

Title (en)
PROCES FOR THE PREPARATION OF BENZENE FROM METHAN

Title (de)
VERFAHREN ZUR HERSTELLUNG VON BENZOL AUS METHAN

Title (fr)
PROCÉDÉ DE PRODUCTION DE BENZÈNE À PARTIR DE MÉTHANE

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EP 10747846 A 20100823

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Abstract (en)
[origin: WO2011026744A2] The present invention relates to a process for the non-oxidative dehydroaromatization of a feed stream containing C1-C4 aliphatics comprising the steps I, feeding the feed stream E into a reaction zone 1, reacting the feed stream E under non-oxidative conditions in the presence of a particulate catalyst to give a product stream P containing aromatic hydrocarbons, and removing the product stream P from the reaction zone 1; II, transferring the catalyst that is reduced in its activity by deposited coke into a reaction zone 2; III, at least partial regeneration of the catalyst with feed of a hydrogen-containing gas stream H in a reaction zone 2, wherein at least some of the deposited coke is converted into methane and a methane-containing gas stream M is formed that is fed at least in part to the reaction zone 1; IV, removing the catalyst from the reaction zone 2 and V, recirculating at least some of the catalyst that is removed to the reaction zone 1, wherein reaction zone 1 and reaction zone 2 are arranged spatially adjacently in the same reactor.

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