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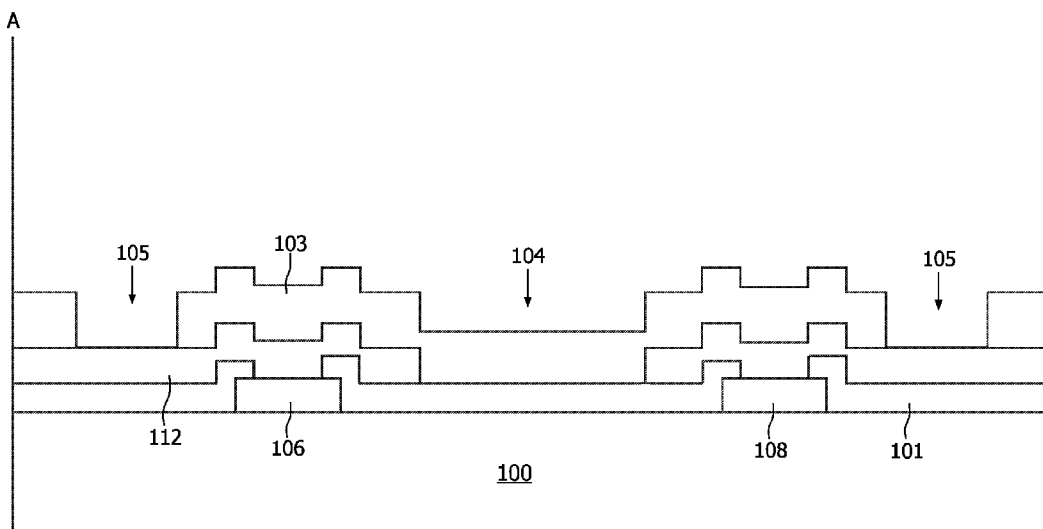
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(54) Title: SEMICONDUCTOR DEVICE WITH SUPPORTING STRUCTURE FOR ISOLATION AND PASSIVATION LAYERS



(57) Abstract: Conductions and vias between different, stacked metallic layers of a semiconductor device may be mechanically damaged by mechanical strain. According to an exemplary embodiment of the present invention, this mechanical strain may be transferred through the layer structure to the substrate by a grid of grounding structures and isolation and passivation layers which are connected by the grounding structures. This may provide for an enhancement of the lifetime of the semiconductor devices.

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INTERNATIONAL SEARCH REPORT

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PCT/IB2006/052607

A. CLASSIFICATION OF SUBJECT MATTER

INV. H01L23/31 H01L23/485 H01L23/522 H01L23/528

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)

H01L

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 763 936 A (YAMAHA TAKAHISA [JP] ET AL) 9 June 1998 (1998-06-09) the whole document	1-19
X	US 2005/118803 A1 (HICHRI HABIB [US] ET AL) 2 June 2005 (2005-06-02) paragraphs [0002], [0017], [0023], [0039], [0042] - [0045]; figures 1,5	1-4,7-12
X	EP 0 924 762 A2 (SIEMENS AG [DE]) 23 June 1999 (1999-06-23) paragraphs [0002], [0003], [0011] - [0013]; figure 2	1-4,6-19
A	US 5 880 529 A (BARROW MICHAEL [US]) 9 March 1999 (1999-03-09) column 2, line 63 - column 3, line 11; figure 5	1-19
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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