

Title (en)

DEVICE AND METHOD WHICH RECOVERS HEAT FROM LIQUIDS DURING CLEANING OF A PLANT PART THAT IS TO BE CLEANED OF A BEVERAGE FILLING PLANT

Title (de)

VORRICHTUNG UND VERFAHREN DIE WÄRME AUS FLÜSSIGKEITEN ZURÜCKGEWINNT BEIM REINIGEN EINES ZU REINIGENDEN ANLAGENTEILS EINER GETRÄNKEABFÜLLANLAGE

Title (fr)

DISPOSITIF ET PROCÉDÉ RÉCUPÉRANT LA CHALEUR DE LIQUIDES LORS DU NETTOYAGE D'UNE PARTIE À NETTOYER D'UNE INSTALLATION D'EMBOUEILLAGE

Publication

EP 3374100 A1 20180919 (DE)

Application

EP 16798435 A 20161110

Priority

- DE 102015119318 A 20151110
- EP 2016077270 W 20161110

Abstract (en)

[origin: WO2017081155A1] The present invention relates to a device (1) for cleaning a plant part that is to be cleaned in a beverage filling plant, comprising a medium inflow (20) for supplying a cleaning medium to the plant part that is to be cleaned, and having a medium return flow (22) for removing the used cleaning medium from the plant part that is to be cleaned, there being provided a heating unit (4) for heating the cleaning medium in the medium inflow (20), there being provided a recuperator (5) for transferring heat energy from the cleaning medium removed via the medium return flow (22) to the cleaning medium to be supplied to the heating unit (4). Thus, heat is recovered from liquids that are to be discharged, making it possible to preheat other liquids required for cleaning.

IPC 8 full level

B08B 9/032 (2006.01); **A47L 15/42** (2006.01); **B08B 3/02** (2006.01)

CPC (source: CN EP US)

A47L 15/42 (2013.01 - CN); **B08B 3/02** (2013.01 - CN); **B08B 3/08** (2013.01 - US); **B08B 3/10** (2013.01 - US); **B08B 3/14** (2013.01 - US); **B08B 9/032** (2013.01 - CN EP US); **B67C 3/001** (2013.01 - EP US); **B08B 2203/007** (2013.01 - EP US); **B08B 2209/032** (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 102015119318 A1 20170511; CN 107847987 A 20180327; CN 117019782 A 20231110; EP 3374100 A1 20180919; EP 3374100 B1 20220803; JP 2018533462 A 20181115; JP 2021192911 A 20211223; JP 7163029 B2 20221031; SI 3374100 T1 20221028; US 11084068 B2 20210810; US 2018178258 A1 20180628; WO 2017081155 A1 20170518

DOCDB simple family (application)

DE 102015119318 A 20151110; CN 201680033432 A 20161110; CN 202311043297 A 20161110; EP 16798435 A 20161110; EP 2016077270 W 20161110; JP 2017563010 A 20161110; JP 2021147644 A 20210910; SI 201631589 T 20161110; US 201615579908 A 20161110