

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
17 May 2001 (17.05.2001)

PCT

(10) International Publication Number
WO 01/34727 A1

(51) International Patent Classification⁷: C10G 11/05

(21) International Application Number: PCT/US00/29692

(22) International Filing Date: 27 October 2000 (27.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/437,408 10 November 1999 (10.11.1999) US

(71) Applicant: EXXON RESEARCH AND ENGINEERING COMPANY [US/US]; P.O. Box 900, Annandale, NJ 08801-0900 (US).

(72) Inventors: STEFFENS, Todd, Richard; 15469 Eagle Tavern Lane, Centreville, VI 20120 (US). LADWIG, Paul, Kevin; 6506 Marston Cluster, Centreville, VI 20120 (US).

(74) Agents: CROMWELL, Michael, A. et al.; Exxon Research and Engineering Company, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

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

Published:

— With international search 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.

(54) Title: PROCESS FOR SELECTIVELY PRODUCING LIGHT OLEFINS

(57) Abstract: The invention is related to a catalyst and a process for selectively producing light (i.e., C₂-C₄) olefins from a catalytically cracked or thermally cracked naphtha stream. The naphtha stream is contacted with a catalyst containing from about 10 to 50 wt.% of a crystalline zeolite having an average pore diameter less than about 0.7 nanometers at reaction conditions. The catalysts do not require steam activation.

WO 01/34727 A1