Has the Time for Electronic Currency Come?
Imagining an E-Currency Future for Money

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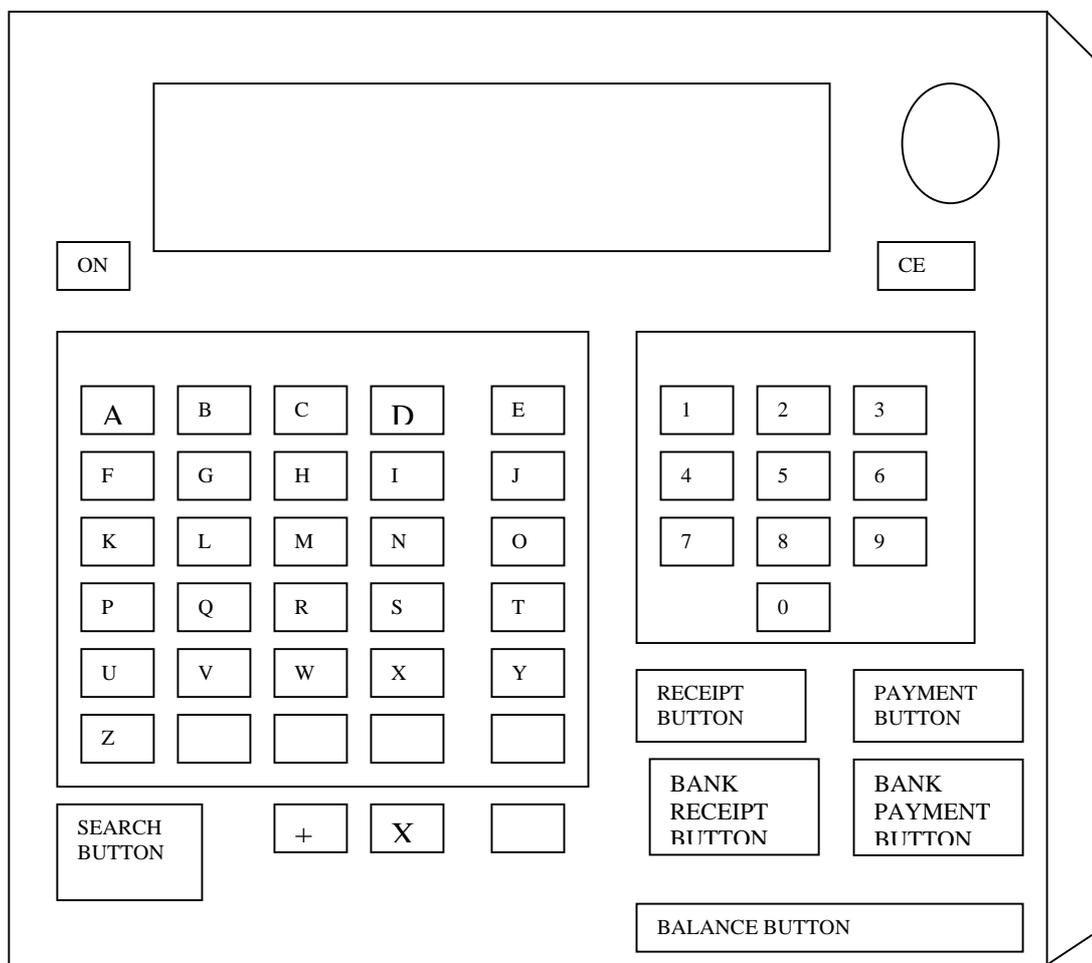www.electroniccurrencytime.com

INTRODUCTION

The more civilized, refined, analytical and scientific that people become, the more sophisticated, systematic and symbolic becomes the form of currency used. All that a primitive person needed was a hunting knife to satisfy his or her varied wants. Now that tool has progressed and evolved into the modern-day credit card, with which a person can buy anything s/he needs. The process of evolution continues into the future with currency altering as the times change. The present world economic scenario strongly requires the development of alternate modes of currency as a medium of exchange that can match the fast-paced computerized economy. The future is thus in the use of handheld, electronic 'Currency (Cash) Pads' which will replace paper currency for many day-to-day transactions.

ELECTRONIC CURRENCY SYSTEM

ELECTRONIC CURRENCY PAD AND TRANSACTION CODE:
ELECTRONIC CURRENCY PAD

This device will be called Electronic Currency Pad. This is shown in fig 1. This may be designed to be waterproof and fire proof. It will have a screen, a speaker, an 'On' Button, Alphabets, Numbers, +-x, a Receipt Button, a Bank Receipt Button, a Payment Button, a Bank Payment Button, a Balance Button, a Search Button, a CE Button.

