



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C07C 29/16, 31/20, B01J 31/24	A1	(11) International Publication Number: WO 00/63143 (43) International Publication Date: 26 October 2000 (26.10.00)
(21) International Application Number: PCT/EP00/02743 (22) International Filing Date: 29 March 2000 (29.03.00) (30) Priority Data: 09/291,737 14 April 1999 (14.04.99) US (71) Applicant (for all designated States except MN): ARCO CHEMICAL TECHNOLOGY, L.P. [US/US]; Suite 238, Two Greenville Crossing, 4001 Kennett Pike, Greenville, DE 19807 (US). (71) Applicant (for MN only): LYONDELL CHEMIE TECH- NOLOGIE NEDERLAND B.V. [NL/NL]; Theernsweg 14, NL-3197 KM Botlek Rotterdam (NL). (72) Inventors: ZAJACEK, John, G.; 669 Clovelly Road, Devon, PA 19333 (US). SHUM, Wilfred, P.; 2603 Winterbridge Lane, West Chester, PA 19382 (US). (74) Agents: COLMER, Stephen, Gary et al.; Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL (GB).		(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, 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: BUTANEDIOL PRODUCTION (57) Abstract Allyl alcohol is hydroformulated to 1,4-butanediol using a rhodium and trialkyl phosphine catalyst having preferably at least 2 methyl groups, the reaction first being carried out at milder conditions and subsequently at more, severe conditons.		