

radii equal to or less than 40 #521 , 4% to 10% of said volume from pores having pore radii from more than 40 +521 +0 to 300 +521 , and 30% to 60% of said volume from pores having pore radii from more than 300 +521 +0 to 5000 +521 .+RE21 .+RE+RE.+RE21 .+RE21 .+RE21 .+RE21 .+RE21 .+RE

5600031

**PROCESS FOR PREFORMING
COBALTOUS SALTS USING
SHELL-TYPE PREFORMER
CATALYSTS**

Roussel Patricia Baton Rouge, LA, UNITED STATES assigned to Exxon Chemical Patents Inc

A process for preparing oxo alcohols and aldehydes by the cobalt catalyzed hydroformylation of C2 to C17 linear or branched monoolefins with subsequent hydrogenation of the hydroformylation product, in which oxo process aqueous solutions of cobalt salts are converted to active hydrido cobalt carbonyl species in a preformer reactor under preforming reaction conditions, the improvement characterized by the preformer reactor containing a shell-type, metal on substrate, preformer catalyst.

5600033

**EPOXIDE ISOMERIZATION
CATALYSTS**

Faraj Mahmoud K Newtown Square, PA, UNITED STATES assigned to ARCO Chemical Technology L P

Improved catalysts for isomerizing epoxides to allylic alcohols are disclosed. The catalysts contain lithium phosphate supported on high-purity silica. The use of high-purity silica as a support results in improved epoxide conversion and allylic alcohol

selectivity, and reduced by-product generation. The invention includes a process for isomerizing epoxides using the catalysts. The process is well-suited to the manufacture of allyl alcohol from propylene oxide.

5602228

NICKEL PHOSPHATE CATALYSTS

Wang Yin; Marrocco Matthew L; Trimmer Mark Diamond Bar, CA, UNITED STATES assigned to Maxdem Incorporated

Methods for coupling aryl halides or aryl sulfonates to produce biaryls or polyaryls using novel nickel phosphite catalysts are provided.

5602267

**ORGANOMETALLIC CATALYSTS
FOR EPOXIDIZING PROCHIRAL
OLEFINS AND A NEW CLASS OF
AMID-SALICYLIDENE LIGANDS**

Zhao Shu-Ha Corpus Christi, TX, UNITED STATES assigned to Hoechst Celanese

Asymmetric synthesis using a novel catalyst comprising the formula: (*See Patent for Chemical Structure*) and which has utility in areas such as epoxidation of olefins.

5602288

**CATALYTIC PROCESS FOR
PRODUCING CF₃CH₂F**

Rao V N Mallikarjuna Wilmington, DE, UNITED STATES assigned to E I Du Pont de Nemours and Company

A process is disclosed for producing $\text{CF}_3\text{CH}_2\text{F}$ from CF_3CHClF by catalytic chlorination of CF_3CHClF to $\text{CF}_3\text{CCl}_2\text{F}$ at elevated temperature, and reaction of $\text{CF}_3\text{CCl}_2\text{F}$ with H_2 in the presence of a carbon-supported precious metal catalyst at a temperature of from about 100°C to 250°C . Suitable catalysts for the chlorination include carbon catalysts and catalysts wherein halides of certain metals (La, Zn, Cu, Cr, Ru, Rh, and/or Pt) are supported on carbon.

5606085

**THERMALLY ACTIVATED OLEFIN
METATHESIS CATALYST
PRECURSOR**

Bell Andrew; Coffy Tim West Grove, PA,
UNITED STATES assigned to Metton America Inc

Molybdenum and tungsten compounds that are useful as catalyst precursors in the metathesis of olefins have the general formula: (*See Patent for Tabular Presentation*) PS wherein M is tungsten or molybdenum; Y is oxygen or NR1; R1, R2, and R3 are the same or different and are selected from alkyl, cycloalkyl, cycloalkenyl, polycycloalkyl, polycycloalkenyl, haloalkyl, haloaralkyl, substituted or unsubstituted aralkyl and aryl groups, and silicon-containing analogs thereof; L is a Lewis base; X is halogen; s is 0 or 1; $x+y+z=4$, and $y \geq 1$, provided that when x is 2 or more, two OR2 groups can be replaced by a chelating ligand (OR2)₂. These compounds can be used for the metathesis of olefins in neat metathesizable olefin, as well as in solution, and require only the input of energy to be converted to active catalysts.

5606103

**ORGANOTIN CATALYZED
TRANSESTERIFICATION**

Trapasso Louis E; Meisel Philip L; Meisel Lee B;
Chwang Willy K West Long Branch, NJ,
UNITED STATES assigned to CPS Chemical
Company Inc

Methyl or ethyl esters of mono- and polycarboxylic acids are transesterified with alcohols and polyols by reaction in the presence of a catalytically effective amount of organotin catalyst, so that an alcohol or polyol carboxylic acid ester is formed, which is then washed with aqueous alkali having a pH bigger than about 13.2 so as to remove essentially all of the organotin catalyst, thereby permitting the recovery of the alcohol or polyol carboxylic acid ester essentially free of the organotin catalyst.

5608096

**METHOD OF FORMING SILOXANE
POLYMERS USING A HETEROPOLY
CATALYST HAVING A KEGGIN
STRUCTURE**

Katsoulis Dimitris; Keryk John R Midland, MI,
UNITED STATES assigned to Dow Corning
Corporation

The invention relates to a method of forming siloxane polymers using a heteropoly catalyst having a Keggin structure. The method comprises contacting a fluid comprising at least one siloxane polymer precursor selected from the group consisting of cyclic siloxanes (I) having the formula $(\text{RR}'\text{SiO})_a$ and linear siloxanes (II) having the formula (*See Patent for Chemical Structure*) where R is a substituted or unsubstituted monovalent hydrocarbon having from 1 to 6 carbon atoms, R' is hydrogen or a substituted or