

Title (en)

In-line bottling plant for containers with liquids and bottling process

Title (de)

Inline-Abfüllanlagen für Behälter mit Flüssigkeiten und Abfüllverfahren

Title (fr)

Établissement d'embouteillage en ligne destinée à des contenants de liquides et procédé de mise en bouteille

Publication

EP 2594499 A1 20130522 (EN)

Application

EP 12192884 A 20121115

Priority

IT PD20110357 A 20111115

Abstract (en)

Bottling plant for containers with liquids, which comprises a filling machine (3), a capping machine (4) and a labeling machine (5). Transportation means (7) adapted to move the containers through the machines of the plant without changing their order are provided. A centralized logic control unit (32) controls the machines to carry out the relative operations in sequence on the single containers. The plant is provided with a detection sensor (33) arranged in the vicinity of the inlet section (8) of the transportation means to intercept the containers that move forward; such sensor is in communication with the logic control unit in order to assign a sequential identification code to each container. Diagnostic means are associated with one or more of the operative machines of the plant in order to detect data identifying the operations that the single containers undergo, such that the control unit can associate the code of each container with a corresponding measurement value received by the diagnostic means. The labeling machine then prints on the label of each container the relative identification code and the corresponding measurement value.

IPC 8 full level

B65C 9/46 (2006.01); **B67B 3/26** (2006.01); **B67C 3/00** (2006.01); **B67C 7/00** (2006.01)

CPC (source: EP)

B65C 9/46 (2013.01); **B67B 3/26** (2013.01); **B67C 3/007** (2013.01); **B67C 7/0073** (2013.01)

Citation (search report)

- [A] EP 2295226 A1 20110316 - KRONES AG [DE]
- [A] WO 2005075299 A1 20050818 - FLOWTEC AG [CH], et al
- [A] EP 2098355 A2 20090909 - KRONES AG [DE]
- [A] WO 2011030211 A1 20110317 - FT SYSTEM SRL [IT], et al

Cited by

CN104986389A; CN109105047A; ITUB20152717A1; CN108545688A; IT201700081876A1; EP3517451A4; EP3835223A1; US11261072B2; WO2020007535A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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