

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
24 September 2009 (24.09.2009)

(10) International Publication Number  
**WO 2009/115784 A3**

(51) International Patent Classification:  
C10J 3/66 (2006.01)

(21) International Application Number:  
PCT/GB2009/000708

(22) International Filing Date:  
18 March 2009 (18.03.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0805020.5 18 March 2008 (18.03.2008) GB  
61/037,695 18 March 2008 (18.03.2008) US

(72) Inventors; and

(71) Applicants : **AL CHALABI, Rifat** [US/US]; Chinook Sciences LLC, 20 Commerce Drive, Cranford, NJ 07016 (US). **PERRY, Ophneil, Henry** [GB/US]; Chinook Sciences LLC, 20 Commerce Drive, Cranford, NJ 07016 (US).

(74) Agent: **HALLAM, Vince**; Marks & Clerk LLP, Alpha Tower, Suffolk Street Queensway, Birmingham B1 1TT (GB).

(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, BR, BW, BY, BZ,

CA, CH, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

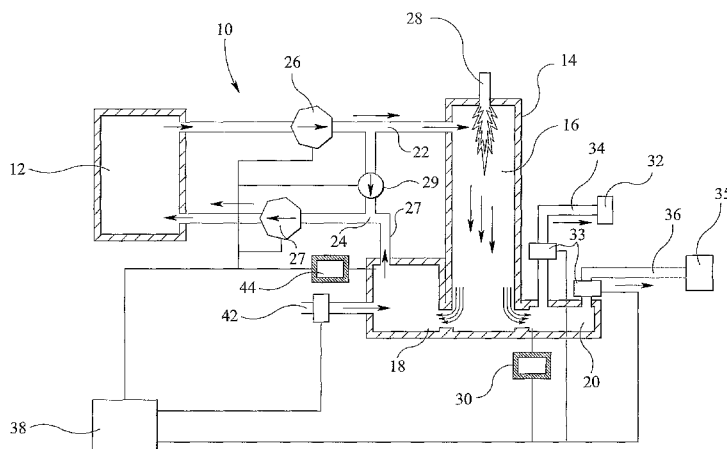
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, 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:

- 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))

(88) Date of publication of the international search report:  
15 April 2010

(54) Title: ACTIVE REFORMER



(57) Abstract: The invention provides an apparatus and method for producing synthetic gas. The apparatus has a pyrolysis chamber (12) for generating synthetic gas, a reformer unit (14), conduit means (22, 24) forming a circulation loop for repeatedly circulating gases between said pyrolysis chamber and said water-gas shift reaction zone and means for adding hydrogen to said gas circulating in said loop by way of a water-gas shift reaction.



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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/GB2009/000708

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. C10J3/66

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)  
C10J

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 practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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X	US 2005/032920 A1 (NORBECK JOSEPH M [US] ET AL) 10 February 2005 (2005-02-10) claims 20,36	1-28
X	WO 2008/010994 A2 (UNIV CALIFORNIA [US]; NORBECK JOSEPH M [US]; PARK CHAN SEUNG [US]; RAJ) 24 January 2008 (2008-01-24) claims 1,3 paragraph [0018] figure 1	1-28
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Date of the actual completion of the international search

Date of mailing of the international search report

15 February 2010

23/02/2010

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040,  
Fax: (+31-70) 340-3016

Authorized officer

Taraallo, Anthony

## INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2009/000708

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