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**ABSTRACT**

5 An application on user's mobile device (having a display screen) generates a one-time use and time-limited barcode by a payment provider on the display when the user enters a PIN. The barcode can be scanned to make purchases at a point of sale (POS). Receipts can also be stored on the device, retrievable by the user and scannable by a merchant for returns.

## MOBILE BARCODE GENERATION AND PAYMENT

### RELATED APPLICATIONS

[0001] This application relates to U.S. Provisional Application Serial No. 61/119,328, filed December 2, 2008; U.S. Application No. 12/414,562, filed on March 30, 2009; and PCT Application PCT/US2009/062394, filed 28 October 2009, which are incorporated by reference in their entirety.

### BACKGROUND

#### Field of the Invention

[0002] The present invention generally relates to facilitating financial transactions and more particularly to facilitating such transactions with a mobile device.

#### Related Art

[0003] Mobile devices, such as cell phones, are being used by more and more people world-wide. In addition to using mobile phones for voice calls, consumers can communicate nearly anytime and anywhere to facilitate information access to mobile services and the Internet. Mobile phones have also become multimedia computing platforms with integral digital cameras for taking pictures and video, playing music, recording conversations, and organizing and planning activities and appointments.

[0004] More recently, mobile phones have been used in conjunction with on-line payment service providers, such as PayPal, Inc. of San Jose, CA. With the ever-increasing popularity of the Internet and of Internet commerce, both consumers and sellers are using the Internet to facilitate financial transactions between parties, whether they are individuals or companies. In on-line financial transactions, consumers may use an on-line payment provider to transfer money and receive money over electronic networks, such as the Internet. The money transfer may be for payment of goods or services. The payment providers supply an infra-structure, software, and services that enable users to make and receive payments. Mobile phone users may contract with a payment provider to allow the user to make payments over the phone. Typically, this requires the user to open up an application on the phone, such as through a web browser. The user then accesses his or her on-line account by entering requested information, such as a user name, phone number, email, and/or password. Payment information can then be entered and transmitted to the payment provider, who

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then transfers funds from the user's account to the payee's account. A confirmation may then be sent to the payer and/or the payee.

[0005] While this service gives the consumer flexibility in paying for services anywhere using a mobile phone, the procedure can be cumbersome, time-consuming, and may be prone to fraudulent transfers.

[0005A] Reference to any prior art in the specification is not, and should not be taken as, an acknowledgment or any form of suggestion that this prior art forms part of the common general knowledge in Australia or any other jurisdiction or that this prior art could reasonably be expected to be ascertained, understood and regarded as relevant by a person skilled in the art.

#### SUMMARY

[0005B] According to the first aspect of the present invention there is provided a method of performing a financial transaction, comprising: receiving, electronically by a hardware processor of a payment provider, information about the financial transaction, wherein the payment provider is a third party service provider in communication with a mobile user device and a merchant to process the financial transaction between the user and the merchant; generating, by the payment provider, a barcode based on the information; transmitting, electronically by the payment provider, the barcode to the mobile user device for display on the mobile user device; transferring funds, by the payment provider, from a user account with the payment provider when the barcode is captured by the merchant; generating, by the payment provider, a receipt barcode for the financial transaction; receiving, by the payment provider, information about a return from the receipt barcode; and transferring funds, by the payment provider, from a merchant account to the user account when the receipt barcode is captured by the merchant.

[0005C] According to the second aspect of the present invention there is provided a method for performing a financial transaction, comprising: capturing a barcode temporarily displayed on a mobile device, wherein the barcode is generated and transmitted electronically to the mobile device by a payment provider for display on the mobile device, wherein the payment provider is a third party service provider in communication with the mobile device and a merchant to process the financial transaction between a user and the merchant; transmitting information about the financial transaction to the payment provider; receiving notification, from the payment provider, of funds for the financial transaction being transferred by the payment provider;

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capturing a receipt barcode displayed on the mobile device; transmitting information contained in the receipt barcode and an item to be returned to the payment provider; and receiving notification of funds being transferred from a merchant account for the returned item.

5 [0005D] According to the third aspect of the present invention there is provided a method for performing a financial transaction, comprising: accessing an application on a mobile device; logging into a payment provider service associated with the application; receiving, electronically from a payment provider, a barcode generated by the payment provider for display on the mobile device, wherein the payment provider is a third party service provider in communication with the  
10 mobile device and a merchant to process the financial transaction between a user and the merchant; having the barcode captured by the merchant; receiving notification, from the payment provider, of funds for the financial transaction being transferred by the payment provider; receiving a receipt barcode for the financial transaction; having the receipt barcode captured by the merchant; and receiving notification of funds being transferred from a merchant account.

15 [0005E] According to the fourth aspect of the present invention there is provided a mobile communication device for performing a financial transaction, comprising: an antenna configured to communicate with an on-line site; a processor configured: to display a barcode generated and received from the on-line site, wherein the on-line site is a third party service provider in  
20 communication with the mobile communication device and a merchant to process the financial transaction between a user and the merchant; and to display a receipt barcode for a refund transaction generated and received from the on-line site; a memory to store information about the financial transaction; and a display to display the barcode and allow the barcode to be captured for transferring funds in the financial transaction.

25 [0006] According to one embodiment, an application on a mobile device having a screen, such as a cell phone, enables the user to generate a barcode on the screen, which can be scanned for payment. The barcode is valid for a limited period of time (e.g., one minute) and for a single use. Once scanned, payment is transferred from the user's account to the merchant's account. In one  
30 embodiment, the user first opens up the application on the phone, which then presents the user with a screen showing a phone number associated with the user and a field for the user to enter a password or PIN. After entering a correct password or PIN, a barcode is generated and appears on the screen. The barcode is generated through a payment provider, such as PayPal. Once the barcode is generated, a scanner, such as a CCD scanner, scans the barcode at the point of sale (POS) or other

physical payment location. Funds are deducted from the user's account and transferred to the retailer's account. The user may be asked for a signature confirmation. A receipt can then be generated on the mobile device, and purchases tracked immediately.

