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(54) **Title:** CATALYSTS WITH MODIFIED ACTIVE PHASE DISPERSION AND METHOD TO PREPARE CATALYSTS WITH MODIFIED ACTIVE PHASE DISPERSION

(57) **Abstract:** Catalyst particles comprising one or more active metal components and methods for manufacturing such catalyst particles are provided. The particles are a composite of a granulating agent or binder material such as an inorganic oxide, and an ultra-stable Y (hereafter "USY") zeolite in which some of the aluminum atoms in the framework are substituted with zirconium atoms and/or titanium atoms and/or hafnium atoms. The one or more active phase components are incorporated in a composite mixture of the inorganic oxide binder and the post-framework modified USY zeolite prior to Conning the catalyst particles.



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