

Title (en)

HIGH-CARBONATE AUTOMATIC DISHWASHING DETERGENT WITH DECREASED CALCIUM SALT DEPOSITION

Publication

EP 0364067 A3 19910130 (EN)

Application

EP 89305572 A 19890602

Priority

US 25687588 A 19881012

Abstract (en)

[origin: EP0364067A2] An automatic dishwashing detergent primarily comprised of an alkali-metal carbonate as the sole builder, alkali-metal silicates, and a calcium precipitation inhibitor system consisting of a low foaming surfactant, a low molecular weight polycarboxylic acid, and a small amount of a threshold inhibition agent. Optionally halogen, peroxygen or peracid bleaching species enzymes, fragrances, dyes and other adjuncts may be included. The composition provides good cleaning performance especially on starchy soils, and no appreciable calcium precipitates results, even in water having a hardness of at least about 400 ppm.

IPC 1-7

C11D 3/10; **C11D 3/08**; **C11D 3/37**

IPC 8 full level

C11D 3/08 (2006.01); **C11D 3/10** (2006.01); **C11D 3/37** (2006.01)

CPC (source: EP)

C11D 3/08 (2013.01); **C11D 3/10** (2013.01); **C11D 3/3761** (2013.01)

Citation (search report)

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EP 0364067 A2 19900418; **EP 0364067 A3 19910130**; **EP 0364067 B1 19960124**; AT E133446 T1 19960215; CA 1322703 C 19931005; DE 68925509 D1 19960307; DE 68925509 T2 19960530; ES 2082776 T3 19960401

DOCDB simple family (application)

EP 89305572 A 19890602; AT 89305572 T 19890602; CA 600710 A 19890525; DE 68925509 T 19890602; ES 89305572 T 19890602