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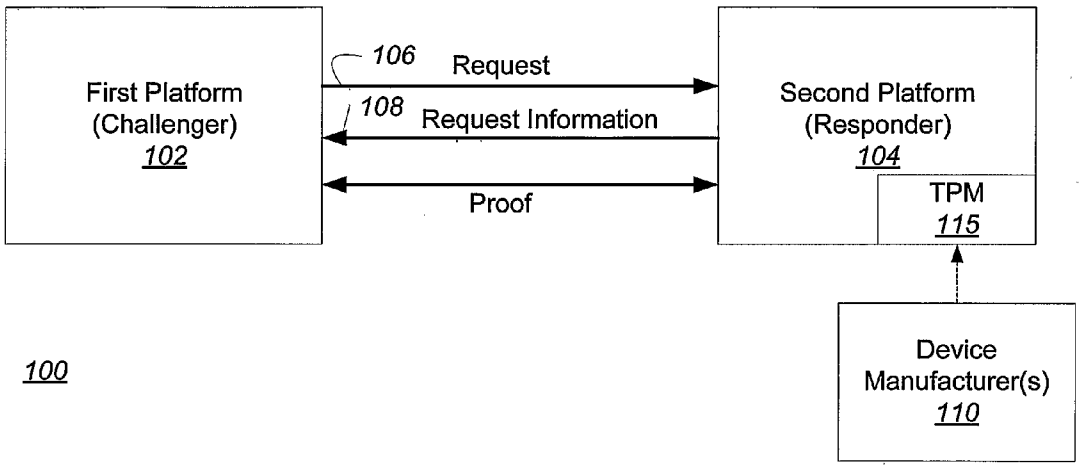
(54) Title: METHOD OF DELIVERING DIRECT PROOF PRIVATE KEYS TO DEVICES USING A DISTRIBUTION CD



(57) Abstract: Delivering a Direct Proof private key to a device installed in a client computer system in the field may be accomplished in a secure manner without requiring significant non-volatile storage in the device. A unique pseudo-random value is generated and stored in the device at manufacturing time. The pseudorandom value is used to generate a symmetric key for encrypting a data structure holding a Direct Proof private key and a private key digest associated with the device. The resulting encrypted data structure is stored on a removable storage medium (such as a CD), and distributed to the owner of the client computer system. When the device is initialized on the client computer system, the system checks if a localized encrypted data structure is present in the system. If not, the system obtains the associated encrypted data structure from the removable storage medium. The device decrypts the encrypted data structure using a symmetric key regenerated from its stored pseudo-random value to obtain the Direct Proof private key. If the private key is valid, it may be used for subsequent authentication processing by the device in the client computer system.

WO 2006/025952 A3

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. H04L9/08 H04L9/32

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)
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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/103281 A1 (BRICKELL ERNIE F) 27 May 2004 (2004-05-27) cited in the application the whole document	1-39
Y	MENEZES, VANSTONE, OORSCHOT: 1997, CRC PRESS LLC , USA , XP002394263 page 321 - page 322 page 330 - page 331 page 388 - page 390 page 394 - page 395 page 397 - page 398 page 472 page 515 - page 516 page 548 - page 552	1-39

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 032 260 A (SASMAZEL ET AL) 29 February 2000 (2000-02-29) abstract column 2 - column 3	1-39

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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