

**EPOXIDATION PROCESS AND CATALYST THEREFORE****ABSTRACT**

A crystalline titanium-containing molecular sieve having a framework structure isomorphous with zeolite beta and containing Si and Ti, but essentially no framework Al, usefully catalyzes the epoxidation of olefin with organic hydroperoxides. The catalyst may be prepared by forming a mixture of a hydrolyzable silicon compound, a hydrolyzable titanium compound, and a benzyl-substituted ammonium species wherein each nitrogen atom bears a single benzyl substituent and subjecting said mixture to hydrothermal treatment at a temperature of from 100 to 200°C for a time effective to form the crystalline titanium-containing molecular sieve.

FIGURE 1