

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/061677 A1

(51) International Patent Classification⁷: **C10G 45/02**

100083 (CN). **SHI, Yahua** [CN/CN]; 18 Xueyuan Road, Haidian District, Beijing 100083 (CN).

(21) International Application Number:
PCT/CN2003/001107

(74) **Agent: CHINA PATENT AGENT (H.K.) LTD.**; 22/F, Great Eagle Centre, 23 Harbour Road, Wanchai, Hong Kong (CN).

(22) International Filing Date:
23 December 2003 (23.12.2003)

(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, 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.

(25) Filing Language: English

(26) Publication Language: English

(71) **Applicants (for all designated States except US): CHINA PETROLEUM & CHEMICAL CORPORATION** [CN/CN]; 6A, Huixin Dong Street, Chaoyang District, Beijing 100029 (CN). **RESEARCH INSTITUTE OF PETROLEUM PROCESSING, SINOPEC** [CN/CN]; 18 Xueyuan Road, Haidian District, Beijing 100083 (CN).

(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).

(72) **Inventors; and**

(75) **Inventors/Applicants (for US only): LI, Dadong** [CN/CN]; 18 Xueyuan Road, Haidian District, Beijing 100083 (CN). **SHI, Yulin** [CN/CN]; 18 Xueyuan Road, Haidian District, Beijing 100083 (CN). **HU, Yunjian** [CN/CN]; 18 Xueyuan Road, Haidian District, Beijing 100083 (CN). **XI, Yuanbing** [CN/CN]; 18 Xueyuan Road, Haidian District, Beijing 100083 (CN). **LI, Mingfeng** [CN/CN]; 18 Xueyuan Road, Haidian District, Beijing

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:** A PROCESS FOR REDUCING SULFUR AND OLEFIN CONTENTS IN GASOLINE

(57) **Abstract:** Disclosed is a process for reducing sulfur and olefin contents in gasoline, comprising contacting gasoline feedstock and hydrogen with a hydrorefining catalyst and a paraffin-modification catalyst. The effluent of the process is separated to obtain a hydrotreated gasoline fraction free of mercaptan and having a low content of sulfur, e.g. less than 200 ppm, a low content of olefins, e.g. less than 20% by volume, and little octane loss. The hydrotreated gasoline fraction can be used as blending component of a final gasoline product.

WO 2005/061677 A1