

Title (en)

Method and device for filling containers with cleaning device

Title (de)

Vorrichtung und Verfahren zum Befüllen von Behältnissen mit Reinigungseinrichtung

Title (fr)

Dispositif et procédé de remplissage de récipients avec des produits de nettoyage

Publication

EP 2409948 A3 20130403 (DE)

Application

EP 11174078 A 20110715

Priority

DE 102010031873 A 20100721

Abstract (en)

[origin: EP2409948A2] The device (1) comprises multiple filling elements (5), which have a discharge unit to fill the fluid in the containers (6), and a valve unit to control the supply of the fluid in the containers. A transport unit is provided, which transports the containers along a predetermined transport path, temporarily during the filling with the liquid. Independent claims are also included for the following: (1) a handling system comprises a sterilization unit; and (2) a method for operating a device for filling of containers with fluid.

IPC 8 full level

B67C 3/00 (2006.01)

CPC (source: EP US)

B67C 3/001 (2013.01 - EP US)

Citation (search report)

- [XY] US 5848515 A 19981215 - CATELLI CAMILLO [IT], et al
- [Y] DE 4331745 A1 19950323 - KRONSEDER MASCHF KRONES [DE]
- [Y] WO 2007132339 A1 20071122 - AZIONARIA COSTRUZIONI ACMA SPA [IT], et al
- [Y] GB 1015188 A 19651231 - UDEC LTD
- [X] DE 721423 C 19420605 - SEITZ WERKE GMBH
- [A] EP 0885838 A1 19981223 - MBF SPA [IT]

Cited by

EP4071103A1; IT202100008711A1; EP3812343A4; CN104891405A; CN111646412A; EP3808696A1; EP3109198A1; WO2018104551A1; US11498823B2; US11834315B2; US10759643B2; US11577950B2; EP2821362A1; CN104276297A; EP3480161A1; JP2022097702A; EP3020679B1; IT201800020926A1; US11040861B2; US11760617B2; EP3808696B1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 11174078 A 20110715; CN 201110199799 A 20110718; DE 102010031873 A 20100721; JP 2011155341 A 20110714; US 201113182970 A 20110714