



(51) International Patent Classification:

C01B 31/20 (2006.01) **F27B 15/00** (2006.01)
C04B 2/10 (2006.01) **C01B 3/04** (2006.01)
F27B 7/10 (2006.01)

(21) International Application Number:

PCT/GB2012/051622

(22) International Filing Date:

10 July 2012 (10.07.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1112492.2 21 July 2011 (21.07.2011) GB
 1205567.9 29 March 2012 (29.03.2012) GB

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(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, 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, 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.

(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, ML, MR, NE, SN, TD, TG).

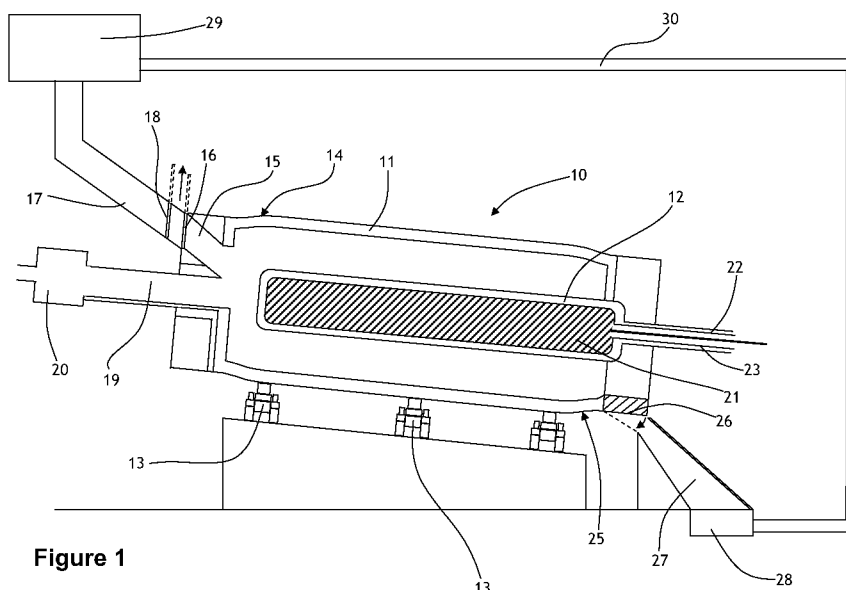
Published:

- 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:

14 March 2013

(54) Title: CARBON DIOXIDE PRODUCTION

**Figure 1**

(57) **Abstract**: Apparatus for the production of carbon dioxide from limestone includes a nuclear energy source (32) arranged to generate electricity and a rotary kiln (10). The rotary kiln (10) has an inlet (15) for the introduction of limestone and an outlet (19) for the release of carbon dioxide. An electrical resistance heating element (21) disposed within the kiln (10) is arranged to be supplied with electricity derived from the nuclear energy source (32) to raise the temperature of the element (21) for transfer of heat to the interior of the rotary kiln (10). Limestone in the rotary kiln (10) is thereby heated to a temperature sufficient for the release of carbon dioxide.

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2012/051622

A. CLASSIFICATION OF SUBJECT MATTER INV. C01B31/20 C04B2/10 F27B7/10 F27B15/00 C01B3/04 ADD.		
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) C01B C04B F27B		
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) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/137289 A1 (LIN PING-WHA [US]) 15 July 2004 (2004-07-15) paragraphs [0005] - [0013] paragraphs [0119] - [0276] figures 1-11	1-17
Y	US 2009/208402 A1 (ROSSI ROBERT A [US]) 20 August 2009 (2009-08-20) paragraphs [0013] - [0144] figures 1-4	1-17
X,P	WO 2012/076863 A2 (STAMP CLIVE R [GB]; STAMP OLIVE [GB]; LOXLEY NEIL [GB]; RENNIE SIMON []) 14 June 2012 (2012-06-14) the whole document	1-17
☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.		
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Date of the actual completion of the international search		Date of mailing of the international search report
3 January 2013		16/01/2013
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 Marino, Emanuela

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2012/051622

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