



- (51) International Patent Classification:
F24D 19/10 (2006.01)
- (21) International Application Number:
PCT/EP2009/064055
- (22) International Filing Date:
26 October 2009 (26.10.2009)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0819586.9 24 October 2008 (24.10.2008) GB
0819587.7 24 October 2008 (24.10.2008) GB
- (71) Applicant (for all designated States except US): **THE TECHNOLOGY PARTNERSHIP PLC** [GB/GB]; Melbourn Science Park, Cambridge Road, Melbourn, Hertfordshire SG8 6EE (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HSIEH, Mark, Chang- Ming** [GB/GB]; 2 Tenison Court, Tenison Road, Cambridge CB1 2EF (GB). **ANDERSON, David, Russell** [GB/GB]; 7 The Grove, Orwell, Royston, Hertfordshire SG8 5RH (GB).
- (74) Agent: **KELDA, Camilla, Karen**; Style, Page White & Farrer, Bedford House, John Street, London, Greater London WC1N 2BF (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, 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, 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, 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:
27 December 2012

(54) Title: AN APPARATUS FOR ANALYSING AN INTERIOR ENERGY SYSTEM

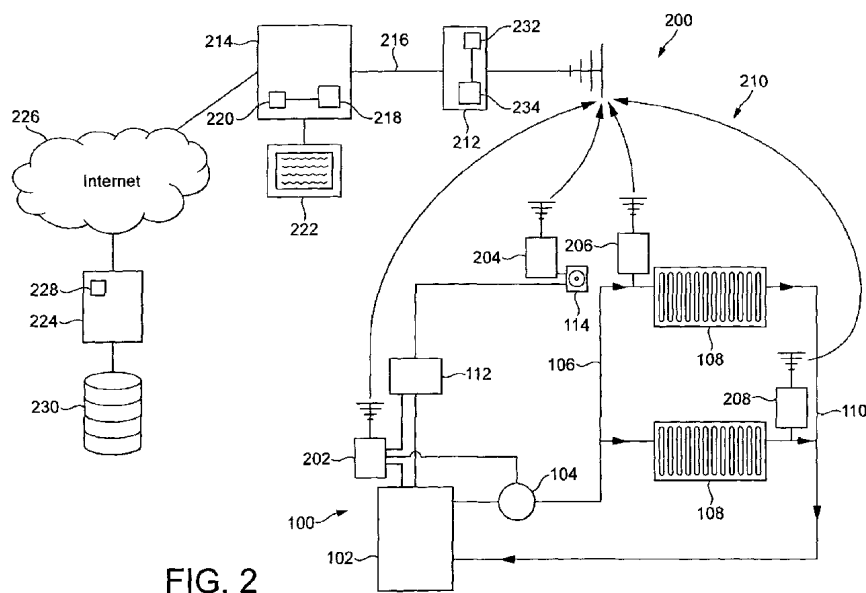


FIG. 2

(57) Abstract: A system for analysing an interior energy system comprising: at least one detachable sensor arranged to monitor a portion of the interior energy system; and an apparatus comprising a processor configured to receive data of a first parameter of the interior energy system from the at least one detachable sensor and determine a second parameter of the interior energy which is inferred on the basis of the received data of the first parameter; and determine a characteristic of the interior energy system from the determined second parameter. The system may provide analysis of the interior energy system and recommend improvements.



A. CLASSIFICATION OF SUBJECT MATTER

INV. F24D19/10

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)

F24D

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.
X	WO 02/054165 A2 (HONEYWELL INT INC [US]) 11 July 2002 (2002-07-11)	1-11, 18-20, 23-26, 31,32, 37-40
Y	pages 5- 14 figures 1-4	21,22
X	----- WO 2008/039065 A1 (KAMSTRUP B V [NL]; WAALDERS ERWIN JOHANNES MARIA [NL]) 3 April 2008 (2008-04-03)	1-4,11, 18,19, 24-26, 31,32, 38-40
Y	pages 11-16	21,22
A	figures 1-3 ----- -/--	14,15

 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 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

29 October 2012

Date of mailing of the international search report

06/11/2012

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

Schwaiger, Bernd

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/175883 A1 (MIU RICHARD [US] ET AL) 2 August 2007 (2007-08-02)	1-13,18, 24-26, 31,39,40
Y	paragraphs [0034] - [0063] -----	19-22
X	EP 1 355 212 A1 (HONEYWELL CONTROL SYST [GB] HONEYWELL TECHNOLOGIES SARL [CH]) 22 October 2003 (2003-10-22)	1-3,7, 11,18, 19, 24-26, 31,32, 38-40
Y	columns 2-7 figures 3-6 -----	21,22
X	EP 0 801 365 A2 (VAILLANT JOH GMBH & CO [DE]) 15 October 1997 (1997-10-15)	1-9,11, 18,25, 27,31, 32,38-40
Y	columns 3-5 figures 1-10 -----	19-22
X	GB 2 065 334 A (CAPLEHORN P L POOLE B J ADAM P; HARRIS W E) 24 June 1981 (1981-06-24)	1-7,11, 18,24, 25, 28-30, 32,35, 36,38-40
Y	pages 2-6 -----	19-22
X	DE 10 2006 042888 A1 (DEUTSCH ZENTR LUFT & RAUMFAHRT [DE]) 14 June 2007 (2007-06-14)	1-7,11, 18, 21-26, 28-34, 38-40
Y	paragraphs [0029] - [0036] paragraphs [0062] - [0095] figures 1, 2, 7 -----	19,20
X	DE 100 57 834 A1 (BRAUNS INGO [DE]) 6 June 2002 (2002-06-06)	1-9,11, 18-26, 31,32, 35-40
Y	columns 1-4 -----	
Y	US 2004/034484 A1 (SOLOMITA MICHAEL V [US] ET AL) 19 February 2004 (2004-02-19) paragraphs [0037] - [0066]; figures 1-3, 14 -----	19,20
Y	US 2006/065750 A1 (FAIRLESS KEITH W [US]) 30 March 2006 (2006-03-30) paragraphs [0041] - [0046], [0064] - [0066] -----	21,22

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
WO 02054165	A2	11-07-2002	AU 2002232813 A1	16-07-2002
			US 6478233 B1	12-11-2002
			WO 02054165 A2	11-07-2002

WO 2008039065	A1	03-04-2008	NL 1032598 A1	01-04-2008
			NL 1032598 C2	25-02-2009
			WO 2008039065 A1	03-04-2008

US 2007175883	A1	02-08-2007	NONE	

EP 1355212	A1	22-10-2003	AT 449991 T	15-12-2009
			EP 1355212 A1	22-10-2003
			GB 2387669 A	22-10-2003

EP 0801365	A2	15-10-1997	DE 19716763 A1	11-12-1997
			EP 0801365 A2	15-10-1997

GB 2065334	A	24-06-1981	NONE	

DE 102006042888	A1	14-06-2007	DE 102006042888 A1	14-06-2007
			EP 1957878 A2	20-08-2008
			WO 2007065783 A2	14-06-2007

DE 10057834	A1	06-06-2002	NONE	

US 2004034484	A1	19-02-2004	NONE	

US 2006065750	A1	30-03-2006	NONE	
