

Title (en)  
APPARATUS AND METHOD FOR STUDYING DISCONTINUOUS PRODUCT FLUID FLOWS DURING THE REACTION OF REACTANT FLUID FLOWS OVER SOLID CATALYSTS

Title (de)  
APPARATUR UND VERFAHREN ZUR UNTERSUCHUNG VON DISKONTINUIERLICHEN PRODUKTFLUIDSTRÖMEN BEI DER UMSETZUNG VON EDUKTFLUIDSTRÖMEN AN FESTSTOFFKATALYSATOREN

Title (fr)  
APPAREILLAGE ET PROCÉDÉ D'ANALYSE DE COURANTS DE FLUIDES PRODUITS DISCONTINUS LORS DE LA CONVERSION DE COURANTS DE FLUIDES ÉDUITS SUR DES CATALYSEURS SOLIDES

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Application  
**EP 14781876 A 20141008**

Priority

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Abstract (en)  
[origin: WO2015052212A2] The invention relates to an apparatus and method for studying solid catalysts and processes in which there are discontinuous product fluid flows. The claimed apparatus, which is preferably designed for studying a plurality of catalysts in parallel, has at least one reaction chamber, with one or more fluid mixing chambers downstream of each reaction chamber. The outlet pipe of the fluid mixing chamber or the outlet pipe of a sequence of fluid mixing chambers is operatively connected to a throttle element (11), the throttle element (11) being operatively connected to an analysis device and to an outlet pipe, and the outlet pipe comprising a control device. The claimed method is characterised by a cyclic operating mode in which there is a controlled supply of at least one product fluid into the at least one fluid mixing chamber, the product fluid flow is mixed in the mixing chamber, and the at least one mixed product fluid flow is passed to the outlet pipe and the analysis device. A cycle lasts from 0.2 to 7200 seconds and can include multiple phases with different compositions. The method can include a plurality of cycles.

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