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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,

(54) **Title:** ISOPARAFFINIC AND ISO-OLEFINIC DISTILLATE COMPOSITIONS

		A	B	C	D
on aromatic rings	Ha	0.17	0.13	0.17	0.15
on olefinic carbons	Ho	0.03	1.29	3.03	4.38
alpha to aromatic rings	H(alpha)	0.16	0.51	1.07	1.49
beta to aromatic rings, naphthenic & paraffinic CH	Hc ₁	4.94	10.97	19.4	26.06
paraffinic CH ₂ , CH ₃ beta to and CH ₂ >= gamma from aromatic ring	Hc ₂	43.3	38.8	32.59	27.69
paraffinic CH ₃ , CH ₃ >=gamma from aromatic ring	Hd	51.4	48.29	43.74	40.24
Hc ₁ / Hc ₂		0.11	0.28	0.60	0.94
Hc ₁ / Hd		0.10	0.23	0.44	0.65
Hc ₂ / Hd		0.84	0.80	0.75	0.69
Hd / (Hc ₁ + Hc ₂)		1.07	0.97	0.84	0.75
Hd / Hc ₂		1.19	1.24	1.34	1.45

Figure

(57) **Abstract:** Compositions are provided that include at least a portion of an isoparaaffinic blend component, an iso-olefinic blend component, or a combination thereof, along with a method for making such a blend component. The highly isoparaaffinic and/or iso-olefinic nature of the blend component can allow a blend component to be used in combination with both conventional / mineral fractions as well as non-traditional feeds to form fuel fractions and/or fuel blending component fractions. Examples of fuels that can be formed by making a blend that includes an isoparaaffinic and/or iso-olefinic blend component include diesel fuels, marine gas oils, and various types of marine fuel oils, such as very low sulfur fuel oils.

[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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