

Title (en)  
AUTOMATIC DISHWASHER DETERGENT COMPOSITION CONTAINING DUAL BLEACH SYSTEM

Publication  
**EP 0395186 A3 19910508 (EN)**

Application  
**EP 90201078 A 19900427**

Priority  
US 34473289 A 19890428

Abstract (en)  
[origin: EP0395186A2] The application is directed to an automatic dishwasher detergent powder composition containing a dual bleach system. The composition contains a chlorine bleach source and a bromide compound. In the wash bath the chlorine source reacts with water to form hypochlorite and the bromide compound reacts with a portion of the hypochlorite to form hypobromite. The active ingredients of the dual bleach system are the hypochlorite and hypobromite which provide improved cleaning performance against both proteinaceous and starchy carbohydrate soils. The powder compositions are dry, free flowing, readily dispersed and easily soluble in the wash bath.

IPC 1-7  
**C11D 3/395**

IPC 8 full level  
**C11D 3/395** (2006.01)

CPC (source: EP)  
**C11D 3/3951** (2013.01)

Citation (search report)  
• [X] EP 0186234 A2 19860702 - PROCTER & GAMBLE [US]  
• [Y] GB 1167888 A 19691022 - UNILEVER LTD [GB]

Cited by  
US7285522B2; WO0034429A1; WO9707188A1; WO9627651A1; US9630206B2; US10463420B2; US11246645B2

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

DOCDB simple family (publication)  
**EP 0395186 A2 19901031; EP 0395186 A3 19910508**; AU 5389590 A 19901101; AU 630689 B2 19921105; BR 9002000 A 19910813; CA 2015603 A1 19901028; GR 1000479 B 19920730; GR 900100318 A 19910927; MX 173778 B 19940328; MY 130031 A 20070531; NO 901909 D0 19900427; NO 901909 L 19901029; NZ 233357 A 19920428; PL 284965 A1 19910114; PT 93873 A 19901120

DOCDB simple family (application)  
**EP 90201078 A 19900427**; AU 5389590 A 19900424; BR 9002000 A 19900427; CA 2015603 A 19900427; GR 900100318 A 19900427; MX 2040390 A 19900420; MY PI9000606 A 19900416; NO 901909 A 19900427; NZ 23335790 A 19900418; PL 28496590 A 19900427; PT 9387390 A 19900426