

Title (en)
BOTTLE CLEANING DEVICE

Title (de)
FLASCHENREINIGUNGSMASCHINE ZUM REINIGEN VON FLASCHEN

Title (fr)
MACHINE DE NETTOYAGE DE BOUTEILLES DESTINÉE AU NETTOYAGE DE BOUTEILLES

Publication
EP 3501676 C0 20230830 (DE)

Application
EP 18176907 A 20180611

Priority
DE 202017107882 U 20171222

Abstract (en)
[origin: CN110000175A] The invention relates to a bottle cleaning device for cleaning bottles, and particularly to the bottle cleaning device for cleaning the bottles in a beverage processing industry. The bottle cleaning device is provided with a conveying device which is used for conveying the bottles to the input area of the bottle cleaning device in an orderless and standing mode. An identification device for identifying the defected and/or tilted bottles is arranged in the input area and/or in front of the input area. The input area is internally provided with a mechanical arm with a grabbing element. A control unit can receive information related with the defected and/or tilted bottle from the identification device, and furthermore can make a robot vertically place the bottom or remove the bottle from the conveying device. Furthermore, the invention further relates to the bottle cleaning device for cleaning the bottles in the beverage processing industry. The bottle cleaning device is equipped with a collecting container for the chosen bottles. The collecting container comprises a material level sensor which is constructed for outputting a signal that indicates a material level when the preset material level is reached.

IPC 8 full level
B08B 9/20 (2006.01); **B07C 5/34** (2006.01); **B08B 9/44** (2006.01); **B65G 43/08** (2006.01)

CPC (source: CN EP)
B07C 5/3408 (2013.01 - EP); **B08B 9/20** (2013.01 - CN); **B08B 9/205** (2013.01 - CN EP); **B08B 9/44** (2013.01 - EP)

Cited by
US11964826B2; WO2023046835A1; WO2020126315A1

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

Participating member state (EPC – UP)
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)
DE 202017107882 U1 20190325; CN 110000175 A 20190712; EP 3501676 A1 20190626; EP 3501676 B1 20230830; EP 3501676 C0 20230830; ES 2962883 T3 20240321

DOCDB simple family (application)
DE 202017107882 U 20171222; CN 201811570627 A 20181221; EP 18176907 A 20180611; ES 18176907 T 20180611