

Title (en)

METHOD AND FILLING SYSTEM FOR FILLING CONTAINERS

Title (de)

VERFAHREN SOWIE FÜLLSYSTEM ZUM FÜLLEN VON BEHÄLTERN

Title (fr)

PROCÉDÉ ET SYSTÈME DE REMPLISSAGE PERMETTANT DE REMPLIR DES CONTENANTS

Publication

EP 3013733 B1 20170329 (DE)

Application

EP 14733113 A 20140613

Priority

- DE 102013106756 A 20130627
- EP 2014062427 W 20140613

Abstract (en)

[origin: WO2014206774A1] The invention relates to a method for filling containers (2) with a liquid filling material by means of a filling system, by means of which the filling material is fed to the containers (2) via a filling-material volumetric flow rate controller (18), which controls the filling-material volumetric flow rate in an open-loop or closed-loop manner on the basis of a target filling curve (FK), which is stored in a control computer (17) that controls the filling-material volumetric flow rate controller (18), namely with a filling-material volumetric flow rate course that changes in a plurality of chronologically consecutive sub-phases, which filling-material volumetric flow rate course comprises at least one reduced filling-material volumetric flow rate (Q1, Q3) at the start and at the end of a filling phase and an increased filling-material volumetric flow rate (Q2) in a quick filling phase lying therebetween. In order to simultaneously fill a container group, the filling system (1) forms a filling position (3.1 - 3.4) for each container (2), wherein during the filling phase the filling material is fed to the filling positions (3.1 - 3.4) via the filling-material volumetric flow rate controller (18), which is common to all filling positions (3.1 - 3.4), and wherein the volumetric flow rate fed to each container is continuously detected as an actual value by means of a respective separate flow meter (20) and is used to correct the control of the filling-material volumetric flow rate controller (18) in the control computer (17).

IPC 8 full level

B67C 3/22 (2006.01); **B67C 3/28** (2006.01)

CPC (source: EP US)

B67C 3/06 (2013.01 - US); **B67C 3/225** (2013.01 - EP US); **B67C 3/26** (2013.01 - US); **B67C 3/286** (2013.01 - EP US); **B67C 3/287** (2013.01 - EP US)

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)

DE 102013106756 A1 20141231; CN 105307972 A 20160203; CN 105307972 B 20170804; EP 3013733 A1 20160504; EP 3013733 B1 20170329; PL 3013733 T3 20170929; US 10131527 B2 20181120; US 2016368751 A1 20161222; WO 2014206774 A1 20141231

DOCDB simple family (application)

DE 102013106756 A 20130627; CN 201480034067 A 20140613; EP 14733113 A 20140613; EP 2014062427 W 20140613; PL 14733113 T 20140613; US 201414901238 A 20140613