5 [0007] According to another embodiment, a receipt can be displayed on the user's mobile device for performing a refund transaction. The receipt is located on the user' s mobile device, using any suitable search, such as by date, recent activity, store, etc. The receipt may have been stored as part

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of a purchase described above. Once located, the receipt, in the form of a scannable barcode, is displayed on the user's device. The receipt is then scanned, either by the merchant or user. The returned merchandise can be scanned before or after the receipt is scanned. Once both the returned merchandise and the receipt are scanned, the information is compared to ensure that the receipt matches the returned merchandise. If the refund is approved, the payment provider transfers the appropriate funds from the merchant's account to the user's account. The merchant and/or user may then be given a receipt, either electronically or in printable/paper form.

[0008] Other scannable financial products may also be generated, such as a virtual debit/credit card, coupons, and gift cards. If a qualifying purchase provides the user with an instant coupon or rebate, those can be generated as well.

[0009] As a result, users can easily and safely pay for transaction using their mobile phone at any location having a suitable scanning device. The user is provided with an alternate or additional vehicle for payment. The user does not need to worry about carrying and managing numerous physical payment means, such as cards, paper coupons, paper gift certificates, etc. Purchases can be instantly categorized and tracked via the phone, and receipts instantly available. For merchants or retailers, this new form of payment may increase sales and volume due to the ability of consumers to have an easy and new way to purchase items. The cost to merchants and retailers may be minimal, as existing scanning systems may be used or simply modified.

[0010] These and other features and advantages of the present invention will be more readily apparent from the detailed description of the embodiments set forth below taken in conjunction with the accompanying drawings.

#### BRIEF DESCRIPTION OF THE FIGURES

[0011] Fig. 1 is a flowchart showing steps for a user to make a payment from a mobile phone according to one embodiment;

[0012] Fig. 2 A is a flowchart showing steps for a payment provider to enable a user to make a payment from a mobile phone according to one embodiment;

[0013] Fig. 2B is a flowchart showing steps for a merchant to perform a financial transaction from a mobile device according to one embodiment;

[0014] Fig. 2C is a flowchart showing steps to enable a user to obtain a refund from a receipt on a mobile phone according to one embodiment;

[0015] Figs. 3 A and 3B show a barcode generated from a mobile phone according to one embodiment; and

[0016] Fig. 4 is a system diagram showing various steps performed by different parties to a payment transaction using a mobile device according to one embodiment; and

5 [0017] Fig. 5 is a block diagram of one embodiment of a system that can be used to implement one or more components of the system described herein.

[0018] Exemplary embodiments and their advantages are best understood by referring to the detailed description that follows. It should be appreciated that like reference numerals are used to identify like elements illustrated in one or more of the figures, wherein showings therein are for purposes of illustrating exemplary embodiments and not for purposes of limiting the same.

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#### DETAILED DESCRIPTION

[0019] Fig. 1 is a flowchart 100 showing one embodiment for a user to make a payment from a mobile phone. In step 102, a user registers with an on-line payment provider, such as PayPal. Registration can be through any suitable means, such as accessing the payment provider site and entering the required information. For example, the user may be asked to create an account if one has not already been established, or if an account is established, to fund the account if needed. The user may then be asked to enter the phone number of the mobile phone and a password or PIN, followed by a confirmation of that password or PIN. Once the user has completed registration, an application can be installed on the user's registered device, such as a mobile phone. When the user is ready to use the service or application, the user opens up the application at step 104, such as by tapping on the application icon on the phone. The user is then presented with a screen showing two fields, a phone number field and a password or PIN field. In one embodiment, the device phone number is already entered. Note that other identifier fields may be used, in any suitable combination, as long as the payment provider is provided sufficient information to authenticate the user. In step 106, the user enters the PIN (or any other requested identification information). If the PIN and phone number are verified by the payment provider, the user is presented with a screen showing a barcode.

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[0020] In step 108, the user presents the barcode image to the merchant. This may be at a checkout stand or point of sale (POS) after the user has finished shopping and the items (and/or services) for purchase have been scanned or entered for payment. A total is presented to the user, at which point, the user provides the merchant a form of payment. In one embodiment, the user displays the

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barcode for the merchant to scan. The merchant then scans the barcode for payment. In another embodiment, the user may scan the barcode himself, such as by passing the screen through a scanner. Note that a suitable scanner system and type may be required depending on the device showing the barcode. For example, a CCD scanner may be needed to accurately scan a device having a reflective screen, such as on a phone. After scanning, the user may be given the option, in step 110, of confirming the payment, such as with a signature, checking an "accept" icon, etc.

[0021] The merchant is then notified whether the payment was approved. Approval may be in the form of the payment provider transmitting, and the merchant receiving, a text message, such as "Approved," a visual message, such as a green light, a verbal message, such as from a live or automated call to the merchant, or any other suitable indication of approval. Denial of the payment may be indicated in similar ways, such as "Denied," a red light, etc. Denial of the payment may result from various reasons, such as insufficient funds in the user's account to make the purchase or payment, an error in reading the barcode, or an invalid barcode. If the denial is from an error in reading, the merchant may be notified accordingly and the barcode re-scanned as needed. If the denial is from an invalid barcode, the barcode may have expired or been used already. If denied, an indication of the reason may be given to the merchant and/or the user so that the reason can be addressed. For example, if the denial is an invalid barcode, the barcode may be scanned again, or a new barcode may be generated for scanning.

[0022] In one embodiment, the barcode generated on the user's phone is valid for only one use (e.g., one confirmed use, where the single use may be from multiple unsuccessful scans and one successful scan) and a specific amount of time. For example, the barcode may only be valid for 30 seconds or one minute after the barcode is generated. This increases security and minimizes misuse or fraudulent use of the barcode.

