

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 February 2023 (09.02.2023)



(10) International Publication Number
WO 2023/012786 A1

(51) International Patent Classification:

C06B 23/00 (2006.01) C06D 5/06 (2006.01)
C06B 43/00 (2006.01) C06D 5/10 (2006.01)
C01B 32/198 (2017.01)

(21) International Application Number:

PCT/IL2022/050827

(22) International Filing Date:

01 August 2022 (01.08.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

285325 02 August 2021 (02.08.2021) IL

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(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, 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).

(54) Title: **ENERGETIC FORMULATIONS CONTAINING EPOXY-MODIFIED GRAPHENE OXIDE**

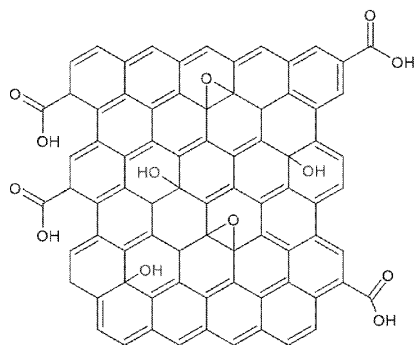


Fig. 1

(57) Abstract: An energetic formulation includes graphene oxide func-
tionalized with a molecule containing at least one epoxy group. The
graphene oxide may include at least one functional group containing ni-
trogen between a graphene sheet and the at least one epoxy group. The
epoxy group may be sourced from a hydrocarbon compound containing
a plurality of epoxy groups. The functionalized graphene oxide may be
coated onto ammonium perchlorate. The functionalized graphene oxide
is used as a stand-alone energetic material in powder form, mixed as
powder in a liquid fuel, or mixed as a powder in a solid fuel.

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Declarations under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i))*

Published:

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