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- (71) **Applicant: EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, New Jersey 08801-0900 (US).
- (72) **Inventors: KADLECEK, Daniel E.**; c/o Exxonmobil Technology and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, New Jersey 08801-0900 (US). **KUECHLER, Keith H.**; c/o Exxonmobil Technology and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, New Jersey 08801-0900 (US). **WELLS, Paul P.**; c/o Exxonmobil Technology and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, New Jersey 08801-0900 (US). **LYNCH, Michael**

J.; c/o Exxonmobil Technology and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, New Jersey 08801-0900 (US). **LILIK, Gregory**; c/o Exxonmobil Technology and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, New Jersey 08801-0900 (US).

(74) **Agent: CARTER, Lawrence E.**; Shook, Hardy & Bacon LLP, 2555 Grand Blvd, Kansas City, Missouri 64108 (US).

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(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 max	25.0 max	D1319
Sulfur, total, wt %	0.0383	0.0255	0.0114	<0.0010	0.30 max	D2622
Naphthalenes, vol %	1.98	-	-	-	3.0 max	D1840
Distillation, °C	-	-	-	-	-	D86
IBP	160.1	164.3	171.1	176.2	Report	*
10%	191.6	189.7	187.7	187.5	205 max	*
20%	-	-	-	-	Report	*
50%	220.7	215.8	210.9	206.8	Report	*
90%	251.8	253.4	257.6	265.3	Report	*
FBP	269.4	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	0.3	1.2	1.5 max	*
Flash Pt., °C	48.9	53.3	54.4	58.9	38 min	D56
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	280 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]

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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