[0023] Assuming the barcode is valid and confirmed, the payment is concluded, and the user is given a receipt at step 112, such as from the merchant terminal in the form of a paper receipt or Short Message Service (SMS) message to the phone. In other embodiments, the user may also view a receipt on the phone and manage or otherwise track the purchase through the payment provider. For example, the user may make notes about the purchase for future reference or send the purchase to another application. The user can also check previous transactions and view or cancel pending authorizations. Note that in some embodiments, the user can easily cancel this service completely, such as when the phone is lost. For example, the user can simply log onto the payment provider site, enter information to access the account, and then cancel the service. Another security feature may

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be that the user is required to first unlock the phone before use. This can be done in various ways, such as biometric scan or entering an ID to unlock the phone. For the latter, the user is then required to enter two passwords or PINS, one for unlocking the phone and one for accessing the application.

[0024] Fig. 2A is a flowchart 200 showing another embodiment of steps for a payment provider to enable a user to make a payment from a mobile phone. In step 202, the user registers for service with the payment provider. The payment provider receives and processes information entered by the user to create the application and account if necessary. The information may include a user name, password, financial information, billing address, PIN, security questions and answers, etc. Communication of the information may be by any means, such as through the Internet, Bluetooth, or a wired connection, using suitable components such as antennas and processors. Next, the payment provider installs the appropriate application on the user's device in step 204, which can be done via a web browser. The application may simply be an icon on the user's device screen. When the user is ready to use the application or service, the user opens the application and enters requested information as discussed above. The payment provider receives this information to confirm the user in step 206. If the information (e.g., phone number and PIN) does not correspond to a registered user, the payment provider may notify the user accordingly for more chances to login. Once the user is confirmed, the payment provider accesses the user's account at step 208.

[0025] At step 210, the payment provider generates a barcode corresponding to the user's account. The barcode can be generated with standard software for display on a screen or terminal, such as through a processor running the software. The barcode may allow access to all the funds in a user's account, only a portion set aside by the user, or be restricted to certain merchants or products/services. For example, a parent may set up an account for a child with limits and restrictions for use. Restrictions may include a maximum amount per transaction or barcode generation, a maximum number of transactions per time period (e.g., week or month), maximum dollar amount of transactions per time period (e.g., week or month), and a pre-determined expiration date of the agreement, such that after expiration, the user can no longer generate the barcodes, unless the user renews the agreement. The barcode may also be for a specific amount, as specified by the user after accessing the application. For example, after access, the user may be given an option of entering the amount, selecting from one of several pre-defined amounts, or using a default amount.

[0026] Once the barcode is generated, the payment provider transmits the barcode to the user device, which displays the barcode on the device. Transmission of the barcode can be by the same

or similar means as used to receive information from the user, e.g., antenna, transmitter, or transceiver. The payment provider then waits for information from the merchant or scanner. This information may include the merchant's name, account information, payment amount, etc. When the information is received at step 212, the payment provider determines whether the received information will allow the payment provider to make the transfer. As discussed above, information that will make the payment provider deny the payment can include a requested payment exceeding the barcode limit, an expired or already used barcode, a barcode not matching the one for the user, an unrecognized merchant account, etc. If the received information is proper, the payment provider affects a transfer of funds from the user's account to the merchant's account in step 214, with protocols and software executed by processors such as used by PayPal and other on-line financial institutions. The payment provider may also send a confirmation to both the user and merchant that funds have been transferred. Confirmation may be the same for the user and merchant or different, and may include a text message, a visual indicator, a voice indicator, etc.

[0027] In another embodiment, the payment provider may provide an additional layer of protection for the merchant, e.g., to minimize charge backs and/or obtain proof of user signature or consent. Initially, the merchant scans the generated barcode with a scanner, such as described above. The POS software at the merchant location then makes a DoAuthorization API call to the payment provider to authorize the payment. In response, the payment provider determines whether the scanned information is consistent with the payment provider information for the user and responds with an authorization or decline to the merchant. If authorized, the merchant can then display the amount for the user to authorize. This can be on an electronic signature pad for the user to sign or just an OK button for the user to press. The POS software then makes a DoCapture API call to the payment provider to capture the payment. The payment provider will then respond with an API response to indicate whether the funds were transferred successfully. If so, the merchant prints a receipt for the user.

[0028] Fig. 2B is a flowchart 230 showing steps performed by a merchant for performing a financial transaction using a mobile device displaying a barcode, according to one embodiment. When a user of a mobile device desires to make a financial transaction with the merchant (or anyone else), the user generates and displays a barcode on the mobile device described above. This may be when the user has completed shopping is ready to check out or pay for the items at the register or point of sale. Initially, at step 232, the merchant records the items for purchase and the total amount owed by the purchaser, such as scanning the items for both a description and price. Next, at step 234, the merchant is presented with a barcode displayed on the user's or purchaser's mobile device, such as a

phone. The barcode is then scanned, at step 236, either by the merchant or by the user (such as with a merchant scanner). Again, depending on the display/screen of the user device, an appropriate scanner is needed to accurately read the barcode, such as a CCD scanner. The barcode information and the purchase information are transmitted to the payment provider at step 238, which is processed by the payment provider. The merchant then receives a notification that the payment has been accepted or denied, at step 240. If denied, the merchant can inform the user at step 242, and the user can respond accordingly. Options include scanning the barcode again, generating a new barcode, or presenting the merchant with a new form of payment. If accepted, the merchant may receive a confirmation of the transaction at step 244. As a result, funds are transferred from the user's account to the merchant's account for the purchase of the desired item(s).

[0029] Fig. 2C is a flowchart 250 showing an embodiment for a user to retrieve a receipt on a mobile phone and use that for a refund at a POS. After a purchase, such as described above, the user may want to return the purchase for a refund. In step 252, the user locates the receipt on the user's mobile phone or device. The receipt may have been stored as part of the initial purchase, as described above. Retrieval of the receipt may include the application having a search menu that allows the user to locate a transaction by the merchant, dollar amount, date, or other category. The user can select the desired transaction to view details, such as item and receipt. Once the desired receipt or transaction is located, the barcode receipt is shown on the display of the mobile device in step 254. For example, a button could be added to the transaction detail page to display the merchant's order ID or invoice ID (represented by the barcode). The barcode receipt may also be displayed or generated in any other suitable manner, such as being captured and stored as a barcode during the purchasing process.

