

Title (en)
CONTAINER RINSING SYSTEM AND METHOD

Title (de)
BEHÄLTERSPÜLSYSTEM UND -VERFAHREN

Title (fr)
SYSTÈME ET PROCÉDÉ DE RINÇAGE DE CONTENANTS

Publication
EP 3427849 A1 20190116 (EN)

Application
EP 18189552 A 20130311

Priority
• US 201213417944 A 20120312
• EP 13761545 A 20130311
• US 2013030171 W 20130311

Abstract (en)
A container rinsing system has a nozzle (1300) adapted to be positioned proximate an opening of the container (C) and adapted to direct a supply of air in any orientation to the container (C). A vacuum member (14) is positioned around the air nozzle (1300) and adapted to vacuum foreign particles away from the container (C). A system comprises an air source and a manifold (1303) having a manifold inlet, an ionization unit (1301), and a plurality of manifold outlets along with a plurality of air nozzles (1300). Each nozzle (1300) has a nozzle inlet, a nozzle outlet, and a nozzle passageway extending between the nozzle inlet and the nozzle outlet. The ionization unit (1301) is placed within the manifold (1303), and the plurality of nozzles (1300) are located on the plurality of manifold outlets such that during operation air is ionized before entering the nozzles (1300). The ionized air is used to clean containers (C).

IPC 8 full level
B08B 9/28 (2006.01); **B08B 5/02** (2006.01); **B08B 9/08** (2006.01); **B08B 15/04** (2006.01); **B65B 55/24** (2006.01)

CPC (source: CN EP RU)
B08B 5/00 (2013.01 - RU); **B08B 5/023** (2013.01 - CN EP); **B08B 9/0813** (2013.01 - CN EP); **B08B 9/283** (2013.01 - CN EP RU); **B08B 9/286** (2013.01 - CN EP RU); **B08B 15/04** (2013.01 - CN EP); **B65B 55/24** (2013.01 - CN EP); **B08B 5/02** (2013.01 - RU); **B08B 6/00** (2013.01 - RU); **B08B 9/28** (2013.01 - RU); **B08B 9/30** (2013.01 - RU)

Citation (applicant)
• US 7621301 B2 20091124 - WU REI-YOUNG [US], et al
• US 2009101178 A1 20090423 - WU REI-YOUNG AMOS [US], et al

Citation (search report)
• [XYI] US 2009101178 A1 20090423 - WU REI-YOUNG AMOS [US], et al
• [A] US 2010094454 A1 20100415 - DEPOT NICOL [CA], et al
• [XAYI] US 2007240784 A1 20071018 - WU REI-YOUNG [US], et al

Cited by
EP3797886A1

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 2013138231 A1 20130919; AU 2013232373 A1 20140918; AU 2013232373 B2 20151126; AU 2013232373 C1 20180927; AU 2016200925 A1 20160303; AU 2016200925 B2 20180322; CA 2865897 A1 20130919; CA 2865897 C 20190326; CN 104254404 A 20141231; CN 104254404 B 20170510; EP 2825323 A1 20150121; EP 2825323 A4 20160316; EP 2825323 B1 20180829; EP 3427849 A1 20190116; ES 2698502 T3 20190205; JP 2015509846 A 20150402; JP 6498113 B2 20190410; MX 2014010793 A 20141014; MX 347058 B 20170410; MX 358920 B 20180907; MX 362426 B 20190117; RU 2014141070 A 20160510; RU 2606984 C2 20170110

DOCDB simple family (application)
US 2013030171 W 20130311; AU 2013232373 A 20130311; AU 2016200925 A 20160212; CA 2865897 A 20130311; CN 201380019628 A 20130311; EP 13761545 A 20130311; EP 18189552 A 20130311; ES 13761545 T 20130311; JP 2015500491 A 20130311; MX 2014010793 A 20130311; MX 2017004575 A 20130311; MX 2017016287 A 20130311; RU 2014141070 A 20130311