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(21) International Application Number: PCT/US99/07714 (22) International Filing Date: 7 April 1999 (07.04.99) (30) Priority Data: 60/081,826 15 April 1998 (15.04.98) US (71) Applicant (for all designated States except US): THE DOW CHEMICAL COMPANY [US/US]; 2030 Dow Center, Midland, MI 48674 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): KUPERMAN, Alex [CA/US]; 903 Deerfield Court, Midland, MI 48640 (US). BOWMAN, Robert, G. [US/US]; 1307 Kirkland Drive, Midland, MI 48640 (US). CLARK, Howard, W. [US/US]; 4318 Forestview Drive, Midland, MI 48642 (US). HARTWELL, George, E. [US/US]; 2908 Georgetown Drive, Midland, MI 48642 (US). (74) Agent: TREANGEN, John, B.; Patent Dept., P.O. Box 1967, Midland, MI 48641-1967 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: PROCESS FOR THE DIRECT OXIDATION OF OLEFINS TO OLEFIN OXIDES		
(57) Abstract A process for the direct oxidation of an olefin, such as propylene, by oxygen to the corresponding olefin oxide, such as propylene oxide. The process involves contacting the olefin with oxygen under reaction conditions in the presence of a reducing agent, such as hydrogen, and in the presence of a catalyst. The catalyst comprises a metal component, such as a transition metal oxide, dispersed on a metal ion-exchanged metallosilicate, such as a Group 1 or Group 2 ion-exchanged porous aluminosilicate. Selectivity to the olefin oxide is high, and the catalyst is readily regenerated.		