

Title (en)

FILLING SYSTEM FOR FILLING CONTAINERS WITH A LIQUID FILLING MATERIAL, AND FILLING MACHINE

Title (de)

FÜLLSYSTEM ZUM FÜLLEN VON BEHÄLTERN MIT EINEM FLÜSSIGEN FÜLLGUT SOWIE FÜLLMASCHINE

Title (fr)

SYSTÈME DE REMPLISSAGE DE RÉCIPIENTS AVEC UN PRODUIT DE REMPLISSAGE LIQUIDE ET MACHINE DE REMPLISSAGE

Publication

EP 3802400 A1 20210414 (DE)

Application

EP 19724472 A 20190515

Priority

- DE 102018112908 A 20180530
- EP 2019062452 W 20190515

Abstract (en)

[origin: WO2019228805A1] The invention relates to a filling system for filling containers (2) with a liquid filling material, comprising at least one filling material tank (5) providing the filling material, and at least one filling element (1.1) for the controlled discharge of the filling material into the container which is arranged in a sealing position on the filling element in a filling phase of the filling. Furthermore, at least one flow path (20) for a liquid and/or gaseous medium is formed in the filling element, wherein the flow path is connected to the interior of the container to be filled at least during the filling phase and wherein return gas displaced from the container during the filling phase can be discharged via said flow path and/or displaced filling material can be returned to the filling material tank via said flow path. The present invention is further characterized in that at least one valve device (26, 27) is provided at least in the flow path, which can be continuously adjusted between an open and/or closed position and by which a volume flow of the liquid and/or gaseous medium flowing through the flow path can be continuously controlled and/or regulated.

IPC 8 full level

B67C 3/12 (2006.01); **B67C 3/28** (2006.01)

CPC (source: EP)

B67C 3/12 (2013.01); **B67C 3/286** (2013.01)

Citation (search report)

See references of WO 2019228805A1

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 102018112908 A1 20191205; EP 3802400 A1 20210414; EP 3802400 B1 20230809; SI 3802400 T1 20231030;
WO 2019228805 A1 20191205

DOCDB simple family (application)

DE 102018112908 A 20180530; EP 19724472 A 20190515; EP 2019062452 W 20190515; SI 201930605 T 20190515