

Title (en)
METHOD FOR WASHING FILLING APPARATUS AND FILLING TANK

Title (de)
VERFAHREN ZUM WASCHEN EINER FÜLLVORRICHTUNG UND EINES FÜLLTANKS

Title (fr)
PROCÉDÉ DESTINÉ À NETTOYER UN APPAREIL DE REMPLISSAGE ET UNE CUVE DE REMPLISSAGE

Publication
EP 2128080 A4 20150325 (EN)

Application
EP 07832081 A 20071119

Priority
• JP 2007072351 W 20071119
• JP 2006345976 A 20061222

Abstract (en)
[origin: EP2128080A1] The object of the present invention is to provide a filling apparatus comprising a cleaning line which is free of hygienic risks caused by solid residue remained even after the cleaning subsequent to the production of solid-containing filler, which enables reduction of the time required for CIP, and which is inexpensive by reducing the number of constituent elements of the cleaning line, and to a method for cleaning a filling tank using the filling apparatus. A filling apparatus is cleaned, which filling apparatus comprises a filling tank (10) having a body part of an approximate cylindrical form, a filling liquid supply pipe (20) which is for feeding a filling liquid into the filling tank and is provided with an on-off valve (V1), a breathing pipe (30) connected to the upper part of the filling tank, and a filling pipe (40) connected to the lower part of the filling tank and provided with a filling piston (41) and a filling nozzle (42). The filling liquid supply pipe and the filling tank are connected to each other in the tangential direction against the filling tank body, so that swirling flow is generated by liquid supply into the filling tank. The inside of the tank is accordingly cleaned with the swirling flow, the breathing pipe is cleaned with the cleaning solution that has reached the upper part of the filling tank, and the filling pipe is cleaned with the cleaning solution discharged from the filling nozzle.

IPC 8 full level
B67C 3/00 (2006.01); **B08B 9/08** (2006.01); **B65B 3/12** (2006.01); **B67C 3/02** (2006.01)

CPC (source: EP)
B08B 9/093 (2013.01); **B65B 3/025** (2013.01); **B65B 65/00** (2013.01); **B67C 3/001** (2013.01); **B65B 2210/06** (2013.01)

Citation (search report)
• [Y] EP 0401510 A1 19901212 - TETRA ALFA HOLDINGS [CH]
• [Y] US 4136719 A 19790130 - KRONSEDER HERMANN [DE], et al
• [A] US 2916406 A 19591208 - BULATKIN ILIYA F
• See references of WO 2008078474A1

Cited by
US11104461B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2128080 A1 20091202; EP 2128080 A4 20150325; JP 2008155945 A 20080710; JP 5032107 B2 20120926; WO 2008078474 A1 20080703

DOCDB simple family (application)
EP 07832081 A 20071119; JP 2006345976 A 20061222; JP 2007072351 W 20071119