[0030] Once displayed, the merchant, at step 256, scans the barcode, as part of the refund process. Scanning of the barcode can be done before or after the merchant scans the returned merchandise. Next, at step 258, the POS software at the merchant location makes a refund API call to initiate the refund. In one embodiment, the payment provider can then determine if the transaction (refund) is proper and valid. Ways in which the payment provider can do this include confirming whether the merchant and user accounts are valid, matching up the specific merchant account with the merchant, matching up the specific user account with the user, determining whether the refunded item was truly purchased and if it was purchased at the merchant, matching the returned item to what is indicated on the receipt, any expiration date on the receipt for refunds, etc. When the refund is approved, either by the payment provider or by the merchant, the payment provider transfers the refunded amount from the merchant's account to the user's account. The payment provider then

transmits an API response to indicate whether the refund was successful. If so, the merchant, at step 260, prints a receipt that shows the refund transaction. The refund receipt may also be stored on the user's phone. This embodiment enables the user to easily and effectively manage receipts and refunds, as compared to saving, storing, and categorizing paper receipts.

5 [0031] Figs. 3 A and 3B show one embodiment of a barcode generated from a mobile phone 300. In Fig. 3A, the user has opened up the application and is presented with a login screen 302. Login screen 302 includes a phone field 304, which may or may not be populated with the device phone number, and a password or PIN field 306, where the user enters his or her PIN, such as using the phone keys. After a successful login, the user is shown a screen with a barcode 308, which may  
10 only be valid for a certain time period and for a single use. The barcode shown on the screen can then be scanned for payment at a POS, as described above.

[0032] Fig. 4 is a diagram showing various steps performed by different parties to a payment transaction using a mobile device according to one embodiment. Path 1 illustrates steps taken by a buyer to register with the payment provider or create an account with the payment provider.

15 Selected information, such as the PIN, phone number, agreement token, and agreement ID are stored in a database 400 of the payment provider. Database 400 may be stored on a local or remote server or any other suitable storage means. Path 2 shows steps for the buyer when he is ready to make a purchase at a store or POS. The user PIN and phone number are searched in database 400 to find the matching user ID. The barcode is generated, with an associated barcode ID. Both the user  
20 ID and barcode ID are stored in database 400. Path 3 shows steps for the merchant after the barcode is generated in path 2. After scanning the barcode, the barcode ID is checked in the database with a matching user ID. When confirmed, the user ID is transmitted to the merchant for confirmation of payment.

[0033] Fig. 5 is a block diagram of a computer system 500 according to one embodiment, which  
25 may be suitable for implementing embodiments of various aspects of this disclosure. In various implementations of embodiments, device 300 may comprise a personal computing device, such as a personal computer, laptop, PDA, cellular phone or other personal computing or communications devices. Database 400 may be within, part of, or comprise a network computing device, such as one or more servers, computer or processor combined to provide the payment services. Thus, it should  
30 be appreciated that the devices described herein may be implemented as computer system 500 in a manner as follows.

[0034] In one embodiment, computer system 500 may include a bus 502 or other communication mechanism for communicating information, which interconnects subsystems and components, such as a processing component 504 (e.g., processor, microcontroller, digital signal processor (DSP), etc.), a system memory component 506 (e.g., RAM), a static storage component 508 (e.g., ROM), a disk drive component 510 (e.g., magnetic or optical), a network interface component 512 (e.g., modem or Ethernet card), a display component 514 (e.g., CRT or LCD for displaying the generated barcode), an input component 516 (e.g., keyboard or keypad for entering a PIN or password), and/or a cursor control component 518 (e.g., keys, mouse, or trackball). In one embodiment, disk drive component 510 may comprise a database having one or more disk drive components. Network interface component 512 may include an antenna, either separate or integrated, to enable transmission and reception via communication link 520.

[0035] Computer system 500 may perform specific operations by processor 504 executing one or more sequences of one or more instructions contained in system memory component 506, according to steps described above with respect to Figs. 1, 2A, and 2B. Such instructions may be read into system memory component 506 from another computer readable medium, such as static storage component 508 or disk drive component 510. The various storage or memory components may be used to store information about trusted sources for the quick-approval process. In other embodiments, hard-wired circuitry may be used in place of or in combination with software instructions to implement the invention.

[0036] Logic may be encoded in a computer readable medium, which may refer to any medium that participates in providing instructions to processor 504 for execution.

Such a medium may take many forms, including but not limited to, non-volatile media, volatile media, and transmission media. In various implementations, non-volatile media includes optical or magnetic disks, such as disk drive component 510, volatile media includes dynamic memory, such as system memory component 406, and transmission media includes coaxial cables, copper wire, and fiber optics, including wires that comprise bus 502. In one example, transmission media may take the form of acoustic or light waves, such as those generated during radio wave and infrared data communications .

[0037] Some common forms of computer readable media includes, for example, floppy disk, flexible disk, hard disk, magnetic tape, any other magnetic medium, CD-ROM, any other optical medium, punch cards, paper tape, any other physical medium with patterns of holes, RAM, PROM,

EPROM, FLASH-EPROM, any other memory chip or cartridge, carrier wave, or any other medium from which a computer is adapted to read.

[0038] In various example embodiments, execution of instruction sequences for practicing embodiments of the invention may be performed by computer system 500. In various other 5 embodiments, a plurality of computer systems 500 coupled by communication link 520 may perform instruction sequences to practice the invention in coordination with one another.

[0039] Computer system 500 may transmit and receive messages, data, information and instructions, including one or more programs (i.e., application code) through communication link 520 and communication interface 512. Received program code may be executed by processor 504 10 as received and/or stored in disk drive component 510 or some other non-volatile storage component for execution.

[0040] Where applicable, various embodiments provided by the present disclosure may be implemented using hardware, software, or combinations of hardware and software. Also, where applicable, the various hardware components and/or software components set forth herein may be 15 combined into composite components comprising software, hardware, and/or both without departing from the spirit of the present disclosure. Where applicable, the various hardware components and/or software components set forth herein may be separated into sub-components comprising software, hardware, or both without departing from the scope of the present disclosure. In addition, where applicable, it is contemplated that software components may be implemented as 20 hardware components and vice-versa.

