

Title (en)
CLEANING ADDITIVE AND CLEANING METHOD USING THE SAME

Title (de)
REINIGUNGSADDITIV UND REINIGUNGSVERFAHREN DAMIT

Title (fr)
ADDITIF DE NETTOYAGE ET PROCÉDÉ DE NETTOYAGE L'UTILISANT

Publication
EP 3000868 B1 20220601 (EN)

Application
EP 15190719 A 20131115

Priority

- CN 201210501952 A 20121129
- EP 13858432 A 20131115
- US 2013070368 W 20131115

Abstract (en)

[origin: WO2014085110A1] The present invention discloses a glass bottle cleaning additive and cleaning method for glass bottles, for use in treatment by cleaning glass bottles in a primary caustic tank and a secondary caustic tank, said cleaning additive consisting of a component A, a component B and a component C, wherein the component A contains an organic phosphine chelating agent, the component B contains a peroxide, and the component C contains an antifoaming agent, the component A is added in the primary caustic tank, the component B is selectively added in the primary caustic tank, the component A and the component B are added in the secondary caustic tank, and the component C is selectively added in the primary caustic tank or the secondary caustic tank. The addition amount of the component A is 0.05%-0.5%, the addition amount of the component B is 0.1%-0.5%, and the addition amount of the component C is 0-0.5%, based on the weight of an caustic solution added in the primary caustic tank or the secondary caustic tank. The caustic solution in said primary caustic tank and said secondary caustic tank is a 1.5%-3% sodium hydroxide solution. The glass bottle cleaning additive and cleaning method for glass bottles of the invention enable a stable and good cleaning effect at a relatively low temperature, usually 50-70 °C.

IPC 8 full level
C11D 1/44 (2006.01); **C11D 1/722** (2006.01); **C11D 1/82** (2006.01); **C11D 3/00** (2006.01); **C11D 3/36** (2006.01); **C11D 3/37** (2006.01); **C11D 3/39** (2006.01); **C11D 7/36** (2006.01); **C11D 11/00** (2006.01)

CPC (source: EP)
C11D 1/44 (2013.01); **C11D 1/722** (2013.01); **C11D 1/82** (2013.01); **C11D 3/0026** (2013.01); **C11D 3/361** (2013.01); **C11D 3/364** (2013.01); **C11D 3/365** (2013.01); **C11D 3/3738** (2013.01); **C11D 3/3942** (2013.01); **C11D 3/3947** (2013.01); **C11D 7/36** (2013.01); **B08B 9/22** (2013.01); **C11D 2111/18** (2024.01); **C11D 2111/44** (2024.01)

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 2014085110 A1 20140605; BR 112015008327 A2 20170704; BR 112015008327 B1 20220118; CN 103849498 A 20140611; EP 2925846 A1 20151007; EP 2925846 A4 20160525; EP 2925846 B1 20200923; EP 3000868 A2 20160330; EP 3000868 A3 20160511; EP 3000868 B1 20220601; KR 101876815 B1 20180710; KR 20150090908 A 20150806; MX 2015006614 A 20150805; PH 12015501081 A1 20150803; PH 12015501081 B1 20150803

DOCDB simple family (application)
US 2013070368 W 20131115; BR 112015008327 A 20131115; CN 201210501952 A 20121129; EP 13858432 A 20131115; EP 15190719 A 20131115; KR 20157016908 A 20131115; MX 2015006614 A 20131115; PH 12015501081 A 20150515