



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C10G 29/06	A1	(11) International Publication Number: WO 99/10451 (43) International Publication Date: 4 March 1999 (04.03.99)
(21) International Application Number: PCT/US98/18045 (22) International Filing Date: 28 August 1998 (28.08.98) (30) Priority Data: 08/920,556 29 August 1997 (29.08.97) US 09/072,763 5 May 1998 (05.05.98) US (71) Applicant: EXXON RESEARCH AND ENGINEERING COMPANY [US/US]; 180 Park Avenue, P.O. Box 390, Florham Park, NJ 07932-0390 (US). (72) Inventors: BEARDEN, Roby, Jr.; 505 Stanford Avenue, Baton Rouge, LA 70808 (US). BLUM, Saul, Charles; 4 Watson Court East, Edison, NJ 08820 (US). OLMSTEAD, William, Neergaard; 200 Gallison Drive, Murray Hill, NJ 07974 (US). (74) Agents: PURWIN, Paul, E. et al.; Exxon Research and Engineering Company, P.O. Box 390, Florham Park, NJ 07932-0390 (US).		(81) Designated States: AU, BR, CA, CN, ID, JP, KR, MX, NO, RU, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>

(54) Title: **PROCESS FOR REDUCING TOTAL ACID NUMBER OF CRUDE OIL**

(57) Abstract

The invention comprises a method for reducing the amount of carboxylic acids in petroleum feeds comprising the steps of (a) adding to said petroleum feed a catalytic agent comprising an oil soluble or oil dispersible compound of a metal selected from the group consisting of Group VB, VIB, VIIB and VIII metals, wherein the amount of metal in said petroleum feed is at least about 5 wppm, (b) heating said petroleum feed with said catalytic agent in a reactor at a temperature of about 400 to about 800 °F (about 204.44 to about 426.67 °C) and a pressure of about atmospheric to about 1000 psig (about 6996.33 kPa) in the substantial absence of hydrogen, and (c) sweeping the reactor containing said petroleum feed and said catalytic agent with an inert gas to maintain the combined water and carbon dioxide partial pressure below about 50 psia (344.75 kPa).