

Title (en)

BIOFUEL COMPOSITION AND METHOD OF PRODUCING A BIOFUEL

Title (de)

BIOKRAFTSTOFFZUSAMMENSETZUNG UND VERFAHREN ZUR HERSTELLUNG EINES BIOKRAFTSTOFFES

Title (fr)

COMPOSITION DE BIOCOMBUSTIBLE ET PROCÉDÉ DE PRODUCTION D'UN BIOCOMBUSTIBLE

Publication

EP 2010631 A2 20090107 (EN)

Application

EP 07755282 A 20070410

Priority

- US 2007008955 W 20070410
- US 79536506 P 20060427

Abstract (en)

[origin: WO2007127059A2] An emulsified biofuel composition comprising: (A) a continuous phase comprising about 50-95 wt% of at least one liquid oil of vegetable or animal origin or mixtures thereof; (B) a water- containing dispersed phase comprising about 1-50 wt% water; (C) about 1-25 wt % of hydroxyl-containing organic compound selected from the group consisting of mono-, di-, tri- and polyhydric alcohols, provided that when a monohydric alcohol is used there is also present at least one of tert-butyl alcohol, at least one C2-C4 alkylene glycol or a mixture of both; (D) about 0.05-10 wt% of at least one emulsifier; wherein the dispersed water-containing droplets have an average particle size of less than about 20 microns. The biofuel is prepared from these components by mixing under high shear conditions, preferably with ultrasonic energy. The emulsifier(s) preferably exhibit a hydrophilic-lipophilic balance of about 8.5 to about 18 and the biofuel includes a cetane enhancer and mixture of an alcohol and mono- or poly-alkylene glycol.

IPC 8 full level

C10L 1/18 (2006.01); **C10L 1/22** (2006.01)

CPC (source: EP KR US)

C10G 3/00 (2013.01 - KR); **C10L 1/08** (2013.01 - KR); **C10L 1/32** (2013.01 - KR); **C10L 1/328** (2013.01 - EP US); **C10L 10/02** (2013.01 - EP US); **C10L 10/12** (2013.01 - EP KR US); **C10L 1/1802** (2013.01 - EP US); **C10L 1/1811** (2013.01 - EP US); **C10L 1/191** (2013.01 - EP US); **C10L 1/1985** (2013.01 - EP US); **C10L 1/231** (2013.01 - EP US); **Y02E 50/10** (2013.01 - EP); **Y02P 30/20** (2015.11 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2007127059 A2 20071108; **WO 2007127059 A3 20080207**; AP 2008004651 A0 20081031; AR 060499 A1 20080625; AU 2007243536 A1 20071108; BR PI0710806 A2 20110816; CA 2650333 A1 20071108; CN 101506336 A 20090812; CO 6140066 A2 20100319; CR 10378 A 20090107; EC SP088848 A 20081230; EP 2010631 A2 20090107; EP 2010631 A4 20100317; GT 200800232 A 20090407; HN 2008001586 A 20110722; IL 194795 A0 20090803; JP 2009535449 A 20091001; KR 20090003360 A 20090109; MA 30947 B1 20091201; MX 2008013727 A 20090205; PE 20080047 A1 20080214; RU 2008146727 A 20100610; TN SN08421 A1 20100414; US 2010037513 A1 20100218; ZA 200808955 B 20101027

DOCDB simple family (application)

US 2007008955 W 20070410; AP 2008004651 A 20070410; AR P070101525 A 20070411; AU 2007243536 A 20070410; BR PI0710806 A 20070410; CA 2650333 A 20070410; CN 200780024110 A 20070410; CO 08114572 A 20081027; CR 10378 A 20081020; EC SP088848 A 20081027; EP 07755282 A 20070410; GT 200800232 A 20081024; HN 2008001586 A 20081024; IL 19479508 A 20081022; JP 2009507709 A 20070410; KR 20087028683 A 20081124; MA 31335 A 20081027; MX 2008013727 A 20070410; PE 2007000442 A 20070411; RU 2008146727 A 20070410; TN SN08421 A 20081023; US 22663707 A 20070410; ZA 200808955 A 20081020