

Title (en)
HARD SURFACE CLEANING COMPOSITIONS COMPRISING POLYMERS

Title (de)
POLYMERE ENTHALTENDE REINIGUNGSMITTEL FÜR HARTE OBERFLÄCHEN

Title (fr)
COMPOSITIONS NETTOYANTES POUR SURFACES DURES, COMPRENANT DES POLYMERES

Publication
EP 0699226 B2 20011107 (EN)

Application
EP 94915114 A 19940426

Priority
• EP 9401290 W 19940426
• GB 9310365 A 19930518

Abstract (en)
[origin: WO9426858A1] Use of certain, relatively long chain, anionic water-soluble polymers in acidic or neutral surfactant compositions brings a primary cleaning benefit in addition to a secondary (anti-soiling) benefit. Commonplace acrylic, methacrylic and maleic anhydride derived polymers exhibit this effect in acidic solutions of nonionic surfactants to the same extent as expensive, quaternised cationic polymers. The invention provides liquid cleaning composition of pH 2-8, comprising: a) 1-30 %wt nonionic surfactant; b) 0.005-5 %wt of a water soluble, anionic polymer having an average molecular weight less than 1,000,000, said polymer being free of quaternary nitrogen groups.

IPC 1-7
C11D 1/72; **C11D 3/37**

IPC 8 full level
C11D 1/66 (2006.01); **C11D 1/68** (2006.01); **C11D 1/72** (2006.01); **C11D 3/37** (2006.01)

CPC (source: EP)
C11D 1/72 (2013.01); **C11D 3/3765** (2013.01)

Citation (opposition)
Opponent :
• EP 0308221 A1 19890322 - ROHM & HAAS [US]
• US 5118436 A 19920602 - AOYAGI MUNEO [JP], et al
• US 4569782 A 19860211 - DISCH KARLHEINZ [DE], et al
• US 5205960 A 19930427 - KRISTOPEIT KAREN K [US], et al
• EP 0379256 A2 19900725 - COLGATE PALMOLIVE CO [US]
• EP 0467472 A2 19920122 - COLGATE PALMOLIVE CO [US]
• US 4797223 A 19890110 - AMICK DAVID R [US], et al

Cited by
EP2981601B1

Designated contracting state (EPC)
CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)
WO 9426858 A1 19941124; AU 6648394 A 19941212; AU 698794 B2 19981105; BR 9406406 A 19951219; CA 2161324 A1 19941124; CA 2161324 C 20050118; CZ 302495 A3 19960313; DE 69401815 D1 19970403; DE 69401815 T2 19970612; DE 69401815 T3 20020404; EP 0699226 A1 19960306; EP 0699226 B1 19970226; EP 0699226 B2 20011107; ES 2098939 T3 19970501; GB 9310365 D0 19930630; HU 217990 B 20000528; HU 9501991 D0 19950928; HU T73043 A 19960628; IN 181393 B 19980606; JP 2750001 B2 19980513; JP H08510276 A 19961029; KR 100221768 B1 19990915; PL 178776 B1 20000630; PL 311696 A1 19960304; SK 140195 A3 19960306; SK 280781 B6 20000711; TW 442567 B 20010623; ZA 943260 B 19951113

DOCDB simple family (application)
EP 9401290 W 19940426; AU 6648394 A 19940426; BR 9406406 A 19940426; CA 2161324 A 19940426; CZ 302495 A 19940426; DE 69401815 T 19940426; EP 94915114 A 19940426; ES 94915114 T 19940426; GB 9310365 A 19930518; HU 9501991 A 19940426; IN 213BO1994 A 19940513; JP 52486394 A 19940426; KR 19950705131 A 19951117; PL 31169694 A 19940426; SK 140195 A 19940426; TW 83105545 A 19940620; ZA 943260 A 19940511