

Title (en)

BOTTLE CLEANING DEVICE AND METHOD FOR CLEANING BOTTLES USING THE BOTTLE CLEANING DEVICE

Title (de)

FLASCHENREINIGUNGSVORRICHTUNG UND VERFAHREN ZUM REINIGEN VON FLASCHEN UNTER VERWENDUNG DER FLASCHENREINIGUNGSVORRICHTUNG

Title (fr)

DISPOSITIF DE NETTOYAGE DE BOUTEILLES ET PROCÉDÉ POUR LE NETTOYAGE DE BOUTEILLES UTILISANT LE DISPOSITIF DE NETTOYAGE DE BOUTEILLES

Publication

EP 3519114 A1 20190807 (DE)

Application

EP 17723335 A 20170510

Priority

- DE 102016218885 A 20160929
- EP 2017061117 W 20170510

Abstract (en)

[origin: WO2018059746A1] The invention relates to a bottle cleaning device comprising a hot water spray region (41) that is arranged downstream of the main lye basin (3) in a bottle transport direction and comprises at least one spray zone (5, 6, 7), each of which comprises a paired collection basin arranged below the spray zone. An overflow (18, 19) which transports water out of the collection basins in a water transport direction is provided between a respective pair of collection basins arranged successively in the bottle transport direction. The bottle cleaning device is also provided with a fresh water spray region (42, 43), which is arranged downstream of the hot water spray region and comprises a first (8) and second freshwater spray zone (9) and a collection device (14, 15, 39) arranged below the spray zone, and an additional overflow (17, 40) between the collection device and the next collection basin, said overflow transporting water out of the collection device in the water transport direction. By means of a heat pump (23) with an evaporator (22) and a condenser (28), a coolant is cooled in a cooling circuit (21), which runs through the collection device and the collection basins, and lye of the main lye basin is heated.

IPC 8 full level

B08B 9/30 (2006.01); **B08B 9/34** (2006.01)

CPC (source: EP)

B08B 9/30 (2013.01); **B08B 9/34** (2013.01)

Citation (search report)

See references of WO 2018059746A1

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 102016218885 A1 20180329; BR 112018074766 A2 20190306; CN 109414736 A 20190301; CN 109414736 B 20211001; EP 3519114 A1 20190807; EP 3519114 B1 20210414; WO 2018059746 A1 20180405

DOCDB simple family (application)

DE 102016218885 A 20160929; BR 112018074766 A 20170510; CN 201780039309 A 20170510; EP 17723335 A 20170510; EP 2017061117 W 20170510