



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <b>(21) International Application Number:</b> PCT/GB99/02462<br><br><b>(22) International Filing Date:</b> 28 July 1999 (28.07.99)<br><br><b>(30) Priority Data:</b><br>9816508.7                      29 July 1998 (29.07.98)                      GB<br><br><b>(71) Applicant (for all designated States except US):</b> EXXON<br>CHEMICAL PATENTS, INC. [US/US]; 5200 Bayway<br>Drive, P.O. Box 2149, Baytown, TX 77522 (US).<br><br><b>(71) Applicant (for GB only):</b> EXXON CHEMICAL LIMITED<br>[GB/GB]; 4600 Parkway, P.O. Box 122, Fareham, Hants<br>PO15 7AP (GB).<br><br><b>(71) Applicant (for US only):</b> VAN DEN BERGE, Jannetje, M.<br>(legal representative of the deceased inventor) [NL/NL];<br>Fazantenlaan 26, NL-3233 BB Oostvoorne (NL).<br><br><b>(72) Inventor:</b> VERDUIJN, Johannes, P. (deceased).<br><br><b>(72) Inventors; and</b><br><b>(75) Inventors/Applicants (for US only):</b> MERTENS, Machteld,<br>M. [BE/BE]; Beringstraat 72, B-3190 Boortmeerbeek<br>(BE). MORTIER, Wilfried, J. [BE/BE]; Diestse Steenweg<br>483, B-3010 Kessel-Lo (BE). JANSSEN, Marcel, J., G. | <p>[NL/BE]; Domeinstraat 84, B-3010 Kessel-Lo (BE). VAN<br/>         OORSCHOT, Cornelius, W., M. [NL/BE]; Ploegsebaan<br/>         136, B-2930 Brasschaat (BE). VAUGHAN, David, E., W.<br/>         [US/US]; 1109 Croton Road, Flemington, NJ 08822 (US).</p> <p><b>(74) Agents:</b> DARBY, David, Thomas et al.; Abel &amp; Imray, 20 Red<br/>         Lion Street, London WC1R 4PQ (GB).</p> <p><b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG,<br/>         BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB,<br/>         GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,<br/>         KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,<br/>         MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,<br/>         SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA,<br/>         ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ,<br/>         UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD,<br/>         RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK,<br/>         ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI<br/>         patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,<br/>         NE, SN, TD, TG).</p> <p><b>Published</b><br/> <i>With international search report.</i></p> |                                                                                                                                                 |
| <b>(54) Title:</b> MOLECULAR SIEVES AND PROCESSES FOR THEIR MANUFACTURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                 |
| <b>(57) Abstract</b><br><br>Crystalline molecular sieve particles of a size suitable for use as seeds in molecular sieve manufacture are obtained by washing larger particle sized product to dislodge smaller particles from the larger.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                 |