

Title (en)

DEVICE AND METHOD FOR FILLING A CONTAINER WITHOUT MEASURING DEVICE

Title (de)

VORRICHTUNG UND VERFAHREN ZUM MESSMITTELLOSEN BEFÜLLEN EINES BEHÄLTNISSES

Title (fr)

DISPOSITIF ET PROCEDE POUR REMPLISSAGE D'UN RECIPIENT SANS EQUIPEMENT DE MESURAGE

Publication

**EP 3201119 A1 20170809 (DE)**

Application

**EP 15807594 A 20150929**

Priority

- DE 102014014317 A 20141001
- EP 2015001922 W 20150929

Abstract (en)

[origin: WO2016050350A1] The present invention relates to a method for filling a fluid into a container without using measuring means and to a filling apparatus therefor which comprises an attachment having a predetermined volume VA, said attachment comprising a valve attachment which has a gas valve and a liquid valve with a valve seat in a housing. Said valve seat surrounds a displacement element that can be moved along the longitudinal axis relative to the housing, and forms an annular gap. According to said method, the attachment is tightly placed onto a container (1) while the displacement element is inserted into the container (1). When the liquid valve (5) is opened, the filling fluid flows into the nominal volume VN of the container (1), and said nominal volume is flooded with the filling fluid; the liquid valve is then closed. The displacement element is withdrawn from the container (1) and the flooded remaining volumes top up the contents in the container (1), the volumina VVA and VFV equaling the volume VRohr of a portion of the displacement element in the flooded portion so that identical containers (1) are filled with identical fill levels.

IPC 8 full level

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

CPC (source: EP US)

**B67C 3/10** (2013.01 - US); **B67C 3/204** (2013.01 - EP US); **B67C 3/2614** (2013.01 - US); **B67C 3/282** (2013.01 - EP US); **B67C 9/00** (2013.01 - US); **B67C 2003/2688** (2013.01 - 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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102014014317 A1 20160407**; **DE 102014014317 B4 20180607**; EP 3201119 A1 20170809; EP 3201119 B1 20181121; US 10023453 B2 20180717; US 2017297883 A1 20171019; WO 2016050350 A1 20160407

DOCDB simple family (application)

**DE 102014014317 A 20141001**; EP 15807594 A 20150929; EP 2015001922 W 20150929; US 201515515649 A 20150929