

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
28 July 2022 (28.07.2022)



(10) International Publication Number
WO 2022/155699 A1

(51) International Patent Classification:

C10M 125/02 (2006.01) B82Y 40/00 (2011.01)

C10N 20/06 (2006.01)

(21) International Application Number:

PCT/AU2021/051127

(22) International Filing Date:

28 September 2021 (28.09.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2021900116 20 January 2021 (20.01.2021) AU

(71) Applicant: **GRAPHENE MANUFACTURING GROUP LTD** [AU/AU]; 90 Staghorn Street, Enoggera, Queensland 4051 (AU).

(72) Inventors: **NICOL, Craig**; C/- Graphene Manufacturing Australia Pty Ltd, 90 Staghorn Street, Enoggera, Queensland 4051 (AU). **SCHEIWE, Timothy**; c/o Graphene Manufacturing Australia Pty Ltd, 90 Staghorn Street, Enoggera, Queensland 4051 (AU). **NANJUNDAN, Ashok Kumar**; C/- Graphene Manufacturing Australia Pty Ltd, 90 Staghorn Street, Enoggera, Queensland 4051 (AU).

(74) Agent: **SPRUSON & FERGUSON**; GPO BOX 3898, Sydney, New South Wales 2001 (AU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: ENHANCED LUBRICANT COMPOSITION

(57) Abstract: Disclosed herein is a lubricant composition comprising a base oil or a fully formulated lubricant; and graphene nanoparticles derived from a carbon containing gas dispersed in the base oil or the fully formed lubricant.

WO 2022/155699 A1