

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 July 2007 (05.07.2007)

PCT

(10) International Publication Number
WO 2007/075382 A1

(51) International Patent Classification:

C01B 39/08 (2006.01) **C01B 37/00** (2006.01)
C01B 39/48 (2006.01)

(21) International Application Number:

PCT/US2006/047849

(22) International Filing Date:

15 December 2006 (15.12.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/751,875 20 December 2005 (20.12.2005) US

(71) Applicant (for all designated States except US): **EXXON-MOBIL RESEARCH AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CORMA, Avelino** [ES/ES]; C/Daniel Balaciart, 6 Pta. 46, E-46002 Valencia (ES). **JOSE DIAZ, Maria** [ES/ES]; C/Daniel Balaciart, 6

Pta. 46, E-46002 Valencia (ES). **REY, Fernando** [ES/ES]; Plaza Professor Santiago Grisolia, 8, 5#B, E-46002 Valencia (ES). **STROHMAIER, Karl, G.** [US/US]; 47 Rockport Road, Port Murray, NJ 07865 (US). **DORSET, Douglas, L.** [US/US]; 475 Ellis Road, Milford, NJ 08848 (US).

(74) Agents: **BAKUN, Estelle, C.** et al.; ExxonMobil Research and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

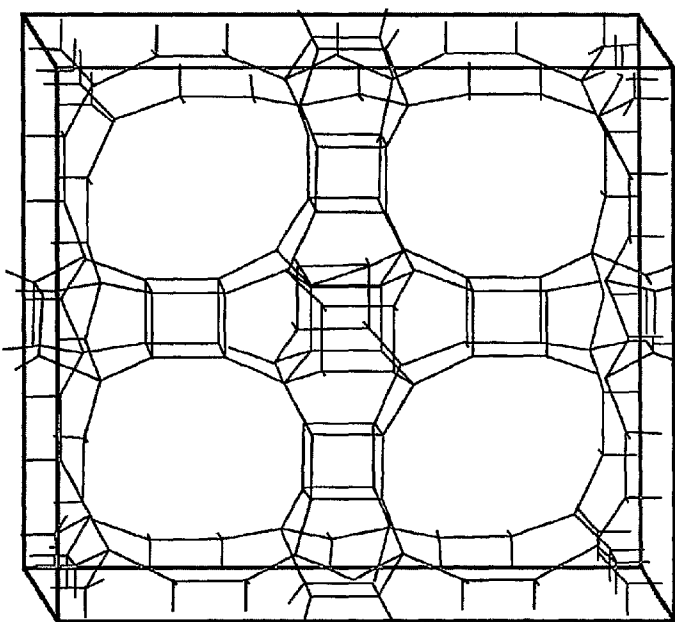
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, 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,

[Continued on next page]

(54) Title: ITQ-26, NEW CRYSTALLINE MICROPOROUS MATERIAL

Framework structure of ITQ-26 showing only the tetrahedral atoms. There is a single unit cell, whose edges are defined by the gray box



(57) Abstract: ITQ-26 (INSTITUTO DE TECNOLOGIA QUIMICA number 26) is a new crystalline microporous material with a framework of tetrahedral atoms connected by atoms capable of bridging the tetrahedral atoms, the tetrahedral atom framework being defined by the interconnections between the tetrahedrally coordinated atoms in its framework. ITQ-26 can be prepared in silicate compositions with an organic structure directing agent. It has a unique X-ray diffraction pattern, which identifies it as a new material. ITQ-26 is stable to calcination in air, absorbs hydrocarbons, and is catalytically active for hydrocarbon conversion.



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, 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

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.