

Title (en)  
LIQUID DETERGENT PRODUCT

Publication  
**EP 0381261 A3 19910306 (EN)**

Application  
**EP 90200154 A 19900122**

Priority  
• GB 8902011 A 19890130  
• GB 8906836 A 19890323  
• GB 8907877 A 19890407

Abstract (en)  
[origin: EP0381261A2] A non-aqueous liquid detergent comprises a liquid phase which preferably includes a nonionic surfactant and a dispersed particulate phase which includes a carbonate, or mixed carbonate/bicarbonate builder and a carboxylic acid polymer, such as a maleic/acrylic copolymer, as a calcium carbonate crystal growth inhibitor. The compositions exhibit good physical stability and performance. Other ingredients such as an oxygen bleach system and lipase enzymes may also be present.

IPC 1-7  
**C11D 17/00**; **C11D 3/10**; **C11D 3/37**; **C11D 3/386**

IPC 8 full level  
**C11D 10/02** (2006.01); **C11D 3/10** (2006.01); **C11D 3/37** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP)  
**C11D 3/10** (2013.01); **C11D 3/3765** (2013.01); **C11D 17/0004** (2013.01)

Citation (search report)  
• [Y] EP 0028849 A1 19810520 - UNILEVER NV [NL], et al  
• [A] EP 0126551 A1 19841128 - UNILEVER NV [NL]  
• [Y] JOURNAL OF THE AMERICAN OIL CHEMISTS' SOCIETY vol. 65, no. 8, August 1988, pages 1353-1356, Champaign, IL, US; A.P. HUDSON et al.: "Polycarboxylates in Soda Ash Detergents"

Cited by  
EP0510580A1; EP0510762A3; US7390776B2; US6376447B1; WO2004024856A3; WO9900471A1; US6921746B2; US8242069B2; WO9618716A1; WO9800511A3

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

DOCDB simple family (publication)  
**EP 0381261 A2 19900808**; **EP 0381261 A3 19910306**; AU 4880690 A 19900802; AU 623483 B2 19920514; BR 9000317 A 19901127; CA 2008387 A1 19900730; JP H02240200 A 19900925; NO 900402 D0 19900129; NO 900402 L 19900731

DOCDB simple family (application)  
**EP 90200154 A 19900122**; AU 4880690 A 19900126; BR 9000317 A 19900125; CA 2008387 A 19900123; JP 2036690 A 19900130; NO 900402 A 19900129