

wherein the catalyst system comprises an inorganic oxide support having immobilized thereon a least one strong Lewis acid comprising at least one metal salt of a strong Bronsted acid wherein the metal is selected from the group consisting of aluminum, boron gallium, antimony, tantalum, niobium, yttrium, cobalt, nickel, iron, tin, zinc, magnesium barium strontium, calcium, tungsten, molybdenum and the metals of the lanthanide series and wherein the strong Bronsted acid is selected from the group consisting of mineral and organic acids stronger than 100% sulfuric acid.

**5612270**

**AMMONIUM TREATED  
SELECTIVATED ZEOLITE  
CATALYST**

Beck Jeffrey S; Stern David L Princeton, NJ, UNITED STATES assigned to Mobil Oil Corporation

There is provided zeolite catalyst, which is first selectivated with a siliceous material and then treated with an aqueous solution comprising ammonium or organoammonium ions under ion exchange conditions.

**5618772**

**METHOD FOR PRODUCING  
CATALYST**

Suda Akihiko; Ukyo Yoshio; Sobukawa Hide; Kandori Toshi; Fukui Masayuk Aichi, JAPAN assigned to Kabushiki Kaisha Toyota Chuo Kenkyusho

A method for producing a catalyst having high catalytic activity even at high temperatures of 1200°C or higher. Fine alumina particles, of which 50% by weight or more have a particle size of 100

nm or less, are mixed with a catalytic component and a substance of inhibiting the sintering of fine alumina particles to form a slurry mixture. This slurry is dried and then calcined to obtain a porous catalyst. The fine alumina particles in the porous catalyst have a large specific surface area even at high temperatures and therefore the porous catalyst maintains its high catalytic activity even at high temperatures of 1200°C or higher.

**5624543**

**AQUEOUS PHASE PRODUCTION OF  
HYDROGEN PEROXIDE AND  
CATALYSTS FOR USE THEREIN**

Guillet James; Kohler Kevin; Friedman Gad Don Mills, CANADA assigned to Peroxco Incorporated

Hydrogen peroxide is produced by a process which uses as catalyst a polymer which has anthraquinone/anthrahydroquinone groups attached to it, and which exhibits differential solubility in water. The polymer is water soluble under one set of conditions, e.g. temperature range, but insoluble under another set of such conditions. Accordingly, the polymer bound anthrahydroquinone groups are oxidized in aqueous solution to form anthraquinone groups and hydrogen peroxide, which dissolves in the aqueous medium. Then the conditions, e.g. temperature, are changed to precipitate the polymer, which can readily be separated off, ready for re-use.

**5624879**

**METHOD OF PREPARING  
ISOMERIZATION CATALYST**

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This invention provides a method of preparing an