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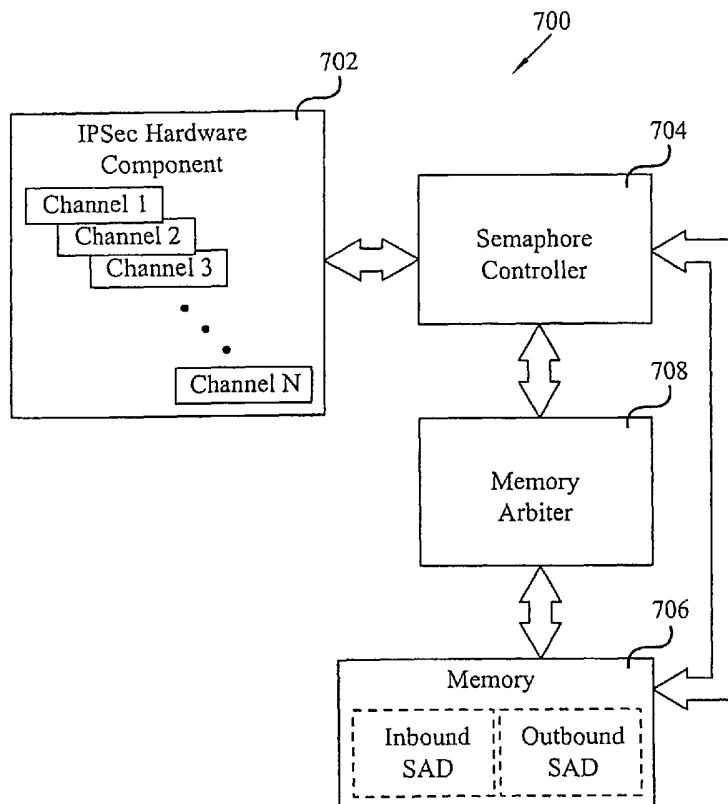
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[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR RESOLVING SECURITY ASSOCIATION DATABASE UPDATE COHERENCY IN HIGH-SPEED SYSTEMS HAVING MULTIPLE SECURITY CHANNELS



(57) Abstract: An apparatus and method for updating security association database entries in a system having multiple security channels by selectively granting access to the entries by a plurality of the multiple security channels that may need to update the same entry using a first-come, first-served scheme. The apparatus includes a controller circuit that functions to carry out the method which, for each of the multiple security channels, includes determining whether another of the security channels has a higher priority to access a particular security association database entry. If no other channel has a higher priority, then the channel requesting access to the entry retrieves it from its address location, modifies it, and writes the modified entry back to its address location. The controller prevents other channels from simultaneously, or substantially simultaneously, retrieving and modifying the same entry.



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## A. CLASSIFICATION OF SUBJECT MATTER

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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)

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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, WPI Data, INSPEC, PAJ, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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|            | -----<br>-/--                                                                                                                                                                                                                        |                       |

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |
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