The screen will show, when a transaction is entered, the transaction code, and balance to the credit. The screen may be designed in a way that it shows the balance in currency prevailing in that country, balance in foreign currency, and/or credit card balance. The speaker will, on command, speak about the transaction (i.e., the transaction code, balance before transaction, transaction amount, balance after transaction, whether receipt, payment or simple calculation functions like +, - x). The 'On' Button will have to be pressed for making the electronic currency pad operable. The keyboard will have the alphabet from A to Z. In addition, it will have all the numbers from 0 to 9. '+','-', 'x' buttons will facilitate calculations for making the transaction easier. The screen will show, when entered for transaction, the transaction code, and balance to the credit. The screen may be designed in a way that it shows balance in currency prevailing in that country, balance in foreign currency, and/or credit card balance. The speaker will, on command, speak about the transaction i.e., transaction code, balance before transaction, transaction amount, balance after transaction, whether receipt, payment or simple calculation functions like +, -, x etc. The 'On' Button will have to be pressed for making electronic currency pad operable. Keyboard will have all the alphabets from A to Z. Also these will have all the numbers from 0 to 9. '+','-', 'x' buttons will facilitate calculations for making the transaction easier. Receipt Button, on pressing receipt button, will perform the receipt function. Bank Receipt Button will be pushed for the bank receipt function. Payment Button, on pressing the payment button, will perform payment function. Bank Payment button will be pressed for performing bank payment function. Balance Button is for depicting balance to the credit of the electronic currency pad owner. CE Button is for rectifying clerical errors. Search Button is for searching various options and choosing them. This electronic currency pad will also have memory. On pressing receipt button, it will perform the receipt function. The bank Receipt Button will be pushed for the bank receipt function. Payment Button, on pressing the payment button, will perform payment function. The Bank Payment button will be pressed for performing bank payment function. The Balance Button is for depicting balance to the credit of the electronic currency pad owner. The CE Button is for rectifying clerical errors. The Search Button is for searching various options and choosing them. This electronic currency pad will also have memory.

ELECTRONIC CURRENCY PAD
Fig. 1

This can even be useful for the blind, as all the functions will be spoken through the speaker. This can be made in brail system as well. It can also have a photograph of the owner. The electronic currency pad will have a password operating system. This means that before any transaction, a password will have to be fed, known only to the owner.

TRANSACTION CODE

There will be a Unique Code, Password for operation, Transaction Code- cash transaction code, bank transaction code and credit card transaction code in electronic currency pad system. The unique code will be unique for every electronic currency pad to be regulated by an apex institution. Every Electronic Currency Pad will ask for the password before becoming ready for functioning. Therefore, the owner of the electronic currency pad will have to feed the password, which s/he will have to remember. The electronic currency pad will ask for the password before letting the holder perform further functions. The password may be alphanumeric as per the owner's choice. The transaction code will be in Bank's control under advice from the apex institution. Both cash and bank transaction will be in the bank's control.

The Unique code should be in such a way that the code becomes unique in every sense. This may have for instance, a Country code, State code, District Code, City code, Residence code, Name code. All these six items may have two to three codes each totaling to 14 to 18 number unique

codes. This unique code should be computer generated, with complete records as to how much unique codes have been issued. The complete record of unique codes should be kept under a strict security system.

A transaction may, for instance, include, a unique code, cash code, and transaction code. This may be 14 unique code numbers (Some representative numbers may also be chosen, but it should ensure uniqueness of the transaction), the Cash code may take two digits like one digit for bank identification and one digit for cash transaction identification. Now the transaction code should have six to eight digits totaling to 24 to 26 digits cash transaction code. Similarly, Bank transaction code should be determined. That may contain unique code, bank code and transaction code again totaling to 24 to 26 digits. These codes should be computer generated and may not be necessarily serially numbered. In other words, code numbers may be randomly allotted to avoid any chances of frauds. Actually, these may have serial numbered backing but only in the eyes of the computer (i.e., these transaction codes are actually, representative numbers to the linked random serial numbers known only to the computer). In the same way, the credit card transaction code number should have a unique code, credit card issuing agency code and transaction code.

Unique code for Manisha Sharma residing in 2 – KA-1, Jawahar Nagar, Jaipur, rajasthan, India may be

Country Code for India	91
State Code for Rajasthan	14
District Code for Jaipur	14
Address Code for 2-KA-1, Jawahar Nagar	2KA1JNR
Code for Manisha Sharma	MS

Now unique code for Manisha Sharma residing in 2-ka-1, Jawahar Nagar, Jaipur, Rajasthan, India may be
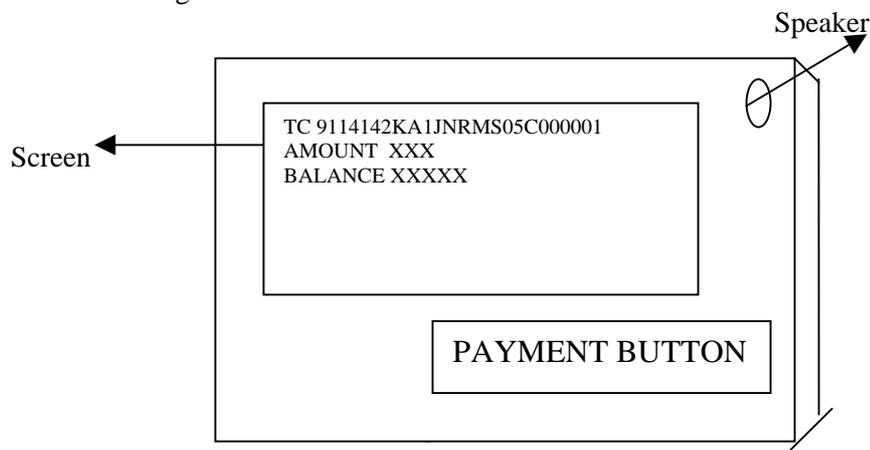
9114142KA1JNRMS

Now cash transaction code may take following form comprising unique code, bank code, cash code, and transaction code.

Unique Code	9114142KA1JNRMS
Bank Code says	05
Cash Code	C
Transaction Code	000001

Now, Cash transaction code may be

9114142KA1JNRMS05C000001

This is illustrated in fig. 1.1A

Only the relevant functions of the Electronic Currency Pad have been shown in diagrammatical representation. TC, as depicted on the screen of the electronic currency pad, denotes the Transaction Code.

