A low profile exhaust hood has a high inlet and a high aspect ratio of horizontal to vertical. A sloping wall of the recess guides hot plumes upwardly to the inlet. The inlet is sized to provide an exhaust face velocity that is at least as high as a highest possible plume velocity for a 400°F oven. The inlet is located high and forwardly to cause a suction zone to be generated near the forward edge of the hood to aid in capturing plumes tending to escape which are remote from the sloping wall.
INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/000379

A. CLASSIFICATION OF SUBJECT MATTER

INV. F24C19/29

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

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 practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>GB 2 270 638 A (* FUJI INDUSTRIAL CO LTD) 23 March 1994 (1994-03-23) pages 7-10; figures 1-6</td>
<td>1-11, 15-22</td>
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<td>US 4 738 243 A (WELSH ET AL) 19 April 1988 (1988-04-19) columns 2-4; figures 1-3</td>
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<td>US 5 421 320 A (BROWN ET AL) 6 June 1995 (1995-06-06) columns 2-4; figures 1-5</td>
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<td>EP 0 874 199 A (CADEXAIR) 28 October 1998 (1998-10-28) columns 3-4; figure 1</td>
<td>1,3,4,5, 7,9,10</td>
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</table>

[ ] Further documents are listed in the continuation of Box C. [X] 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 document but published on or after the international filing data
  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another publication or other special reason (as specified)
  "O" document relating 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

**" 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 novel or 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 the person skilled in the art.
"A" document member of the same patent family

Date of the actual completion of the international search
28 April 2006

Date of mailing of the international search report
06.10.2006

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Authorized officer
Merkt, Andreas

Form PCT/IBA/310 (second sheet) (April 2008)
**INTERNATIONAL SEARCH REPORT**

**Box II  Observations where certain claims were found unsearchable**

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 8.4(a).

**Box III  Observations where unity of invention is lacking**

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 fee, this Authority did not invite payment of any additional fee.

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.:

   1-11, 15-22

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant’s protest.

☐ No protest accompanied the payment of additional search fees.
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-11,15-22
   An exhaust apparatus with a hood interior wall improving the buffering abilities.

2. claims: 12-14
   An exhaust apparatus with a hood arrangement and piping for use with conveyor ovens.
<table>
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<th>Patent document cited in search report</th>
<th>Publication date</th>
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