

Publication

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Application

**EP 97905571 A 19970109**

Priority

- GB 9600553 A 19960111
- US 9700471 W 19970109

Abstract (en)

[origin: GB2309032A] There is provided a bismuth diphosphonate compound by which is meant essentially any salt or complex of bismuth with essentially any nitrogen-free organic diphosphonic acids wherein the molar ratio of bismuth to diphosphonate components is from 1:0.7 to 1:7. Bleaching and detergent compositions adapted for use in machine dishwashing having reduced silver-tarnishing, as well as good cleaning performance are also provided which contain an oxygen bleach and the bismuth diphosphonate compound. Preferred processes for making the compositions are described.

IPC 1-7

**C11D 7/18**

IPC 8 full level

**C07F 9/38** (2006.01); **C07F 9/94** (2006.01); **C11D 3/00** (2006.01); **C11D 3/36** (2006.01); **C11D 3/39** (2006.01)

CPC (source: EP)

**C07F 9/386** (2013.01); **C07F 9/94** (2013.01); **C11D 3/0073** (2013.01); **C11D 3/361** (2013.01); **C11D 3/3932** (2013.01)

Citation (search report)

- [PX] WO 9622348 A1 19960725 - PROCTER & GAMBLE [US], et al
- [X] US 4517060 A 19850514 - DETTKE MANFRED [DE], et al
- [A] CH 673033 A5 19900131 - COSMINA AG
- [A] GB 1586067 A 19810318 - PROCTER & GAMBLE
- [A] EP 0070587 A1 19830126 - PROCTER & GAMBLE [US]
- See references of WO 9725405A1

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 2309032 A 19970716**; **GB 9600553 D0 19960313**; BR 9706928 A 19990720; CA 2242418 A1 19970717; EP 0948593 A1 19991013; EP 0948593 A4 19991013; WO 9725405 A1 19970717

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