

Title (en)

METHOD FOR FILLING BOTTLES OR SIMILAR CONTAINERS, AND FILLING SYSTEM

Title (de)

VERFAHREN ZUM FÜLLEN VON FLASCHEN ODER DERGLEICHEN BEHÄLTERN SOWIE FÜLLSYSTEM

Title (fr)

PROCÉDÉ POUR REMPLIR DES BOUTEILLES OU DES RÉCIPIENTS SIMILAIRES AINSI QUE SYSTÈME DE REMPLISSAGE

Publication

EP 2162383 B1 20130731 (DE)

Application

EP 08759274 A 20080618

Priority

- EP 2008004882 W 20080618
- DE 102007030559 A 20070630

Abstract (en)

[origin: WO2009003582A1] A filling system for filling bottles or similar containers (2) with a liquid substance from a reservoir or tank (6) containing the liquid substance, with filling elements (3, 4,) that comprise control valves or liquid valves (13, 14) and that are controlled in terms of their filling quantity by a control means (10), the filling elements (3, 4) forming at least one group of filling elements with at least two filling elements (3, 4), each filling element group being assigned a flow meter (9) for measuring the total amount of liquid substance that is dispensed in each filling phase through the filling elements (3, 4) of this group of filling elements, characterized in that the control means (10) opens and/or closes the liquid valves (13, 14) with time-offset on the basis of the measurement signal delivered from the respective flow meter (9) and on the basis of a time correction compensating for different filling speeds of the filling elements (3, 4), and/or in that the at least one adjustable throttle (15) is influenced in such a way that each container (2) contains the required amount of substance at the end of the filling phase.

IPC 8 full level

B67C 3/20 (2006.01); **B67C 3/28** (2006.01)

CPC (source: EP US)

B67C 3/20 (2013.01 - EP US); **B67C 3/28** (2013.01 - EP US); **B67C 3/007** (2013.01 - EP)

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102007030559 A1 20090115; DE 102007030559 B4 20100218; BR PI0806424 A2 20110906; CN 101652315 A 20100217;
CN 101652315 B 20110914; EP 2162383 A1 20100317; EP 2162383 B1 20130731; JP 2010531782 A 20100930; JP 5159880 B2 20130313;
MX 2009007162 A 20090930; PL 2162383 T3 20131231; RU 2412107 C1 20110220; SI 2162383 T1 20131129; US 2010192521 A1 20100805;
US 8701719 B2 20140422; WO 2009003582 A1 20090108

DOCDB simple family (application)

DE 102007030559 A 20070630; BR PI0806424 A 20080618; CN 200880002273 A 20080618; EP 08759274 A 20080618;
EP 2008004882 W 20080618; JP 2010513720 A 20080618; MX 2009007162 A 20080618; PL 08759274 T 20080618;
RU 2010103052 A 20080618; SI 200831068 T 20080618; US 65008309 A 20091230