990915; EP 0877080 B1 20020102; JP 3221831 B2 20011022; JP H09263800 A 19971007

DOCDB simple family (application)
JP 9700112 W 19970121; DE 69709850 T 19970121; EP 97900466 A 19970121; JP 3378996 A 19960221