

Title (en)  
Acidic cleaning compositions

Title (de)  
Saure Reinigungszusammensetzungen

Title (fr)  
Compositions de nettoyage acides

Publication  
**EP 0808891 A1 19971126 (EN)**

Application  
**EP 96201366 A 19960521**

Priority  
EP 96201366 A 19960521

Abstract (en)  
The present invention is a liquid acidic composition comprising an acid, and a surfactant system comprising from 0.01% to 10% by weight of the total composition of an amine oxide according to the formula R<sub>1</sub>R<sub>2</sub>R<sub>3</sub>NO, wherein each of R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> is independently a saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl group of from 1 to 30 carbon atoms, and from 0.01% to 10% by weight of the total composition of an amine according to the formula RR'R"N, wherein R is a saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl group of from 1 to 30 carbon atoms, and wherein R' and R" are independently saturated or unsaturated, substituted or unsubstituted, linear or branched alkyl groups of from 1 to 30 carbon atoms, or hydrogen. Said compositions deliver excellent limescale removal performance as well as outstanding greasy soap scum cleaning on hard-surfaces.

IPC 1-7  
**C11D 1/835**; **C11D 3/20**; **C11D 1/40**; **C11D 1/75**; **C11D 3/34**; **C11D 3/02**

IPC 8 full level  
**C11D 1/62** (2006.01); **C11D 1/75** (2006.01); **C11D 1/835** (2006.01); **C11D 3/02** (2006.01); **C11D 3/04** (2006.01); **C11D 3/20** (2006.01); **C11D 3/30** (2006.01); **C11D 3/34** (2006.01); **C11D 17/08** (2006.01); **C11D 1/40** (2006.01)

CPC (source: EP)  
**C11D 1/75** (2013.01); **C11D 1/835** (2013.01); **C11D 3/042** (2013.01); **C11D 3/2075** (2013.01); **C11D 3/2082** (2013.01); **C11D 3/2086** (2013.01); **C11D 3/30** (2013.01); **C11D 1/40** (2013.01)

Citation (search report)  
• [Y] EP 0666305 A1 19950809 - PROCTER & GAMBLE [US]  
• [Y] GB 2071688 A 19810923 - JEYES LTD  
• [A] WO 9613565 A1 19960509 - PROCTER & GAMBLE [US]  
• [A] WO 9533024 A1 19951207 - PROCTER & GAMBLE [US], et al  
• [DA] EP 0253676 A2 19880120 - R & C PRODUCTS PTY LTD [AU]  
• [A] EP 0666303 A1 19950809 - PROCTER & GAMBLE [US]  
• [Y] EP 0666304 A1 19950809 - PROCTER & GAMBLE [US]  
• [Y] ROERIG, H. ET AL: "Cationic surfactants in organic acid-based hard surface cleaners", COMUN. JORN. COM. ESP. DETERG., vol. 21, 1990, SEVILLA ES, pages 191 - 206, XP000196765

Cited by  
WO2011104000A1

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)  
**EP 0808891 A1 19971126**; CA 2255722 A1 19971127; JP H11514696 A 19991214; WO 9744421 A1 19971127

DOCDB simple family (application)  
**EP 96201366 A 19960521**; CA 2255722 A 19970516; JP 54258697 A 19970516; US 9708353 W 19970516