Title: A SYSTEM AND COMPUTER PROGRAM FOR EFFECTING MONETARY TRANSACTIONS BETWEEN PAYERS AND PAYEES

Abstract: A system for effecting monetary transactions between payers and payees, said system including a computer readable data storage medium including data representing monetary values associated with respective ones of said payers, said system for performing the steps of generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees; generating data uniquely identifying one of said monetary values associated with said one of said payers; debiting said one of said monetary values by said monetary amount; and crediting said one of said payees with said monetary amount, wherein said data uniquely identifying one of said monetary values is, at least in part, included on a portable device.
A SYSTEM AND COMPUTER PROGRAM FOR EFFECTING MONETARY
TRANSACTIONS BETWEEN PAYERS AND PAYEES

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Field of the Invention

The present invention relates to a system for effecting monetary transactions between
payers and payees.

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Background of the Invention

Carrying around cash in today's society can sometimes be a liability. For example, wallets,
purses, handbags, and the like, have previously been soft targets for criminals seeking cash
contained therein. Much of the contents of a handbag, or a wallet, can be replaced in the
event of theft or loss. However, the cash contained therein can not.

Parents or guardians may be hesitant to give children money in the form of cash for fear
that the money may be too easily stolen or lost. To overcome these difficulties, parents
may distribute pocket money to their children in small instalments. Children, being the
victims of such regimes, may therefore be forced to more frequently badger parents for
these smaller amounts of money. An increase in the frequency of badgering may be
detrimental to the mental health of parents.

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Electronic funds transfer systems, such as EFTPOS, provide useful alternatives to using
hard currency in financial transactions. However, such systems require participants to
acquire debit cards or credit cards associated with an established bank account. As such,
these systems may not necessarily provide a simple and safe means for spending controlled
amounts of money.

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People generally carry a wallet, or a purse, containing various combinations of
denominations of cash in anticipation of future cash payments for goods and services. It
may not always be convenient for a person to carry multiple combinations of denominations of cash in their wallet or purse. Further, it may not always be convenient for a person to visit a bank to obtain more cash.

5 Merchants, service providers, etc typically provide change for cash transactions when a purchaser does not have the correct combination of denominations of cash to meet a sale price. A merchant, for example, may attempt to anticipate the amount of change that they will likely require during a day's trading and ensure that they begin each day's trading with this amount of change. It may not always be convenient to obtain the mentioned amount of change for each day of trading.

It is generally desirable to overcome, or ameliorate, one or more of the above problems, or at least provide a useful alternative.

15 **Summary of Invention**

In accordance with one aspect of the present invention, there is provided a system for effecting monetary transactions between payers and payees, said system including a computer readable data storage medium including data representing monetary values associated with respective ones of said payers, said system for performing the steps of:

(a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;

(b) generating data uniquely identifying one of said monetary values associated with said one of said payers;

(c) debiting said one of said monetary values by said monetary amount; and

(d) crediting said one of said payees with said monetary amount,

wherein said data uniquely identifying one of said monetary values is, at least in part, included on a portable device.

30 Preferably, a monetary value of each one of said monetary values associated with respective ones of said payers cannot exceed a predetermined amount.
Preferably, the predetermined amount is one hundred dollars.

Preferably, the portable device is valid for a predetermined period of time after which monetary transactions between the respective payer and a payee cannot be effected.

Preferably, the predetermined period of time is three months.

In accordance with another aspect of the present invention, there is provided a computer program for effecting monetary transactions between payers and payees, said program is adapted to communicate with computer readable data storage medium including data representing monetary values associated with respective ones of said payers, said program for performing the steps of:

(a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;

(b) generating data uniquely identifying one of said monetary values associated with said one of said payers;

(c) debiting said one of said monetary values by said monetary amount; and

(d) crediting said one of said payees with said monetary amount,

wherein said data uniquely identifying one of said monetary values is, at least in part, included on a portable device.

Preferably, a monetary value of each one of said monetary values associated with respective ones of said payers cannot exceed a predetermined amount.

Preferably, the predetermined amount is one hundred dollars.

Preferably, the portable device is valid for a predetermined period of time after which monetary transactions between the respective payer and a payee cannot be effected.

Preferably, the predetermined period of time is three months.
In accordance with another aspect of the present invention, there is provided a computer readable data storage medium including the above-described computer program stored thereon.

In accordance with yet another aspect of the invention, there is provided a portable device for use in effecting a monetary transaction between a payer and a payee, including data for uniquely identifying a monetary amount associated with the payer stored on a remote data storage device, wherein said transaction is effected when a monetary amount of the transaction is deducted from said monetary amount associated with the payer.

Preferably, said monetary amount associated with the payer cannot exceed a predetermined value.

In accordance with another aspect of the present invention, there is provided a system for effecting monetary transactions between payers and payees, said system including a computer readable data storage medium including data representing monetary values associated with respective ones of said payees, said system for performing the steps of:

(a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;

(b) storing said monetary amount of said monetary transaction as a monetary value on said computer readable data storage medium; and

(c) generating data uniquely identifying said monetary value, wherein said one of said monetary transactions is effected by transferring the data uniquely identifying said monetary value from said one of said payers to said one of said payees.

Preferably, said system for performing the step of generating a receipt for said one of said payers that includes said data uniquely identifying said monetary value.

Preferably, said one of said monetary transactions must be effected within a predetermined period of time before the transaction is invalid.
Preferably, the predetermined period of time is three months.

In accordance with another aspect of the present invention, there is provided a computer program for effecting monetary transactions between payers and payees, said system including a computer readable data storage medium including data representing monetary values associated with respective ones of said payees, said system for performing the steps of:

(a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;

(b) storing said monetary amount of said monetary transaction as a monetary value on said computer readable data storage medium; and

(c) generating data uniquely identifying said monetary value,

wherein said one of said monetary transactions is effected by transferring the data uniquely identifying said monetary value from said one of said payers to said one of said payees.

 Preferably, said program for performing the step of generating a receipt for said one of said payers that includes said data uniquely identifying said monetary value.

 Preferably, said one of said monetary transactions must be effected within a predetermined period of time before the transaction is invalid.

 Preferably, the predetermined period of time is three months.

In accordance with another aspect of the present invention, there is provided a computer readable data storage medium including the above described computer program stored thereon.

Brief Description of the Drawings:

Preferred embodiments are hereafter described, by way of non-limiting example only, with reference to the accompanying drawings in which:
Figure 1 is a diagrammatic illustration of a preferred embodiment of the electronic monetary system connected to a network;

Figure 2 is a diagrammatic illustration of an electronic data storage device;

Figure 3 is a diagrammatic illustration of the electronic monetary system shown in Figure 1;

Figure 4 is a diagram showing data flow between the entities of one aspect of the system;

Figure 5 is a flow diagram showing the steps executed by the aspect of the system shown in Figure 4;

Figure 6 is a diagram showing data flow between the entities of another aspect of the system;

Figure 7 is a flow diagram showing the steps executed by the aspect of the system shown in Figure 6;

Figure 8 is a diagram showing data flow between the entities of another aspect of the system;

Figure 9 is a flow diagram showing the steps executed by the aspect of the system shown in Figure 8;

Figure 10 is a diagram showing data flow between the entities of another aspect of the system;

Figure 11 is a flow diagram showing the steps executed by the aspect of the system shown in Figure 10;

Figure 12 is a diagram showing data flow between the entities of another aspect of the system;

Figure 13 is a flow diagram showing the steps executed by the aspect of the system shown in figure 12;

Figure 14 is a flow diagram showing the steps executed by another aspect of the system; and

Figure 15 is a flow diagram showing the steps executed by another aspect of the system.
Detailed Description of Preferred Embodiments of the Invention

Prepaid Debit Card

The system 10 shown in Figure 1 supports use of prepaid debit cards 12 for use in the purchase of goods and services. For example, a person can purchase a card 12 from an authorised dealer, set up an account associated with the card 12 and then charge the account with a predetermined amount of money for later spending. The person can then use the system 10 to effect a monetary transaction by transferring money from an account associated with a card 12 to a chosen payee. The person can use the card 12 to purchase goods and services until such a time that the monetary value of the account associated with the card 12 has been depleted or until an expiry date associated with the card 12 expires.

The disposable cash card 12 shown in Figure 2 includes a computer readable data storage medium 14, such as a magnetic strip, for storing data including, for example, an account number, personal identification number and the expiry date of the card. The account number can alternatively be written on or embossed on to one side of the card 12.

The system 10 is hereafter described by way of example only with reference to a single remote storage location where members of the system 10 have one active account associated with their cards. However, it would be understood by those skilled in the relevant art that the system 10 could support use of a plurality of remote storage locations, where members of the system have at least one active account with any one of the participating remote storage locations.

The system 10 is provided by an electronic financial transaction point of sale system (EFTPOS) computer system 18 that includes a server 20 in communication with the equipment 24,28 of the members. Members include:
1. Authorised suppliers/dealers of prepaid cash cards 12;
2. Suppliers of goods or services that are able to receive payment for their goods or services by way of the system 10; and

EFTPOS systems are known in the art and are not described herin in detail. The equipment 24 of the members may be connected to the server 20 by way of a secure link over the communication network 26 in an analogous manner to that of known credit card and debit card systems whereby an EFTPOS terminal 24,28 in communication with a server 20 is used to effect an electronic monetary transactions.

The system 10 supports the following functions:

1. Card 12 purchase and registration;
2. Purchase of goods and services by way of the card 12;
3. Card 12 recharge;
4. Card 12 balance; and
5. Transfer of money from a card 12.

The operations of these functions supported by the EFTPOS system 18 are described below with reference to an alternative embodiment of the system 10.

The system 10 is alternatively provided by a computer system 18 that includes a server 20 in communication with a database 22. The computer system 18 is able to communicate with equipment 24 of members, or users, of the system 10 over a communications network 26 using standard communication protocols. Members include:

1. Authorised suppliers/dealers of prepaid cash cards 12;
2. Suppliers of goods or services that are able to receive payment for their
goods or services by way of the system 10; and

The equipment 24 of the members can be a variety of communications devices, such as personal computers; interactive televisions; hand held computers; mobile telephones; personal digital assistants, that are in electronic communication with card readers/writers 28. The communications network 26 may include the Internet, telecommunications networks and/or local medium networks.

The components of the computer system 18 can be configured in a variety of ways. The components can be implemented entirely by software to be executed on standard computer server hardware, which may comprise one hardware unit or different computer hardware units distributed over various locations, some of which may require the communications network 26 for communication. A number of the components or parts thereof may also be implemented by application specific integrated circuits (ASICs). It will be apparent from the description of the computer system 18, and its operation below, that the a practical implementation of the components of the computer system 18 is a software implementation stored on the server 20. Alternative methods of providing system displays and information can also be used, for example WML pages for mobile telephones, and interactive voice response (IVR) systems for connection to standard fixed telephones or voice over IP terminals.

The server 20 of the computer system 18 includes a web server 30, a transaction engine 32 and a database server 34 arranged in the manner shown in Figure 4. The web server 30 is software stored on the server 20 that allows the computer system 18 to serve static and dynamic web pages of the web application. The web server 30 allows members of the system 10 to access web pages created and stored on the computer system 18 via their respective terminals 24. The web pages published by the web server 30 are dynamic and are populated by data provided by the transaction engine 32 of the computer system 18.

The transaction engine 32 is software that processes data received by the web server 30
from users of the system 10 via their terminals 24 and is able to retrieve and store data on the database 22 via the database server 34. The transaction engine 32 communicates with the web server 30 and database server 34 to execute data transactions for the system 10 and thereby provides dynamic content for the web pages provided by the web server 30, as described below.

The database server 34 is software stored on the server 20. The database server 34 reads, writes, maintains and secures data on the database 22. The database server 34 maintains data in the database for all members of the system 10. The database 22 is maintained preferably on hard disk storage of the server 20 of the computer system 18.

A member can use his or her personal computer 24, for example, to access the system login web page via the Internet 26. The login web page generated by the system 18 includes a user identification data box and a user password data box. On detection of a valid user name and password, the system 18 establishes a secure connection and generates a web page for display on the member's computer 24 that is populated with data associated with the member.

The system 10 supports the following functions:

1. Card 12 purchase and registration;
2. Purchase of goods and services by way of the card 12;
3. Card 12 recharge;
4. Card 12 balance; and
5. Transfer of money from a card 12.

I. Card purchase and registration

Authorised dealers sell prepaid debit cards 12. Authorised dealers include any retail or wholesale outlet that has been approved to deal with the cards 12. Authorised dealers
would likely include post offices, convenience stores, etc. A person can purchase and register a prepaid debit card from any such authorised dealer. To effect registration of the prepaid debit card 12, the authorised dealer can use his or her computer terminal 24 to access the system login page. On detection of a correct user name and password, the system 18 generates a web page for display on the authorised dealer's computer 24.

The web page includes a "Register Debit Card" function button that, when selected by the retailer, requests that the authorised dealer perform the following steps:

1. Insert prepaid debit card 12 into the card reader/writer 28 connected to the member's computer terminal 24;
2. Enter the desired prepaid monetary value of the card; and
3. Confirm the registration details.

On detection of confirmation, the system 18 performs the following steps, as shown in Figure 4 and 5:

a. Read the card number from the magnetic strip 14 on the card, at step 36;
b. Receive the prepaid monetary value of the card 12, at step 38;
c. Set up a new account for the card number, at step 40;
d. Set the monetary value of the account to the prepaid monetary value of the card, at step 42;
e. Generate, at step 44, a personal identification number (PIN) for the account;
f. Generate, at step 46, an expiry date for the new prepaid card 12;
g. Generate, at step 48, a confirmation message for display on the retailer's terminal 24 including:

i. The account number;
ii. The personal identification number generated;
iii. The expiry date generated; and
iv. The monetary value of the prepaid debit card 12.
The retailer then confirms that the account details are correct and prints a receipt for the purchaser. The receipt includes the following information for the purchaser:

- The account number;
- The personal identification number generated;
- The expiry date of the prepaid debit card 12; and
- The monetary value of the prepaid debit card 12.

Alternatively, the purchaser of the card can select their own personal identification number.

The prepaid debit card 12 can then be used to purchase goods and services from participating traders and suppliers.

The prepaid cards 12 can be purchased already charged to a prepaid limit. The cards 12 are purchased from authorised dealers and are sealed in a package together with a scratch card concealing the pre-allocated pin, the card number and the expiry date. The account has previously been established on the computer system 18 and the authorised dealer need only register the sale to activate the card 12.

Alternatively, the authorised dealer can call a service centre associated with the system 10 to effect the above steps of registering a card 12 by providing the call centre with the above mentioned details.

2. **Purchase of goods and services by way of the card 12**

A member having a prepaid debit card 12 can use the monetary value of the card 12 as legal tender for the purchase of goods and services. To effect a sale, the relevant trader, or service provider, can use his or her terminal 24 to access the system login page. On
detection of a correct user name and password, the system 18 generates a web page for display on the member's terminal 24.

The web page includes a "Purchase" function button that, when selected by the retailer, requests that the following steps be performed:

1. Insert prepaid debit card 12 into the card reader/writer 28 connected to the member's computer terminal 24;
2. Enter the personal identification number associated with the card 12;
3. Enter the purchase price; and
4. Confirm the purchase details.

On detection of confirmation, the system 18 performs the following steps, as shown in Figure 6 and 7:

a. Read the card number from the magnetic strip 14 on the card, at step 50;
b. Receive the card number, amount of the relevant purchase, and the personal identification number entered, at step 52;
c. Search database 22 and locate the account corresponding to the card number received, at step 54;
d. Compare the personal identification number received with the personal identification number associated with the relevant account and proceed to the next step only if the numbers are equal;
e. If the expiry date associated with the account has not expired, then determine the balance of the account;
f. If the balance is greater than or equal to purchase amount, then, at step 60, deduct the purchase amount from the account balance;
g. Credit the retailer's bank account with a percentage of the purchase price, at step 62; and
h. Generate, at step 64, a confirmation message for display on the retailer's terminal 24 including:
i. The card number;
ii. The purchase price;
iii. The monetary value remaining on the card; and
iv. The expiry date of the card.

The retailer can then print a receipt of the transaction for the purchaser. The receipt includes the above information for the purchaser.

10 The transaction terminates unsuccessfully if:

a. The personal identification number received from the retail store is not equal to the personal identification number associated with the relevant account;

b. The expiry date associated with the account has expired; or
c. The balance is not greater than or equal to purchase amount.

No money is deducted from the account if the transaction terminates unsuccessfully.

20 The computer system 18 credits the relevant retailer's bank account with a percentage of the sale price. For example, the computer system may credit the retailer's bank account with 95% of the sale price and retain 5% as a commission for effecting the sale. Alternatively, the system 18 transfers 100% of the transaction amount to the relevant retailer's bank account.

25 Otherwise, the system 18 can reimburse the retailer for the sale price by any other suitable means.

The system 10 keeps a log of all monetary transfers. The log is stored on the database 22 and can be used determine where errors occurred during monetary transfers.
Alternatively, the retailer could effect the above described steps by calling a service centre associated with the system 10. In this embodiment, the retailer would provide the above information to the service centre by telephone to effect the monetary transaction.

3. Card 12 Recharge

A member can add to the monetary value of his or her prepaid debit card 12 by visiting an authorised dealer and requesting the dealer to transfer a predetermined amount of money to the account associated with the member's card 12. The member can pay the dealer in cash, transfer money to the dealer by way of EFTPOS, or make payment by any other suitable means.

The authorised dealer will be invoiced by the system 18 for the monetary amount transferred to the member's card 12. Otherwise the dealer can credit the system administrators with the monetary amount transferred to the member's card 12 by any other suitable means. The authorised dealer may charge a percentage of the monetary amount as a commission for the transaction.

To add money to the card 12, the relevant dealer can use his or her terminal 24 to access the system login page. On detection of a correct user name and password, the system 18 generates a web page for display on the member's terminal 24.

The web page includes an "Add Money" function button that, when selected by the retailer, requests that the following steps be performed:

1. Insert prepaid debit card 12 into the card reader/writer 28 connected to the member's computer terminal 24;
2. Enter the amount to be added to the card 12; and
3. Confirm the purchase details.

On detection of confirmation, the system 18 performs the following steps, as shown in Figure 8 and 9:

a. Read the card number from the magnetic strip 14 on the card, at step 70;

b. Receive the card number, and the monetary amount to be added to the card, at step 72;

c. Search database 22 and locate the account corresponding to the card number received, at step 74;

d. Determine the expiry date associated with the account and terminate unsuccessfully if the date has expired;

e. Add the monetary amount to be added to the card to the account balance, at step 78; and

i. Generate, at step 80, a conformation message for display on the retailer's terminal 24 including:

   i. The card number;
   v. The monetary amount added to the card 12;
   vi. The new monetary value of the card; and
   vii. The expiry date of the card.

The retailer can print a receipt of the transaction for the member. The receipt includes the above information.

The transaction will terminate unsuccessfully if the expiry date associated with the account has expired. No money is added from the account if the transaction terminates unsuccessfully.

The system 10 keeps a log of all monetary transfers. The log is stored on the database 22 and can be used determine where errors occurred during monetary transfers.
A non-member can add money to a member's card by approaching an authorised dealer with the card number and effecting the above steps.

The prepaid cards 12 preferably each have a maximum card limit. For example, a given prepaid card may have a limit of $20. The cards they are available in $20, $50, $100 and $1000 versions.

A card owner can access the system splash page and log in as a registered card owner by entering the card number and password associated with their card 12. In doing so, the system generates a display that includes the card balance, and the expiry date of the card. The display also allows the member to transfer money from his or her bank account into the account associated with their card.

A member can also call a call centre associated with the system 10 to transfer money to his or her account. Payment could be effected, for example, by credit card or by any other suitable means.

4. **Card 12 Balance.**

A member can check the available balance on his or her card 12 by approaching an authorised dealer and requesting that the dealer check the balance. To check the balance, the authorised dealer can use his or her terminal 24 to access the system login page. On detection of a correct user name and password, the system 18 generates a web page for display on the member's terminal 24.

The web page includes an "Check Balance" function button that, when selected by the retailer, requests that the dealer insert the card 12 into the card reader/writer 28 connected
to the member's computer terminal 24. Once this has been completed, the system 18 performs the following steps, as shown in Figure 10 and 11:

a. Read the card number from the magnetic strip 14 on the card, at step 82;

b. Search the database 22 and locate the account corresponding to the card number received, at step 84;

c. Determine the expiry date associated with the account and terminate unsuccessfully if the date has expired;

d. Determine the monetary value of the account, at step 88; and

e. Generate, at step 90, a conformation message for display on the retailer's terminal 24 including:

i. The card number;

ii. The monetary value of the card; and

iii. The expiry date of the card.

The retailer can print a receipt of the transaction for the member. The receipt includes the above information.

The transaction will terminate unsuccessfully if the expiry date associated with the account has expired.

If a card 12 is lost or stolen, then the relevant member can contact the administrators of the computer system 18 and request that the account be suspended. The system 18 can reimburse the relevant member with the value of the suspended account by way of a cheque, or by directly crediting the member's bank account. Alternatively, the system 18 can credit another card 12 with the balance of the suspended account.
The system 18 permits the balance of an expired account to be transferred to the balance of another account stored on the database 22. Alternatively, the system 18 can credit the relevant member's bank account with the balance of an expired account.

A member can also call a call centre associated with the system 10 and request an account balance.

5. **Transfer of money from a card 12.**

A member having a prepaid debit card 12 can reclaim the monetary value of the card 12 in cash, or any other suitable medium. To reclaim money from a card 12 in the form of cash, the relevant member requests an authorised dealer to transfer money on his or her behalf. The relevant dealer can use his or her terminal 24 to access the system login page. On detection of a correct user name and password, the system 18 generates a web page for display on the member's terminal 24.

The web page includes a "Transfer Money From Card" function button that, when selected by the dealer, requests that the following steps be performed:

1. Insert prepaid debit card 12 into the card reader/writer 28 connected to the member's computer terminal 24;
2. Enter the personal identification number associated with the card 12;
3. Enter the amount to transfer; and
4. Confirm the transfer details.

On detection of confirmation, the system 18 performs the following steps, as shown in Figure 12 and 13:

a. Read the card number from the magnetic strip 14 on the card, at step 92;
b. Receive the card number, amount of the relevant transfer, and the personal
identification number entered, at step 94;
c. Search database 22 and locate the account corresponding to the card number received, at step 96;
d. Compare the personal identification number received with the personal identification number associated with the relevant account and proceed to the next step only if the numbers are equal;
e. If the expiry date associated with the account has not expired, then determine the balance of the account;
f. If the balance is greater than or equal to transfer amount, then, at step 98, deduct the transfer amount from the account balance;
g. Credit the retailer's bank account with the transfer amount, at step 100; and
h. Generate, at step 102, a confirmation message for display on the retailer's terminal 24 including:

i. The card number;
ii. The transfer amount;
iii. The monetary value remaining on the card; and
iv. The expiry date of the card.

The retailer can then print a receipt of the transaction for the purchaser and gives the member the cash amount of the transaction. The receipt includes the above information for the purchaser.

The transaction terminates unsuccessfully if:

a. The personal identification number received from the retail store is not equal to the personal identification number associated with the relevant account;
b. The expiry date associated with the account has expired; or
c. The balance is not greater than or equal to transfer amount.
No money is deducted from the account if the transaction terminates unsuccessfully.

Alternatively, the member can transfer the money to a bank account or any other account stored on the system 18.

The system 10 keeps a log of all monetary transfers. The log is stored on the database 22 and can be used to determine where errors occurred during monetary transfers.

Alternatively, the system 18 can transfer the money directly into the member's bank account.

Advantageously, parents can give their children a card 12 having a prepaid amount of money. The children can then use their cards 12 as to purchase goods and services as they see fit. If a card is lost or stolen, then the money can be reclaimed.

Advantageously, the cards 12 are associated with the members' bank accounts. The members have access to a limited amount of money. The spending of that money is controlled by the monetary limit of the card 12 and by the relatively short expiration date of the card 12.

*Disposable Receipt*

The system 10 also supports use disposable receipts that can be used to effect one transaction for a predetermined amount of money. Each receipt includes:

1. The monetary amount of the transaction;
2. An account number;
3. A personal identification number; and
4. A short expiry date.

The receipt functions in an analogous manner to that of the card 12 in that it functions as a
key to an account stored on the database 22. The account has an associated account balance for the predetermined amount of money. The receipt details can be transferred to another person, i.e., a payee, and the other person can access the account and spend/transfer the money, in the above described manner. The account can only be accessed once. The receipt can therefore be used to effect a payment in a monetary transaction and can be thrown away after the transaction has been effected. The expiry date of the disposable receipt is preferably one week or one month.

The system 10 supports the following functions:

1. Receipt purchase and registration; and
2. Transfer of money from a receipt.

The operation of these functions are hereafter described by way of example to the above described system 10. However, they could equally be effected automatically by an EFTPOS based system provided by the computer system 18.

1. Receipt purchase and registration

A person can purchase and register a prepaid receipt from an authorised dealer. To effect registration of the prepaid receipt, the authorised dealer can use his or her computer terminal 24 to access the system login page. On detection of a correct user name and password, the system 18 generates a web page for display on the authorised dealer’s computer 24.

The web page includes a “Register Receipt” function button that, when selected by the retailer, requests that the authorised dealer perform the following steps:

1. Enter the desired prepaid monetary value of the receipt; and
2. Confirm the registration details.
On detection of confirmation, the system 18 performs the following steps, as shown in Figure 14:

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   a. Receive the prepaid monetary value of the receipt, at step 110;  
   b. Generate receipt number, at step 112;  
   c. Set up a new account associated with the receipt number, at step 114;  
   d. Set the monetary value of the account to the prepaid monetary value of the receipt, at step 116;  
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   e. Generate, at step 118, a personal identification number (PIN) for the account;  
   f. Generate, at step 120, an expiry date for the receipt; and  
   g. Generate, at step 122, a confirmation message for display on the retailer's terminal 24 including:  
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      i. The receipt number;  
      ii. The personal identification number generated;  
      iii. The expiry date generated; and  
      iv. The monetary value of the prepaid receipt.  
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The dealer can then confirm that these details are correct and then print the receipt for the purchaser. The receipt includes the following information for the purchaser:

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   a. The receipt number;  
   b. The personal identification number generated;  
   c. The expiry date; and  
   d. The monetary value of the prepaid debit card 12.

The prepaid receipt can then be used to purchase goods and services from another person by simply providing the payee with the details on the receipt. The payee can then access the account set up on the system and spend or transfer the monetary value stored therein.
The member can purchase items on the Internet, for example, by purchasing a receipt for the amount of the relevant transaction and by providing the payee with those details. The payer thereby doesn’t expose himself to the risk of the payee making further unauthorised credit card transactions, for example. Rather, the payee is restricted to one transaction for the agreed purchase amount only.

2. Transfer of money from a receipt.

A member having a receipt can reclaim the monetary value of the receipt in cash, or any other suitable medium. To reclaim money from a receipt in the form of cash, the relevant member requests an authorised dealer to transfer money on his or her behalf. The relevant dealer can use his or her terminal 24 to access the system login page. On detection of a correct user name and password, the system 18 generates a web page for display on the member's terminal 24.

The web page includes a "Transfer Money From Receipt" function button that, when selected by the dealer, requests that the following steps be performed:

1. Enter receipt number;
2. Enter the personal identification number associated with the receipt; and
3. Confirm the transfer details.

On detection of confirmation, the system 18 performs the following steps, as shown in Figure 15:

a. Receive the receipt number, amount of the relevant transfer, and the personal identification number entered, at step 122;

b. Search database 22 and locate the account corresponding to the receipt number received, at step 124;

c. Compare the personal identification number received with the personal
identification number associated with the relevant account and proceed to the next step only if the numbers are equal;

d. Deduct, at step 126, the transfer amount from the account balance;

e. Credit the retailer's bank account with the transfer amount, at step 128; and

f. Generate, at step 130, a conformation message for display on the retailer's terminal 24 including:

i. The receipt number;

ii. The transfer amount; and

iii. The monetary value remaining on the receipt.

The retailer can then print a receipt of the transaction for the purchaser and give the person the cash amount of the transaction. The receipt includes the above information for the purchaser.

The transaction terminates unsuccessfully if the personal identification number received from the retail store is not equal to the personal identification number associated with the relevant account; or if the balance is not greater than or equal to transfer amount.

No money is deducted from the account if the transaction terminates unsuccessfully.

Alternatively, the person can transfer the money to a bank account, or any other account stored on the system 18.

The system 10 keeps a log of all monetary transfers. The log is stored on the database 22 and can be used determine where errors occurred during monetary transfers.

A receipt holder, be it the payer or a payee, can access the system 18 splash page via the Internet and login by entering the receipt number and password associated with the receipt.

In doing so, the system generates a display that includes the receipt balance, and the expiry
date. The display also allows the user to transfer money from the system account to his or her bank account.

A member can also call a call centre associated with the system 10 to transfer money to his or bank account from the account associated with the receipt.

While we have shown and described specific embodiments of the present invention, further modifications and improvements will occur to those skilled in the art. We desire it to be understood, therefore, that this invention is not limited to the particular forms shown and we intend in the append claims to cover all modifications that do not depart from the spirit and scope of this invention.
CLAIMS

1. A system for effecting monetary transactions between payers and payees, said system including a computer readable data storage medium including data representing monetary values associated with respective ones of said payers, said system for performing the steps of:
   (a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;
   (b) generating data uniquely identifying one of said monetary values associated with said one of said payers;
   (c) debiting said one of said monetary values by said monetary amount; and
   (d) crediting said one of said payees with said monetary amount,
wherein said data uniquely identifying one of said monetary values is, at least in part, included on a portable device.

2. The system claimed in claim 1, wherein a monetary value of each one of said monetary values associated with respective ones of said payers cannot exceed a predetermined amount.

3. The system claimed in claim 2, wherein the predetermined amount is one hundred dollars.

4. The system claimed in any one of claims 1 to 3, wherein the portable device is valid for a predetermined period of time after which monetary transactions between the respective payer and a payee cannot be effected.

5. The system claimed in claim 4, wherein the predetermined period of time is three months.
6. The system claimed in any one of the preceding claims, including the steps of:
   (e) generating data representing a monetary value associated with another payer;
   (f) generating data uniquely identifying said monetary value associated with said another payer;
   (g) storing said data representing a monetary value associated with said another payer and said data uniquely identifying said monetary value on the computer readable data storage medium.

7. The system claimed in claim 6, including the step of generating a receipt including said monetary value associated with said another payer and said data uniquely identifying said monetary value.

8. The system claimed in any one of the preceding claims, wherein the data uniquely identifying said monetary values associated with said payers includes an account number and an identification number.

9. The system claimed in any one of the preceding claims, wherein the portable device includes a computer readable data storage medium that includes said data uniquely identifying one of said monetary values.

10. The system claimed in any one of the preceding claims, wherein said data uniquely identifying one of said monetary values is, at least in part, visibly displayed on the portable device.

11. The system claimed in any one of the preceding claims, wherein the portable device is a prepaid debit card.

12. A computer program for effecting monetary transactions between payers and payees, said program is adapted to communicate with computer readable data
storage medium including data representing monetary values associated with respective ones of said payers, said program for performing the steps of:

(a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;

(b) generating data uniquely identifying one of said monetary values associated with said one of said payers;

(c) debiting said one of said monetary values by said monetary amount; and

(d) crediting said one of said payees with said monetary amount,

wherein said data uniquely identifying one of said monetary values is, at least in part, included on a portable device.

13. The program claimed in claim 12, wherein a monetary value of each one of said monetary values associated with respective ones of said payers cannot exceed a predetermined amount.

14. The program claimed in claim 13, wherein the predetermined amount is one hundred dollars.

15. The program claimed in any one of claims 12 to 14, wherein the portable device is valid for a predetermined period of time after which monetary transactions between the respective payer and a payee cannot be effected.

16. The program claimed in claim 14, wherein the predetermined period of time is three months.

17. The program claimed in any one of claims 12 to 16, including the steps of:

(e) generating data representing a monetary value associated with another payer;

(f) generating data uniquely identifying said monetary value associated with said another payer;

(g) storing said data representing a monetary value associated with said another
payer and said data uniquely identifying said monetary value on the computer readable data storage medium.

18. The program claimed in claim 17, said program for performing the step of generating a receipt including said monetary value associated with said another payer and said data uniquely identifying said monetary value

19. The program claimed in any one of claims 12 to 18, wherein the data uniquely identifying said monetary values associated with said payers includes an account number and an identification number.

20. The program claimed in any one of claims 12 to 19, wherein the portable device includes a computer readable data storage medium that includes said data uniquely identifying one of said monetary values.

21. The program claimed in any one of claims 12 to 20, wherein said data uniquely identifying one of said monetary values is, at least in part, visibly displayed on the portable device.

22. The program claimed in any one of claims 12 to 21, wherein the portable device is a prepaid debit card.

23. A computer readable data storage medium including the computer program claimed in any one of claims 12 to 22 stored thereon.

24. A portable device for use in effecting a monetary transaction between a payer and a payee, including data for uniquely identifying a monetary amount associated with the payer stored on a remote data storage device, wherein said transaction is effected when a monetary amount of the transaction is deducted from said monetary amount associated with the payer.
25. The portable device claimed in claim 24, wherein said monetary amount associated with the payer cannot exceed a predetermined value.

26. The portable device claimed in claim 24 or claim 25, wherein said data for uniquely identifying the monetary amount can be read from the device by a person.

27. The portable device claimed in claim 24 or claim 25, including a computer readable data storage medium, wherein said data for uniquely identifying the monetary amount is stored on the computer readable data storage medium.

28. The portable device claimed in any one of claims 24 to 27, including a personal identification number associated for effecting the monetary transaction.

29. The portable device claimed in any one of claims 24 to 28, including an expiry date, after the expiration of which said monetary transactions can not be effected.

30. A system for effecting monetary transactions between payers and payees, said system including a computer readable data storage medium including data representing monetary values associated with respective ones of said payees, said system for performing the steps of:
   (a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;
   (b) storing said monetary amount of said monetary transaction as a monetary value on said computer readable data storage medium; and
   (c) generating data uniquely identifying said monetary value,
   wherein said one of said monetary transactions is effected by transferring the data uniquely identifying said monetary value from said one of said payers to said one of said payees.

31. The system claimed in claim 30, said system for performing the step of generating a receipt for said one of said payers that includes said data uniquely identifying said
monetary value.

32. The system claimed claim 30 or claim 31, wherein said one of said monetary transactions must be effected within a predetermined period of time before the transaction is invalid.

33. The system claimed in claim 32, wherein the predetermined period of time is three months.

34. The system claimed in any one of claims 30 to 33, wherein the data uniquely identifying said monetary value includes an account number and an identification number.

35. A computer program for effecting monetary transactions between payers and payees, said system including a computer readable data storage medium including data representing monetary values associated with respective ones of said payees, said system for performing the steps of:
   (a) generating data representing a monetary amount of one of said monetary transactions between one of said payers and one of said payees;
   (b) storing said monetary amount of said monetary transaction as a monetary value on said computer readable data storage medium; and
   (c) generating data uniquely identifying said monetary value, wherein said one of said monetary transactions is effected by transferring the data uniquely identifying said monetary value from said one of said payers to said one of said payees.

36. The program claimed in claim 35, said program for performing the step of generating a receipt for said one of said payers that includes said data uniquely identifying said monetary value.

37. The program claimed claim 35 or claim 36, wherein said one of said monetary
transactions must be effected within a predetermined period of time before the transaction is invalid.

38. The program claimed in claim 37, wherein the predetermined period of time is three months.

39. The program claimed in any one of claims 35 to 38, wherein the data uniquely identifying said monetary value includes an account number and an identification number.

40. A computer readable data storage medium including the computer program claimed in any one of claims 35 to 39 stored thereon.
Figure 4
Read Card Number

Receive Prepaid Monetary Value of Card

Set up new account

Set value of account to the prepaid monetary value received

Generate PIN

Generate expiry date

Generate confirmation message

Figure 5
Figure 6
Read card number

Receive card number, purchase price and PIN

Locate account corresponding to the card number

PIN Approved

Card Expired?

Balance ok?

Terminate unsuccessfully

Deduct purchase price from account balance

Credit Retailer's account

Generate Confirmation

Terminate Successfully

Figure 7
Figure 8
Read card number

Receive card number and $ to be added

Locate account corresponding to the card number

Card Expired?  
No  
Terminate unsuccessfully

Yes

Add $ to account balance

Generate Confirmation

Terminate Successfully
Figure 10

Diagram:
- **Computer system 18**
- **Terminal 24 & card reader 28**
  - $ Value remaining
  - Expiry date
  - Card Number

Connections:
- From **Computer system 18** to **Terminal 24 & card reader 28**
- From **Terminal 24 & card reader 28** to **Card 12**
- From **Card 12** to **Terminal 24 & card reader 28**
- From **Terminal 24 & card reader 28** to **Card 12**
Figure 11

1. Read card number
2. Locate account corresponding to the card number
   - No
   - Yes: Card Expired?
     - No: Generate Confirmation
     - Yes: Determine account balance
       - No: Terminate unsuccessfully
       - Yes: Terminate successfully
Figure 12
13/15

Read card number

Receive card number, transfer amount and PIN

Locate account corresponding to the card number

No

Yes

PIN Approved?

No

Yes

Card Expired?

No

Balance ok?

Yes

Deduct transfer amount from account balance

Credit Retailer's account

Generate Confirmation

Terminate SuccessFully

Figure 13
Receive $ value of receipt

Generate receipt Number

Set up new account

Set monetary value of account $ received

Generate PIN

Generate expiry date

Generate confirmation message

Figure 14
Receive receipt number, $ to transfer and PIN

Locate account corresponding to the receipt number

No

PIN Approved

Yes

Deduct purchase price from account balance

Credit Retailer’s account

Generate Confirmation

Terminate Successfully

Terminate unsuccessfully

Figure 15
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.

G06Q 30/00 (2006.01)

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)

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 practicable, search terms used)
USPTO - keywords (prepaid card), ESPACE - keywords (prepaid, stored value, card)
Google: stored value cards merchant

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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[X] Further documents are listed in the continuation of Box C | X See patent family annex

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent 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)
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"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
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Date of the actual completion of the international search
07 July 2006

Date of mailing of the international search report
17 JUL 2006

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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