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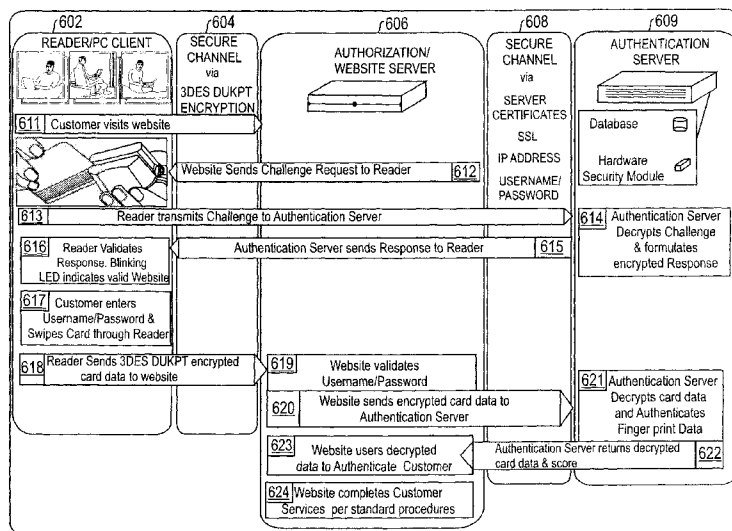
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(54) Title: CARD AUTHENTICATION SYSTEM



(57) Abstract: A card authentication system. In one embodiment, the invention relates to a method for authenticating a data card having an intrinsic magnetic characteristic and recorded data on the data card, the method including reading information from the data card, the data card information including the intrinsic magnetic characteristic and the recorded data on the data card, encrypting the data card information, sending the encrypted data card information, receiving the encrypted data card information, decrypting a portion of the encrypted data card information, the portion including the intrinsic magnetic characteristic, generating a score indicative of a degree of correlation between the intrinsic magnetic characteristic of the data card information and a stored value, and determining an authenticity of the data card based at least in part on the score.

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**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(8) - G06K 19/06 (2008.04)

USPC - 235/493

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: 235/493

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

USPC: 235/493; 360/2 (text searched)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST(USPT,PGPB,EPAB,JPAB); Google Scholar

Search Terms - card, magnetic, remanent, noise, score, decrypt, network, reader, correlate

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,920,628 A (Indeck et al.) 06 July 1999 (06.07.1999), entire document, especially Abstract, col. 14, ln. 3-30 and co. 19, ln. 62 - col. 20, ln. 4	1-32
Y	US 2006/0059073 A1 (Walzak) 16 March 2006 (16.03.2006), entire document, especially para. [0018]	1-32
Y	US 2005/0173530 A1 (DeLand et al.) 11 August 2005 (11.08.2005), entire document; especially para. [0035]	2, 4, 17, and 19
Y	US 2005/0165695 A1 (Berardi et al.) 28 July 2005 (28.07.2005), entire document, especially para. [0023]	7, 8, 12, 22, 23, and 26

Further documents are listed in the continuation of Box C.

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"P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

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