HOW THE ELECTRONIC CURRENCY PAD WILL FUNCTION?

The Electronic Currency Pad will function on general commercial principles that every transaction affects two sides. Those affected sides are firstly the receipt-side and secondly the payment-side. This means that when one person is receiving from another person, this implies that another related person is paying. In short, one is receiver while the other is payer. This is a transaction. Transaction means give and take.

Now how this electronic currency pad will function is explained. Every citizen will be issued with one electronic currency pad bearing a unique code number. This electronic currency pad will be fed into its memory, with the money balance belonging to that electronic currency pad holder. Balance may contain country currency, foreign currency in hand, bank balance that may include all types of deposits, loan amount and credit card issued amount.

Each and every financial transaction will be effected through this electronic currency pad. These transactions will be effected through transaction codes as already explained earlier. These transaction codes are like cheque numbers or paper currency numbers. These transaction codes will be computer generated. The maintenance of transaction codes should be under strict government control. These transaction codes will be designed in such a way that every transaction will become unique. Transaction code, until the transaction is effected, should not be known to anybody except the computer, not even to programmer or computer operator. Development and designing of transaction code should be kept most secret and secured.

Transaction codes can be divided into a transaction code for the particular electronic currency pad and transaction codes of the whole country issued to anybody anywhere within the country. Thus, each electronic currency pad will be fed into its memory, (A) a unique code both belonging to that particular electronic currency pad as well as a unique code number belonging to all electronic currency pads with in that country, through computer (B) (1) transaction codes especially for that particular electronic currency pad and (2) all transaction codes issued to any electronic currency pad anywhere within the country up to a particular period. The bank will periodically update these transaction codes for smooth functioning.

The government should monitor the unique code number for every electronic currency pad. Transaction codes may be issued through computers by banks under strict government controls. Transaction codes should have separate series for cash transaction and separate series for the bank. Similarly, credit card transactions and loan transaction should also have separate series. Banks would not have to issue a chequebook. That means that printing, inventory carrying cost and monitoring cost in this regard is saved.

CASH TRANSACTIONS

Assume X pays Y for some purchases. This transaction will be performed through X's electronic currency pad and Y's electronic currency pad. Here X is payer while Y is receiver. X, on his electronic currency pad, will first switch on by pressing ON Button. This device will function in this way that this should have in its memory, besides transaction codes issued exclusively for that particular electronic currency pad and all transaction codes issued to anybody anywhere with in the country, it will also have in its memory unique codes assigned to any electronic currency pad

issued to anybody anywhere with in the country. These Electronic Currency Pads should be updated periodically for both unique codes and transaction code by the controlling authority. This should be designed to be remote sensing to make it functioning. This will function on the principle that 'payer to initiate the transaction'. Now, for payment, payer 'X' will approach with his electronic currency pad bringing it with in the range of the electronic currency pad of the receiver 'Y'. 'X' will switch on the button of his electronic currency pad signalling its unique code to the electronic currency pad of the receiver 'Y'. Y's electronic currency pad will verify for the validity of the unique code with the help of its memory. After verifying receiver's electronic currency pad will depict in its screen "ok for transaction". Now, X the payer will press payment button. Immediately transaction code will appear in the screen of electronic currency pad of X. X will then feed the payable amount. Now on pressing the payment button again, this transaction code along with the payable amount will be transferred to 'Y' the receiver's electronic currency pad. Now, Y's electronic currency pad will verify for the validity of the transaction code with the help of its memory. Now if X's transaction code matches with the transaction codes in Y's electronic currency pad's memory both X's and Y's electronic currency pad will be updated effecting the transaction. Both X's and Y's electronic currency pads will now be showing updated balance on pressing balance button.

The memory of electronic currency pad contains, as already explained, transaction codes and unique codes of the whole country issued to any electronic currency pad anywhere with in the country up to a particular period. These transaction codes and unique codes will be fed by bank. On utilization of the transaction codes, fresh series of transaction codes will be fed into the memory of the electronic currency pad through computer by bank. System should be developed in such a way that transaction code series is periodically updated by the bank. That means electronic currency pad's memory should be periodically updated with transaction codes to smooth functioning. At the time of updating, bank will also update the electronic currency pad's memory with all the transaction codes issued to any electronic currency pad any where with in the country. These have been explained with the help of illustration. Only relevant functions of Electronic Currency Pad have been shown in diagrammatical representation.

Fig. 2.1 shows the money balance in hand in electronic currency pads of both the manufacturer and buyer respectively, before effecting the transaction. Fig. 2.1B, shows effecting of transaction through electronic currency pads. In fig. 2.1B, X has brought his electronic currency pad with in the range of Y's electronic currency pad. Now X has signaled his electronic currency pad's unique code number. Y's electronic currency pad will verify for the validity of X's unique codes number with the help of its memory. On verification Y's electronic currency pad will signal 'OK for transaction'. Now X will press payment button. Immediately cash transaction code will appear in X's electronic currency pad's screen. X will now feed the payable amount manually on to his electronic currency pad and then will again press payment button. Now this cash transaction code along with payable amount will be transferred to Y's electronic currency pad. Now on pressing Receipt button, Y's electronic currency pad will verify for the validity of Cash transaction code with the help of its memory. Fig also shows TC that means cash transaction code along with transaction amount appearing in both electronic currency pads' screen. On verifying cash transaction code transaction will take place. Fig. 2.1C shows the updated balance position after effecting the transaction.
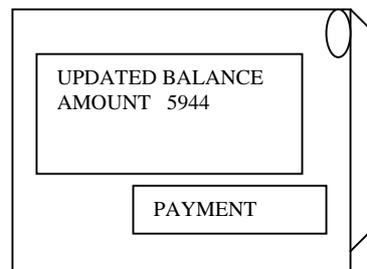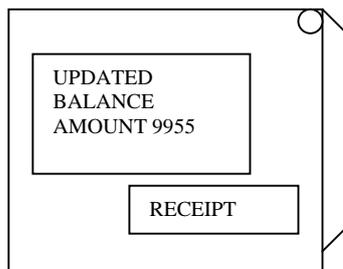
Y's
Electronic Currency Pad

