## NEW CATALYST FORMULATIONS

## 5599962

# PROCESS FOR THE PREPARATION OF RUTHENIUM HYDROGENATION CATALYSTS AND PRODUCTS THEREOF

Beatty Richard P; Paciello Rocco A Newark, DE, UNITED STATES assigned to E I Du Pont de Nemours and Company

This invention relates to a process for the preparation of ruthenium complexes of the formula RuH2L2(PR3)2, wherein each L is independently H2 or an additional equivalent of PR3, and each R is independently H, a hydrocarbyl group, or an assembly of at least two hydrocarbyl groups connected by ether or amine linkages, comprising contacting a source of ruthenium and PR3 with gaseous hydrogen in the presence cf a strong base, a phase transfer catalyst, water and an organic solvent; and the use of certain classes of ruthenium complexes as catalysts in hydrogenation, and reductive hydrolysis processes.

## 5602070

## PROCESS FOR PREPARING SILVER CATALYST

# Rizkalla Nabil River Vale, NJ, UNITED STATES assigned to Scientific Design Company Inc

An improved silver catalyst for the oxidation of ethylene with molecular oxygen is made by impregnating a porous support with a silver salt of an acid; subjecting the impregnated support to a multi-stage activation by heating and post impregnating the support with an cesium carbonate or bicarbonate from an anhydrous alcohol solution followed by washing with alcohol solvent and rapid drying to produce a finished catalyst having from 1-6\*10-3 gew of the alkali metal per kg of catalyst.

## 5604174

# METAL FOIL CATALYST MEMBERS BY AQUEOUS ELECTROPHORETIC DEPOSITION

Friedman Semyon; Kerkar Awdhoot; Hughes Ernest; Brezny Rast; Lau John W; Block Jacob Baltimore, MD, UNITED STATES assigned to W R Grace & Co-Conn

Flexible metal foil catalyst members suitable for use in catalytic devices for combustion engine emission control are prepared by electrophoretic deposition using an aqueous slurry of catalyst support particles. The deposited support layer is of uniform thickness and stable surface area. The catalyst support may then be impregnated with catalytic species and assembled into a catalytic device. The catalyst members from the invention are especially suitable for use in automotive applications, and more especially in electrically heated catalytic devices.

## 5607890

# SUPPORTED LEWIS ACID CATALYSTS DERIVED FROM SUPERACIDS USEFUL FOR HYDROCARBON CONVERSION REACTIONS

Chen Frank J; Guyot Alai; Hamaide Thierry; Le Deore Christoph Edison, NJ, UNITED STATES assigned to Exxon Chemical Patents Inc

A supported Lewis acid catalyst system for catalyzing hydrocarbon conversion reactions including cationic polymerization, alkylation, isomerization and cracking reactions is disclosed,