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(21) International Application Number: PCT/EP98/01155 (22) International Filing Date: 2 March 1998 (02.03.98) (30) Priority Data: 08/816,611 13 March 1997 (13.03.97) 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): ARCO CHEMIE TECHNOLOGIE NEDERLAND, B.V. [NL/NL]; Theemsweg 14, P.O. Box 7195, NL-3000 HD Rotterdam (NL). (72) Inventors: COMBS, George; 345 Donofrio Drive, Down- ington, PA 19335 (US). HINNEY, Harry, R.; 27 Hidden Cove, Cross Lanes, WV 25313 (US). BOWMAN, Paul, T.; 100 Gladwood Lane, Hurricane, WV 25526 (US). (74) Agent: CROPP, John, Anthony, David; Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL (GB).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, 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, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(54) Title: PROCESS FOR MAKING DOUBLE METAL CYANIDE CATALYSTS		
(57) Abstract <p>A process for making substantially non-crystalline double metal cyanide (DMC) catalysts having improved activity and performance is disclosed. The process comprises using a metal salt having an alkalinity within the range of about 0.2 to about 2.0 wt.% as metal oxide based on the amount of metal salt to prepare the catalyst. Surprisingly, important polyol properties such as viscosity and unsaturation improve when the alkalinity of the metal salt used to make the DMC catalysts is properly controlled. The process allows catalyst producers to enjoy the benefits of substantially non-crystalline DMC catalysts even when relatively inexpensive, technical-grade metal salts are used to make the catalyst.</p>		