

Title (en)
SILVER-CORROSION PROTECTION AGENT (II)

Title (de)
SILBERKORROSIONSSCHUTZMITTEL II

Title (fr)
PRODUITS DE PROTECTION DE L'ARGENT CONTRE LA CORROSION II

Publication
EP 0697036 B1 19990728 (DE)

Application
EP 94917579 A 19940502

Priority
• DE 4315397 A 19930508
• DE 4338724 A 19931112
• EP 9401387 W 19940502

Abstract (en)
[origin: WO9426860A1] The invention concerns the use of organic redox compounds, in particular ascorbic acid, indole, methionine, N-(C1-C4 alkyl) glycines, 2-phenylglycine or coupler and/or development compounds selected from the group comprising diaminopyridines, aminohydroxypyridines, dihydroxypyridines, heterocyclic hydrazones, aminohydroxypyrimidines, dihydroxypyrimidines, tetraaminopyrimidines, triaminohydroxypyrimidines, diaminodihydroxypyrimidines, dihydroxynaphthalines, naphthols, pyrazolones, hydroxyquinolines, aminoquinolines, primary aromatic amines which have, in addition, a free hydroxy or amino group, or a hydroxy or amino group substituted with C1-C4 alkyl or C2-C4 hydroxyalkyl groups, at the ortho, meta or para position, and di- or trihydroxybenzenes as silver-corrosion protection agents in dishwasher washing agents, in particular low-alkali dishwasher washing agents.

IPC 1-7
C11D 3/00; **C11D 3/20**; **C11D 3/28**; **C11D 3/30**; **C11D 3/33**; **C11D 3/34**; **C11D 17/06**

IPC 8 full level
C11D 3/00 (2006.01); **C11D 3/02** (2006.01); **C11D 3/12** (2006.01); **C11D 3/20** (2006.01); **C11D 3/28** (2006.01); **C11D 3/30** (2006.01); **C11D 3/33** (2006.01); **C11D 3/34** (2006.01); **C11D 3/36** (2006.01); **C11D 17/00** (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP)
C11D 3/0042 (2013.01); **C11D 3/0073** (2013.01); **C11D 3/046** (2013.01); **C11D 3/048** (2013.01); **C11D 3/1213** (2013.01); **C11D 3/122** (2013.01); **C11D 3/2065** (2013.01); **C11D 3/2079** (2013.01); **C11D 3/2086** (2013.01); **C11D 3/2096** (2013.01); **C11D 3/28** (2013.01); **C11D 3/30** (2013.01); **C11D 3/33** (2013.01); **C11D 3/349** (2013.01); **C11D 3/361** (2013.01); **C11D 3/38609** (2013.01); **C11D 3/3907** (2013.01); **C11D 17/0039** (2013.01); **C11D 17/0091** (2013.01); **C11D 17/065** (2013.01); **C11D 3/2058** (2013.01); **C11D 3/3472** (2013.01)

Citation (examination)
• EP 0346112 A2 19891213 - PROCTER & GAMBLE [US]
• WO 9407981 A1 19940414 - HENKEL KGAA [DE], et al
• WO 9416045 A1 19940721 - UNILEVER PLC [GB], et al

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

DOCDB simple family (publication)
WO 9426860 A1 19941124; AT E182615 T1 19990815; CA 2162459 A1 19941124; CZ 262595 A3 19960214; CZ 287850 B6 20010214; DE 59408548 D1 19990902; DK 0697036 T3 20000131; EP 0697036 A1 19960221; EP 0697036 B1 19990728; ES 2134944 T3 19991016; HU 218008 B 20000528; HU 218021 B 20000528; HU 9503200 D0 19960129; HU 9503201 D0 19951228; HU T73025 A 19960628; HU T73028 A 19960628; JP H08509778 A 19961015; PL 177935 B1 20000131; PL 311624 A1 19960304

DOCDB simple family (application)
EP 9401387 W 19940502; AT 94917579 T 19940502; CA 2162459 A 19940602; CZ 262595 A 19940502; DE 59408548 T 19940502; DK 94917579 T 19940502; EP 94917579 A 19940502; ES 94917579 T 19940502; HU 9503200 A 19940502; HU 9503201 A 19940502; JP 52488894 A 19940502; PL 31162494 A 19940502