

Title (en)

REGENERATION OF CATALYSTS FOR DEHYDRATING ALKANES

Title (de)

REGENERATION VON KATALYSATOREN ZUR DEHYDRIERUNG VON ALKANEN

Title (fr)

RÉGÉNÉRATION DE CATALYSEURS DE DÉSHYDROGÉNATION D'ALCANES

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Application

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Abstract (en)

[origin: WO2009018924A1] The invention relates to a method for dehydrating alkanes, wherein the alkane is guided in a reactor for the dehydration of alkanes via a catalyst, and the process may be carried out adiabatically or non-adiabatically, and the catalyst for dehydration can be regenerated after the reaction phase by means of transferring a gas, wherein said gas is guided via the catalyst after a short rinsing phase using water vapor, and said regeneration gas consists of a gas containing oxygen and of steam, and after regeneration the catalyst is freed of the gas containing oxygen by transferring steam, wherein the duration of the transfer of a gas containing oxygen is significantly reduced as compared to common methods and represents 70% or less of the total regeneration time, and the catalyst has an increased selectivity for forming alkene by means of carrying out the regeneration at a constant activity, and the catalyst is comprised of a metal of the group of platinum metals or of the group VIB of the periodic table of the elements, which is applied to a carrier in the form of a compound or in elementary form, which substantially consists of oxides of the elements of tin, zinc, or aluminum.

IPC 8 full level

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