(51) International Patent Classification:
G06F 15/16 (2006.01)  G06F 11/00 (2006.01)

(21) International Application Number:
PCT/US2005/045723

(22) International Filing Date:

(25) Filing Language:
English

(26) Publication Language:
English

(30) Priority Data:
60/596,400 20 September 2005 (20.09.2005) US


(72) Inventors; and


(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH), GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UF, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, [Continued on next page]

(54) Title: SYSTEM FOR DETERMINING PRINTED CIRCUIT BOARD PASSIVE CHANNEL LOSSES

(57) Abstract: A method for determining passive channel losses for passive channel structures 48 in electronic circuit boards includes selecting parameters from the list including driver/receiver device current and device time or device voltage and device time data, electrical environment variables, electrical [Continued on next page]
data for materials used, electrical data for via structures, copper trace electrical data, connector electrical data, schematic design data and similar selected parameters. At least one selected parameter is inputted into a processor (62) for generating an output (26) based upon calculating desired output characteristics of the desired channel structure (48). The output (26) from the calculation is correlated with previously measured data for generating a resulting output planning a desired channel structure (48).
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: G06F 15/16( 2006.01), 11/00( 2006.01)

USPC: 709/246, 714/43
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.: 709/246, 714/43

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)
East, Derwent, JPO, EPO

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>Y, E</td>
<td>US 7,103,806 B1 (HORVITZ) 05 September 2006, see whole document.</td>
<td>1-13</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)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" 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
- "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
- "K" document member of the same patent family

Date of the actual completion of the international search
23 June 2007 (23.06.2007)

Date of mailing of the international search report
11 SEP 2007

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. (571) 273-3201

Authorized officer
Thu Ha Nguyen
Telephone No. 571-272-9600
DEBORAH A. THOMAS
PARALEGAL SPECIALIST

Form PCT/ISA/210 (second sheet) (April 2005)