

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number
WO 2004/044100 A1

(51) International Patent Classification⁷: **C10G 47/16**,
47/18, 47/20, B01J 29/10, 29/12, 29/16

(21) International Application Number:
PCT/US2003/035130

(22) International Filing Date:
4 November 2003 (04.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/290,791 8 November 2002 (08.11.2002) US

(71) Applicant: **CHEVRON U.S.A. INC.** [US/US]; 6001
Bollinger Canyon Road, Building T, Third Floor, San
Ramon, CA 94583 (US).

(72) Inventors: **TIMKEN, Hye, Kyung, C.**; 710 Pomona Av-
enue, Albany, CA 94706 (US). **BULL, Lucy, Melinda**;
1205 McDonald Drive, Pinole, CA 94564 (US). **HARRIS,**
Thomas, V.; 183 West Seaview Drive, Benicia, CA 94510
(US).

(74) Agents: **ROTH, Steven, H.** et al.; ChevronTexaco Corpo-
ration, Law Department, Post Office Box 6006, San Ra-
mon, CA 94583-0806 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (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 "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: EXTREMELY LOW ACIDITY ULTRASTABLE Y ZEOLITE CATALYST COMPOSITION AND PROCESS

(57) Abstract: A catalyst composition comprising a low acidity, highly dealuminated ultra stable Y zeolite having an Alpha value of less than about 3 and Broensted acidity measured by FT-IR from about 1 to about 20, preferably from about 1-10, micro mole/g of, an amorphous cracking component and a catalytic amount of hydrogenation component selected from the group consisting of a Group VI metal, a Group VIII metal, and mixtures thereof is disclosed. The present invention provides for a process for converting hydrocarbonaceous oils comprising contacting the hydrocarbonaceous oils with the catalyst under suitable hydrocarbon conversion conditions. Such processes include, but are not limited to, single stage hydrocracking, two-stage hydrocracking, series-flow hydrocracking, mild hydrocracking, tube hydrocracking, hydrotreating, tube hydrofinishing, hydrodesulphurization, hydrodenitrification, catalytic dewaxing and catalytic cracking.



WO 2004/044100 A1