

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 May 2003 (22.05.2003)

PCT

(10) International Publication Number
WO 03/042566 A2

(51) International Patent Classification⁷: **F16F**

(21) International Application Number: PCT/GB02/05111

(22) International Filing Date:
12 November 2002 (12.11.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0127375.4 14 November 2001 (14.11.2001) GB
0203016.1 8 February 2002 (08.02.2002) GB

(71) Applicant (for all designated States except US): **MICRO-GEN ENERGY LIMITED** [GB/GB]; 100 Thames Valley Park Drive, Reading, Berkshire RG6 1PT (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GREGORY, Adam, Richard** [GB/GB]; 80 Blackwood, Coalville, Leicestershire LE67 4RF (GB). **CLARK, David, Anthony**

[GB/GB]; 4 Mill Dam, Hugglescote, Leicestershire LE67 2B (GB). **HYDE, Julie, Patricia** [GB/GB]; 150 Barn Lane, Olton, Solihull, West Midlands B92 7LZ (GB). **JENNAWAY, David, Michael** [GB/GB]; The Old Woodyard, Prestwold, Loughborough, Leicestershire LE12 5SH (GB).

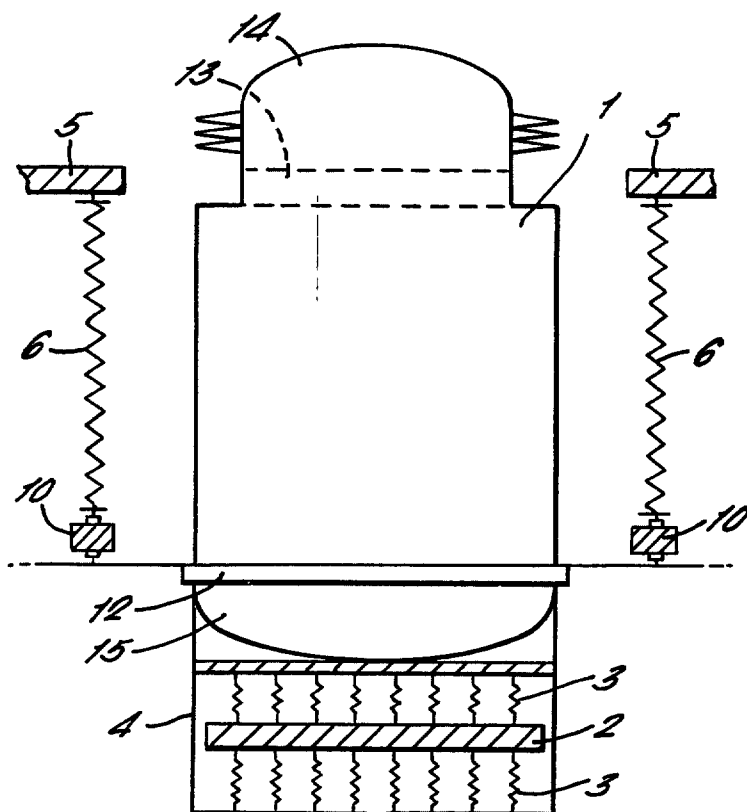
(74) Agents: **DRAPER, Martyn, John** et al.; Boulton Watt Tennant, Verulam Gardens, 70 Gray's Inn Road, London WC1X 8BT (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: A STIRLING ENGINE ASSEMBLY



(57) Abstract: A Stirling engine assembly for a DCHP system. A Stirling engine (1) is suspended from a mounting frame (5) by a plurality of tension springs (6). An annular absorber mass (2) surrounds the Stirling engine and is suspended from the engine on a plurality of resilient members (3) arranged asymmetrically about the main axis. The asymmetric arrangement is provided by members of different stiffnesses, or irregular spacing of the members. The absorber mass (2) itself may be reduced adjacent to the resilient members.



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (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*

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

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.