Title: DATA PROCESSING SYSTEMS UTILIZING SECURE MEMORY

Abstract: A system (100) is provided that includes a processor (102) and a random access memory (RAM) (108) coupled to the processor. The RAM is divided into non-secure RAM (110) and secure RAM (112). The system also includes a system memory (106) coupled to the processor, wherein the system memory stores RAM resize instructions (120) that, when executed, enable the non-secure RAM and the secure RAM to be dynamically resized. The system memory may also store save/restore secure RAM instructions (122) that, when executed, perform a save operation that saves the secure RAM to non-volatile memory and a restore operation that restores the secure RAM from the non-volatile memory. The system memory may also store arbitration instructions (124) that, when executed, enable a cryptographic hardware accelerator (HWA) (130) to be shared by a secure application and a non-secure application.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(8) - G06F 12/00 (2008.01)

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)

USPC 711/100

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC 711/100,104,105

Electronic database consulted during the international search (name of database and, where applicable, search terms used)

PubWEST(USPT,PGPB,EPA,EPAB,JPAB), DialogPRO, WIPO, EPO, CITESEEER, Google patents, Google scholar

**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>A</td>
<td>US 6,192,477 B1 (CORTHELL) 20 February 2001 (20 02 2001) entire document</td>
<td>1-1 1</td>
</tr>
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</table>

**D. Further documents are listed in the continuation of Box C.**

**E. Date of the actual completion of the international search**

24 January 2008 (24 01 2008)

**F. Date of mailing of the international search report**

![Date stamp]

**Name and mailing address of the ISA/US**

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PCT OSP 571-272-7774

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