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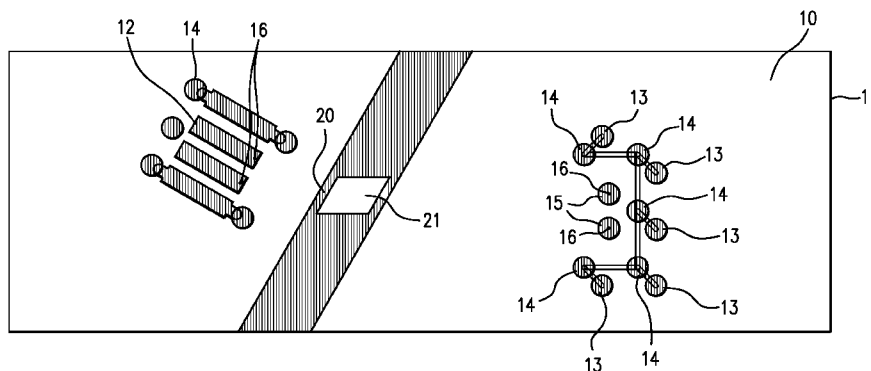


FIG. 1

(57) Abstract: The present invention is a specially designed PCB (11) that allows XFP compliant transceiver modules and EMI gaskets to be used in a manner specified in the XFP standard and results in an integrated solution that is compliant with the XFP standard. Various geometric features are incorporated into the PCB to achieve improvements that in combination result in an integrated solution meeting the XFP standard. Some of these improved features include: specific thickness of prepreg and other layering of the PCB, specific spacing, dimensions and weights for certain components of the PCB, an opening on the first layer XFP cage ground shield (20) connecting to the EMI gasket, guard ground traces (27) in the second layer (25) surrounding the differential pair signal traces (26), openings (32) in the copper of the third layer (31) beneath the XFP cage ground shield and XFP connector pads (12), and ground vias (14) at the XFP connector and PHY connector pads (15).

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

INV. H05K1/02

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)

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>Dr. Lew Aronson (FINISAR): "XFP The Ultimate 10Gb/s Solution"</p> <p>October 2002 (2002-10), XP002552688 ANSOFT Empowering Profitability Workshop on September 16 - November 14, 2002 Retrieved from the Internet: URL: http://www.ansoft.com/EMpower/Finisar.pdf [retrieved on 2009-09-24] page 30 - page 32</p> <p style="text-align: center;">----- -/--</p>	1-6,8-9

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

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International application No

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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.
X	<p>XFP MSA Group: "10 Gigabit Small Form Factor Pluggable Module Revision 4.5" http://www.xfpmsa.org/</p> <p>31 August 2005 (2005-08-31), XP002552689 Retrieved from the Internet: URL:http://www.xfpmsa.org/XFP_Rev4_5_SFF_I_NF_8077i.pdf> [retrieved on 2009-10-27] page 23, line 21 - line 26 page 106 - page 107; figures 34-36, 40, 41 page 142 - page 148; figures 60-65</p>	1-6,8-9
A	<p>Dr. Eric Bogatin: "16 EMC Rules"</p> <p>March 2007 (2007-03), XP002552690 Retrieved from the Internet: URL:http://www.altera.com/technology/signa1/columns/2007/2007-03-mar_1.html> [retrieved on 2009-10-26] the whole document</p>	1,8
A	<p>US 6 020 562 A (BURNS LAWRENCE M [US] ET AL) 1 February 2000 (2000-02-01) column 1, line 57 - column 2, line 14; figures 9, 1,2 column 9, lines 1-17</p>	1,8
A	<p>US 2003/107056 A1 (CHIN TSUN-KIT [US] ET AL) 12 June 2003 (2003-06-12) paragraphs [0027], [0 29] abstract; figures 3a-3c</p>	1,8
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A	<p>US 2007/194434 A1 (LIN CHIN-SUNG [TW] ET AL) 23 August 2007 (2007-08-23) paragraph [0023]; figure 3</p>	7

INTERNATIONAL SEARCH REPORT

Information on patent family members

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