

Title (en)

DEVICE AND METHOD FOR CATALYTICALLY CONVERTING CHEMICAL SUBSTANCES AT DWELL TIMES IN THE RANGE OF 0.1-10 SECONDS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR KATALYTISCHEN UMSETZUNG VON CHEMISCHEN STOFFEN BEI VERWEILZEITEN IM BEREICH VON 0,1 - 10 SEKUNDEN

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR LA RÉACTION CATALYTIQUE DE SUBSTANCES CHIMIQUES POUR DES TEMPS DE SÉJOUR DE 0,1 À 10 SECONDES

Publication

EP 3658272 A1 20200603 (DE)

Application

EP 18746667 A 20180725

Priority

- EP 17183734 A 20170728
- EP 2018070090 W 20180725

Abstract (en)

[origin: WO2019020655A1] The invention relates to a device and to a method for catalytically converting chemical substances in the presence of pulverous catalysts in a trickle-bed reactor at dwell times in the range of 0.1-10 seconds, the device comprising at least one trickle-bed reactor (2), the inlet side of which is operatively connected to at least one catalyst storage container (1) and to at least one reactant feed and the outlet side of which is operatively connected to at least one separator (3). The at least one separator (3) has at least one outlet line for leading away a product flow. The device is characterized in that the outlet line arranged on the separator (3) for leading away the product flow has a continuous valve, which is connected to a pressure-measuring sensor by means of a controller, the continuous valve and the pressure-measuring sensor forming a pressure control circuit together with a controller. The examinations performed by means of the device according to the invention and by means of the method according to the invention have higher accuracy than the devices and methods known in the prior art.

IPC 8 full level

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Citation (search report)

See references of WO 2019020655A1

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