DECONTOAMINATION PROCEDURE FOR A FUEL CELL POWER PLANT

A decontamination procedure for a fuel cell power plant (10) includes operating the plant to produce electrical power for an operating period, and then terminating operation of the plant (10) for a decontamination period, and then, whenever optimal electrical production of a plant fuel cell (12) is reduced by at least 5% by contaminants adsorbed by a fuel cell electrodes (24, 42), decontaminating the fuel cell (12) of the plant (10) during the decontamination period by oxidizing contaminants adsorbed by electrodes (24, 42) of the fuel cell. Oxidizing the contaminants may be accomplished by various steps including exposing the electrodes (24, 42) to flowing oxygen; to heated flowing oxygen; to a sequence of start-stop cycles; and, to varying controlled potentials.

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INTERNATIONAL SEARCH REPORT

PCT/US05/46428

A. CLASSIFICATION OF SUBJECT MATTER

IPC: H01M 8/02(2006.01)

USPC: 429/13,23

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)

U.S. : 429/13, 22, 23

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)

Please See Continuation Sheet

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 5,945,229 A (MELTSER) 31 August 1999 (31.08.1999), column 2, lines 21-65.</td>
<td>1-13</td>
</tr>
<tr>
<td>A</td>
<td>DE 101 34 193 A1 (GOLDNER et al) 07 February 2002 (07.02.2002), sections 0061 and 0062.</td>
<td>1-13</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search: 25 January 2008 (25.01.2008)

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. (571) 273-3201

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Authorized officer: Stephen J. Kalafut
Telephone No. 571-272-1700

Form PCT/ISA/210 (second sheet) (April 2005)
Continuation of B. FIELDS SEARCHED Item 3:
EAST: USPATS, USCOP, USOCR, DERWENT, JPAB, EPAB
search terms: decontaminate$4, contaminant$4, power, voltage$2, output$2, decrease$2, reduce$2 ($2 and $4 are truncation symbols.)

Form PCT/ISA/210 (extra sheet) (April 2005)