

Title (en)

LIQUID SURFACTANT PREPARATION CONTAINING LIPASE AND PHOSPHONATE

Title (de)

FLÜSSIGE TENSIDZUBEREITUNG ENTHALTEND LIPASE UND PHOSPHONAT

Title (fr)

PRÉPARATION TENSIOACTIVE LIQUIDE CONTENANT DE LA LIPASE ET DU PHOPHONATE

Publication

EP 2655587 B1 20170510 (DE)

Application

EP 11805804 A 20111213

Priority

- DE 102010063743 A 20101221
- EP 2011072513 W 20111213

Abstract (en)

[origin: WO2012084582A1] The invention relates to a liquid surfactant preparation which contains phosphonate and which should have an advantageous lipolytic activity. This is achieved by using a lipase that is naturally present in a microorganism, said microorganism being *Rhizopus oryzae* or *Mucor javanicus*.

IPC 8 full level

C11D 3/386 (2006.01); **D06L 4/40** (2017.01)

CPC (source: EP KR US)

C11D 1/78 (2013.01 - US); **C11D 3/361** (2013.01 - EP US); **C11D 3/364** (2013.01 - EP US); **C11D 3/365** (2013.01 - EP US); **C11D 3/386** (2013.01 - KR); **C11D 3/38627** (2013.01 - EP US); **D06L 4/40** (2016.12 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012084582 A1 20120628; DE 102010063743 A1 20120621; EP 2655587 A1 20131030; EP 2655587 B1 20170510; ES 2634512 T3 20170928; HU E035746 T2 20180528; KR 101928587 B1 20181212; KR 20130135272 A 20131210; MX 2013007116 A 20130827; PL 2655587 T3 20171031; US 2013266552 A1 20131010

DOCDB simple family (application)

EP 2011072513 W 20111213; DE 102010063743 A 20101221; EP 11805804 A 20111213; ES 11805804 T 20111213; HU E11805804 A 20111213; KR 20137015919 A 20111213; MX 2013007116 A 20111213; PL 11805804 T 20111213; US 201313922509 A 20130620