

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/070046 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2005/000318

(22) International Filing Date: 5 January 2005 (05.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/754,885 9 January 2004 (09.01.2004) US

(71) Applicant (for all designated States except US): **CLEAN FUELS TECHNOLOGY, INC.** [US/US]; 210 Gentry Way, Reno, NV 89502 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WALDRON, Jack, L.** [CA/CA]; 8796 Damselfly Drive, Reno, NV 89523 (US). **GRIMES, Patrick** [US/US]; 6570 Mahogany Ridge Drive, Reno, NV 89523 (US).

(74) Agent: **D'ALESSANDRO, Kenneth**; Sierra Patent Group, Ltd., P.O. Box 6149, Stateline, NV 89449 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

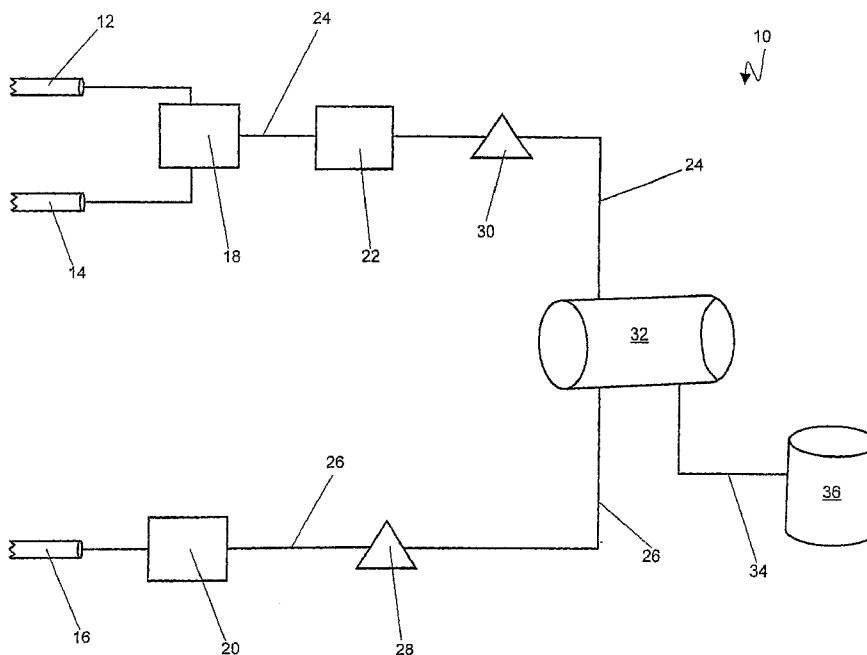
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MIXING APPARATUS AND METHOD FOR MANUFACTURING AN EMULSIFIED FUEL



(57) Abstract: A mixing apparatus is disclosed. The mixing apparatus comprises a mixing device having a constant flow area. The mixing device is configured to create a shearing environment. Several types of mixing apparatus are disclosed. Methods for producing aqueous fuel emulsions with consistently uniform dispersed phase particle sizes using a mixing apparatus are also disclosed.

WO 2005/070046 A2