

Title (en)
PROCESS FOR CLEANING AND LABEL REMOVAL FOR BOTTLES

Title (de)
VERFAHREN ZUR REINIGUNG UND ETIKETTENTFERNUNG FÜR FLASCHEN

Title (fr)
PROCÉDÉ POUR LE NETTOYAGE ET LE RETRAIT DES ÉTIQUETTES DES BOUTEILLES

Publication
EP 2638138 B1 20190612 (EN)

Application
EP 10787046 A 20101111

Priority
EP 2010067312 W 20101111

Abstract (en)
[origin: WO2012062372A1] The present invention relates to a method for washing and/or label removal of glass, ceramic or plastic ware with a liquid cleaning composition at a process temperature below 80° C, wherein the liquid cleaning composition comprises active components in an amount of about = 0.001wt.-% to about = 10 wt.-% and an alkaline source in an amount of about = 0.5 wt.-% to about = 3.5 wt.-%, wherein the active components comprising: a) at least one sequestering agent selected from the group of a phosphonic acid, phosphonate based sequestering agent, and/or a polymer of monomers of monoethylenically unsaturated C3-C8- carboxylic acids or salts thereof; b) at least one C4 to C18 hydroxymonocarboxylic acid or salt thereof.

IPC 8 full level
C11D 1/44 (2006.01); **C11D 1/72** (2006.01); **C11D 1/825** (2006.01); **C11D 1/835** (2006.01); **C11D 3/04** (2006.01); **C11D 3/20** (2006.01); **C11D 3/36** (2006.01); **C11D 3/37** (2006.01); **C11D 7/06** (2006.01); **C11D 7/26** (2006.01); **C11D 7/36** (2006.01); **C11D 11/00** (2006.01)

CPC (source: CN EP KR)
B08B 3/08 (2013.01 - CN); **C11D 1/44** (2013.01 - EP KR); **C11D 1/72** (2013.01 - CN EP KR); **C11D 1/721** (2013.01 - EP); **C11D 1/722** (2013.01 - CN); **C11D 1/825** (2013.01 - CN EP KR); **C11D 1/835** (2013.01 - EP); **C11D 3/044** (2013.01 - EP); **C11D 3/20** (2013.01 - KR); **C11D 3/2086** (2013.01 - CN EP); **C11D 3/36** (2013.01 - KR); **C11D 3/361** (2013.01 - CN EP); **C11D 3/362** (2013.01 - EP); **C11D 3/364** (2013.01 - EP); **C11D 3/3765** (2013.01 - EP); **C11D 7/06** (2013.01 - EP); **C11D 7/265** (2013.01 - EP); **C11D 7/36** (2013.01 - EP); **B08B 2220/01** (2013.01 - CN); **C11D 2111/18** (2024.01 - CN EP); **C11D 2111/24** (2024.01 - CN EP)

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 2012062372 A1 20120518; AU 2010363885 A1 20130314; AU 2010363885 B2 20151126; AU 2016200969 A1 20160317; AU 2016200969 B2 20170720; BR 112013006533 A2 20190903; BR 112013006533 B1 20210622; CA 2808962 A1 20120518; CA 2808962 C 20191126; CN 103154221 A 20130612; CN 107474971 A 20171215; CN 107474971 B 20201030; EP 2638138 A1 20130918; EP 2638138 B1 20190612; EP 3540033 A1 20190918; EP 3540033 B1 20230823; EP 3540033 B9 20240828; EP 3540033 C0 20230823; JP 2014500898 A 20140116; JP 5907982 B2 20160426; KR 101782883 B1 20170928; KR 101915061 B1 20181105; KR 20140040069 A 20140402; KR 20170113679 A 20171012; MX 2013004959 A 20130628; PL 2638138 T3 20200131; PL 3540033 T3 20231204; ZA 201304116 B 20140326

DOCDB simple family (application)
EP 2010067312 W 20101111; AU 2010363885 A 20101111; AU 2016200969 A 20160216; BR 112013006533 A 20101111; CA 2808962 A 20101111; CN 201080069512 A 20101111; CN 201710738233 A 20101111; EP 10787046 A 20101111; EP 19171824 A 20101111; JP 2013538078 A 20101111; KR 20137015032 A 20101111; KR 20177026667 A 20101111; MX 2013004959 A 20101111; PL 10787046 T 20101111; PL 19171824 T 20101111; ZA 201304116 A 20130605