lower polyhydric alcohols such as ethanediol, propylene glycol, butanediol and glycerol, by means of hydrogenolysis reaction of higher polyhydric alcohols.

## 5543532

# CATALYST AND METHOD FOR VAPOR PHASE OXIDATION OF ALKANE HYDROCARBONS

Kourtakis Kostantinos; Sonnichsen George C Hockessin, DE, UNITED STATES assigned to E I Du Pont de Nemours and Company

This invention relates to cation substituted catalysts based primarily upon vanadium pyrophosphate, useful in the oxidation of alkane hydrocarbons.

#### 5543536

# MONODENTATE PHOSPHITE AND NICKEL CATALYST COMPOSITION FOR MONOOLEFIN HYDROCYANATION

Tam Wilson Boothwyn, PA, UNITED STATES assigned to E I Du Pont de Nemours and Company

Catalyst compositions comprising zero-valent nickel and a mondentate phosphite ligand are provided, with a process for the hydrocyanation of monoolefins using these compositions in the presence of a Lewis acid promoter.

### 5559065

### **COATED CATALYSTS**

Lauth Guenter; Hoelderich Wolfgang; Harth Klaus; Hibst Hartmut Grosskarlbach, GERMANY assigned to BASF Aktiengesellschaft

A coated catalyst is prepared by depositing an alloy by physical vapor deposition and/or chemical vapor deposition on a molding, at least one alloy component being a metal selected from the group consisting of aluminum, gallium, silicon. germanium, tin, lead, bismuth, yttrium, titanium, zirconium, vanadium. niobium, tantalum. chromium, molybdenum, tungsten, iron, cobalt, ruthenium, rhodium, palladium, osmium, iridium, platinum, copper, silver, gold and zinc.

#### 5559259

## PROCESS FOR PRODUCING POISON-RESISTANT CATALYSTS

Maier Wilhelm Mulheim an der Ruhr, GERMANY assigned to Studiengesellschaft Kohle mbH

The invention relates to a poison-resistant catalytically active microporous membrane to be used for heterogeneously catalyzed reactions, which membrane is characterized in that it is permeable to one of the reactants separated by said membrane, and that it is impermeable to the other reactants and the contaminants contained therein, the molecules of all of which are larger in size than the pore size of the membrane, and to a process for carrying out a heterogeneously catalyzed reaction under conditions preventing the catalyst from being poisoned. This membrane allows to conduct three-phase reactions in a new manner, whereby the reaction gas is directly transported to the active sites.

### 5559261

## METHOD FOR MANUFACTURING COBALT CATALYSTS

Sivik Mark Fairfield, OH, UNITED STATES assigned to The Procter & Gamble Company