

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 May 2001 (03.05.2001)

PCT

(10) International Publication Number
WO 01/30942 A1

(51) International Patent Classification⁷: C10G 59/02, 69/08, 61/02

(74) Agents: SHERER, Edward, F. et al.; ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX 77522-2149 (US).

(21) International Application Number: PCT/US00/29291

(22) International Filing Date: 23 October 2000 (23.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/428,762 28 October 1999 (28.10.1999) US

(71) Applicant: MOBIL OIL CORPORATION [US/US];
5200 Bayway Dr., Baytown, TX 77520-5200 (US).

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

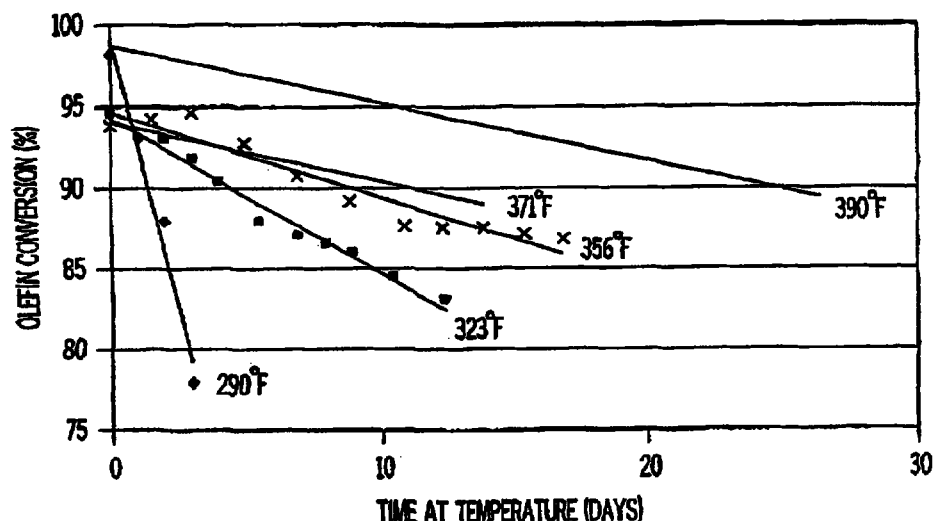
(84) Designated States (*regional*): ARIPO patent (GI, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,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



(57) Abstract: A process for the removal of hydrocarbon contaminants, such as dienes and olefins, from an aromatics reformat by contacting an aromatics reformat stream with a hydrotreating catalyst and/or a molecular sieve. The hydrotreating catalyst substantially converts all dienes to oligomers and partially converts olefins to alkylaromatics. The molecular sieve converts the olefins to alkylaromatics. The process provides an olefin depleted product which can be passed through a clay treater to substantially convert the remaining olefins to alkylaromatics. The hydrotreating catalyst has a metal component of nickel, cobalt, chromium, vanadium, molybdenum, tungsten, nickel-molybdenum, cobalt-nickel-molybdenum, nickel-tungsten, cobalt-molybdenum or nickel-tungsten-titanium, with a nickel molybdenum/alumina catalyst being preferred. The molecular sieve is an intermediate pore size zeolite, preferably MCM-22. The clay treatment can be carried out with any clay suitable for treating hydrocarbons.

WO 01/30942 A1