Abstract: A system includes a power source, a compressor that operates in a reduced-capacity mode and a full-capacity mode, and an actuation assembly that modulates the compressor between the reduced-capacity mode and the full-capacity mode. A controller reduces the power source to a predetermined level prior to the power source being supplied to the actuation assembly for use by the actuation assembly in controlling the compressor between the reduced-capacity mode and the full-capacity mode.
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:
5 April 2007

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INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC: F04B 49/00 (2006.01)

USPC: 417/213, 212

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. : 417/213, 212

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>X</td>
<td>US 6,120,255 A (SCHUMANN et al.) 19 September 2000 (19.09.2000), column 7, lines 1-13, claim 1.</td>
<td>1-3, 11-17, 24-33, 36-41</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,412,293 A (PHAN et al.) 2 July 2002 (02.07.2002), Figure 16, thermostat 402.</td>
<td>4-10, 18-23</td>
</tr>
<tr>
<td>Y</td>
<td>US 3,606,752 A (SHAW) 21 September 1971 (21.09.1971), column 1, lines 47-60.</td>
<td>6-10, 20-23</td>
</tr>
<tr>
<td>Y</td>
<td>US 2003/0095895 A1 (O' LOUGHLIN) 22 May 2003 (05.22.2003), Figure 5, TRIAC 42</td>
<td>4 and 18</td>
</tr>
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</table>

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

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Date of the actual completion of the international search: 21 December 2006 (21.12.2006)

Date of mailing of the international search report: 5 December 2006

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