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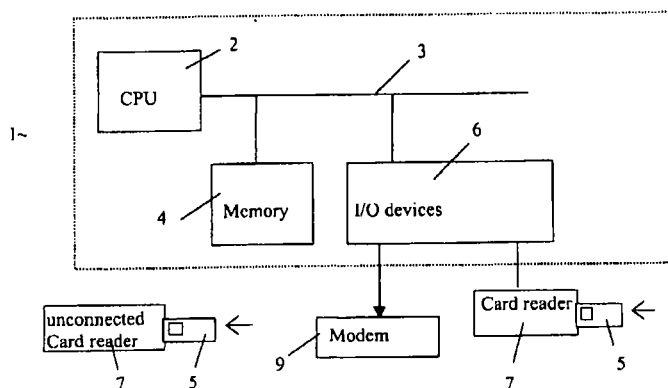
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(54) Title: AUTHENTICATION ARRANGEMENT AND METHOD FOR USE WITH FINANCIAL TRANSACTIONS



(57) Abstract: An authentication arrangement for use in a network payment system for transacting a sale of merchandise over a network using an Integrated Circuit Card is described, the arrangement comprising: a merchant server in communication with said network, said merchant server having at least a first item of merchandise for sale; a client terminal in communication with said network, said client terminal having an output device for reviewing said first item for sale, and an input device for initiating a purchase transaction to purchase said first item for sale, said client terminal being arranged to build a purchase message using information relating to a merchant identifier and financial transaction information obtained from said merchant server; a card reader for communicating with said Integrated Circuit Card, said client terminal having means to generate a challenge message, said challenge message being generated from the information relating to the merchant identifier and an account number, means for receiving the challenge message at the card reader and for generating a value from the challenge message; said Integrated Circuit Card having means for generating a cryptographic message from at least a part of said value, the card reader having means to generate an authentication token from at least a part of the cryptographic message, and said client terminal having means for transmitting at least part of the authentication token in a message for transmission via the network.

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