Title: SHOCK RESISTANT DEVICE

Abstract: A shock resistant device. A printed circuit board comprising electronics and a frequency reference is rigidly mounted to a central support member. The electronics can be mounted to both surfaces of the printed circuit board. The central support member is mounted to an enclosure via wire rope isolators. The central support member is designed to maximize rigidity at minimum mass. The central support member can comprise a thin wall metal mesh or honeycomb. At least a portion of the central support member directly contacts the printed circuit board beneath the frequency reference.
A. CLASSIFICATION OF SUBJECT MATTER

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<th>IPC</th>
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<th>E02F3/84</th>
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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)

| IPC    | G01S | E02F | F16F | H05K |

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, PAJ, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<td>US 5 631 658 A (GUDAT ET AL) 20 May 1997 (1997-05-20)</td>
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

Special categories of cited documents:

- **X** 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
- **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 taken alone
- **Z** 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

Date of the actual completion of the international search: 24 May 2005

Date of mailing of the international search report: 03/06/2005

Authorized officer: Reuss, T

Name and mailing address of the ISA:

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Lijsselijn Tel. (+49-70) 340-2040, Tx. 31 651 epo at, Fax: (+49-70) 340-3016
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