[0041] Software, in accordance with the present disclosure, such as program code and/or data, may be stored on one or more computer readable mediums. It is also contemplated that software identified herein may be implemented using one or more general purpose or specific purpose computers and/or computer systems, networked and/or otherwise. Where applicable, the ordering of 25 various steps described herein may be changed, combined into composite steps, and/or separated into sub-steps to provide features described herein.

[0042] The foregoing disclosure is not intended to limit the present invention to the precise forms or particular fields of use disclosed. It is contemplated that various alternate embodiments and/or modifications to the present invention, whether explicitly described or implied herein, are possible 30 in light of the disclosure. For example, entry of a user PIN with associated phone number may create a virtual debit card with a corresponding barcode. The barcode can then be scanned for

normal debit card processing. Other examples include generation of barcodes corresponding to coupons, gift cards, or virtually any financial instrument. Furthermore, the generation and scanning of the barcode can be at any time during the transaction, such as before, during, or after items are scanned or otherwise recorded.

- 5 [0043] Having thus described embodiments of the invention, persons of ordinary skill in the art will recognize that changes may be made in form and detail without departing from the scope of the invention. Thus, the invention is limited only by the claims.

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## CLAIMS:

1. A method of performing a financial transaction, comprising:
  - receiving, electronically by a hardware processor of a payment provider, information about the financial transaction, wherein the payment provider is a third party service provider in communication with a mobile user device and a merchant to process the financial transaction between the user and the merchant;
  - generating, by the payment provider, a barcode based on the information;
  - transmitting, electronically by the payment provider, the barcode to the mobile user device for display on the mobile user device;
  - transferring funds, by the payment provider, from a user account with the payment provider when the barcode is captured by the merchant;
  - generating, by the payment provider, a receipt barcode for the financial transaction;
  - receiving, by the payment provider, information about a return from the receipt barcode;and
  - transferring funds, by the payment provider, from a merchant account to the user account when the receipt barcode is captured by the merchant.
2. The method of claim 1, further comprising accessing the user account after receiving information from the user.
3. The method of claim 1, wherein the information comprises login information.
4. The method of claim 3, wherein the login information comprises a password or PIN.
5. The method of claim 1, further comprising receiving information from a second user after the barcode is used.
6. The method of claim 5, wherein the second user is a merchant.
7. The method of claim 5, wherein the funds are transferred to an account of the second user based on the information received from the second user.

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8. The method of claim 1, wherein the barcode is valid for a predetermined and finite amount of time.

9. The method of claim 1, wherein the barcode is valid for a single approved use.

10. The method of claim 1, wherein the barcode has conditions for use predetermined by the user.

11. The method of claim 10, wherein the conditions comprise a periodic limit, a per transaction limit, a merchant limit, or a number of transactions limit.

12. The method of claim 1, wherein the mobile user device is a phone.

13. A method for performing a financial transaction, comprising:

capturing a barcode temporarily displayed on a mobile device, wherein the barcode is generated and transmitted electronically to the mobile device by a payment provider for display on the mobile device, wherein the payment provider is a third party service provider in communication with the mobile device and a merchant to process the financial transaction between a user and the merchant;

transmitting information about the financial transaction to the payment provider; and receiving notification, from the payment provider, of funds for the financial transaction being transferred by the payment provider;

capturing a receipt barcode displayed on the mobile device;

transmitting to the payment provider information contained in the receipt barcode and about an item to be returned; and

receiving notification of funds for the returned item being transferred from a merchant account.

14. The method of claim 13, wherein the transmitting is by a merchant at a point of sale.

15. The method of claim 13, wherein the funds for the financial transaction are transferred from a user account associated with the mobile device to the merchant account.

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16. The method of claim 13, wherein the funds for the returned item are transferred from the merchant account to a user account associated with the mobile device.

17. A method for performing a financial transaction, comprising:

5 accessing an application on a mobile device;

logging into a payment provider service associated with the application;

10 receiving, electronically from a payment provider, a barcode generated by the payment provider for display on the mobile device, wherein the payment provider is a third party service provider in communication with the mobile device and a merchant to process the financial transaction between a user and the merchant;

having the barcode captured by the merchant;

receiving notification, from the payment provider, of funds for the financial transaction being transferred by the payment provider;

receiving a receipt barcode for the financial transaction;

15 having the receipt barcode captured by the merchant; and

receiving notification of funds for a returned item being transferred from a merchant account.

18. The method of claim 17, wherein the logging into comprises entering a password or PIN.

19. The method of claim 17, further comprising confirming the financial transaction after the barcode is scanned.

20. The method of claim 17, further comprising setting limits on the barcode.

21. The method of claim 20, wherein the limits comprise limits based on time, number, or dollar amount.

22. A mobile communication device for performing a financial transaction, comprising:

30 an antenna configured to communicate with an on-line site;

a processor configured:

to display a barcode generated and received from the on-line site, wherein the on-line site is a third party service provider in communication with the mobile communication device and a merchant to process the financial transaction between a user and the merchant; and

to display a receipt barcode for a refund transaction generated and received from the on-line site;

a memory to store information about the financial transaction; and

a display to display the barcode and allow the barcode to be captured for transferring funds for the financial transaction.

