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| <b>(51) International Patent Classification <sup>6</sup> :</b><br><b>C10G 3/00, C10C 1/00</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 98/45386</b><br><b>(43) International Publication Date:</b> 15 October 1998 (15.10.98)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>(21) International Application Number:</b> PCT/US98/06668<br><b>(22) International Filing Date:</b> 1 April 1998 (01.04.98)<br><br><b>(30) Priority Data:</b><br>60/042,762 9 April 1997 (09.04.97) US<br>09/052,764 31 March 1998 (31.03.98) US<br><br><b>(71) Applicant:</b> CONOCO INC. [US/US]; 1000 South Pine Street, Ponca City, OK 74602-1267 (US).<br><br><b>(72) Inventors:</b> ZIMMERMAN, Andrea, K.; 10 Plover Court, Wilmington, DE 19808 (US). RODGERS, John, A.; 424 Riverview Drive, Dayton, TN 37321 (US). ROMINE, H., Ernest; 3 Ridge Drive, Ponca City, Ok 74604 (US). MCCONAGHY, James, R.; 2504 Turner Street, Ponca City, OK 74604 (US). DAVIS, Lorita; 4560 Stardust Trail, Ponca City, OK 74604 (US).<br><br><b>(74) Agents:</b> SCHUPBACH, Cortlan, R. et al.; Conoco Inc., 1000 South Pine Street, Ponca City, OK 74602-1267 (US). |           | <b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, 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, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, 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, ML, MR, NE, SN, TD, TG).<br><br><b>Published</b><br><i>With international search report.</i> |
| <b>(54) Title:</b> HIGH TEMPERATURE, LOW OXIDATION STABILIZATION OF PITCH FIBERS<br><br><b>(57) Abstract</b><br><br>The present invention provides a process for thermosetting pitch fibers in reduced times, at low concentrations of oxygen and at higher temperatures than previously possible. Additionally, the present invention provides a pitch fiber which has an oxygen diffusion rate to the center of the fiber which is competitive with the rate of oxidation at the fiber's surface. Further, the present invention provides a high density pitch fiber batt which thermosets without loss of fiber structure.                                                                                                                                                                                                                                   |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |