

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