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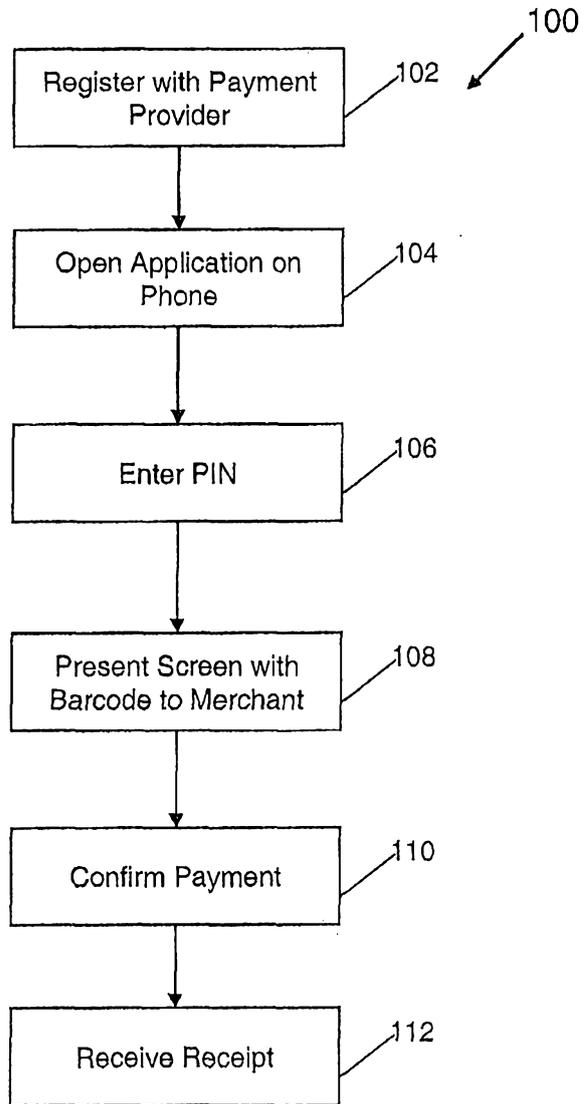


FIG. 1

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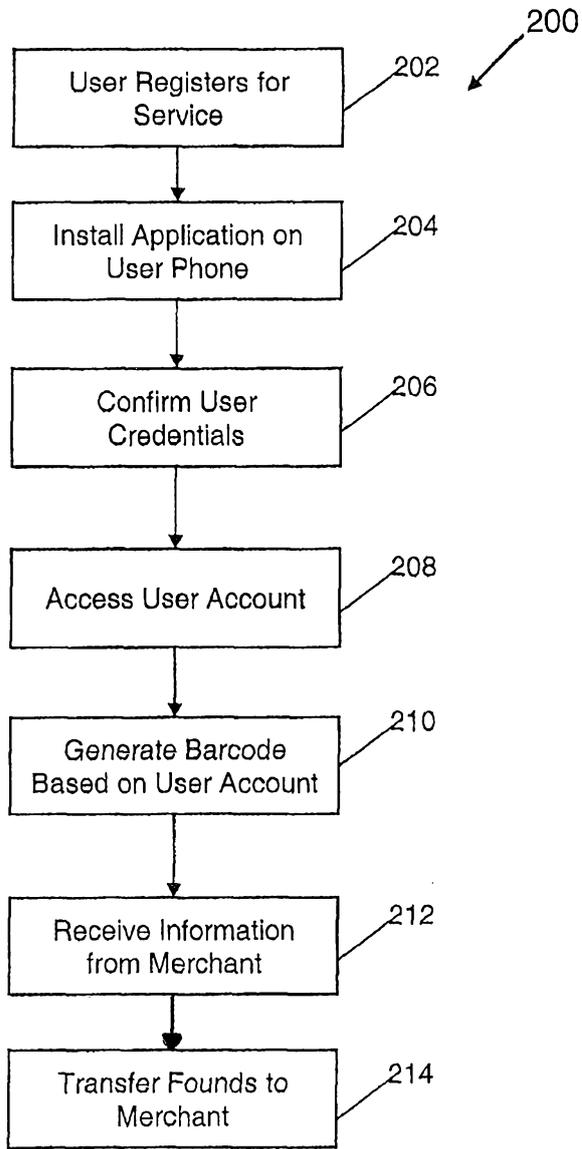


