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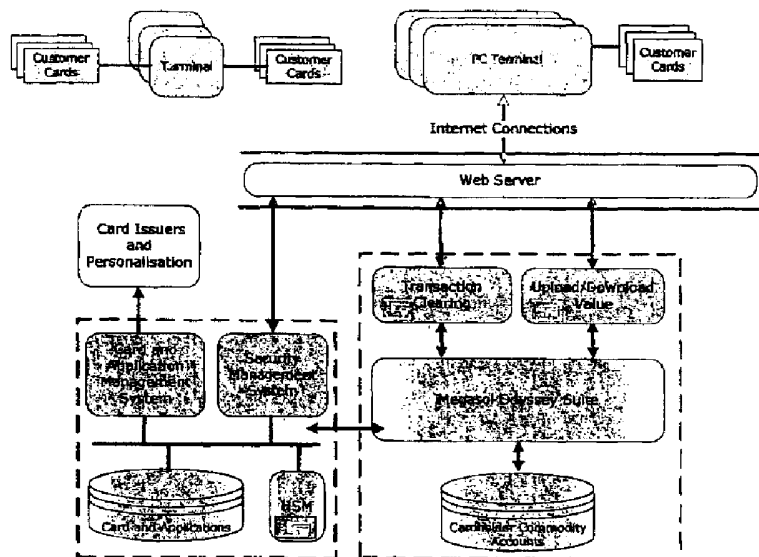
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(54) Abstract Title: **Smartcard-based value transfer**

(57) In a value transfer scheme, users are provided with programmable devices, for example, smart cards, capable of carrying data representing at least one available commodity value. Data representing user accounts is held at a remote processing station. Transactions between users are effected by the off-line exchange of data between users' respective smartcards, the exchanged data containing a record of each transaction entered into. The user account data for each user's account held at the remote processing station is updated only subsequently when the user's smartcard is on-line to the remote processing station and data therefrom is uploaded to the remote processing station. The scheme of the invention can, conveniently, be based around the ITSO scheme which is used to govern the secure transfer of data. The scheme is capable of providing a secure multi-commodity value transfer system.



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