

Title (en)  
USE OF SURFACE-ACTIVE SUBSTANCES IN CLEANING AGENTS

Title (de)  
VERWENDUNG OBERFLÄCHENAKTIVER SUBSTANZEN IN REINIGUNGSMITTELN

Title (fr)  
UTILISATION DE SUBSTANCES TENSIOACTIVES DANS DES NETTOYANTS

Publication  
**EP 2240562 A2 20101020 (DE)**

Application  
**EP 09711301 A 20090206**

Priority

- EP 2009000823 W 20090206
- DE 102008009366 A 20080214

Abstract (en)  
[origin: US2010323948A1] The invention relates to selected surface-active substances of groups a) and b), the surface-active compound a) being selected from compounds of general formula (Ia), wherein M represents a group CH<sub>2</sub>—CH<sub>2</sub> or CHR—CH<sub>2</sub>, R, R' or R'' independently represent saturated, unsaturated, linear or branched alkyl groups or alkenyl groups with 6 to 22 C atoms, and the indices n and m independently can have values between 1 and 40, and/or compounds of general formula (Ib), wherein R''' and R'''' independently represent saturated, unsaturated, linear or branched alkyl groups or alkenyl groups with 4 to 22 C atoms, and the indices n and m independently can have values between 1 and 40 and X' and X'' independently represent H or saturated, unsaturated, linear or branched alkyl groups or alkenyl groups with 1 to 18 C atoms. The surface active substances of the invention, either on their own or combined with other nonionic surfactants, lead to dishwashing agents with an improved drying performance, especially in multifunctional agents for automatic dishwashers.

IPC 8 full level  
**C11D 1/825** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP US)  
**C11D 1/721** (2013.01 - EP US); **C11D 1/825** (2013.01 - EP US)

Citation (search report)  
See references of WO 2009100855A2

Cited by  
DE102011086639A1

Designated contracting state (EPC)  
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 SE SI SK TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**US 2010323948 A1 20101223; US 8148313 B2 20120403**; AT E523582 T1 20110915; AU 2009214382 A1 20090820; CA 2713335 A1 20090820; CN 101945986 A 20110112; CN 101945986 B 20121010; DE 102008009366 A1 20090820; EP 2240562 A2 20101020; EP 2240562 B1 20110907; EP 2267110 A2 20101229; EP 2267110 A3 20110427; EP 2267110 B1 20121128; ES 2373084 T3 20120131; ES 2400791 T3 20130412; PL 2240562 T3 20120229; WO 2009100855 A2 20090820; WO 2009100855 A3 20091008

DOCDB simple family (application)  
**US 86701009 A 20090206**; AT 09711301 T 20090206; AU 2009214382 A 20090206; CA 2713335 A 20090206; CN 200980105293 A 20090206; DE 102008009366 A 20080214; EP 09711301 A 20090206; EP 10187277 A 20090206; EP 2009000823 W 20090206; ES 09711301 T 20090206; ES 10187277 T 20090206; PL 09711301 T 20090206