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(54) Title: DIRECT EPOXIDATION PROCESS USING A MIXED CATALYST SYSTEM

(57) Abstract: Catalyst mixtures useful for the direct epoxidation of olefins are disclosed. The catalyst mixture comprises a titanium or vanadium zeolite and a supported catalyst comprising a noble metal, bismuth, and a carrier. The invention includes a process for producing an epoxide comprising reacting an olefin, hydrogen and oxygen in the presence of the catalyst mixture. The process results in significantly reduced alkane byproduct formed by the hydrogenation of olefin.



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