

Title (en)

Liquid detergent composition containing lipase and protease.

Title (de)

Lipase- und proteasehaltige flüssige Waschmittelzusammensetzung.

Title (fr)

Composition détergente liquide contenant une lipase et une protéase.

Publication

EP 0486073 A2 19920520 (EN)

Application

EP 91200149 A 19910125

Priority

- EP 90870212 A 19901114
- EP 91200149 A 19910125

Abstract (en)

Liquid detergent compositions are disclosed which contain conventional detergency ingredients and an enzyme system, wherein the enzyme system comprises a mixture of a lipase, or mixtures thereof, and a modified bacterial serine protease, or mixtures of said proteases..

IPC 1-7

C11D 3/386

IPC 8 full level

C11D 1/83 (2006.01); **C11D 3/386** (2006.01); **C12N 9/56** (2006.01); **C12N 9/96** (2006.01); **D06L 1/12** (2006.01); **C11D 1/14** (2006.01); **C11D 1/52** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP)

C11D 1/83 (2013.01); **C11D 3/38618** (2013.01); **C11D 3/38627** (2013.01); **C11D 3/38663** (2013.01); **C11D 1/14** (2013.01); **C11D 1/525** (2013.01); **C11D 1/72** (2013.01)

Cited by

US5442100A; US5472628A; EP2199386A1; WO9308253A1; WO9517494A1; EP2250246B1; EP3074494B1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 9208779 A1 19920529; AU 9041691 A 19920611; CA 2096256 A1 19920515; CA 2096256 C 19990511; CN 1062374 A 19920701; DE 69121059 D1 19960829; DE 69121059 T2 19970306; DK 0486073 T3 19961209; EP 0486073 A2 19920520; EP 0486073 A3 19930623; EP 0486073 B1 19960724; ES 2091280 T3 19961101; IE 913951 A1 19920520; JP H06504555 A 19940526; MX 9102022 A 19920708; NZ 240571 A 19941125; TR 27423 A 19950421; TW 215108 B 19931021

DOCDB simple family (application)

US 9108041 W 19911104; AU 9041691 A 19911104; CA 2096256 A 19911104; CN 91111550 A 19911114; DE 69121059 T 19910125; DK 91200149 T 19910125; EP 91200149 A 19910125; ES 91200149 T 19910125; IE 395191 A 19911113; JP 50087891 A 19911104; MX 9102022 A 19911112; NZ 24057191 A 19911113; TR 106991 A 19911204; TW 81100525 A 19920125