Title (en)

METHOD AND DEVICE FOR COMPLETELY HYDROGENATING A HYDROCARBON FLOW

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VOLLHYDRIERUNG EINES KOHLENWASSERSTOFFSTROMES

Title (fr)

PROCEDE ET DISPOSITIF POUR HYDROGENER INTEGRALEMENT UN FLUX D'HYDROCARBURES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2006053733A1] The invention relates to a method for hydrogenating material flows in systems for producing alkenes by catalytically dehydrogenating light alkanes, in addition to a device for carrying out said method. All of the unsaturated hydrocarbons contained in the entire hydrocarbon flow which is made of fresh and recycled alkane and which is to be introduced into the dehydrogenation reactor, are subjected to a complete hydrogenation before being introduced into the dehydrogenation reactor. As a result, the formation of coke in the dehydrogenation reactor is drastically reduced. Energy expenditure for preheating the educt flow to the reaction temperature is reduced such that energy released during exothermic hydrogenation remains almost completely in the hydrocarbon flow.

IPC 8 full level

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CPC (source: EP KR US)

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