

Title (en)

PREDICTION MODEL FOR PREDICTING PRODUCT QUALITY PARAMETER VALUES

Title (de)

VORHERSAGEMODELL ZUM VORHERSAGEN VON PRODUKTQUALITÄTSPARAMETERWERTEN

Title (fr)

MODÈLE DE PRÉDICTION POUR PRÉDIRE DES VALEURS DE PARAMÈTRE DE QUALITÉ DE PRODUIT

Publication

EP 4291957 A1 20231220 (DE)

Application

EP 22709254 A 20220211

Priority

- DE 102021201296 A 20210211
- EP 2022053351 W 20220211

Abstract (en)

[origin: WO2022171788A1] The invention relates to a method for training a machine-learning module (216) of a computer-implemented prediction model (210) for predicting product quality parameter values for one or more quality parameters of a chemical product (920) manufactured by a chemical production installation (900). The production installation comprises a plurality of sensors (946) that are each configured to capture process parameter values for one or more process parameters of a chemical process performed by the production installation in order to manufacture the chemical product during operation of the production installation. Information about the production installation and the process performed by the production installation is used a priori and comprises time cycle information about a time cycle of the process performed within the production installation, sensor-specific time shifts for the sensors between a capture time of training process parameter values (210) and a manufacturing time of a product unit during the manufacture of which the applicable training process parameter value was captured.

IPC 8 full level

G05B 13/02 (2006.01)

CPC (source: EP US)

G05B 13/0265 (2013.01 - EP); **G06N 5/022** (2013.01 - US)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021201296 A1 20220811; EP 4291957 A1 20231220; US 2024144043 A1 20240502; WO 2022171788 A1 20220818

DOCDB simple family (application)

DE 102021201296 A 20210211; EP 2022053351 W 20220211; EP 22709254 A 20220211; US 202218276967 A 20220211