

(43) International Publication Date
14 November 2013 (14.11.2013)

- (51) International Patent Classification:
C01B 39/48 (2006.01) *B01J 29/70* (2006.01)
- (21) International Application Number:
PCT/US2013/035437
- (22) International Filing Date:
5 April 2013 (05.04.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/643,955 8 May 2012 (08.05.2012) US
- (71) Applicant: **EXXONMOBIL CHEMICAL PATENTS INC.** [US/US]; 5200 Bayway Drive, Baytown, TX 77520 (US).
- (72) Inventors: **BURTON, Allen, W.**; 1238 Fairview Circle, Stewartsville, NJ 08886 (US). **VROMAN, Hilda, B.**; 32 Madison Avenue, Piscataway, NJ 08854 (US).
- (74) Agents: **TYUS, Darryl, M.** et al.; ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX 77522-2149 (US).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

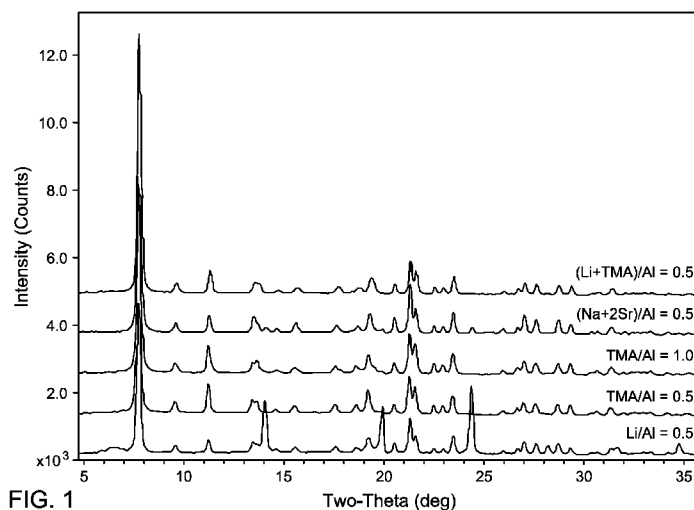
Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: ZEOLITE ZSM-18, ITS SYNTHESIS AND ITS USE



(57) Abstract: ZSM-18 is synthesized from a mixture comprising water, a source of an oxide of a tetravalent element (Y), a source of an oxide of a trivalent element (X), a source of a first cation Q selected from either butamethonium cations or N,N,N-trimethyl-N-butylammonium cations and a source of at least one second cation M, wherein the second cation M is selected from lithium, strontium, sodium, tetraalkylammonium and mixtures thereof when the first cation, Q is butamethonium cations, and wherein the second cation M is tetramethylammonium when the first cation Q is N,N,N-trimethyl-N-butylammonium cations.