A method and nickel-containing catalyst are disclosed for preparing synthesis gas by the reforming of a hydrocarbyl compound using an oxygen-containing compound.

5591323

PROCESS FOR SWEETENING PETROLEUM CUTS WITHOUT REGULAR ADDITION OF ALKALINE SOLUTION USING A BASIC SOLID CATALYST

Marcilly Christian; Leporq Serge; Courty Philippe Houilles, FRANCE assigned to Institut Francais du Petrole

A process for sweetening a petroleum cut containing mercaptans, wherein said petroleum cut is subjected to oxidation conditions by being contacted with a porous catalyst, in the presence of air said process being characterised in that said catalyst comprises 10 to 98% by weight of at least one mineral solid phase constituted of an alkaline aluminosilicate with a Si/Al atomic ratio less than or equal to 5, 1 to 60% by weight of active carbon, 0.02 to 2% by weight of at least one metal chelate and 0 to 20% by weight of at least one organic or mineral binding agent, has a basicity determined according to the 2896 ASTM standard with 20 milligrams of potash per gram and a total BET surface area of 10 m²g-1, and contains inside its pore structure a permanent aqueous phase representing 0.1 to 40% by weight of dry catalyst.

5591326

CATALYTIC PROCESS FOR CRUDE OIL DESALTING

Shih Stuart S Cherry Hill, NJ, UNITED STATES assigned to Mobil Oil Corporation

A catalytic desalting process for processing whole crude oils. The desalting process uses an M41S catalyst to remove salts from the whole crude. Solids may also be removed from the whole crude using a porous material having a pore size greater than about 10 microns. The catalytic desalting process does not generate waste water.

5591689

PREPARATION OF ISOMERIZATION CATALYST COMPOSITION

Wu An-hsiang; Drake Charles A; Melton Ralph J Bartlesville, OK, UNITED STATES assigned to Phillips Petroleum Company

A Group VIII metal and chloride-containing composition (effective as an alkane/cycloalkane isomerization catalyst) is prepared by a method which comprises mixing aluminum trichloride with a solid material containing at least one Group VIII metal (Pt and/or Pd and/or Ni) and alumina, heating the obtained mixture in an inert gas at about 450° -750°C., and then treating the mixture with a hydrogen chloride-containing gas at about 300° -700°C.

5597944

DEHYDROGENATION OF N-PARAFFIN TO N-OLEFIN EMPLOYING MANGANESE OXIDE OCTAHEDRAL MOLECULAR SIEVE AS CATALYST

O'Young Chi-Lin; Sawicki Robert A; Yin Yuan-Gen; Xu Wen-Qing; Suib Steven L Poughkeepsie, NY, UNITED STATES assigned to Texaco Inc

The dehydrogenation of n-parrofins to n-olefins is catalyzed by novel synthetic manganese oxide