

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 January 2003 (09.01.2003)

PCT

(10) International Publication Number
WO 03/002697 A1

(51) International Patent Classification⁷: **C10M 141/02**,
141/06, 173/00 // (C10M 141/02, 125:00, 125:10, 129:12,
125:14, 129:06, 129:08, 129:16, 129:93, 129:95, 133:08)
(C10M 141/06, 125:00, 125:10, 129:12, 125:14, 129:06,
129:08, 129:16, 133:52, 133:56), C10N 20:06, 30:04,
30:12, 40:25, 40:26

(21) International Application Number: PCT/US02/20394

(22) International Filing Date: 27 June 2002 (27.06.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/302,180 29 June 2001 (29.06.2001) US
60/342,734 20 December 2001 (20.12.2001) US

(71) Applicant (for all designated States except US): **THE LUBRIZOL CORPORATION** [US/US]; 29400 Lakeland Blvd., Wickliffe, OH 44092-2298 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MAYHEW, Alexandra** [RO/GB]; 32 Ratcliffe Avenue, Branston, Burton on Trent, Staffordshire DE14 3DA (GB). **COOK, Stephen, J.** [GB/GB]; 3 Ridgeway-on-the-Hill, Ambergate, Belper,

Derbyshire DE56 2LA (GB). **CRESSEY, Helena, M.** [GB/GB]; 27 Bradwell Way, Belper, Derbyshire DE56 1NJ (GB). **BARDASZ, Ewa A.** [US/US]; 6900 Weatherby Drive, Mentor, OH 44060 (US).

(74) Agents: **LAFERTY, Samuel, B.** et al.; The Lubrizol Corporation, Patent Dept.-022B, 29400 Lakeland Blvd., Wickliffe, OH 44092-2298 (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, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LUBRICANT INCLUDING WATER DISPERSIBLE BASE

(57) Abstract: A lubricant in the form of an oil- insoluble solvent e.g. water in oil emulsion is described where a water soluble or water dispersible base is present in the dispersed phase. These lubricants are beneficial in various applications such as internal combustion engines where the oil desirable has enough basicity to neutralize any inorganic acids generated by sulfur present in the fuel.



WO 03/002697 A1