

Title (en)

DEVICE AND METHOD FOR CARRYING OUT HETEROGENEOUSLY CATALYSED GAS PHASE REACTIONS WITH HEAT TONALITY

Title (de)

VORRICHTUNG UND VERFAHREN ZUR DURCHFÜHRUNG VON HETEROGEN KATALYSIERTEN GASPHASENREAKTIONEN MIT WÄRMETÖNUNG

Title (fr)

DISPOSITIF ET PROCEDE PERMETTANT DE METTRE EN OEUVRE DES REACTIONS EN PHASE GAZEUSE, A CATALYSE HETEROGENE, AVEC CHALEUR DE REACTION

Publication

**EP 1289650 A2 20030312 (DE)**

Application

**EP 01957805 A 20010525**

Priority

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Abstract (en)

[origin: WO0189683A2] The invention relates to a device for carrying out, in a substantially isothermal manner, a heterogeneously catalysed reaction in a gas phase with high heat tonality. The inventive device comprises at least one reactor chamber (101) with an inlet (131, 141) and an outlet (143). The reactor chamber is defined by heat dissipating walls, lying at a substantially constant distance of  $\leq 30$  mm along the main flow axis of a reaction gas; the reactor chamber is equipped with catalyst-coated strips (120, 132); the strips are permeable for the reaction gas and are flexible in all directions of the reactor chamber, having a surface/volume ratio of 50 to 5000  $\text{m}^2/\text{m}^3$  and good thermal conductivity; the reaction gas in the reactor chamber flows at a rate of  $\geq 200$   $\text{m}^3$  per  $\text{m}^2$  surface area per hour; and a heat exchange medium flows on the side of the reactor wall opposite the reactor chamber.

IPC 1-7

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Citation (search report)

See references of WO 0189683A2

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