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(54) Title: METHOD OF INCREASING THE LIFETIME OF A HYDRO-OXIDATION CATALYST

(57) Abstract: A method of increasing the lifetime of a hydro-oxidation catalyst comprising, preferably, gold, silver, or mixtures thereof, and optionally one or more promoters, on a titanium-containing support, such as a titanosilicate or titanium dispersed on silica. The method of the invention involves contacting the catalyst support with a hydroxy-functionalized organosilicon compound, a carboxy-functionalized organosilicon compound, or a mixture of hydroxy- and carboxy-functionalized organosilicon compounds, such as, sodium methyl silicate or (2-carboxypropyl)tetramethyldisiloxane. The contacting is preferably conducted during deposition of the catalytic metal(s) and optional promoters(s) onto the support. A catalyst composition and hydro-oxidation process utilizing the silicon-treated catalyst support are also claimed.



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