X's
Electronic Currency Pad
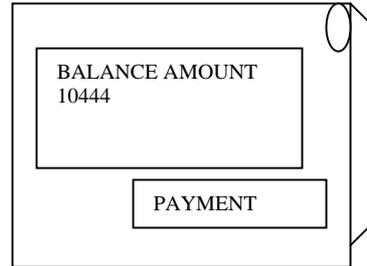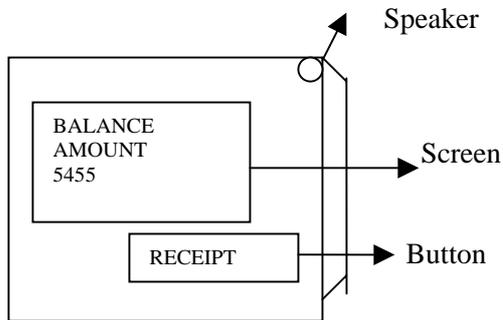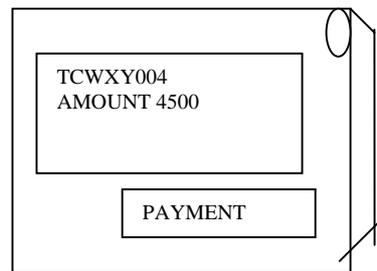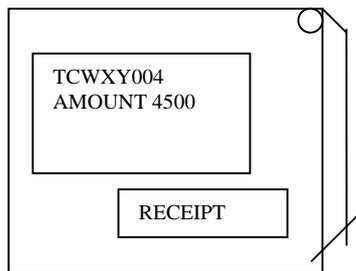
Fig. 2.1

BANK TRANSACTION

In the above illustration, we have seen how cash transactions will take place in the electronic currency system. These transactions are possible only when both the receiver and payer are at the same place within the vicinity of the range of electronic currency pad. Now it is explained as to how monetary transactions are possible when the payer and receiver are residing at different places. This will be done with the help of Bank Transaction Codes (Payment through bank).

In the electronic currency pad system, this will be like this- X has to pay to Y through cheque. X will press 'bank payment' button on to his electronic currency pad. Immediately, on pressing bank payment button, bank transaction code will appear in X's electronic currency pad's screen. Now assume Y resides in distant place. In this system, X will intimate Y, his bank transaction code together with the payable amount through telephone, fax, Email etc. Y will press Bank Receipt Button on to his electronic currency pad. Y, on knowing the X's bank transaction code, will feed that transaction code into his electronic currency pad along with the receivable amount as conveyed by X. Now system should be designed in such a way that this Bank transaction will be treated as provisional unless updated by the bank. That means updating of Bank transactions, in this system will be effected and balance will be updated only by bank. In this case X will approach his bank intimating about provisional bank transaction, similarly, Y will also approach his bank with his electronic currency pad stating particulars of receipted bank transaction. Now both X's and Y's bank will clear this provisional bank transaction through normal bank clearing procedure and accordingly update, both X's and Y's electronic currency pads and account statement with bank, for balance. This bank clearing will be through the Internet for speedy clearance. In this way, Banks can function smoother, efficient and faster. No cheque is to be written, all costs and time relating to handling cheques is saved resulting in quicker business deals with easy realizations.

This has been illustrated in the following manner:

Y's
Electronic Currency Pad

X's
Electronic Currency Pad

(A)
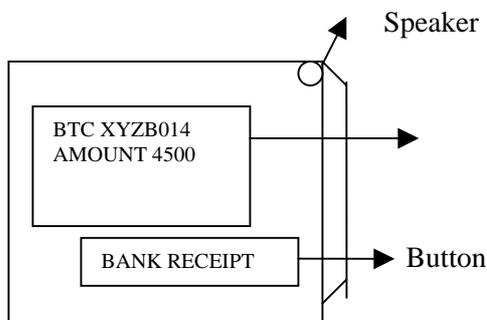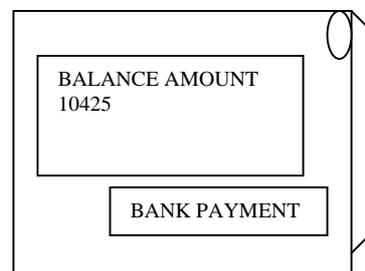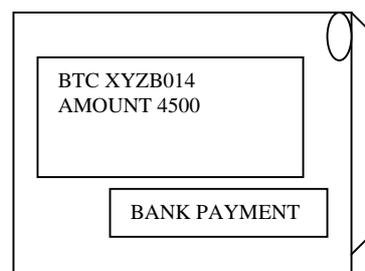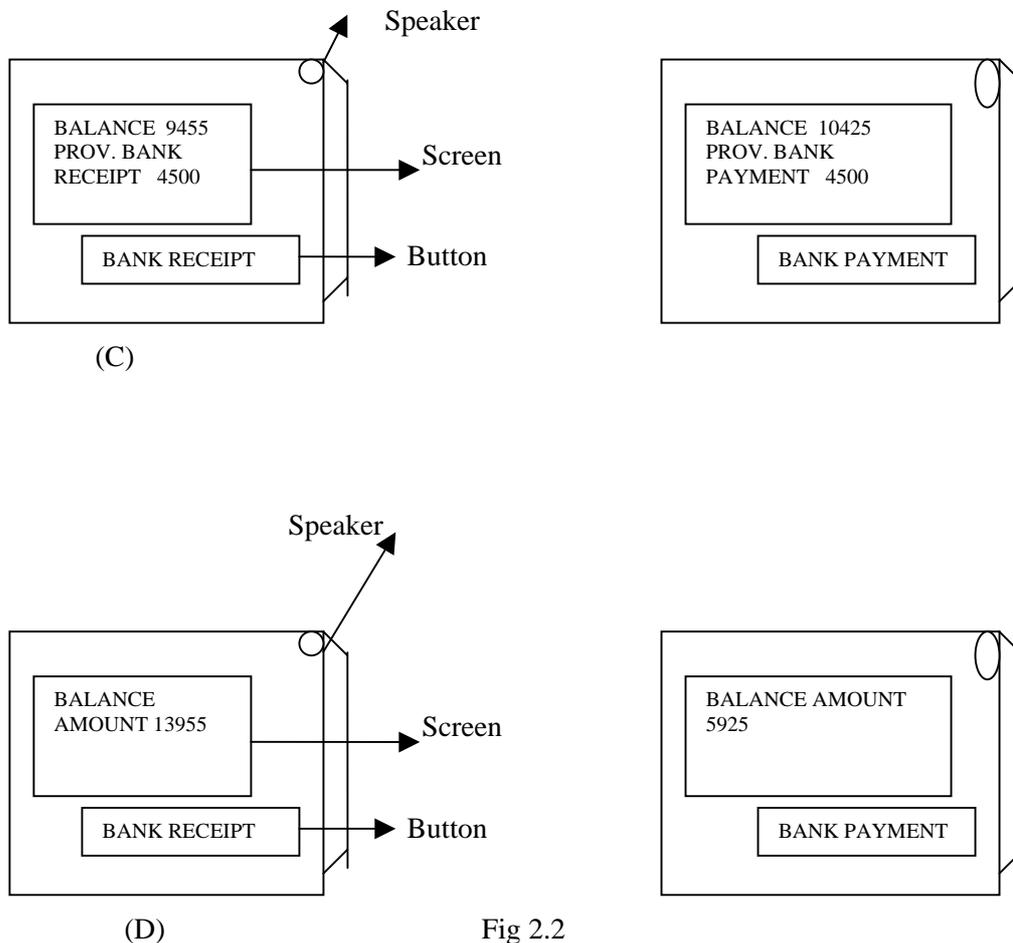

(B)

(C)
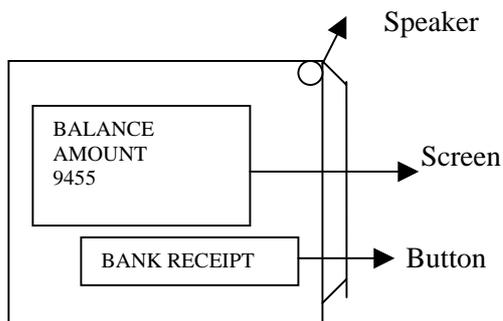
(D)   Fig 2.2

Fig. 2.2 shows money balance in hand in electronic currency pads of both X and Y respectively. This balance is, before effecting the transaction. Fig. 2.2B shows bank transaction code along with the transaction amount. Here, X who is payer has pressed 'Bank Payment Button' on to his electronic currency pad. Bank transaction code has appeared. Now he has fed the amount required to be paid and then has conveyed both bank transaction code and payable amount to manufacturer through Fax, email, Telephone etc. Y, on the other hand, has pressed 'Bank Receipt Button', and then has fed both bank transaction code and receivable amount on to his electronic currency pad. Fig. 2.2C shows provisional bank receipt amount and provisional bank payment amount along with the balances in Y's and X's electronic currency pads respectively. Fig. 2.2D shows that on approaching by both Y and X to their respective banks, banks have updated their electronic currency pad through normal bank clearing procedure. Hence, transaction is effected. Therefore, updated balances after effecting the transaction is shown.

Other forms of bank payment like honouring bills of exchange can also be monitored through this system. Suppose X draws Y a bill of exchange promising to pay after 30 days. Now Y has the option to get the bill discounted from bank. Y may approach his bank for discounted money. Bank, in this case, will update Y's electronic currency pad with the discounted money. This will be done through bank's own transaction code. Now after thirty days, X will pay to Y's bank, pressing his electronic currency pad's bank payment button. Immediately bank transaction code

will appear in X's electronic currency pad. X will intimate his bank transaction code to Y's bank. This provisional bank transaction code along with amount will be updated by X's bank completing the transaction in all respect.

Payment through Demand Draft will not be required as payment through ordinary bank transaction code will be much faster; resulting in huge savings for the banks and business houses.In fact, under the electronic currency pad system, bankers will find themselves into altogether different economic environment. Automation will be to the highest level. Paper work will be reduced to almost negligible proportions. Bankers' operating cost will be reduced.

This system will be advantageous for even blind and illiterate people as the 'speaker' in the electronic currency pad will speak for every aspect of transaction. This will save them from getting cheated.

PREREQUISITES FOR AN ELECTRONIC CURRENCY PAD SYSTEM

The electronic currency system requires computerization at the bank level, Internet facility, facility with the banks for downloading and uploading the transactions from electronic currency pads and electronic currency pads. Computerization at the bank level with Internet facility will facilitate feeding transaction codes into the electronic currency pad and for bank transaction clearing function, which will be exactly similar to the present bank cheque clearing procedure. This system does not need a minting press, printing paper currency, arranging special paper for paper currency, chequebooks and drafts. Neither does it need making arrangements for counting money, disposing soiled/mutilated notes and likewise.

This system can be implemented very easily. All the fiat currency balances including currency in circulation, in balance and deposits with banks, at the time of implementing the system, with government; autonomous bodies, business sector, employees, household sector and others, will be credited to their respective electronic currency pads. Transaction effecting after the system is implemented can be handled like any bank or cash electronic currency transaction as have been explained and illustrated earlier.

THE BANKER'S ROLE AND DISBURSEMENT OF LOANS

In the present system, banks accept deposits from public and advance loan to the needy persons. In the electronic currency pad system, banks will have ample deposits, in other words, all the money will always be with bank. Banks' do not have to go or advertise for attracting deposits. As deposits will grow, banks would find, under electronic currency system, very easy and safe to grant and disburse loans to needy person or institution. Rate of interest will become competitive both for granting loans and on bank deposits. Banks do not need to get cheques printed, to keep unissued cheques under safe custody, handling large cheques for clearing and keeping records for issued and unissued cheques. This way banks will save courier, inventory carrying and communication cost. No need for making drafts paper work will be reduced to a considerable extent. Loan recoveries also will become much easier.

IMPACTS ON THE ECONOMY

Electronic currency can be used:
1. As a medium of exchange, in exchange for goods and services and for the discharge of debts and contracts.

2. As a unit of account, a common yard stick that makes the operation of the price system possible and provides the basis for keeping accounts and calculating cost, profit, and loss.
3. As a store of value to transfer purchasing power into the future.
4. As a standard of deferred payments, the unit in which loans are made and future transactions are fixed.
5. To provide a store of wealth, a convenient form in which to hold any income not immediately required for use.
6. To be a tool for distribution of national income.
7. To help in optimal utilization of resources by consumers and producers.

INCOME CYCLE

Government will have sufficient finance available from internal sources for all kinds of Government expenditure including development expenditure. As all the citizen's money will always be with the banks without hampering their money (liquidity) transaction, banks will find themselves in a position to advance this money deposits to Government or needy people. Government will be able to incur this advanced money for development works and other expenditure. This incurrence of government expenditure will result in people getting increase in their income. This will automatically result in increase in bank deposits for the people. This increased bank deposit base will again enable banks to advance finance to Government and the needy people. This way government will again be in a position to get finance for development works resulting in people getting increased earnings. This process will keep on repeating, resulting in creation and rotation of income cycle making people and ultimately the country richer and self-sufficient. This will also have positive impact on unemployment problem. This can be illustrated as: Let G stands for Government, B stands for Bank and C stands for citizen of a country. This is already stated that all citizens'/ Government's money will always be deposited with Banks. Now let us assume to begin with that citizens have 1000 units of currency as total money. In an electronic currency system, this 1000 units will always be with bank (i.e., money can never be withdrawn from the system). Now, following diagram shows how income cycle will be created and rotated:
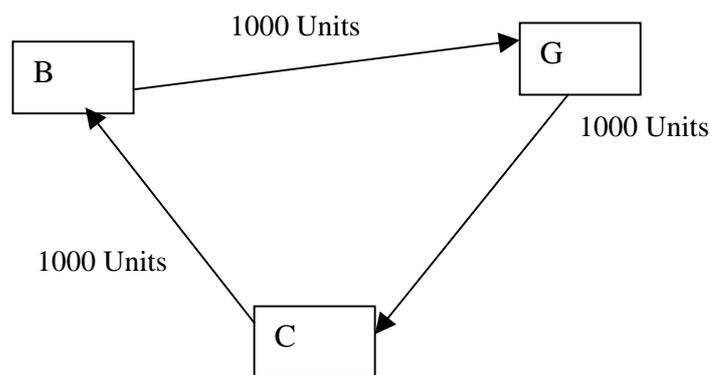
Fig 3

As shown in fig. 3., 1000 units of money is with the Bank, say B. As money can never be withdrawn from the system, Bankers will be in position to advance this 1000 units to Government/Public/ Business Houses for developments/project installation etc. Now this advanced 1000 units will be ultimately transferred to citizens say C in return of the services/labour rendered by the citizens. As citizens will get increase in their earning, their total money now will be 1000+1000 (i.e., 2000 units). This means 1000 units now has become 2000

units. As citizens money has increased to 2000 units and all the money will always be deposited with the bank without hampering liquidity of the money, bank deposits will also increase by 1000 units totalling 2000 units deposit. This will result in increase in bank's capacity to advance money further by 1000 units. Now the bank will be in a position to further advance this increased deposit to Government say G. Here is the formation of income cycle. Now this increased /further advance of 1000 units to Government will ultimately increase citizen's income by a further 1000 units making their total money to 3000 units thereby increasing bank deposits by further 1000 units. This is rotation of the income cycle. This process will keep on repeatedly rotating the income cycle resulting in increase in per capita income/national income, solving unemployment problem etc. This is further illustrated as below:

I Let us suppose in a country having an e-currency system, there are two citizens A & B. A has Rs. 500 and B has Rs. 500. Now as I have already explained whatever the money people have will always be kept deposited with the Bank without affecting the liquidity of the monetary transactions. Here, the Bank will have 1000Rs as total deposit. Thus, Banks' records will depict as follows:-

Bank's Books/Records:

Liabilities	
A's A/c Deposits	Rs. 500
B's A/c Deposits	Rs. 500
Total	Rs. 1000
Assets Money Balance in Hand	Rs. 1000
Total	Rs. 1000

Citizens' Books	
A's Books Bank Deposit	Rs. 500
B's Book Bank Deposit	Rs. 500

II Now, Bank. We suppose, can grant this deposited money as loan to Government for its various projects. Let's presume Bank has advanced Rs. 750 to Government. Now Bank. Government and Citizens record will depict the following picture:

Bank's Books

Liabilities	
A's A/c (deposit)	Rs. 500
B's A/c (deposit)	Rs. 500
Total	Rs. 1000
Assets	
Loans to Government	Rs. 750
Money Balance in hand	Rs. 250
Total	Rs. 1000

Government Books

Loans from Bank	Rs. 750

Citizens Book

A's A/c (deposits)	Rs. 500
B's A/c (deposits)	Rs. 500
Total Money with Citizen	Rs. 1000

III Now let us again presume that Government has incurred this Bank Loan on its various projects. This is obvious that whatever amount government incur the ultimate amount will go to the citizens who would be working for Government in its various projects in the form of employee/contractor/supplier etc. Government's investing the money will bring citizen income for their labour as remuneration, salary, wages etc. Now in our example, on Government investing Rs. 750, Citizens A & B will get remuneration say A gets Rs. 350 while B gets Rs. 400. Now Citizens, Government and Banks records will give the following picture:

Citizens Books

A's A/c	
Previous Balance	Rs. 500
Remuneration from Government	Rs. 350
Total Deposits(Money) i	Rs. 850
B's A/c	
	Rs. 500

Previous Balance	
Remuneration from Government	Rs. 400
Total Deposits (Money) ii	Rs. 900
Total Money with Citizens (i)+(ii)	Rs. 1750

Now Citizens will approach their Banks for periodically updating and feeding of fresh transaction code series. The Bank at this time will download all the monetary transactions on to its computer updating its records. In this example Bank will download the transactions i.e., between Government and citizens on to its records resulting in the following:

Bank's Books

Liabilities	
A's A/c (deposit) Previous Balance Rs. 500 Now deposited Rs. 350	
Total A's Deposits	Rs. 850
B's A/c (deposit) Previous Balance Rs. 500 Now deposited Rs. 400	
Total B's Deposits	Rs. 900
Total Deposits with Bank(A+B)	Rs. 1750
Assets	
Loans to Government	Rs. 750
Money Balance in hand	Rs. 1000
Total	Rs. 1750

Government Books	
Liabilities	
Bank Loan	Rs. 750
Assets	
Projects	Rs. 750

Now we have seen that Bank's deposit base is increased due to the Citizen's increased earning through Government. Now this increased earning will enable the Bank to further advance the balance in hand (i.e., Rs. 1000 to Government for its various projects). Let us suppose the Bank has advanced Rs. 750 again to Government. Now Government will incur this loan amount on to its projects. Citizens will be the people executing these projects hence they will get the benefits in the form of remuneration. Now suppose Citizen gets Rs. 750 as remuneration. The Government, Citizens and Banks records will be as:

Citizens Books

A's A/c Previous Balance	Rs. 850
New receipts say	Rs. 400
Total Money Deposits(i)	Rs. 1250
B's A/c Previous Balance	Rs. 900
New Receipts say	Rs. 350
Total Money Deposits(ii)	Rs. 1250
Total Money with Citizens(i)+(ii)	Rs. 2500

Government Books	
Liabilities	
Bank Loan Previous Balance	Rs. 750
New Loans	Rs. 750
Total Loan	Rs. 1500
Assets	
Government Projects	Rs. 1500

Bank:
Now citizens will again approach Bank for updating and fresh issue of transaction codes. Bank at this time will unload all the transaction details on to its records updating bank's records. Now Bank's updated records will be as follows:

Liabilities	
Deposits	
A's A/c Previous Balance	Rs. 850
New Deposits (received through Government in the form of remuneration)	Rs. 400
Total (A's A/c Deposits)	Rs. 1250
B's A/c Previous Balance	Rs. 900
New Deposits (received through Government in the form of remuneration)	Rs. 350
Total (B's A/c Deposits)	Rs. 1250
Total Liabilities(Rs. 1250+Rs.1250)	Rs. 2500
Assets	
Loan to Government	
Previous Balance	Rs. 750
New loan	Rs. 750
Total Loans	Rs. 1500
Money Balance in Hand	Rs. 1000
Total Money	Rs. 2500

Now we can see this increased deposits with the Bank will enable the Bank to further advance this increased money to the Government for its project. Government will incur these money loans from the Bank to its project-making citizen receiving remuneration for their services in these projects. This process will keep on repeatedly resulting in creating and rotating Income Cycle.

IMPACTS OF THE ELECTRONIC CURRENCY SYSTEM ON THE PRESENT PAPER CURRENCY SYSTEM

1. UNACOUNTED MONEY/PARALLEL ECONOMY/BLACK MONEY
From the very definition of the system it is clear that every financial transaction will be accounted leaving no scope for black money. This will enable government to recover 100% taxes. This will reduce economic inequalities and concentration of wealth among few affluent. Properties will be registered at appropriate prices. Prices for land for building home will be with in the reach of middle class. Illegal transfer of money to foreign countries will be stopped. Political System and bureaucracy will be free from the shackles of corruption.

2. INFLATION
Electronic currency will help government to have sufficient funds. Government will have sufficient funds for spending. If needed loans form internal sources will be generated. Hence, automatically inflation will be controlled.

3. FINANCIAL CRIME

Burglary, theft, robbery including bank robbery, pick pocketing of currency is not possible in this system. Nobody, but for the owner of the electronic currency pad, can operate and transfer money to undesired account. If, by any chance, through coercion, owner is made to transfer the funds to undesired account, owner can approach the bank, which will find through transaction code the location of undesired account, to which money is transferred, and will call for rectification, thereby returning the amount to the owner.

4. BRIBERY

Under this system, white-collar people will find taking financial bribe impossible. In this system every transaction will be accounted therefore any transfer of funds that do not correspond to the normal earning capacity of any official can be detected and explanation can be called for by anti corruption department.

5. CURRENCY FRAUD

Handling currency i.e., smuggling money out of country is impossible in this system. If any person transfers funds to foreign country account, this will have to go through legitimate process, any abnormalities will be noticed and immediate corrective measures can be taken. Fake currency printing and circulating is just out of question in this system. Here transaction codes will be computer generated and will be known only at the time of transaction and transaction codes will be randomly numbered. Hence, any efforts for duplicating the transaction code will be foiled. Besides, transaction codes are not manually entered except for Bank Transaction codes, which are verified, by bank at the time of updating through bank clearing.

Making fake drafts and bills of exchange will also be impossible as banker can know the actual balance one is having besides bank can know the origin of the transaction. So any type of bank fraud cannot happen.

Other petty crimes can be effectively handled by this system inferring that under electronic currency system any type of financial irregularities cannot happen. This is a precise and effective system.

6. MATCH FIXING

In match fixing speculators bribe players, some time the whole team to play according to speculators' wishes. They assign funds to players and in this way they purchase players. Speculators then rate players and decide in advance the fate of the match thereby win huge amount of money. By match fixing spectators are betrayed, as they cannot watch the true play, so is the nation for whom those players are playing. In an electronic currency system, every transaction is recorded, ruling out any financial dealing which is unauthorized. If any efforts are made in this regard, source of fund can be very easily detected because of the reason that every transaction will be accounted in this system.

7. TERRORISM CONTROLLED

Terrorism is the result of terrorist activities. Terrorists purchase weapons/arsenals, bombs etc through funds/money. Terrorist organizations lure innocent people giving them funds in many ways for example salary. They recruit these people, train them and get the terrorist activities done by giving them funds. This way unemployed/poor people also join them in search of employment. All these activities are becoming possible because of funds that arise mainly because of anonymous funds. These terrorist organizations collect funds through various ways viz., voluntary anonymous contributions, coercion, undue influence, hijacking and various other illegal methods. These collections are mainly possible because Government find itself unable to locate

these fund transfer originating sources. If we can somehow control/check these funds flow, terrorism will also be controlled. Besides, unemployment problem another root problem for terrorism should also be solved. Both these problems can be effectively solved through "electronic currency system application". In this system, every monetary transaction done by anybody with anybody will be accounted. Banks will have complete record of every single transaction. If any illegal fund transfer is doubted, both transferor and transferee can be easily identified making them accountable to law. This way illegal transaction can be checked at the very root level making terrorism impossible as without fund terrorists cannot act. Besides, another root cause for terrorism, unemployment problem can be solved through "income cycle creation" explained earlier in this "electronic Currency System".

Soon, carrying cumbersome bags full of currency notes, using vehicles for transferring or depositing or withdrawal of funds from one place to another, fear of getting looted, pick pocketed, paying for security of currency, keeping strong rooms for currency notes, investing in a big safe for keeping cash, at the end of the day physically verifying the cash balance, tallying cash with book balance, counting notes at the time of deposit or withdrawal, spending insurance premium for fidelity and cash insurance, hiring detectives and keeping dogs will all become phenomena of the past. Police will find themselves wanting for financial crimes.

Banks will find themselves in altogether different competitive economic environment. They will not have to beg for deposits as all the peoples' money will always be deposited with the bank. There will not be any need for printing chequebooks, drafts and other related stationery-reducing operating cost to the lowest. Transaction will be possible to any decimals. Minting, printing and paper costs of paper currency will be effectively saved. Here, I would like to state that Banks will have complete parallel records, they will also monitor computer generated reconciliation statement viz.,

Unique Code of Payer ◄──► Transaction Code ◄── Unique Code of Receiver

This way Bank will come to know about every detail/address of every defaulter/transaction.
Any transaction code remaining un-reconciled will prompt banker to ask from that one unique code holder about other person whether receiver/payer for better control.

This way not only electronic currency system can help prevent the various kinds of corruptions and crimes up to a certain extent but it can also help in economic prosperity and autonomy of the country.

In conclusion, I want to say that it is difficult to see things clearly on the horizon of the future but I definitely see though with weak eyesight that there is something called 'electronic currency' out there. I am sure that some one with better vision and with the help of the binoculars of computer knowledge will be able to tell the world a more spectacular narrative.