



(51) International Patent Classification:

C01B 37/02 (2006.01) *C01B 39/12* (2006.01)
B01J 29/89 (2006.01) *C01B 39/40* (2006.01)
C01B 39/08 (2006.01)

(21) International Application Number:

PCT/EP2013/058481

(22) International Filing Date:

24 April 2013 (24.04.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12165356.2 24 April 2012 (24.04.2012) EP

(71) Applicant: **BASF SE** [DE/DE]; 67056 Ludwigshafen (DE).

(71) Applicant (for CY only): **BASF SCHWEIZ AG** [CH/CH]; Klybeckstraße 141, CH-4057 Basel (CH).

(72) Inventors: **FEYEN, Mathias**; Talstrasse 1 A, 69493 Hirschberg (DE). **MÜLLER, Ulrich**; Am Stecken 14a, 67435 Neustadt (DE). **PARVULESCU, Andrei-Nicolae**; Theaterstrasse 14, 69117 Heidelberg (DE). **SCHAACK, Bernd, Bastian**; Ritterstrasse 72, 67063 Ludwigshafen (DE). **AHRENS, Sebastian**; Sofienstrasse 33, 69168 Wiesloch (DE). **GERHARD, Dirk**; Windeckstrasse 48, 68163 Mannheim (DE). **SON, Sunghee**; Eschkopfstraße 2, 68163 Mannheim (DE). **IFFLAND, Gabriele**; Brechtelstr. 14, 69126 Heidelberg (DE). **SEELIG, Bianca**; Blankenheimerstr. 40, 50937 Köln (DE).

(74) Agent: **ALTMANN, Andreas**; Herzog Fiesser & Partner, Isartorplatz 1, 80331 Munich (DE).

(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).

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: ZEOLITIC MATERIALS AND METHODS FOR THEIR PREPARATION USING ALKENYLTRIALKYLAMMONIUM COMPOUNDS

(57) Abstract: The present invention relates to a process for the preparation of a zeolitic material comprising the steps of: (1) providing a mixture comprising one or more sources for YO_2 and one or more alkenyltrialkylammonium cation $\text{R}^1\text{R}^2\text{R}^3\text{R}^4\text{N}^+$ -containing compounds as structure directing agent; and (2) crystallizing the mixture obtained in step (1) to obtain a zeolitic material; wherein Y is a tetravalent element, and wherein R^1 , R^2 , and R^3 independently from one another stand for alkyl; and R^4 stands for alkenyl, as well as to zeolitic materials which may be obtained according to the inventive process and to their use.

