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(54) Title: POLYMER-ENCAPSULATED TITANIUM ZEOLITES FOR OXIDATION REACTIONS

(57) **Abstract:** Catalysts useful for oxidation reactions are disclosed. The catalysts comprise a polymer-encapsulated titanium zeolite. The catalysts are easy to prepare and use, they are easy to recover and reuse, and they provide good conversions in a variety of important oxidation processes. The invention includes a process which comprises oxidizing an organic compound in the presence of hydrogen peroxide and a polymer-encapsulated titanium zeolite. In one example, the organic compound is propylene and the reaction product is propylene oxide.



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