FIG. 2A

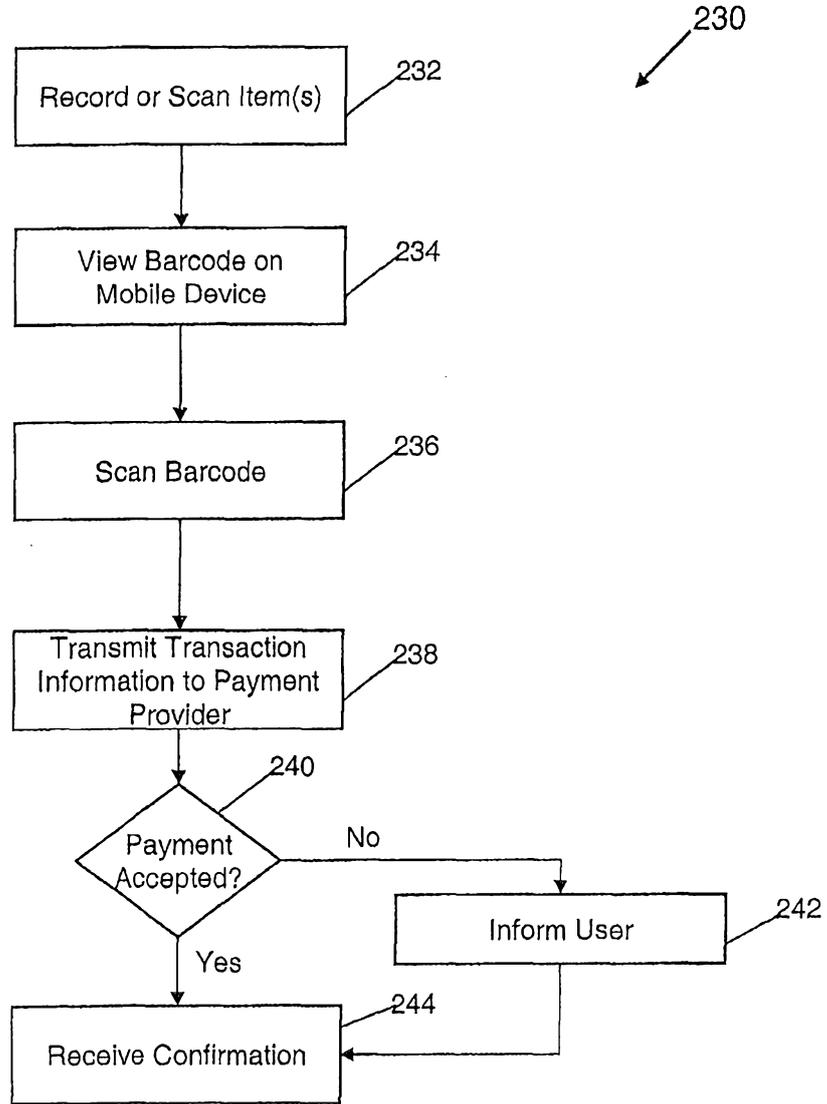


FIG. 2B

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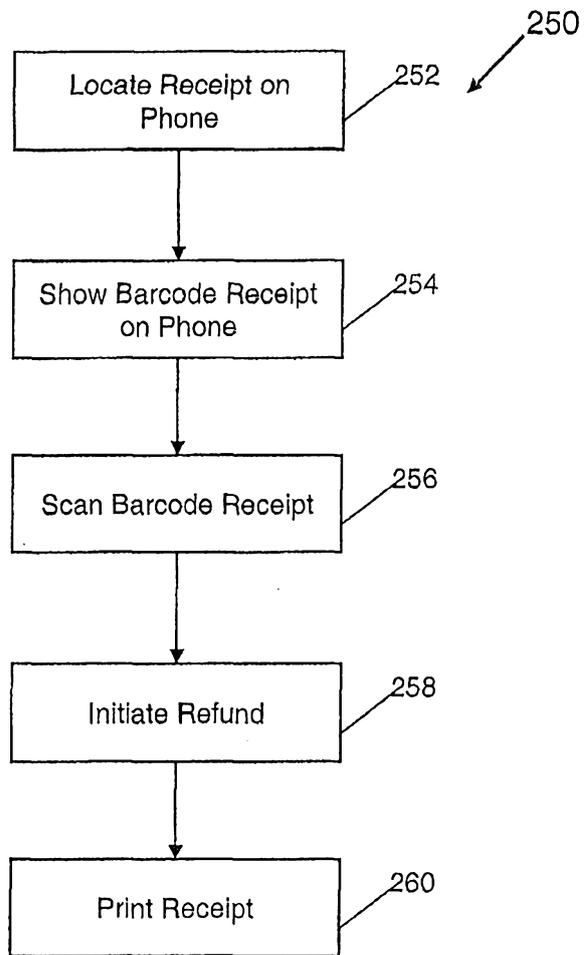


