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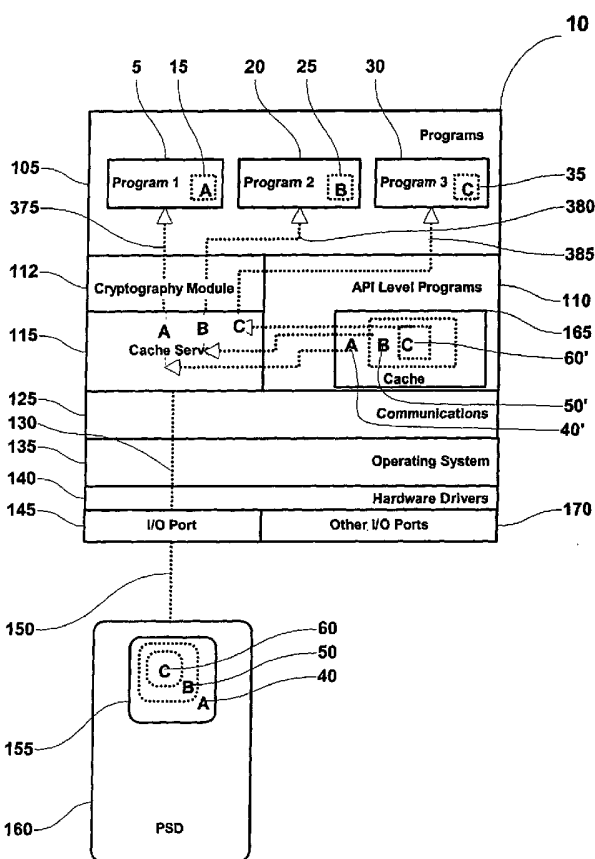
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[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR REDUCING PERSONAL SECURITY DEVICE LATENCY



(57) **Abstract:** This invention describes a system and method for reducing communications throughput latency caused by the low-level communications protocol and serial communications interface associated with the use of personal security devices. To improve the data throughput, a cache (165) is created under the exclusive ownership of an API level program called a cache server (115). The cache server (115) maintains access rights associated with the data (40, 50, 60) transferred from the PSD (160) into cache memory. Requests made by programs for cached PSD data (40', 50', 60') are first verified for access rights and serviced by the cache server (115). Cryptographic techniques may be employed to prevent unauthorized monitoring of the contents of the cache (165).

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F1/00 H04L29/06				
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 7 G06F H04L				
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, PAJ, IBM-TDB				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	US 5 854 891 A (POSTLEWAITE WILLIAM M ET AL) 29 December 1998 (1998-12-29) column 1, line 5 - line 17 column 2, line 57 - column 3, line 7 column 4, line 54 - line 60 column 5, line 1 - line 50 ---	1-14		
A	EP 0 936 530 A (SIEMENS NIXDORF INF SYST) 18 August 1999 (1999-08-18) paragraph '0026! paragraph '0030! paragraph '0054! - paragraph '0056! paragraph '0103! - paragraph '0110! --- -/--	1-14		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.				
<input checked="" type="checkbox"/> Patent family members are listed in annex.				
° Special categories of cited documents :				
<table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none; vertical-align: top;"> "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but 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 </td> <td style="width:50%; border: none; vertical-align: top;"> "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. "&" document member of the same patent family </td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but 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. "&" document member of the same patent family
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but 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. "&" document member of the same patent family			
Date of the actual completion of the international search <p align="center">6 February 2004</p>	Date of mailing of the international search report <p align="center">13/02/2004</p>			
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer <p align="center">Alecú, M</p>			

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International Application No
PCT/EP 02/12852

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>"FIPS PUB 140-1, Federal Information Processing Standards Publication: Security Requirements for cryptographic modules" FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATION, U.S. DEPT. OF COMMERCE, WASHINGTON, DC, US, 11 January 1994 (1994-01-11), pages 1-55, XP002237651 ISSN: 0083-1816 the whole document -----</p>	1-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

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			AU 4094397 A	06-03-1998
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