

Title (en)  
Automatic dishwashing composition

Title (de)  
Maschinengeschirrspülmittel

Title (fr)  
Composition detergente pour lave-vaisselle

Publication  
**EP 1004655 A3 20020925 (DE)**

Application  
**EP 99120429 A 19991014**

Priority  
DE 19854960 A 19981129

Abstract (en)  
[origin: EP1004655A2] Liquid to pasty detergent for dishwashing machine contains a crystalline foliated silicate (I) besides usual components. Liquid to pasty detergent for dishwashing machine contains a crystalline foliated silicate of formula (I) besides usual components.  $A_2O.bBO.cC_2O_3.dD_2O_5.eSiO_2.fH_2O$  (I) A = an alkali metal and/or hydrogen; B = an alkaline earth metal; C = a main group III element; D = a main group V element; a = 0-1; b = 0-0.5; c/e = 0-0.05; d/e = 0-0.25; e = 1.9-4; f = 0-20. An Independent claim is also included for the production of the detergent.

IPC 1-7  
**C11D 3/12**; C11D 3/08; C11D 17/00

IPC 8 full level  
**C11D 3/08** (2006.01); **C11D 3/12** (2006.01); **C11D 17/00** (2006.01); **C11D 1/14** (2006.01); **C11D 1/72** (2006.01); **C11D 1/75** (2006.01); **C11D 1/755** (2006.01)

CPC (source: EP US)  
**C11D 3/08** (2013.01 - EP US); **C11D 3/1273** (2013.01 - EP US); **C11D 17/003** (2013.01 - EP US); **C11D 1/143** (2013.01 - EP US); **C11D 1/146** (2013.01 - EP US); **C11D 1/72** (2013.01 - EP US); **C11D 1/75** (2013.01 - EP US); **C11D 1/755** (2013.01 - EP US)

Citation (search report)

- [X] DE 4102743 A1 19920806 - HENKEL KGAA [DE]
- [X] DE 4109247 A1 19920924 - HENKEL KGAA [DE]
- [X] DE 4436151 A1 19960502 - HENKEL KGAA [DE]
- [X] DE 4437486 A1 19960425 - HENKEL KGAA [DE]
- [X] DE 3627773 A1 19880218 - HOECHST AG [DE]
- [X] WO 9731996 A1 19970904 - UNILEVER NV [NL], et al
- [X] WO 9800490 A1 19980108 - PROCTER & GAMBLE [US], et al

Cited by  
EP1205537A3; DE102007006253B4; EP1162255A3; US6844310B2; US6699831B2; WO2015070976A1; WO2010078979A1

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**EP 99120429 A 19991014**; CA 2291419 A 19991125; DE 19854960 A 19981129; US 44824699 A 19991124