

Title (en)
THIXOTROPIC AQUEOUS LIQUID AUTOMATIC DISHWASHING DETERGENT COMPOSITION

Publication
EP 0314050 A3 19910327 (EN)

Application
EP 88117692 A 19881025

Priority
• US 11491187 A 19871030
• US 10220587 A 19870929

Abstract (en)
[origin: EP0314050A2] Thixotropic aqueous liquid automatic dishwashing detergent composition with improved anti-filming properties and method of using the detergent composition. The detergent composition comprises alumina or titanium dioxide anti-filming agent, inorganic builder salts, chlorine bleach, bleach-stable detergent and a thixotropic thickener. The compositions provide reduced filming on dishware, glassware, china and the like, particularly in hard water, and remain stable against phase separation.

IPC 1-7
C11D 17/00; C11D 3/12

IPC 8 full level
C09K 3/00 (2006.01); **C11D 3/12** (2006.01); **A47L 15/00** (2006.01); **C11D 3/395** (2006.01); **C11D 10/02** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP)
C11D 3/1213 (2013.01); **C11D 3/124** (2013.01); **C11D 3/3956** (2013.01); **C11D 17/003** (2013.01)

Citation (search report)
• [X] EP 0206534 A1 19861230 - CLOROX CO [US]
• [XD] GB 2140450 A 19841128 - COLGATE PALMOLIVE CO
• [X] GB 2184454 A 19870624 - COLGATE PALMOLIVE CO
• [A] GB 2176495 A 19861231 - COLGATE PALMOLIVE CO
• [AP] EP 0252708 A2 19880113 - UNILEVER PLC [GB], et al

Cited by
EP0718630A1; EP0460810A1; US5094771A; EP0365271A3; WO0195864A1; WO0118167A1; WO0146377A1; WO0127236A1

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EP 0314050 A2 19890503; EP 0314050 A3 19910327; AT 397389 B 19940325; AT A240688 A 19930815; AU 2446888 A 19890504; AU 630860 B2 19921112; BE 1002929 A5 19910827; BR 8805014 A 19890509; CA 1317846 C 19930518; CA 1318214 C 19930525; CH 677931 A5 19910715; DE 3833378 A1 19890503; DK 545188 A 19890330; DK 545188 D0 19880929; DK 605388 A 19890501; DK 605388 D0 19881028; ES 2010379 A6 19891101; FI 884463 A0 19880928; FI 884463 A 19890330; FI 884992 A0 19881028; FI 884992 A 19890501; FR 2621046 A1 19890331; FR 2621046 B1 19940506; GB 2210382 A 19890607; GB 2210382 B 19920102; GB 8822856 D0 19881102; GR 1000495 B 19920730; GR 880100646 A 19890622; IL 87842 A0 19890331; IL 87842 A 19920525; IL 88168 A0 19890630; IL 88168 A 19920525; IT 1224540 B 19901004; IT 8848391 A0 19880928; JP H01132696 A 19890525; JP H01163300 A 19890627; LU 87356 A1 19890406; MX 169812 B 19930727; MX 169908 B 19930730; NL 8802359 A 19890417; NO 172293 B 19930322; NO 172293 C 19930630; NO 884301 D0 19880928; NO 884301 L 19890330; NO 884828 D0 19881028; NO 884828 L 19890502; NZ 226289 A 19900926; NZ 226711 A 19910226; PT 88598 A 19881001; PT 88598 B 19921130; PT 88884 B 19930129; SE 8803411 D0 19880927; SE 8803411 L 19890330; ZA 887068 B 19900530; ZA 888076 B 19900627

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EP 88117692 A 19881025; AT 240688 A 19880929; AU 2446888 A 19881028; BE 8801109 A 19880928; BR 8805014 A 19880928; CA 578629 A 19880928; CA 581584 A 19881028; CH 361788 A 19880929; DE 3833378 A 19880928; DK 545188 A 19880929; DK 605388 A 19881028; ES 8802943 A 19880928; FI 884463 A 19880928; FI 884992 A 19881028; FR 8812702 A 19880928; GB 8822856 A 19880929; GR 880100646 A 19880929; IL 8784288 A 19880923; IL 8816888 A 19881026; IT 4839188 A 19880928; JP 24586088 A 19880929; JP 27594888 A 19881031; LU 87356 A 19880929; MX 1319388 A 19880928; MX 1363288 A 19881031; NL 8802359 A 19880926; NO 884301 A 19880928; NO 884828 A 19881028; NZ 22628988 A 19880921; NZ 22671188 A 19881025; PT 8859888 A 19880927; PT 8888488 A 19881028; SE 8803411 A 19880927; ZA 887068 A 19880921; ZA 888076 A 19881027