

Title (en)

PROCESS AND CATALYST FOR THE CATALYTIC OXIDATIVE DEHYDROGENATION OF ALKYL AROMATICS AND PARAFFINS

Title (de)

VERFAHREN UND KATALYSATOR FÜR DIE KATALYTISCHE OXIDATIVE DEHYDRIERUNG VON ALKYLAROMATEN UND PARAFFINEN

Title (fr)

PROCEDE ET CATALYSEUR DE DESHYDROGENATION CATALYTIQUE OXYDATIVE D'AROMATES D'ALKYLE ET DE PARAFFINES

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Application

EP 97942868 A 19970821

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Abstract (en)

[origin: DE19636884A1] The invention concerns a process for the heterogenocatalytic oxidative gaseous phase dehydrogenation of alkyl aromatics or aliphatics (educts) to form the corresponding alkenyl aromatics or olefins. In a first reaction step, the educt is dehydrogenated with a bismuth-containing redox catalyst (oxygen carrier) in the absence of molecular oxygen, and, in a second reaction step, the reduced catalyst is reoxidized with an oxidizing agent. The reaction steps are chronologically or spatially decoupled, and at least one reducible bismuthate (5) on a basic or neutral carrier is used as the bismuth-containing catalyst. The invention further concerns Ba-bismuthate (5) having the composition Ba₉Bi₃O₁₄ as novel substance.

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IPC 8 full level

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