### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization

International Bureau



# 

# (10) International Publication Number WO 2009/091679 A3

# (43) International Publication Date 23 July 2009 (23.07.2009)

- (51) International Patent Classification: A47J 37/04 (2006.01) F24C 15/02 (2006.01) F24C 14/00 (2006.01)
- (21) International Application Number:

PCT/US2009/030691

(22) International Filing Date:

12 January 2009 (12.01.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

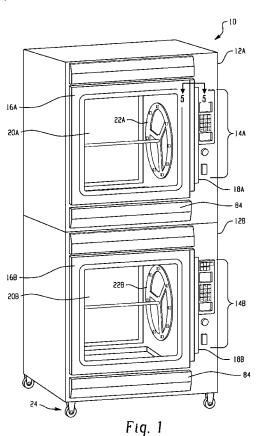
61/021,130 15 January 2008 (15.01.2008) US 12/324,333 26 November 2008 (26.11.2008) US

(71) Applicant (for all designated States except US): PRE-MARK FEG L.L.C. [US/US]; 1300 Market Street, Suite 504, Wilmington, DE 19801 (US).

- (72) Inventors: and
- (75) Inventors/Applicants (for US only): HEISER, James, M. [US/US]; 3600 West Lake Avenue, Glenview, IL 60026 (US). WEBER, Matthew, A. [US/US]; 3600 West Lake Avenue, Glenview, IL 60026 (US). VALENTINE, Richard, D. [US/US]; 3600 West Lake Avenue, Glenview, IL 60026 (US). MULLENIX, Scott, A. [US/US]; 3600 West Lake Avenue, Glenview, IL 60026 (US).
- (74) Agents: NIEBERDING, Michael, J. et al.; Thompson Hine LLP, Post Office Box 8801, Dayton, OH 45401-8801 (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, 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,

[Continued on next page]

### (54) Title: SELF-CLEANING ROTISSERIE OVEN INCLUDING OVEN DOOR WITH LABYRINTH SEAL



(57) Abstract: A self-cleaning rotisserie oven including an oven cabinet including an internal cooking chamber with an access opening. The oven cabinet includes an access opening frame about the access opening. A self-cleaning system is provided for cleaning the cooking chamber with a liquid. A rotor is located within the cooking chamber. A door is mounted on the oven cabinet. The door spanning the access opening with the door in a closed configuration and providing access to the cooking chamber when in an open configuration. With the door in the closed configuration, the door including a plate extending inwardly toward the oven chamber. The plate is located to an interior side of a lip extending outwardly from the access opening frame and toward the door thereby defining a tortuous path for liquid delivered from the self-cleaning system to follow.

- NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, Published: 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).

- 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: 19 August 2010

## INTERNATIONAL SEARCH REPORT

International application No PCT/US2009/030691

		1017 88288	3, 200031
A. CLASSI INV.	FICATION OF SUBJECT MATTER A47J37/04 F24C14/00 F24C15/	02	
According to	o International Patent Classification (IPC) or to both national classific	cation and IPC	
	SEARCHED		
Minimum do A47J	ocumentation searched (classification system followed by classificat $F24C-A21B$	ion symbols)	
Documental	tion searched other than minimum documentation to the extent that	such documents are included in the fields se	earched
l	ata base consulted during the international search (name of data baternal, WPI Data	ase and, where practical, search terms used	
2 200UM		· .	
	ENTS CONSIDERED TO BE RELEVANT	· · · · · · · · · · · · · · · · · · ·	Relevant to claim No.
Category*	Citation of document, with indication, where appropriate, of the re	evant passages	Helevant to ciaim ivo.
X	US 2004/142082 A1 (FRIEDL DAVID AL) 22 July 2004 (2004-07-22) page 8, right-hand column, paragifigure 26	1-9, 14-18	
A	DE 101 56 419 A1 (BSH BOSCH SIEM HAUSGERAETE [DE]) 5 June 2003 (20 the whole document	1-6	
A	EP 0 532 393 A (EUROP EQUIP MENA) 17 March 1993 (1993-03-17) claims; figure 2	7	
A	DE 38 20 572 A1 (ELOMA GMBH [DE] 21 December 1989 (1989-12-21) the whole document	1	
Furth	ner documents are listed in the continuation of Box C.	See patent family annex.	
"A" docume	ategories of cited documents: ent defining the general state of the art which is not	"T" later document published after the inte or priority date and not in conflict with cited to understand the principle or the	the application but
consid	ered to be of particular relevance document but published on or after the international	invention	
filing d		"X" document of particular relevance; the c cannot be considered novel or cannot involve an inventive step when the do	be considered to
which citation	is cited to establish the publication date of another n or other special reason (as specified)	"Y" document of particular relevance; the c cannot be considered to involve an inv	laimed invention ventive step when the
other r		document is combined with one or mo ments, such combination being obviou	ore other such docu-
"P" docume later th	ent published prior to the international filing date but nan the priority date claimed	in the art.  "&" document member of the same patent	family
Date of the	actual completion of the international search	Date of mailing of the international sear	rch report
2	6 February 2010	01/07/2010	
Name and n	nailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer	
	NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Fax: (+31–70) 340–3016	Rohr, Peter	

International application No. PCT/US2009/030691

### **INTERNATIONAL SEARCH REPORT**

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)						
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:						
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:						
Claims Nos.:     because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:						
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).						
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)						
This International Searching Authority found multiple inventions in this international application, as follows:						
see additional sheet						
As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.						
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.						
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:						
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:						
see additional sheet(s)						
Remark on Protest  The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.						
The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.						
No protest accompanied the payment of additional search fees.						

# FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-9, 14-18

Labyrinth seal in a rotisserie oven

2. claims: 10-13

Aerated door in a rotisserie oven

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2009/030691

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2004142082	A1	22-07-2004	NONE		
DE 10156419	A1	05-06-2003	NONE		
EP 0532393	Α	17-03-1993	FR	2681127 A1	12-03-1993
DE 3820572	A1	21-12-1989	NONE		-

Form PCT/ISA/210 (patent family annex) (April 2005)