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09/779,285 8 February 2001 (08.02.2001) US(71) Applicant: **BP CORPORATION NORTH AMERICA INC.** [US/US]; 200 East Randolph Drive, MC2207A, Chicago, IL 60601 (US).(72) Inventors: **GONG, William, H.**; 900 Fairfield, Elmhurst, IL 60126 (US). **REGALBUTO, Monica, Cristina**; 1432 Executive Court, Glenview, IL 60025 (US). **HUFF, JR., George, A.**; 823 Morven Court, Naperville, IL 60563 (US).(74) Agent: **EKKEHARD, Schoettle**; BP America Inc., 200 East Randolph Drive, MC 2207A, Chicago, IL 60601 (US).(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, GQ, GW, ML, MR, NE, SN, TD, TG).**Published:**

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(54) Title: PREPARATION OF COMPONENTS FOR TRANSPORTATION FUELS

(57) Abstract: Economical processes are disclosed for the production of components for refinery blending of transportation fuels by selective oxidation of feedstocks comprising a mixture of hydrocarbons, sulfur-containing and nitrogen-containing organic compounds. Oxidation feedstock is contacted with an immiscible phase comprising at least one organic peracid or precursors of organic peracid in a liquid phase reaction mixture maintained substantially free of catalytic active metals and/or active metal-containing compounds and under conditions suitable for oxidation of one or more of the sulfur-containing and/or nitrogen-containing organic compounds. Blending components containing less sulfur and/or less nitrogen than the oxidation feedstock are recovered from the reaction mixture. Advantageously, at least a portion of the immiscible acid-containing phase is recycled to the oxidation.