



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B01J 2/22, 35/08, 37/00	A1	(11) International Publication Number: WO 99/58236 (43) International Publication Date: 18 November 1999 (18.11.99)
(21) International Application Number: PCT/EP99/03266 (22) International Filing Date: 11 May 1999 (11.05.99) (30) Priority Data: 10/127008 11 May 1998 (11.05.98) JP (71) Applicants (for all designated States except US): NIPPON KETJEN CO., LTD. [JP/JP]; Daiei Kaikan Building, 12-14, Ginza 7-chome, Chuo-ku, Tokyo 104 (JP). AKZO NOBEL N.V. [NL/NL]; Velperweg 76, NL-6824 BM Arnhem (NL). (72) Inventors; and (75) Inventors/Applicants (for US only): MATSUMOTO, Nobuhito [JP/JP]; 17-4, Isoura-cho, Niihama-shi, Ehime pref. 792-0002 (JP). YANO, Eiichi [JP/JP]; 17-4, Isoura-cho, Niihama-shi, Ehime pref. 792-0002 (JP). SHIMOWAKE, Masafumi [JP/JP]; 17-4, Isoura-cho, Niihama-shi, Ehime pref. 792-0002 (JP). KAMO, Tetsuro [JP/JP]; 17-4, Isoura-cho, Niihama-shi, Ehime pref. 792-0002 (JP). (74) Agent: SCHALKWIJK, Pieter, Cornelis; Akzo Nobel N.V., Intellectual Property Dept. (Dept. AIP), P.O. Box 9300, NL-6800 SB Arnhem (NL).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, 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> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: PROCESS FOR PRODUCING SPHERICAL OXIDE PARTICLES (57) Abstract The invention pertains to a process for preparing spherical oxide particles comprising the steps of shaping a starting material comprising an oxide hydrate into particles of substantially constant length by leading the material to a set of two rolls rotating towards each other followed by leading the material to a roll equipped with grooves to form rod-type shapes, cutting the rod-type shapes into particles of substantially constant length, converting the thus formed particles into spheres, and heating the particles to convert the oxide hydrate into an oxide. The process results in particles in which there is substantially no difference in density between the core portion and the shell portion of the particles, which results in a high abrasion resistance. The particles prepared by the claimed process are particularly suitable for the preparation of hydroprocessing catalysts, more in particular for the preparation of hydroprocessing catalysts suitable for the hydroprocessing of heavy hydrocarbon feeds.		