(57) Abstract: A dry scrubbing system for treatment of effluent from an upstream effluent-generating process. The dry scrubbing system accommodates operation in a process window involving substantial variation in process conditions, e.g., flow rate and/or concentration, of scrubbable gas species in the effluent. Multiple scrubbing media are utilized in the dry scrubbing system, each optimal in a regime of the operating window, and together ensuring at least a predetermined level of removal of scrubbable gas species over the entire operating window. In a specific aspect, gaseous phosphorus in the effluent is abated by use of potassium hydroxide as an active abatement agent.
Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report: 20 October 2005

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.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/29382

A. CLASSIFICATION OF SUBJECT MATTER
   IPC(7)  :  B01D 53/02, 59/26, 53/12, 53/22
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)

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>US 2,384,502A (STREICHER) 11 September 1945</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>US 2,095,851 A (FRICKE) 26 October 1937</td>
<td></td>
</tr>
</tbody>
</table>

☐ 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 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
22 June 2005 (22.06.2005)

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703) 305-3230

Date of mailing of the international search report
06 SEP 2005

Authorized officer
RICHARD CRISPINO

Telephone No. 571 272-1700

Form PCT/ISA/210 (second sheet) (January 2004)