Abstract: A hardware-accelerated simulator includes a storage memory and a program memory that are separately accessible by the simulation processor (100). The program memory stores instructions to be executed in order to simulate the chip. The storage memory is used to simulate the user memory. Since the program memory and storage memory are separately accessible by the simulation processor, the simulation of reads and writes to user memory does not block the transfer of instructions between the program memory and the simulation processor, thus increasing the speed of simulation. In one aspect, user memory addresses are mapped to storage memory addresses by adding a fixed, pre-determined offset to the user memory address. Thus, no address translation is required at run-time.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: G06F 17/50( 2006.01);G06F 9/455( 2006.01);G06F 12/00( 2006.01)

USPC: 703/13;703/23;71 1/220

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. : 703/13; 703/23; 711/220; 703/26

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)
Google internet search, ACM, IEEE

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</td>
<td>US 6,212,489 B1 (Klein et al) 3 April 2001 (03.04.2001), FIG. 2; entire disclosure</td>
<td>1-2, 28, 42-50</td>
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</tbody>
</table>

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

Date of the actual completion of the international search
20 June 2008 (20.06.2008)

Date of mailing of the international search report
22/3DT. 2008

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