

Title (en)

INTEGRATED REACTOR-EXCHANGER WITH TWO LEVELS OF FIXED BEDS IN SERIES AND RELATED METHOD

Title (de)

INTEGRIERTER REAKTOR-AUSTAUSCHER MIT ZWEI ETAGEN VON FESTBETTEN IN SERIE UND ZUGEHÖRIGES VERFAHREN

Title (fr)

REACTEUR-ECHANGEUR INTEGRE A DEUX ETAGES DE LITS FIXES EN SERIE ET PROCEDE ASSOCIE

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Application

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Abstract (en)

[origin: WO2022043401A1] The invention relates to a catalytic synthesis reactor-exchanger (1) comprising a first reactor (2) that is suitable for receiving a first catalyst fixed bed (7), and a second reactor (3) that is suitable for receiving a second catalyst fixed bed (11), the first reactor (2) and the second reactor (3) being arranged in series, characterized in that the second reactor (3) is arranged inside the first reactor (2) such that the second reactor (3) is in contact with the first catalyst fixed bed (7) of the first reactor (2) in order that heat-transfer fluid is not required to provide a heat exchange between the first reactor (2) and the second reactor (3). The present invention relates to the field of catalytic reactors. It applies in a particularly advantageous manner to the field of catalytic reactors that use solid catalysts and dedicated to exothermic or endothermic reactions.

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