

Title (en)

BUILDER-FREE LIQUID DETERGENTS WITH SOFTENING PROPERTIES

Publication

**EP 0201016 B1 19900117 (DE)**

Application

**EP 86105800 A 19860426**

Priority

DE 3516091 A 19850504

Abstract (en)

[origin: US4717507A] A liquid, readily pourable detergent concentrate having fabric-softening properties is free from builder salts and contains the following constituents: (a) from about 5 to about 15% by weight of sodium alkylbenzene sulfonate, (b) from about 7 to about 20% by weight of ethoxylated alcohols containing from 12 to 18 carbon atoms in the alcohol residue and from 5 to 10 glycol ether groups, (c) from about 6 to about 16% by weight, based on the weight of the fatty acids used to form the soap, of saturated or monounsaturated fatty acids containing from 12 to 18 C-atoms, present as a water-soluble soap, (d) from about 7 to about 15% by weight of a fatty acid diethanolamide derived from C16-C18 fatty acids of which at least 50% are monounsaturated, (e) from about 0.2 to about 3% by weight of sequestering agents, (f) from about 5 to about 15% by weight of low molecular weight alcohols and from about 25 to about 45% by weight of water. The ratio by weight of (a) to (b) to (c) to (d) is in the range of 1:(1-2):(1-2):(1.5-2.5).

IPC 1-7

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

IPC 8 full level

**C11D 1/22** (2006.01); **C11D 1/72** (2006.01); **C11D 3/00** (2006.01); **C11D 3/20** (2006.01); **C11D 3/32** (2006.01); **C11D 3/34** (2006.01); **C11D 9/02** (2006.01); **C11D 10/00** (2006.01); **C11D 10/04** (2006.01); **C11D 17/00** (2006.01); **C11D 1/14** (2006.01); **C11D 1/52** (2006.01)

CPC (source: EP US)

**C11D 3/0015** (2013.01 - EP US); **C11D 10/04** (2013.01 - EP US); **C11D 1/14** (2013.01 - EP US); **C11D 1/523** (2013.01 - EP US); **C11D 1/72** (2013.01 - EP US)

Citation (examination)

GB 1104441 A 19680228 - UNILEVER LTD

Cited by

EP0353973A3; EP0592947A1; EP0534009A1; WO9900479A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

**EP 0201016 A2 19861112; EP 0201016 A3 19870923; EP 0201016 B1 19900117**; AT E49608 T1 19900215; DE 3668330 D1 19900222; ES 554587 A0 19881116; ES 8900056 A1 19881116; JP S61255999 A 19861113; US 4717507 A 19880105

DOCDB simple family (application)

**EP 86105800 A 19860426**; AT 86105800 T 19860426; DE 3668330 T 19860426; ES 554587 A 19860430; JP 9951586 A 19860501; US 86027586 A 19860505