

Title (en)

METHOD FOR OPTIMIZING THE FILLING OF A CONTAINER

Title (de)

VERFAHREN ZUM OPTIMIEREN DES ABFÜLLENS EINES BEHÄLTERS

Title (fr)

PROCÉDÉ D'OPTIMISATION DU REMPLISSAGE D'UN RÉCIPIENT

Publication

EP 3448798 A1 20190306 (DE)

Application

EP 17719258 A 20170425

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Abstract (en)

[origin: WO2017186708A1] The invention relates to a method for optimizing the filling of a container with a water-containing product, in which method the product is fed to the container via an adjustable control valve, the passage cross-section of which can be controlled in order to control the filling rate during the filling, in which method the following is performed in a learning phase: a) at least one filling parameter, in particular the filling rate, is set in accordance with a similar product, b) a filling operation is performed with the set filling parameter, wherein the foaming associated with the set filling parameter and/or the total filling duration of the filling operation is measured as a target value, c) relationships between the filling parameter and the target value are captured and saved in a data model that simulates the behavior of the filling machine for different products, d) the saved target value is evaluated by means of an evaluation function in order to determine a best target value, e) if a termination criterion is achieved, a jump is made to step g), f) the set filling parameter is varied on the basis of an algorithm, in particular by using the data model, and a jump is made back to step b), g) the filling parameter associated with the best target value is saved as an optimal filling parameter for the product in the data model, and h) the optimal filling parameter is used during the filling with the product in a filling machine.

IPC 8 full level

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Citation (search report)

See references of WO 2017186708A1

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