

Title (en)

FILLING MACHINE FOR FILLING CONTAINERS WITH LIQUID CONTENTS, AND METHOD FOR COOLING A DRIVE UNIT AND/OR GEAR UNIT OF A FILLING MACHINE

Title (de)

FÜLLMASCHINE ZUM FÜLLEN VON BEHÄLTERN MIT EINEM FLÜSSIGEN FÜLLGUT UND VERFAHREN ZUM KÜHLEN EINER ANTRIEBS- UND/ODER GETRIEBEEINHEIT EINER FÜLLMASCHINE

Title (fr)

MACHINE DE REMPLISSAGE POUR REMPLIR DES CONTENANTS D'UN PRODUIT DE REMPLISSAGE LIQUIDE, ET PROCÉDÉ POUR REFROIDIR UNE UNITÉ D'ENTRAÎNEMENT ET/OU DE TRANSMISSION D'UNE MACHINE DE REMPLISSAGE

Publication

EP 3999464 A1 20220525 (DE)

Application

EP 20736626 A 20200701

Priority

- DE 102019119596 A 20190719
- EP 2020068482 W 20200701

Abstract (en)

[origin: WO2021013486A1] The invention relates to a filling machine (1) for filling containers (2) with liquid contents (18), the filling machine (1) having at least one transporting apparatus (6) for transporting the containers (2), having at least one drive unit and/or gear unit (7; 8) for driving the at least one transporting apparatus (6), wherein the drive unit and/or gear unit (7; 8) can be cooled by a cooling medium (17), having a filling unit (5) for introducing the liquid contents (18) into the containers (2), having a contents reservoir (3) for providing the liquid contents (18), and having a contents line (4) for conducting the liquid contents (18) from the contents reservoir (3) to the filling unit (5), wherein the filling machine (1) has at least one cooling circuit (9), which carries the cooling medium (17), a cooling-medium-pump unit (10), which is integrated in the cooling circuit (9), and a heat-exchanger unit (11), which is integrated in the cooling circuit (9). The filling machine (1) is distinguished, in particular, in that the heat-exchanger unit (11) is designed for the exchange of heat between the cooling medium (17) and the liquid contents (18) flowing through the contents line (4). The invention also relates to a method for cooling a drive unit and/or gear unit (7; 8) of a filling machine (1) for filling containers (2) with liquid contents (18), wherein, in a heat-exchanger unit (11), heat is dissipated from a cooling medium (17) to the liquid contents (18).

IPC 8 full level

B67C 3/02 (2006.01); **B67C 3/22** (2006.01)

CPC (source: EP)

B67C 3/02 (2013.01); **B67C 3/22** (2013.01)

Citation (search report)

See references of WO 2021013486A1

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 102019119596 A1 20210121; EP 3999464 A1 20220525; WO 2021013486 A1 20210128

DOCDB simple family (application)

DE 102019119596 A 20190719; EP 2020068482 W 20200701; EP 20736626 A 20200701