

mixture comprises a sulfur-sensitive reforming catalyst protected from sulfur deactivation by a manganese-oxide catalyst. The invention shows substantial benefits over prior-art processes in catalyst utilization.

5614453

CATALYST CONTAINING ZEOLITE BETA AND A PILLARED CLAY

Ocelli Mario L Yorba Linda, CA, UNITED STATES assigned to UOP

A composition of matter comprising zeolite Beta and a pillared clay is especially suited for use in combination with one or more hydrogenation components as a catalyst for hydrocracking various types of feedstocks.

5618407

CATALYTIC CRACKING PROCESS UTILIZING A CATALYST COMPRISING ALUMINUM BORATE AND ZIRCONIUM BORATE

Kallenbach Lyle R; Senn Dwayne; Johnson Marvin M Bartlesville, OK, UNITED STATES assigned to Phillips Petroleum Company

A process for catalytically cracking a hydrocarbon-containing oil employs a cracking catalyst comprising aluminum borate and zirconium borate.

5618769

PROCESS FOR THE RECOVERY OF ALKYLATION CATALYST

Hommeltoft Sven I Hillerod, DENMARK assigned to Haldor Tops

Process for the recovery of spent fluorinated sulfonic catalyst from acid soluble oil (ASO) being formed during alkylation of hydrocarbons in the presence of the acid catalyst. The process includes washing the ASO with water and recovering an aqueous solution of the acid catalyst, neutralizing the acid in the aqueous solution by adding to the solution a basic compound being selected from the group of amino compounds, ammonia and ammonium salts, thereby, forming ammonium salts of the acid catalyst with a melting point at which the obtained acid catalyst salt in a subsequent concentration and drying step is in the form of a melt, drying the melt, and finally recovering the acid catalyst by protonization of the dried melt with sulfuric acid and distilling off the recovered acid catalyst from the sulfuric acid.

5624547

PROCESS FOR PRETREATMENT OF HYDROCARBON OIL PRIOR TO HYDROCRACKING AND FLUID CATALYTIC CRACKING

Sudhakar Chakka; Fritz Paul O; Kjellson Carl J; Huang Hua-Min; Sandford Gerald Fishkill, NY, UNITED STATES assigned to Texaco Inc

Disclosed is a process for pretreatment of hydrocarbon feed containing sulfur and nitrogen compounds and aromatics prior to hydrocracking or fluid catalytic cracking which comprises: contacting said feedstock with a sulfided catalyst comprising a metal of non-noble Group VIII and Group VIB, and, optionally one or more elements