

5569806

**OLEFIN ISOMERISATION PROCESS
USING METALLIC CATALYSTS
IMPREGNATED WITH ORGANIC
SULPHUR-CONTAINING
COMPOUNDS BEFORE LOADING
INTO THE REACTOR**

Cameron Charle; Nocca Jean-Luc; Sarrazin Patrick;
Forestiere Alain Paris, FRANCE assigned to
Institut Francais Du Petrole

The invention concerns a process for the isomerisation of less substituted olefins to more substituted external olefins and/or internal olefins in the absence of diolefins, in the presence of a palladium based catalyst deposited on a support. Before loading it into the reactor, said catalyst is treated with at least one sulphur-containing compound which is dissolved in a solvent then activated in a neutral or reducing atmosphere between 20°C. and 300°C., 1 and 50 bars and with a VVH of 50 to 600 h-1. The catalyst, containing 0.05% to 10% by weight of sulphur, is brought into contact with the feedstock and hydrogen between 20° C. and 200° C., 1 and 50 bars, a VVH of 0.5 to 10 h-1 and a H2/olefin molar ratio of 0.01 to 1.

5582713

**CATALYTIC CRACKING UTILIZING
A CATALYST COMPRISING ZEOLITE
GZS-11**

Wu Jianxin; Gatte Robert R; Roberie Terry G
Elkridge, MD, UNITED STATES assigned to W R
Grace & Co -Conn

A synthetic zeolite, designated zeolite GZS-11, is made having a molar composition expressed by the formula: (*See Patent for Tabular Presentation*) PS where M is an inorganic cation of valance n, R is

an organic cation of valence n, x has a value of less than 1.0, Y is one or more of +3 valence elements, such as aluminum, boron, gallium, iron, chromium, vanadium, molybdenum, or manganese, X is one or more of +4 valence elements, such as silicon, germanium, or titanium, y has a value of between 6 to 25, w has a value of up to 4 depending upon the degree of hydration of the zeolite, and having an X-ray diffraction pattern of the assynthesized zeolite substantially as in Table 1. The method for making the low ratio of XO₂/Y₂O₃ such as SiO₂/Al₂O₃ is achieved by adjusting the synthesis mixture composition during the aging stage through the addition of one or more of the solutions containing the reactive sources of zeolitic components.

5585316

CATALYST TREATMENT

Nay Barry; Smith Mark R; Telford Clive D
Woking, UNITED KINGDOM assigned to British
Petroleum Company plc

A cobalt catalyst for use in the Fischer Tropsch reaction of synthesis gas to form hydrocarbons is activated or regenerated by treatment of a cobalt containing catalyst with a gas containing carbon monoxide, said gas containing less than 30% v hydrogen. The catalyst obtained has increased activity and greater selectivity towards producing C₅+ hydrocarbons.

5591238

**METHOD FOR PREPARING
SYNTHESIS GAS USING NICKEL
CATALYSTS**

Bhattacharyya Alakananda; Chang Wen-Dong;
Kleefisch Mark S; Udovich Carl Wheaton, IL,
UNITED STATES assigned to Amoco Corporation