Title: MEASURING SIGNAL PROPAGATION AND ADJUSTABLE DELAYS IN ELECTRONIC DEVICES

Abstract: Systems and methods to measure signal propagation delay through objects. The system includes a controller, a single shot pulse generator, a first pulse/edge former, a multiplexer/demultiplexer, a second pulse/edge former, a timer, and a counter. The controller initializes the system, the clock, and the counter. A pulse is sent from the single shot pulse generator to the first pulse/edge former. The pulse is propagated through the first pulse/edge former to the multiplexer, through a device under test, to the demultiplexer, and to the second pulse/edge former. The second pulse edge generator provides the pulse to the counter, which counts a predetermined number of pulses, and the clock, which measures the amount of time the counter counts the pulses. The propagation delay of the device under test is then calculated based on the counted number of pulses and the elapsed time measured by the clock.
A. CLASSIFICATION OF SUBJECT MATTER
   IPC(8) - G01R 29/26 (2007.01)
   USPC - 324/614

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(8) - G01R 29/26 (2007.01)
   USPC - 324/614

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)
   MicroPatent, IP.com, DialogPro

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</td>
<td>WO 00/10358 A1 (TIHONEN et al) 24 February 2000 (24.02.2000) entire document</td>
<td>1-10 and 18-20</td>
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Further documents are listed in the continuation of Box C.

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Date of the actual completion of the international search
   14 August 2007

Name and mailing address of the ISA/US
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Date of mailing of the international search report
   13 MAR 2008

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