

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
12 October 2023 (12.10.2023)



(10) International Publication Number
WO 2023/196289 A1

(51) International Patent Classification:
C10L 1/04 (2006.01)

(21) International Application Number:
PCT/US2023/017394

(22) International Filing Date:
04 April 2023 (04.04.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/362,565 06 April 2022 (06.04.2022) 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, 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, MG, MK, MN, MU, 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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST,

(54) Title: ISOPARAFFINIC KEROSENE COMPOSITIONS

Analysis	100% JET-A1	JET-A1 / 30% IPB-1	JET-A1 / 70% IPB-1	100 % IPB-1	JET-A1 passing value	JET-A1 Spec
Appearance	C&B	C&B	C&B	C&B	C&B	C&B ¹
Acidity, mg KOH/g	0.010	0.010	0.010	0.015	0.015 max	D3242
Aromatics, vol %	23.8	17.0	8.3	0.245 mM	25.0 max	D1319
Sulfur, total, wt %	0.0363	0.0255	0.0114	<0.0010	0.30 max	D2622
Naphthalenes, vol %	1.98	-	-	-	3.0 max	D1840
Distillation, °C	-	-	-	-	-	D66
IBP	160.1	164.3	171.1	176.2	Report	*
10%	181.6	189.7	197.7	197.5	205 max	*
20%	-	-	-	-	Report	*
50%	220.7	215.8	210.8	206.8	Report	*
90%	251.8	253.4	257.8	265.3	Report	*
FBP	289.4	281.8	293.3	303.9	300 max	*
Distill. Resid., vol %	1.0	1.0	1.0	1.2	1.5 max	*
Distill. Loss, vol %	0.6	0.3	0.8	1.2	1.5 max	*
Flash Pt., °C	48.9	53.3	54.4	58.8	38 min	D58
Density, kg/m ³	823.8	806.8	784.8	767.0	775 - 840	D4052
Freeze Pt., °C	-63.0	-64.0	-57.0	-56.0	-47 max	D2386
Heat of Comb., MJ/kg	43.08	43.21	43.61	43.73	42.8 min	D3338
Smoke Pt., mm	22.0*	28.0	39.0	45.0	25.0 min	D1322
Copper Corrosion	1a	1a	1a	1a	1 max	D130
JFTOT breakpoint, °C	270	270	285	295	260 min	D3241
Ext gum mg/100mL	2	1	2	2	7 max	D381
Hydrogen Cont., wt %	13.57	13.85	14.53	14.51	13.40 min	D3343
MSEP	96	93	96	100	90 min	D3948

1 - C&B refers to "clear and bright"

* - Smoke point below 25 meets specification when the naphthalene content is less than 3.0 vol%

(57) Abstract: Jet boiling range compositions are provided that include at least a portion of an isoparaaffinic blend component, along with a method for making such a blend component. The highly isoparaaffinic nature of the blend component can allow the isoparaaffinic blend component to be used in combination with both conventional / mineral jet fuel boiling range fractions as well as non-traditional feeds (such as Fischer-Tropsch fractions) to form jet fuel fractions and/or jet fuel blending component fractions.

FIG. 1

[Continued on next page]

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, ME, 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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

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