

Title (en)

Low-phosphate detergent composition for fabric washing.

Title (de)

Waschmittel mit niedrigem Phosphatgehalt zum Waschen von Geweben.

Title (fr)

Composition détergente à faible teneur en phosphates pour le lavage des tissus.

Publication

EP 0000235 A1 19790110 (EN)

Application

EP 78200065 A 19780628

Priority

- US 81122077 A 19770629
- US 85218777 A 19771116
- US 88446678 A 19780307

Abstract (en)

Laundry detergent compositions containing no phosphate or low levels of phosphate materials and specific mixtures of selected nonionic surfactants and selected cationic surfactants are disclosed. The nonionic/cationic surfactant mixtures are formulated to have "cloud point" characteristics and, preferably, reduced cationic monomer concentrations as defined herein. These compositions are unusually effective in removing greasy and oily soils and body soils from fabrics; they are also effective in the removal of particulate soils. A process is disclosed for laundering fabrics using compositions containing nonionic surfactants and cationic surfactants.

IPC 1-7

C11D 1/835

IPC 8 full level

C11D 1/60 (2006.01); **C11D 1/62** (2006.01); **C11D 1/72** (2006.01); **C11D 1/835** (2006.01)

CPC (source: EP)

C11D 1/60 (2013.01); **C11D 1/62** (2013.01); **C11D 1/72** (2013.01); **C11D 1/835** (2013.01)

Citation (search report)

- FR 1224327 A 19600623 - SHELL RES LTD
- FR 2000171 A1 19690829 - UNILEVER NV
- DE 1220956 B 19660714 - HENKEL & CIE GMBH
- [D] US 3607763 A 19710921 - SALMEN LEO A, et al
- [A] FR 2316326 A1 19770128 - EXQUISIT KOSMETIK GMBH [DE]
- [A] US 3668133 A 19720606 - IJIRI YOSHINOBU, et al
- [A] FR 2083258 A5 19711210 - KOUROVTZEFF KIR
- [A] DE 2625945 A1 19770203 - HENKEL & CIE GMBH
- [A] DE 2426581 A1 19741219 - COLGATE PALMOLIVE CO
- [A] GB 895456 A 19620502 - GRACE W R & CO
- [A] FR 2283667 A1 19760402 - KAO CORP [JP]

Cited by

EP0012483A1; EP0021491A1; EP0303187A3; US4931063A; GB2163770A; US6395696B2; EP0008142B1

Designated contracting state (EPC)

BE CH DE FR GB NL SE

DOCDB simple family (publication)

EP 0000235 A1 19790110; AT 396690 B 19931125; AT A469278 A 19861215; AU 3759678 A 19800103; AU 524807 B2 19821007; BE 10 T1 19800111; CH 648344 A5 19850315; DE 2857157 A1 19800327; DE 2857157 C2 19881229; FR 2416944 A1 19790907; FR 2416944 B1 19840810; GB 2040984 A 19800903; GB 2040984 B 19821103; IT 1097133 B 19850826; IT 7825098 A0 19780628; NL 7815011 A 19790928; SE 449372 B 19870427; SE 7906524 L 19790801

DOCDB simple family (application)

EP 78200065 A 19780628; AT 469278 A 19780628; AU 3759678 A 19780629; BE 78200065 A 19780628; CH 291080 A 19780628; DE 2857157 A 19780628; FR 7911109 A 19790502; GB 7922538 A 19780628; IT 2509878 A 19780628; NL 7815011 A 19780628; SE 7906524 A 19790801