# ELECTRONIC WALLET FUND TRANSFER SYSTEM

## CROSS-REFERENCE TO RELATED APPLICATIONS

**[0001]** This application claims priority to the filing date of U.S. Patent Application No. 14/194,360, filed February 28, 2014, which cliams priority to U.S. Provisional Patent Application Serial No. 61/877,187, filed on September 12, 2013, the entire disclosures of which are hereby incorporated herein by reference.

## BACKGROUND

### Field of the Invention

**[0002]** The present disclosure generally relates to online and/or mobile payments and more particularly to transferring funds to an electronic wallet used to make online and/or mobile payments.

### Related Art

**[0003]** More and more consumers are purchasing items and services over electronic networks such as, for example, the Internet. Consumers routinely purchase products and services from merchants and individuals alike. The transactions may take place directly between a conventional or on-line merchant or retailer and the consumer, and payment is typically made by entering credit card or other financial information. Transactions may also take place with the aid of an on-line or mobile payment service provider such as, for example, PayPal, Inc. of San Jose, CA. Such payment service providers can make transactions easier and safer for the parties involved. Purchasing with the assistance of a payment service provider from the convenience of virtually anywhere using a mobile device is one main reason why on-line and mobile purchases are growing very quickly.

**[0004]** Payment service providers sometimes provide electronic "wallets" to their users that include user payment accounts that are provided by the payment service provider and that allow the user to make payments for purchases and/or other expenses. In addition, a user may link their financial accounts such as, for example, checking accounts, savings accounts, credit accounts, and/or a variety of other financial account known in the art, to their electronic wallet in order to fund their user payment account for making purchases.

Furthermore, different users of the payment service provider may transfer funds between their respective electronic wallets. As such, electronic wallets provided by the payment service provider may be funded by the users of those electronic wallets using their financial account, or through payments or other fund transfers from other users with electronic wallets. However, the funding of such electronic wallets via entities without user payment accounts provided by the payment service provider can raise a number of issues.

**[0005]** For example, if a user wishes to fund their electronic wallet via a paycheck from their employer that does not have a user payment account provided by the payment service provider, that user may (1) receive a physical check from their employer, deposit that physical check in their bank account, and then transfer the deposited funds from their bank account to their electronic wallet, or (2) instruct their employer to deposit their paycheck directly into their bank account and then transfer the deposited funds from their bank account to their electronic wallet. Such conventional electronic wallet fund transfers require that the user have a bank account, require that the user provide their bank account information to the payer, and can be time consuming and costly for both the user and the payer.

**[0006]** Thus, there is a need for an improved electronic wallet fund transfer system.

## SUMMARY OF INVENTION

**[0006a]** ~~According to a first aspect of the present invention, there is provided an electronic wallet fund transfer system, comprising: a non-transitory memory storing a user account that is associated with a user and that is provided by a payment service provider; one or more hardware processors coupled to the memory and operable to read instructions from the memory to perform the steps of: receiving, from a payer, a request for fund transfer information for the user account; providing, to the payer, a routing number that is associated with the payment service provider and a virtual account number that is associated with the user account; receiving, from a financial institution, information about a funds transfer to a payment service provider account that is provided to the payment service provider by the financial institution, wherein the information about the funds transfer includes a funding amount and the virtual account number; and allocating the funding amount to the user account using the virtual account number.~~

According to a first aspect of the present invention, there is provided an electronic wallet fund transfer system, comprising: a non-transitory memory storing a user an electronic wallet account that is associated with a user and that is provided by a payment service provider; one or more hardware processors coupled to the non-transitory memory and configured to execute instructions to cause the system to perform operations comprising : receiving, from a payer, a request for fund transfer information for the user electronic wallet account, wherein the fund transfer information includes a funding amount and a virtual account number; generating, in response to receiving the request for fund transfer information, the virtual account number; associating the virtual account number with the electronic wallet account; providing, to the payer, a routing number that is associated with the payment service provider and a the virtual account number that is associated with the user electronic wallet account; receiving, from the payer, the routing number and the fund transfer information to a payer financial account that is provided to the payer by a financial institution; receiving, from a the financial institution, the fund transfer information about a funds transfer to a payment service provider account that is provided to the payment service provider by the financial institution, wherein the information about the funds transfer includes a funding amount and the virtual account number; and allocating the funding amount to the user electronic wallet account using the virtual account number.

**[0006b]** ~~According to a second aspect of the present invention, there is provided a method for transferring funds to an electronic wallet, comprising: receiving, by a payment service provider device over a network from a payer device that is associated with a payer, a request for fund transfer information for a user account; providing, by the payment service provider device over the network to the payer device, a routing number that is associated with the payment service provider and a virtual account number that is associated with the user account; receiving, by the payment service provider device over the network from a financial institution device, information about a funds transfer to a payment service provider account that is provided to a payment service provider by a financial institution, wherein the information about the funds transfer includes a funding amount and the virtual account number; and allocating, by the payment service provider device, the funding amount to the user account using the virtual account number.~~

According to a second aspect of the present invention, there is provided a method for transferring funds to an electronic wallet, comprising: receiving, by a payment service provider device over a network from a payer device that is associated with a payer, a request for fund transfer information for a user an electronic wallet account, wherein the fund transfer information includes a funding amount and a virtual account number; generating, by the payment service provider device in response to receiving the request for fund transfer information, the virtual account number; and associating, by the payment service provider device, the virtual account number with the electronic wallet account; providing, by the payment service provider device over the network to the payer device, a routing number that is associated with the payment service provider and a the virtual account number that is associated with the user electronic wallet account; receiving, from the payer device, the routing number and the fund transfer information to a payer financial account that is provided to the payer device by a financial institution device; receiving, by the payment service provider device over the network from a the financial institution device, the fund transfer information about a funds transfer to a payment service provider account that is provided to a payment service provider by a the financial institution, wherein the information about the funds transfer includes a funding amount and the virtual account number; and allocating, by the payment service provider device, the funding amount to the user electronic wallet account using the virtual account number.

