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61/171,386 21 April 2009 (21.04.2009) US(71) Applicant (for all designated States except US): **SAPPHIRE ENERGY, INC.** [US/US]; Attn: Legal Department, 3115 Merryfield Row, San Diego, CA 92121 (US).

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(54) Title: METHODS OF PREPARING OIL COMPOSITIONS FOR FUEL REFINING

(57) Abstract: Disclosed herein are methods and systems for upgrading (for example, removing heteroatoms, metals, or metalloids) an oil composition derived or extracted from a biomass. The upgraded oil composition can be used to make a desired product, for example, a fuel product.

	Crude Oil	Algae Oil
C	84-87%	77-78%
H	11-14%	11-12%
S	<0.1-8%	<<0.1%
N	<0.1-1.5%	~0.5-4%
O	<0.1%	10-12%
P	<<0.1%	0.3-1%
Olefins	<1%	?
Metals	<0.1-0.15%	~0.05%

Figure 1



SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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