

Title (en)

NEUTRAL COMPOSITION FOR DISHWASHING MACHINE

Publication

EP 0530635 A3 19930804 (DE)

Application

EP 92114418 A 19920824

Priority

DE 4128767 A 19910829

Abstract (en)

[origin: EP0530635A2] The invention relates to phosphate-free compositions, which are in liquid or powder form, contain a builder system, are free of NTA and EDTA and have a pH of 5-9 in 1% strength aqueous solution, for dishwashing machines. The builder system can be composed of a) the salt of a hydroxy carboxylic acid, or b) the mixture of a hydroxy carboxylic acid and the salt of a hydroxy carboxylic acid, or c) the mixture of a hydroxy carboxylic acid and the salt of a hydroxy carboxylic acid, and a polymer. h

IPC 1-7

C11D 3/20; C11D 3/386; C11D 3/37

IPC 8 full level

C11D 3/20 (2006.01); **C11D 3/37** (2006.01); **C11D 3/386** (2006.01)

CPC (source: EP)

C11D 3/2086 (2013.01); **C11D 3/3757** (2013.01)

Citation (search report)

- [X] EP 0368341 B1 19960131 - KAO CORP [JP]
- [YD] FR 2016272 A1 19700508 - HENKEL & CIE GMBH
- [Y] FR 2184726 A1 19731228 - CONTINENTAL OIL CO [US]
- [A] FR 2130382 A1 19721103 - PROCTER & GAMBLE
- [AD] DE 3532586 C1 19860911 - ALMACA BIOPRODUKTE HERSTELLUNG
- [A] DE 2230453 A1 19740117 - BENCKISER GMBH JOH A, et al

Cited by

US9127235B2; US9487738B2; EP0863199A3; US5786314A; US5898025A; DE10311429A1; US5786315A; US8314056B2; US7041628B2; US9040279B2; EP2428572A2; WO03006594A1; WO2010049187A1; US7192911B2; US9040278B2; US7153816B2; US8507243B2; US9840683B2; WO2011049945A2; US10364409B2; US8323945B2; US8975056B2; US9090887B2; EP0636170B1; WO9708281A1; WO9407981A1; EP3034588B1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0530635 A2 19930310; EP 0530635 A3 19930804; EP 0530635 B1 19970514; AT E153056 T1 19970515; DE 59208478 D1 19970619; DK 0530635 T3 19970929; ES 2100985 T3 19970701; GR 3023893 T3 19970930

DOCDB simple family (application)

EP 92114418 A 19920824; AT 92114418 T 19920824; DE 59208478 T 19920824; DK 92114418 T 19920824; ES 92114418 T 19920824; GR 970401540 T 19970626