

Title (en)
DISH CLEANING AGENT

Publication
EP 0171008 A3 19890503 (DE)

Application
EP 85109466 A 19850727

Priority
DE 3428833 A 19840804

Abstract (en)
[origin: EP0171008A2] The agents can be used in machines at low temperatures. They contain alkali metal di- or triphosphates, zeolites or organic complexing agents for calcium, alkali metal metasilicate, sodium carbonate, sodium bicarbonate, waterglass, compounds which release active oxygen, a low-foam, non-ionic surfactant, 0.1 to 5% by weight of a hydrolase enzyme (amylases, proteases, lipases) and as cleaning enhancer 0.1 to 5% by weight of high molecular weight terminal or non-terminal epoxyalkanes which are reacted with 1 mole of mono- or diethanolamine per mole of alkane and are optionally alkoxylated with 1 to 5 mole of ethylene oxide or propylene oxide.

IPC 1-7
C11D 3/386; **C11D 3/30**; **C11D 3/37**; **C11D 3/06**

IPC 8 full level
C11D 1/52 (2006.01); **C11D 3/06** (2006.01); **C11D 3/30** (2006.01); **C11D 3/37** (2006.01); **C11D 3/386** (2006.01)

CPC (source: EP)
C11D 3/30 (2013.01); **C11D 3/3703** (2013.01); **C11D 3/3707** (2013.01); **C11D 3/38609** (2013.01); **C11D 3/38627** (2013.01)

Citation (search report)
• [A] FR 1600256 A 19700720
• [A] FR 2518567 A1 19830624 - COLGATE PALMOLIVE CO [US]
• [AP] WO 8404324 A1 19841108 - EKA AB [SE]
• [A] US 4101457 A 19780718 - PLACE GEOFFREY, et al
• [A] DE 2062465 A1 19720622
• [AP] EP 0135227 A2 19850327 - UNILEVER NV [NL], et al

Cited by
US4931217A; US4935561A; WO9716408A1; EP0271155B2

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

DOCDB simple family (publication)
EP 0171008 A2 19860212; **EP 0171008 A3 19890503**; **EP 0171008 B1 19910227**; AT E61066 T1 19910315; DE 3428833 A1 19860213; DE 3581857 D1 19910404; JP S6142596 A 19860301

DOCDB simple family (application)
EP 85109466 A 19850727; AT 85109466 T 19850727; DE 3428833 A 19840804; DE 3581857 T 19850727; JP 17130685 A 19850805