Title: IMPROVED CONNECTION ASSEMBLY FOR INTEGRATED CIRCUIT SENSORS

Abstract: An improved connection assembly for an integrated circuit sensor uses direct chip attachment to connect a circuit board covers and protects the integrated circuit except over the sensor areas. The use of a thin circuit board reduces the physical interference between the circuit board and the sensor area.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01L 23/02
US CL : 257/680, 737, 780, 434, 433

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. : 257/680, 737, 780, 434, 433

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST (USPAT, US-PGPUB, EPO, JPO, DERWENT)

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,X,E</td>
<td>US 6,396,116 B (Kelly et al) 28 May 2002, column 5, lines 30-67, column 6, lines 1-34, column 7, lines 53-67, and column 8, lines 1-6.</td>
<td>1, 2 and 7</td>
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<td>3, 4, 5, and 6</td>
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<td>X</td>
<td>US 5,867,368 A (Glenn) 02 February 1999, column 3, lines 14-67, column 4, lines 1-46 and 64-67, column 5, lines 1-67.</td>
<td>1, 2, and 7</td>
</tr>
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<td></td>
<td>US 5,805,422 A (Otake et al) 08 September 1998, column 4, lines 41-67, column 5, lines 1-67, column 6, lines 1-39, column 7, lines 11-67.</td>
<td>3, 4, 5, and 6</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)

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*R* document published prior to the international filing date but later than the priority date claimed

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*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

*&E* document member of the same patent family

Date of the actual completion of the international search

10 March 2003 (10.03.2003)

Date of mailing of the international search report

19 MAR 2003

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks

Box PCT

Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

David L. Talbott

Telephone No. (703) 308-0956

Form PCT/ISA/210 (second sheet) (July 1998)