

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
05 May 2022 (05.05.2022)



(10) International Publication Number
WO 2022/094572 A1

(51) International Patent Classification:

G01N 33/28 (2006.01) G01N 21/64 (2006.01)

C10L 1/10 (2006.01)

(21) International Application Number:

PCT/US2021/072073

(22) International Filing Date:

28 October 2021 (28.10.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17/087,127 02 November 2020 (02.11.2020) US

(71) Applicant: AFTON CHEMICAL CORPORATION

[US/US]; 500 Spring Street, Richmond, Virginia 23219 (US).

(72) Inventor: SCHWAB, Scott D.; 12216 Valleybrook Drive,

Richmond, Virginia 23233 (US).

(74) Agent: CHELSTROM, Jeffrey A. et al.; Honigman Miller

Schwartz and Cohn LLP, 650 Trade Centre Way, Suite 200, Kalamazoo, Michigan 49002-0402 (US).

(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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: METHODS OF IDENTIFYING A HYDROCARBON FUEL

(57) Abstract: The present disclosure provides methods for identifying a hydrocarbon fuel, such as the presence and/or amounts of marker compounds having a fluorescence intensity and, through correlation, the presence and/or amounts of additive package(s) within the hydrocarbon fuel.

WO 2022/094572 A1