



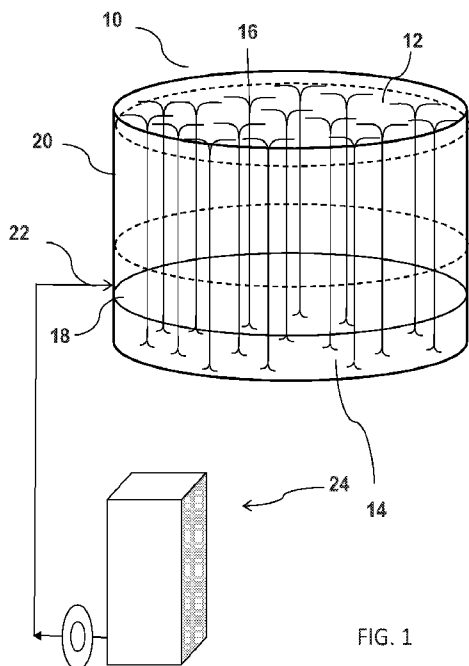
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- (71) **Applicant (for all designated States except US):** AQUATECH BIOENERGY LLC [US/US]; 908 S. Fawn Ct., Sioux Falls, South Dakota 57110-1300 (US).
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- (74) **Agents:** KAHLER, Rachel A. et al; 2200 Wells Fargo Center, 90 South Seventh Street, Minneapolis, Minnesota 55402-3901 (US).

- (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, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, 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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[Continued on nextpage]

(54) **Title:** METHOD AND SYSTEM FOR COLLECTING WATER FROM AN AQUATIC CELL



(57) **Abstract:** Methods and systems for collecting, purifying, and/or extracting ethanol produced during anaerobic metabolism by aquatic plants is provided. The system includes a cell containing water and an aquatic plant, an ethanol extraction assembly in fluid communication with the cell for removing ethanol from the water. Ethanol is released by the aquatic plant by initiating an anaerobic process in the plant such as by regulating the photosynthesis inducing light that reaches the aquatic plant.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/056261**A. CLASSIFICATION OF SUBJECT MATTER*****C07C 29/76(2006.01)i, C07C 31/08(2006.01)1, B01J 19/24(2006.01)1***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C07C 29/76; C12M 1/00; C12P 3/00; A01G 33/00; C12M 1/02; C12P 7/10; C12N 1/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: aquatic cell, aquatic plant, water, substrate, ethanol extraction assembly, strata, photosynthesis.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2011-0086419 A1 (HAGEN TONY A.) 14 April 2011 See abstract; claims 1, 2, 13-15; paragraphs [0004], [0020], [0023], [0024], [0042], [0046], [0054], [0055], [0059]; figures 1, 2, 4, 5.	1-3, 7-9, 18, 19 , 22-23 4-6, 10-17, 20-21
A	US 2008-0176304 A1 (JAMES WEIFU LEE) 24 July 2008 See abstract; claims 92-99; figures 9-11.	1-23
A	US 04532210 A (MIURA; YOSHIIHARU et al.) 30 July 1985 See abstract; claim 1.	1-23
A	US 04324068 A (ANTHONY; MYRON L.) 13 April 1982 See abstract; claims 1-9; figure 1.	1-23

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

28 March 2013 (28.03.2013)

Date of mailing of the international search report

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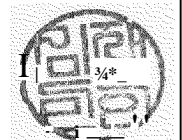
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2011-0086419 A1	14.04.2011	CA 2759802 A1 CN 102428188 A EP 2427560 A2 EP 2507379 A2 JP 2012-525843 A KR 10-2012-0013964 A KR 10-2012-0106782 A US 2010-0285551 A1 US 2010-0285554 A1 US 2011-0045561 A1 US 2011-0086401 A1 US 8143041 B2 WO 2010-129449 A2 WO 2011-068745 A2 WO 2011-068748 A2 WO 2011-068749 A2	11.11.2010 25.04.2012 14.03.2012 10.10.2012 25.10.2012 15.02.2012 26.09.2012 11.11.2010 11.11.2010 24.02.2011 14.04.2011 27.03.2012 11.11.2010 09.06.2011 09.06.2011 09.06.2011
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