

Title (en)
LOW-CONCENTRATION HIGHLY VISCOUS LIQUID DETERGENTS

Title (de)
NIEDRIGKONZENTRIERTE HÖHERVISKOSE FLÜSSIGWASCHMITTEL

Title (fr)
DETERGENTS LIQUIDES TRES VISQUEUX ET FAIBLEMENT CONCENTRES

Publication
EP 1032645 B1 20020306 (DE)

Application
EP 98964403 A 19981117

Priority

- DE 19752163 A 19971126
- EP 9807344 W 19981117

Abstract (en)
[origin: US6342472B1] Low-concentration, highly viscous liquid detergents which maintain their degree of viscosity in storage in a range of climatic conditions, do not undergo any phase separation or agglomerate separation, and maintain their color under the influence of light. Liquid detergents with the desired properties contain 0.2 to 5 wt. % of a polyurethane or modified polyacrylate, 0.5 to 7 wt. % of a boron compound and 1 to 8 wt. % of a complexer.

IPC 1-7
C11D 17/00; **C11D 3/02**; **C11D 3/20**; **C11D 3/37**

IPC 8 full level
C11D 17/08 (2006.01); **C11D 3/02** (2006.01); **C11D 3/20** (2006.01); **C11D 3/37** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP KR US)
C11D 3/042 (2013.01 - EP US); **C11D 3/37** (2013.01 - KR); **C11D 3/3726** (2013.01 - EP US); **C11D 3/3765** (2013.01 - EP US);
C11D 17/003 (2013.01 - EP US)

Cited by
KR100376284B1; DE102007036910A1

Designated contracting state (EPC)
AT BE DE ES FR GB IT NL

DOCDB simple family (publication)
US 6342472 B1 20020129; AT E214092 T1 20020315; DE 19752163 A1 19990527; DE 59803303 D1 20020411; EP 1032645 A1 20000906; EP 1032645 B1 20020306; ES 2173661 T3 20021016; HU 228345 B1 20130328; HU P0100078 A2 20010528; HU P0100078 A3 20021128; JP 2001525453 A 20011211; JP 4361678 B2 20091111; KR 100567607 B1 20060404; KR 20010032541 A 20010425; PL 187488 B1 20040730; PL 340621 A1 20010212; WO 9928430 A1 19990610

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US 55514700 A 20000815; AT 98964403 T 19981117; DE 19752163 A 19971126; DE 59803303 T 19981117; EP 9807344 W 19981117; EP 98964403 A 19981117; ES 98964403 T 19981117; HU P0100078 A 19981117; JP 2000523309 A 19981117; KR 20007005784 A 20000526; PL 34062198 A 19981117