Title (en)

APPARATUS AND METHOD FOR MONITORING CLEANING

Title (de

VORRICHTUNG UND VERFAHREN ZUM ÜBERWACHEN DER REINIGUNG

Title (fr)

DISPOSITIF ET PROCÉDÉ SERVANT À SURVEILLER LE NETTOYAGE

Publication

EP 2632610 A2 20130904 (DE)

Application

EP 11775917 A 20111025

Priority

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Abstract (en

[origin: WO2012055542A2] The invention relates to an apparatus comprising at least one process container and/or at least one process line, a cleaning device via which the process container and/or process line can be cleaned by means of introducing a detergent solution, a measuring device for determining a first physical characteristic of the detergent solution, a measuring device for determining a second physical characteristic of the detergent solution, an evaluation unit which determines the detergent concentration in the detergent solution via the first and second physical characteristics and via the temperature of the detergent solution, and determines the continuance or termination of the cleaning and/or the re-concentration and/or replacement of the detergent as a function of the detergent concentration that is determined. The invention further relates to methods for monitoring the cleaning of an apparatus, comprising the steps of: (a) cleaning the apparatus (1) with a detergent solution, wherein the detergent is chemically converted during the cleaning, (b) measuring a first and a second physical characteristic and measuring the temperature of the detergent solution, (c) determining the detergent concentration in the detergent solution via the first and second physical characteristics and via the temperature of the detergent solution, (d) continuing or terminating the cleaning and/or re-concentrating and/or replacing the detergent as a function of the detergent concentration determined.

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CPC (source: EP US)

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See references of WO 2012055542A2

Citation (examination)

US 2002143474 A1 20021003 - SPITZ MACDONALD LEO [US], et al

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