(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 June 2004 (10.06.2004)

PCT

(10) International Publication Number
WO 2004/047988 A1

(51) International Patent Classification[7]: B01J 29/08, 29/80, 29/14, C10G 47/16

(21) International Application Number:
PCT/EP2003/050897

(22) International Filing Date:
25 November 2003 (25.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/429,620 27 November 2002 (27.11.2002) US

(71) Applicant *(for all designated States except US)*: **SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.** [NL/NL]; Carel van Bylandtlaan 30, NL-2596 HR Netherlands (NL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CREYGHTON, Edward, Julius** [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL). **OUWEHAND, Cornelis** [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL).

(81) Designated States *(national)*: 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, 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, US, 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 "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/047988 A1

(54) Title: HYDROCRACKING CATALYST

(57) Abstract: Hydrocracking catalyst composition comprising an optional metal hydrogenation component supported on a carrier comprising a zeolite of the faujasite structure having a unit cell size in the range of from 24.10 to 24.40 Å, a bulk silica to alumina ratio (SAR) above 12, and a surface area of at least 850 m^2/g as measured by the BET method and ATSM D4365-95 with nitrogen adsorption at a p/po value of 0.03.