

Title (en)  
DETERGENT COMPOUND

Title (de)  
WASCHMITTELVERBINDUNG

Title (fr)  
COMPOSE DETERGENT

Publication  
**EP 0975720 A4 20020821 (EN)**

Application  
**EP 98906216 A 19980211**

Priority  
• GB 9702731 A 19970211  
• US 9802366 W 19980211

Abstract (en)  
[origin: GB2321900A] Cationic surfactants containing at least one quaternary amine group and at least one primary, secondary or tertiary amine group may be used in cleaning or detergent compositions.

IPC 1-7  
**C11D 1/40**; **C11D 1/42**; **C11D 1/44**; **C11D 1/48**; **C11D 1/62**

IPC 8 full level  
**C07C 209/00** (2006.01); **C07C 211/63** (2006.01); **C11D 1/62** (2006.01); **C11D 1/65** (2006.01); **C11D 3/37** (2006.01); **C11D 3/39** (2006.01); **C11D 3/43** (2006.01); **C11D 17/06** (2006.01); **C11D 1/14** (2006.01); **C11D 1/22** (2006.01)

CPC (source: EP)  
**C07C 211/63** (2013.01); **C11D 1/62** (2013.01); **C11D 1/65** (2013.01); **C11D 3/3723** (2013.01)

Citation (search report)  
• [X] US 5259990 A 19931109 - SCHLUETER JR EDWARD L [US], et al  
• [X] US 4824867 A 19890425 - SMITH KIM R [US], et al  
• [X] BYUNG-HO CHUNG ET AL: "Regiospezifische N-Monoalkylierungen ditertiärer Diamine", ARCHIV DER PHARMAZIE, VCH VERLAGSGESELLSCHAFT MBH, WEINHEIM, DE, vol. 317, no. 4, 1984, pages 307 - 314, XP000925810, ISSN: 0365-6233  
• [X] JOYNES D ET AL: "Novel polymerizable mono- and divalent quaternary ammonium cationic surfactants: I. Synthesis, structural characterization and homopolymerization", POLYMER, ELSEVIER SCIENCE PUBLISHERS B.V, GB, vol. 37, no. 8, 1996, pages 1453 - 1462, XP004069337, ISSN: 0032-3861  
• See references of WO 9835003A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)  
**GB 2321900 A 19980812**; **GB 9702731 D0 19970402**; AU 6149698 A 19980826; BR 9807832 A 20000919; CA 2279882 A1 19980813; CN 1252091 A 20000503; EP 0975720 A1 20000202; EP 0975720 A4 20020821; JP 2001511209 A 20010807; WO 9835003 A1 19980813

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**GB 9702731 A 19970211**; AU 6149698 A 19980211; BR 9807832 A 19980211; CA 2279882 A 19980211; CN 98804060 A 19980211; EP 98906216 A 19980211; JP 53493598 A 19980211; US 9802366 W 19980211