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(21) International Application Number: PCT/US98/18537 (22) International Filing Date: 8 September 1998 (08.09.98) (30) Priority Data: 08/925,279 8 September 1997 (08.09.97) US (71) Applicant: PROBEX CORPORATION [US/US]; Suite 111, 1467 Lemay, Carrollton, TX 75007 (US). (71)(72) Applicants and Inventors: DASPIT, Alexander, D., B. [US/US]; 3509 Springbrook Drive, Dallas, TX 75205 (US). MACDONALD, Martin [US/US]; Suite 433, 5945 W. Parker Road, Plano, TX 75093 (US). MURRAY, Thomas [US/US]; 184 Cooper Creek Road, Denton, TX 76208 (US). (74) Agents: STAVISH, Matthew et al.; Longacre & White, Suite 401, 1919 South Eads Street, Arlington, VA 22202 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, 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, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: METHOD OF RE-REFINING WASTE OIL BY DISTILLATION AND EXTRACTION (57) Abstract A process for recovering a base oil of lubricating viscosity from used oil in which, following optional pretreatment, used oil is re-refined by distilling it in distillation apparatus having multiple theoretical plates. Impurities are then extracted from the lube range distillate fraction or fractions with a liquid extractant such as N-Methyl-2-Pyrrolidone (NMP) at a temperature below the temperature, if any, of complete miscibility of the extractant and the oil. The oil and extractant are then separated whereupon the extractant is re-used in the process and the oil is subject to further treatment, as necessary, for targeted uses.		