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(71) Applicant: **LYONDELL CHEMICAL TECHNOLOGY, L.P.** [US/US]; Two Greenville Crossing, 4001 Kennett Pike, Suite 238, Greenville, Delaware 19807 (US).

(72) Inventor: **GREY, Roger, A.**; 111 Piedmond Road, West Chester, Pennsylvania 19382 (US).

(74) Agents: **CARROLL, Kevin, M.** et al.; LyondellBasell Industries, 3801 West Chester Pike, Newtown Square, Pennsylvania 19073 (US).

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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.



WO 2009/054875 A1