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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 July 2008 (10.07.2008)

PCT

(10) International Publication Number
WO 2008/082927 A1

(51) International Patent Classification:
B01J 29/04 (2006.01) *C01B 33/26* (2006.01)

(21) International Application Number:
PCT/US2007/087684

(22) International Filing Date:
15 December 2007 (15.12.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/882,322	28 December 2006 (28.12.2006)	US
11/945,001	26 November 2007 (26.11.2007)	US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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

Published:
— *with international search report*

WO 2008/082927 A1

(54) Title: METHOD OF MAKING ULTRASMALL CRYSTAL MTT MOLECULAR SIEVES

(57) Abstract: A method for preparing a crystalline molecular sieve having MTT framework topology and crystallite sizes of about 150 to about 600 Angstroms, comprising: a. preparing a reaction mixture comprising, in terms of mole ratios, the following: YO_2/WO_3 30-40, R^+/YO_2 0.06 - 0.12, OH^-/YO_2 0.20 - 0.26, K^+/YO_2 0.09 - 0.15 and an amount of water not substantially in excess of the amount required to cause and maintain crystallization, wherein Y is silicon, germanium or mixtures thereof; W is aluminum, boron, gallium, iron or mixtures thereof; and R^+ is a diisopropylimidazolium cation; and b. heating said reaction mixture at crystallization conditions and in the absence of an external liquid phase for sufficient time to form a crystallized material containing crystals of the molecular sieve. Also, a method to make the shaped ultrasmall crystal MTT molecular sieve, and a method to form the molecular sieve using a particular order of addition of components.