

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
28 February 2019 (28.02.2019)



(10) International Publication Number
WO 2019/040726 A1

(51) International Patent Classification:

G01N 30/62 (2006.01) C10L 1/00 (2006.01)
G01N 30/68 (2006.01) G01N 30/02 (2006.01)
G01N 30/74 (2006.01) G01N 30/88 (2006.01)

(21) International Application Number:

PCT/US2018/047713

(22) International Filing Date:

23 August 2018 (23.08.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/549,087 23 August 2017 (23.08.2017) US

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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, 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, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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: MARKER COMPOSITIONS WITH NITROGEN COMPOUNDS, AND METHODS FOR MAKING AND USING SAME

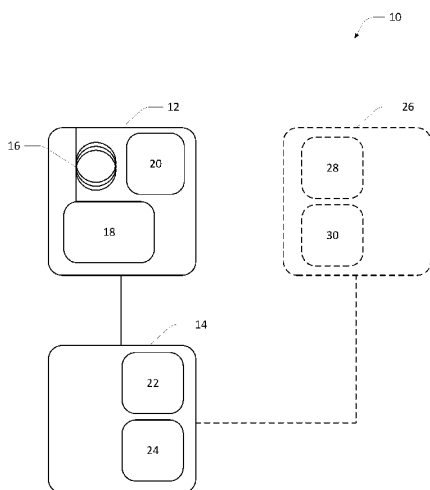


Fig. 1

(57) Abstract: The present disclosure provides compositions, methods, and systems for identifying marked hydrocarbon fluids. These compositions, methods, and systems utilize a gas chromatography marker including a non-pyrrolidinone nitrogen-containing compound. The methods and systems can identify the presence or absence of the gas chromatography marker and/or the non-pyrrolidinone nitrogen-containing compound. The compositions, methods, and systems can optionally utilize a spectroscopic marker.

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