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| (51) International Patent Classification <sup>6</sup> :<br><b>C10G 19/00, C09K 3/00</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>A1</b>                   | (11) International Publication Number: <b>✓ WO 97/08271</b><br>(43) International Publication Date: <b>6 March 1997 (06.03.97)</b> |    |            |                            |    |            |                        |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p>(21) International Application Number: <b>PCT/US96/13690 ✓</b></p> <p>(22) International Filing Date: <b>23 August 1996 (23.08.96) ✓</b></p> <p>(30) Priority Data:</p> <table border="0"> <tr> <td>08/519,554</td> <td>25 August 1995 (25.08.95) ✓</td> <td>US</td> </tr> <tr> <td>08/597,310</td> <td>6 February 1996 (06.02.96)</td> <td>US</td> </tr> <tr> <td>08/655,261</td> <td>4 June 1996 (04.06.96)</td> <td>US</td> </tr> </table> <p>(71) Applicant (for all designated States except US): <b>EXXON RESEARCH AND ENGINEERING COMPANY [US/US]; 180 Park Avenue, P.O. Box 390, Florham Park, NJ 07932-0390 (US). ✓</b></p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): <b>BLUM, Saul, C. [US/US]; 4 Watson Court East, Edison, NJ 08820 (US). ANDERSON, Michael, P. [US/US]; 10 WestWay, Clinton, NJ 08809 (US). RAMANARAYANAN, Trikur, A. [IN/US]; 33 Chestnut Circle, Somerset, NJ 08873 (US). SARTORI, Guido [US/US]; 73 Meadowview Drive, Annandale, NJ 08801 (US). SAVAGE, David, W. [GB/US]; 5 Fieldstone Drive, Lebanon, NJ 08833 (US). GORBATY, Martin, L. [US/US]; 204 Twin Oaks Terrace, Westfield, NJ 07090 (US). BALLINGER, Bruce, H. [US/US]; 18 Overlook</b></p> | 08/519,554                  | 25 August 1995 (25.08.95) ✓                                                                                                        | US | 08/597,310 | 6 February 1996 (06.02.96) | US | 08/655,261 | 4 June 1996 (04.06.96) | US | <p>Road, Bloomsbury, NJ 08804 (US). MARTELLA, David, J. [US/US]; 11F Brookline Court, Princeton, NJ 08540 (US).</p> <p>(74) Agents: <b>SCUORZO, Linda, M. et al.; Exxon Research and Engineering Company, P.O. Box 390, Florham Park, NJ 07932-0390 (US).</b></p> <p>(81) Designated States: <b>AU, BR, CA, CN, JP, KR, MX, NO, RU, SG, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</b></p> <p><b>Published</b><br/><i>With international search report.</i></p> |
| 08/519,554                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 25 August 1995 (25.08.95) ✓ | US                                                                                                                                 |    |            |                            |    |            |                        |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 08/597,310                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 6 February 1996 (06.02.96)  | US                                                                                                                                 |    |            |                            |    |            |                        |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 08/655,261                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4 June 1996 (04.06.96)      | US                                                                                                                                 |    |            |                            |    |            |                        |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (54) Title: <b>PROCESS FOR DECREASING THE CORROSIVITY AND ACIDITY OF PETROLEUM CRUDES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                             |                                                                                                                                    |    |            |                            |    |            |                        |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p>(57) Abstract</p> <p>The invention relates to a process for treating acidic crudes or fractions thereof to reduce or eliminate their corrosivity by addition of suitable amounts of Group IA or Group IIA oxides, hydroxides, hydroxides hydrates or naphthenate salts to an acidic, corrosive crude, or by reblending a naphthenate salt-containing crude in appropriate ratios with an acidic corrosive crude. The process has the additional benefits of reducing materials handling problems associated with treating acidic crude oils using liquid solvents and in reducing emulsion formation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                             |                                                                                                                                    |    |            |                            |    |            |                        |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |