Title: ISOLATOR FOR CONTROLLED POWER SUPPLY

Abstract: An isolation circuit for adjustable power systems in which the user analog inputs (16) and optional user analog outputs (18) are isolated from the load common potential by discrete value isolators (50) instead of expensive, less accurate, analog isolators. The isolation is achieved by: digitizing the analog signal using analog to digital converter (ADC), transmitting the digital signal through a digital isolator, and converting the isolated digital data back to analog signal using digital to analog converter (DAC). Discrete-value opto-couplers (71 - 76) or isolation transformers may be used as digital isolators.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPCL(3) : H04B 1/00; H03M 1/00, 1/02
US CL. : 375/222; 341/108, 110, 137

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. : 375/222; 341/108, 110, 137

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 6,603,807 B1 (Yokotsuka et al.) 5 August 2003 (05.08.2003), Figures 1, 2, 10, 12a-f and Column 3, lines 1-9; Column 6, line 44 through Column 7, line 5 and Column 15.</td>
<td>1-20</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
24 June 2005 (24.06.2005)

Date of mailing of the international search report
31 Aug 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

Authorized officer
Ronald W. Leja

Telephone No. (571) 272-1562

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