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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 September 2003 (12.09.2003)

PCT

(10) International Publication Number
WO 03/074176 A2

(51) International Patent Classification[7]: B01J 29/00

(21) International Application Number: PCT/US03/04153

(22) International Filing Date: 10 February 2003 (10.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/360,963	28 February 2002 (28.02.2002)	US
60/366,012	20 March 2002 (20.03.2002)	US
60/374,697	22 April 2002 (22.04.2002)	US
10/215,511	9 August 2002 (09.08.2002)	US

(71) Applicant: **EXXONMOBIL CHEMICAL PATENTS INC.** [US/US]; 5200 Bayway Drive, Baytown, TX 77520-5200 (US).

(72) Inventors: **LEVIN, Doron**; 88 Westchester Terrace, Annandale, NJ 08801 (US). **VARTULI, James, C.**; 89 Bartlett Drive, Schwenksville, PA 19473 (US).

(74) Agents: **SHER, Jaimes**; ExxonMobil Chemical Company, Law TechExxonMobil Chemical Patents Inc., P.O. Box 2149, Baytown, TX 77522-2149 et al. (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 03/074176 A2

(54) Title: MOLECULAR SIEVE COMPOSITIONS, CATALYST THEREOF, THEIR MAKING AND USE IN CONVERSION PROCESSES

(57) Abstract: The invention relates to a catalyst composition, a method of making the same and its use in the conversion of a feedstock, preferably an oxygenated feedstock, into one or more olefin(s), preferably ethylene and/or propylene. The catalyst composition comprises a molecular sieve and at least one oxide of a metal from Group 4, optionally in combination with at least one metal from Groups 2 and 3, of the Periodic Table of Elements.