



(51) International Patent Classification:

C12M 1/00 (2006.01) H01M 14/00 (2006.01)

H01M 8/16 (2006.01) C12N 21/00 (2006.01)

H01M 8/18 (2006.01) G06F 19/00 (2011.01)

H01M 12/00 (2006.01)

(21) International Application Number:

PCT/US2014/028655

(22) International Filing Date:

14 March 2014 (14.03.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/794,864 15 March 2013 (15.03.2013) US

(71) Applicant: TAURIGA SCIENCES, INC. [US/US]; 39 Old Ridgebury Road, Danbury, CT 06180 (US).

(72) Inventor: BARKELOO, Jason, E.; 5479 Wasigo Drive, Cincinnati, OH 45230 (US).

(74) Agent: NEVRIVY, Daniel, J.; Nevriy Patent Law Group P.L.L.C., 1000 Potomac Street, NW, Suite 200, Washington, DC 20007 (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, IR, IS, JP, KE, KG, 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, SA, 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.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- with sequence listing part of description (Rule 5.2(a))

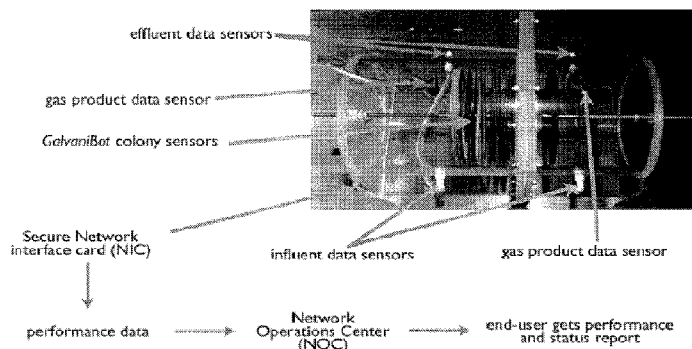
(88) Date of publication of the international search report:

20 November 2014

(54) Title: SENSOR AND PERFORMANCE AND USAGE DATA ARRAY FOR ELECTROGENIC BIOREACTOR

FIG. 7

Electrogenic Bioreactor (EBR) Proposed Network Architecture Edge of the Network



(57) Abstract: The present invention relates to alternative clean energy resources, and in particular to systems for efficiently utilizing and generating electrical energy from renewable energy sources for the home, office and complexes of buildings. The present invention provides using a electrogenic bioreactor as a hub to collect sensor and performance data and providing it to the end user.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 2014/028655

A. CLASSIFICATION OF SUBJECT MATTER (see extra sheet) 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) C12M 1/02, H01M 8/16, 8/18, 12/00, 14/00, C12N 21/00, G06F 19/00 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CIPO, DEPATISNET, DWPI, EAPATIS, EMBL, EPO-Internal, ESP@CENET, KIPRIS, PAJ, PubMed, RUPTO, SCIEDIRECT, SIPO, USPTO		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2007/0134520 A1 (EBARA CORPORATION) 14.06.2007, claims	1-60
Y	US 2010/0297737 A1 (JASON E. BARKELOO et al.) 25.11.2010, p.1-8, examples 1-9, p.11-16, SEQ ID NO:1-8, claims	1-60
Y	US 2011/0125422 A1 (UNIVERSIDADE FEDERAL DE MINAS GERAIS UFMG et al.) 26.05.2011, p.3, claims	1-60
Y	US 2006/0056370 A1 (MARTIN A.HANCOCK et al.) 16.03.2006, claims	1-60
☐ 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 document 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 another 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 11 August 2014 (11.08.2014)		Date of mailing of the international search report 11 September 2014 (11.09.2014)
Name and mailing address of the ISA/RU: FIPS, Russia, 123995, Moscow, G-59, GSP-5, Berezhkovskaya nab., 30-1 Facsimile No. +7 (499) 243-33-37		Authorized officer O.Fedonova Telephone No. 495 531 65 15

INTERNATIONAL SEARCH REPORT
Classification of subject matter

International application No.

PCT/US 2014/028655

C12M 1/00 (2006.01)
H01M 8/16 (2006.01)
H01M 8/18 (2006.010)
H01M 12/00 (2006.01)
H01M 14/00 (2006.01)
C12N 21/00 (2006.01)
G06F 19/00 (2011.01)