FIG. 2C

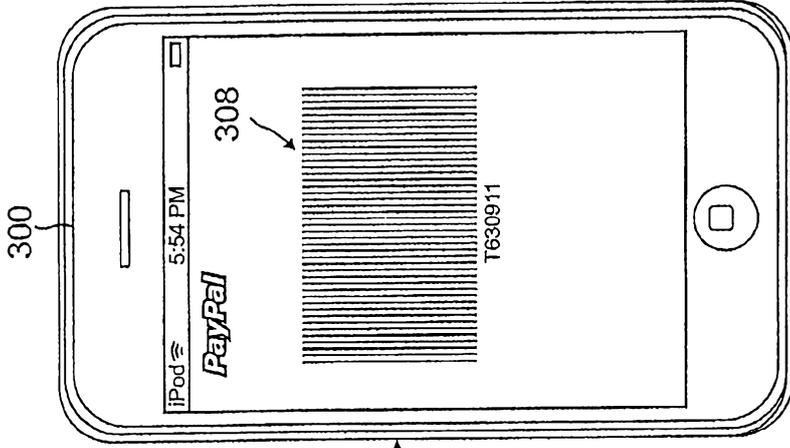


FIG. 3B

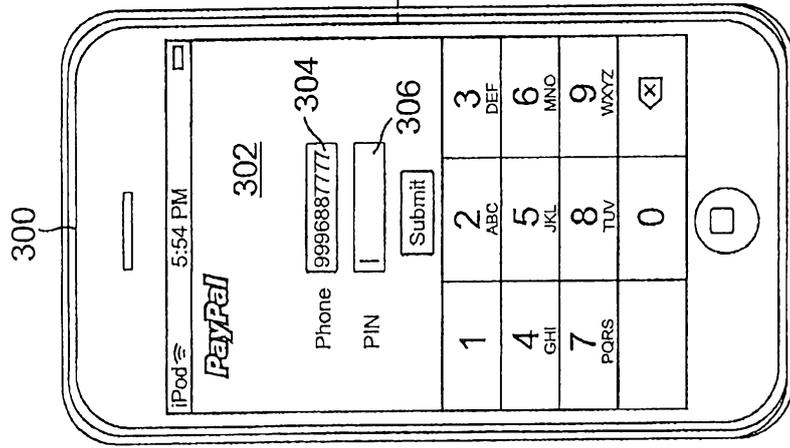


FIG. 3A

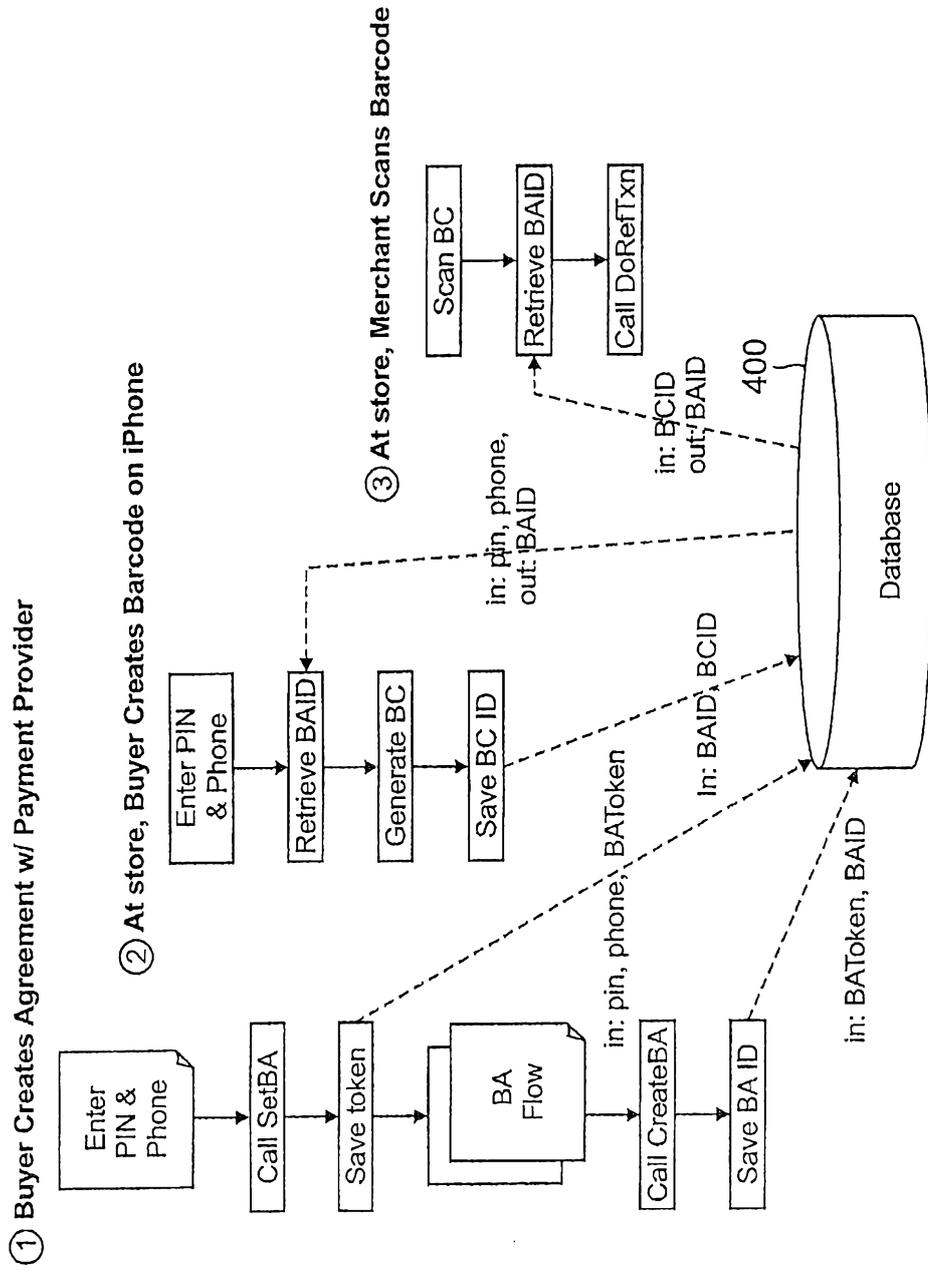


FIG. 4

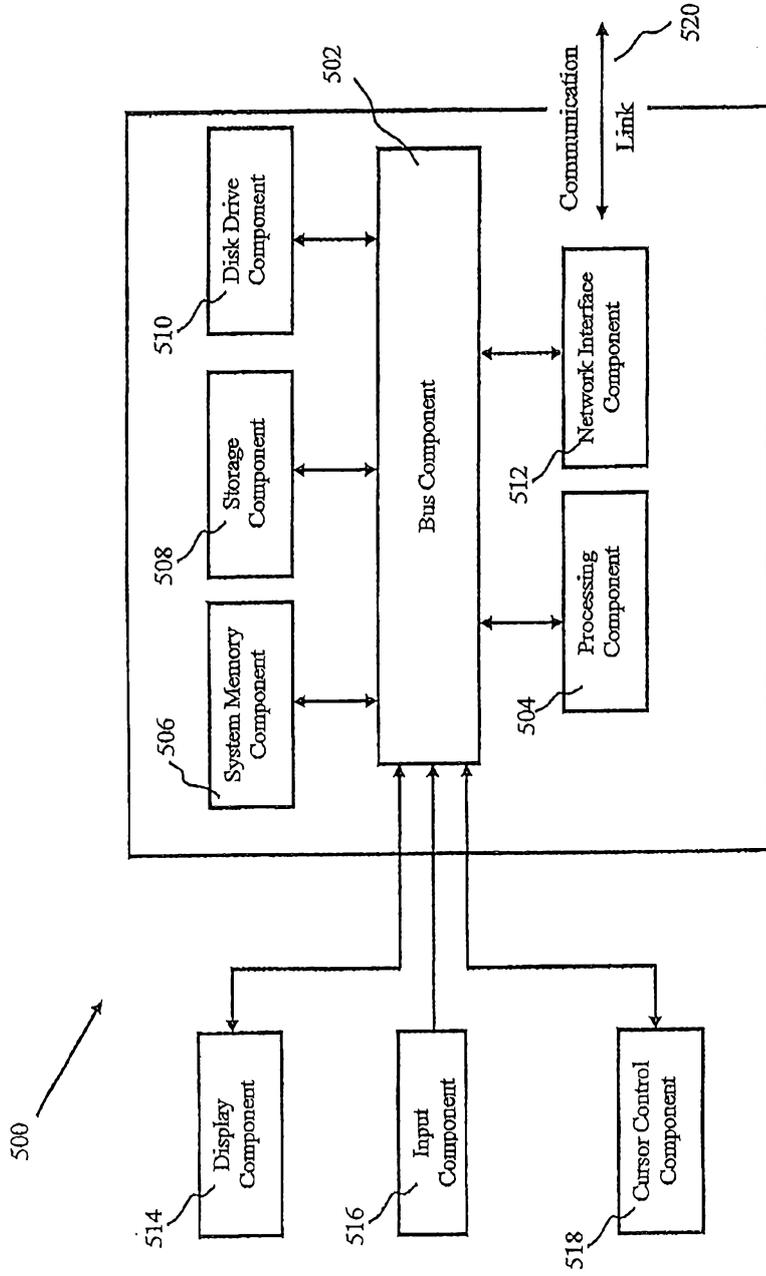


FIG. 5