



- (51) **International Patent Classification:**
F24C 15/20 (2006.01)
- (21) **International Application Number:**
PCT/US2012/035510
- (22) **International Filing Date:**
27 April 2012 (27.04.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/479,518 27 April 2011 (27.04.2011) US
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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:**
27 December 2012

(54) **Title:** HIGH EFFICIENCY RANGE

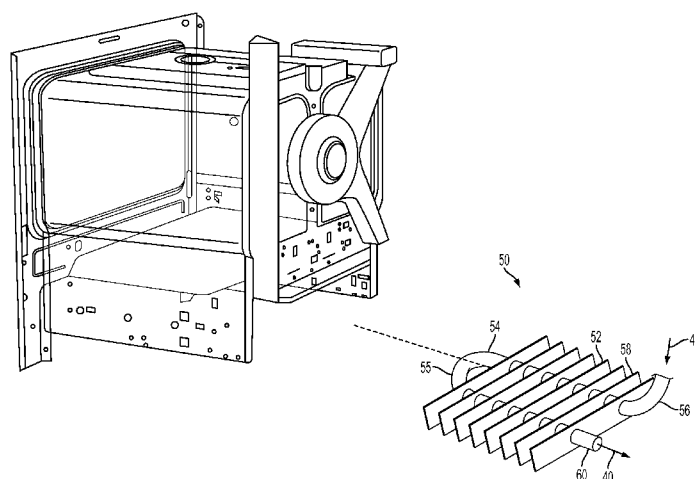


FIG. 3

(57) **Abstract:** An oven includes an oven enclosure having a plurality of walls (14) defining an oven cavity (18). The oven enclosure includes an oven door (16) for accessing the oven cavity. The oven includes a venting assembly (30) attached to a wall of the oven enclosure and in fluid communication with the oven cavity. The venting assembly includes an exhaust passage (32) attached to the wall of the oven enclosure, the exhaust passage defining a flow path (40) through which exhaust gas flows from the oven cavity. The venting assembly includes a flow control device (36) positioned within the exhaust passage, the flow control device selectively restricting the passage of the exhaust gas through the exhaust passage. The venting assembly includes a fluid treatment structure (50) disposed downstream from the flow control device within the exhaust passage, the fluid treatment structure altering characteristics of the exhaust gas flowing through the exhaust passage.



INTERNATIONAL SEARCH REPORT

International application No
PCT/US2012/035510

A. CLASSIFICATION OF SUBJECT MATTER
INV. F24C15/20
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)
F24C A21B

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 10 2006 030644 A1 (ELECTROLUX HOME PROD CORP [BE]) 10 January 2008 (2008-01-10)	1-5,18,19
Y	paragraph [0022]; claim 3; figure 1	6,16,17
Y	EP 1 201 999 A2 (BSH BOSCH SIEMENS HAUSGERAETE [DE]) 2 May 2002 (2002-05-02)	6
Y	US 2005/039613 A1 (KAMINAKA IKUYASU [JP] ET AL) 24 February 2005 (2005-02-24)	16,17
	sentences 10-12, paragraph 84; figure 1	



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

10 July 2012

Date of mailing of the international search report

15/11/2012

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/035510

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:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ 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

1. ☐ 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.:

1-6, 16-19

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.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ US2012/ 035510

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-6, 16-19

Oven with a flow control device and a fluid treatment structure

2. claims: 7-15

Oven with an heat exchanger

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/035510

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 102006030644 A1	10-01-2008	NONE	
EP 1201999 A2	02-05-2002	DE 10053412 A1 EP 1201999 A2	08-05-2002 02-05-2002
US 2005039613 A1	24-02-2005	AU 2002360004 A1 CN 1608186 A US 2005039613 A1 WO 03058125 A1	24-07-2003 20-04-2005 24-02-2005 17-07-2003