

Title (en)
METHOD FOR FILLING AND CLOSING CONTAINERS

Title (de)
VERFAHREN ZUM BEFÜLLEN UND VERSCHLIEßEN VON BEHÄLTERN

Title (fr)
PROCÉDÉ DE REMPLISSAGE ET DE FERMETURE DE RÉCIPIENTS

Publication
EP 4025531 A1 20220713 (DE)

Application
EP 20761795 A 20200825

Priority
• DE 102019123460 A 20190902
• EP 2020073690 W 20200825

Abstract (en)
[origin: WO2021043621A1] The invention relates to a method for filling and closing containers (2) on a filling and closing apparatus (4) of a processing station (S), in which a sealable process chamber (17) having at least one pressure sensor (DS) for detecting the actual pressure values prevailing in the process chamber is provided on the filling and closing apparatus. Before the filling phase, at least the interior space of the container is evacuated at least once to a negative pressure of preferably 0.05 to 0.15 residual pressure and subsequently is flushed with steam and/or with flushing gas containing steam so that, before the opening of a filling valve (4.1) for filling the container, the flushing gas pressure in the container is increased at least to atmospheric pressure. Subsequently the filling valve is opened, so that the liquid filling material flows into the container arranged in the sealing position on the filling and closing apparatus. After the filling phase, still on the filling and closing apparatus, a settling phase is carried out in which, in particular above the mouth of the container, the process chamber is set by means of steam and/or gas containing steam to a pressure at or above a CO₂ saturation pressure of the introduced filling material. Then, after the settling phase, still on the filling and closing apparatus of the processing station, the container is closed by pressing on of a closure cap under the pressure conditions set during the settling phase, before the internal pressure in the process chamber is relieved to atmospheric pressure, at least the evacuation phase and/or the flushing phase and/or the settling phase being controlled and/or regulated in accordance with detected actual pressure values of the pressure sensor.

IPC 8 full level
B67C 3/06 (2006.01); **B67C 3/12** (2006.01); **B67C 7/00** (2006.01)

CPC (source: CN EP US)
B67C 3/06 (2013.01 - EP US); **B67C 3/10** (2013.01 - CN US); **B67C 3/12** (2013.01 - CN EP US); **B67C 3/2614** (2013.01 - US); **B67C 3/2634** (2013.01 - US); **B67C 3/2642** (2013.01 - US); **B67C 3/283** (2013.01 - US); **B67C 7/00** (2013.01 - CN EP US); **B67C 7/0073** (2013.01 - US); **B67C 2003/228** (2013.01 - US); **B67C 2003/2697** (2013.01 - CN EP US); **B67C 2007/0066** (2013.01 - EP)

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 102019123460 A1 20210304; CN 114423705 A 20220429; EP 4025531 A1 20220713; US 11795045 B2 20231024; US 2022289546 A1 20220915; WO 2021043621 A1 20210311

DOCDB simple family (application)
DE 102019123460 A 20190902; CN 202080061674 A 20200825; EP 2020073690 W 20200825; EP 20761795 A 20200825; US 202217683773 A 20220301