

Title (en)

DETERGENT COMPOSITION COMPRISING CATIONIC ESTER SURFACTANT AND PROTEASE ENZYME

Title (de)

KATIONISCHES ESTERTENSID UND PROTEASE UNTHALTENDES WASCHMITTEL

Title (fr)

COMPOSITION DETERGENTE COMPRENANT UN TENSIOACTIF CATIONIQUE DU TYPE ESTER ET UNE PROTEASE

Publication

EP 0842246 A4 20000112 (EN)

Application

EP 96923625 A 19960703

Priority

- GB 9513999 A 19950708
- US 9611249 W 19960703

Abstract (en)

[origin: WO9703156A1] There is provided a detergent composition comprising: a) from 1 % to 95 % by weight of a surfactant system comprising an anionic surfactant and a cationic ester surfactant, other than N,N-di(2-stearyloxyethyl)-N-(2-hydroxyethyl)-N-methyl ammonium chloride, present in a weight ratio of said anionic surfactant to said cationic ester surfactant of 2.5:1 to 25:1; and b) from 0.0001 % to 5 % by weight of a proteolytic enzyme, wherein the % weight of proteolytic enzyme in the formulation is based on an enzyme activity of 4 Knpu/g of the enzyme particle, and wherein the weight ratio of said anionic surfactant to said proteolytic enzyme is at least 1.5:1.

IPC 1-7

C11D 1/38; **C11D 1/02**; **C11D 3/386**

IPC 8 full level

C11D 1/62 (2006.01); **C11D 3/386** (2006.01)

CPC (source: EP)

C11D 1/62 (2013.01); **C11D 3/386** (2013.01)

Citation (search report)

- [PX] WO 9609276 A1 19960328 - PROCTER & GAMBLE [US], et al
- [X] EP 0000225 A1 19790110 - PROCTER & GAMBLE [US]
- [A] US 3985686 A 19761012 - BARRAT CHRISTIAN & GB 1375450 A 19741127
- See references of WO 9703156A1

Cited by

EP0819164B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 9703156 A1 19970130; AR 002785 A1 19980429; BR 9609669 A 19990330; CA 2226666 A1 19970130; CA 2226666 C 20020430; EP 0842246 A1 19980520; EP 0842246 A4 20000112; GB 9513999 D0 19950906; MX 9800276 A 19980430

DOCDB simple family (application)

US 9611249 W 19960703; AR 10349996 A 19960708; BR 9609669 A 19960703; CA 2226666 A 19960703; EP 96923625 A 19960703; GB 9513999 A 19950708; MX 9800276 A 19960703