

(19) World Intellectual Property Organization
International Bureau



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

PCT

(10) International Publication Number
WO 01/34731 A1

- (51) International Patent Classification⁷: **C10G 69/04**, 69/06
- (21) International Application Number: **PCT/US00/30378**
- (22) International Filing Date:
3 November 2000 (03.11.2000)
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
09/436,660 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: **LADWIG, Paul, Kevin**; 6506 Marston Cluster, Centreville, VA 20120 (US). **STUNTZ, Gordon, Frederick**; 12217 Lake Lingham Circle, Baton Rouge, LA 70816 (US). **BRIGNAC, Garland, Barry**; 13598 Highway 10, Clinton, LA 70722 (US). **HALBERT, Thomas, Risher**; 13903 Hootsell, Baton Rouge, LA 70816 (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, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, 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.*

(54) Title: **NAPHTHA CRACKING AND HYDROPROCESSING PROCESS FOR LOW EMISSIONS, HIGH OCTANE FUELS**

(57) Abstract: The invention is related to a two step process wherein the first step comprises cracking an olefinic naphtha resulting in a cracked product having a diminished total concentration of olefinic species. The second step comprises hydroprocessing at least a portion of the cracked product, especially a naphtha fraction, to provide a hydroprocessed cracked product having a reduced concentration of contaminant species but without a substantial octane reduction.

WO 01/34731 A1