

Title (en)

METHOD AND DEVICE FOR THE PROCESS-ATTENDANT CLEANING OF MICRO- AND MINI-REACTORS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR PROZESSBEGLEITENDEN REINIGUNG VON MIKRO- UND MINIREAKTOREN

Title (fr)

PROCEDE ET DISPOSITIF DE NETTOYAGE DE MICRO-REACTEURS ET DE DE MINI-REACTEURS CONCOMITANT A UN PROCESSUS

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Application

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Abstract (en)

[origin: WO03020414A1] The invention relates to methods and devices for the process-attendant cleaning of micro- and mini-reactors for controlled process management and for avoiding blockages on carrying out chemical reactions and physical processes. The invention is characterised in that the micro- or mini-reactor is cleaned by means of a controlled pressure increase with a subsequent sudden release or with a gas pressure surge in a cyclical manner or using a controller. Wall deposits formed from solid material(s) involved in the chemical synthesis or the physical process are thus almost completely removed such that, after the cleaning procedure, the initial operating pressure can be set in the micro- or mini-reactor. A blockage of the micro- or mini-reactor can thus be avoided and the transferring of said production method to the production scale with micro- or mini-reactors is possible for the first time. The above is particularly true for reactions in which educts in the form of suspensions are used and/or solid products arise, such as in the production of azo dyes, for example.

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