**[0006c]** ~~According to a third aspect of the present invention, there is provided a non-transitory machine-readable medium comprising a plurality of machine-readable instructions which, when executed by one or more processors, are adapted to cause the one or more processors to perform a method comprising: receiving, from a payer, a request for fund transfer information for an user account; providing, to the payer, a routing number that is associated with a payment service provider and a virtual account number that is associated with the user account; receiving, from a financial institution, information about a funds transfer to a payment service provider account that is provided to the payment service provider by the financial institution, wherein the information about the funds transfer includes a funding amount and the virtual account number; and allocating the funding amount to the user account using the virtual account number.~~

According to a third aspect of the present invention, there is provided a non-transitory machine-readable medium having stored thereon machine-readable instructions executable to cause a machine to perform operations comprising : receiving, from a payer, a request for fund transfer information for an electron wallet account, wherein the fund transfer information includes a funding amount and a virtual account number; generating, in response to receiving the request for fund transfer information, the virtual account number; associating the virtual account number with the electronic wallet account; providing, to the payer, a routing number that is associated with a payment service provider and a virtual account number that is associated with the electronic wallet account; receiving, from the payer, the routing number and the fund transfer information to a payer financial account that is provided to the payer by a financial institution; receiving, from the financial institution, the fund transfer information to a payment service provider account that is provided to the payment service provider by the financial institution; and allocating the funding amount to the electronic wallet account using the virtual account number.

BRIEF DESCRIPTION OF THE FIGURES

**[0007]** Fig. 1 is a flow chart illustrating an embodiment of a method for transferring funds to an electronic wallet;

**[0008]** Fig. 2 is a schematic view illustrating an embodiment of an electronic wallet fund transfer system;

**[0009]** Fig. 3a is a screen shot illustrating an embodiment of a fund transfer method selection screen;

**[0010]** Fig. 3b is a screen shot illustrating an embodiment of an electronic wallet authentication screen;

**[0011]** Fig. 3c is a screen shot illustrating an embodiment of a fund transfer method confirmation screen;

**[0012]** Fig. 4 is a schematic view illustrating an embodiment of a networked system;

**[0013]** Fig. 5 is a perspective view illustrating an embodiment of a payer device;

**[0014]** Fig. 6 is a schematic view illustrating an embodiment of a computer system; and

~~WHAT IS CLAIMED IS:~~CLAIMS

1. An electronic wallet fund transfer system, comprising:

a non-transitory memory storing ~~a user~~ an electronic wallet account that is associated with a user and that is provided by a payment service provider;

one or more hardware processors coupled to the non-transitory memory and ~~operable~~ configured to ~~read~~ execute instructions ~~from the memory~~ to cause the system to perform ~~the steps of~~ operations comprising:

receiving, from a payer, a request for fund transfer information for the ~~user~~ electronic wallet account, wherein the fund transfer information includes a funding amount and a virtual account number;

generating, in response to receiving the request for fund transfer information, the virtual account number;

associating the virtual account number with the electronic wallet account;

providing, to the payer, a routing number that is associated with the payment service provider and ~~a~~ the virtual account number that is associated with the ~~user~~ electronic wallet account;

receiving, from the payer, the routing number and the fund transfer information to a payer financial account that is provided to the payer by a financial institution;

receiving, from ~~a~~ the financial institution, the fund transfer information ~~about a funds transfer~~ to a payment service provider account that is provided to the payment service provider by the financial institution~~, wherein the information about the funds transfer includes a funding amount and the virtual account number~~; and

allocating the funding amount to the ~~user~~ electronic wallet account using the virtual account number.

~~2. The system of claim 1, wherein the one or more hardware processors are operable to read instructions from the memory to perform the steps of:~~

~~generating, in response to receiving the request for fund transfer information, the virtual account number; and~~

~~associating the virtual account number with the user account.~~

~~32~~. The system of claim ~~21~~, wherein the ~~one or more processors are operable to read instructions from the memory to perform the steps of~~operations further comprise:

disassociating the virtual account number and the ~~user~~ electronic wallet account following the allocating of the funding amount to the account.

~~43~~. The system of claim 1, wherein the routing number is an Automated Clearing House (ACH) routing number that identifies the payment service provider.

~~54~~. The system of claim 1, wherein the operations further comprise~~one or more hardware processors are operable to read instructions from the memory to perform the steps of~~:

providing, through a website associated with the payer, an authentication credentials request screen; and

receiving, through the authentication credentials request screen, authentication credentials for the account, wherein the routing number and the virtual account number are provided in response to authenticating the authentication credentials for the ~~user~~ electronic wallet account.

~~65~~. The system of claim 1, wherein the ~~user~~ electronic wallet account is linked with a plurality of different financial institution accounts that are associated with the user.

~~76~~. A method for transferring funds to an electronic wallet, comprising:

receiving, by a payment service provider device over a network from a payer device that is associated with a payer, a request for fund transfer information for ~~a user~~ an electronic wallet account, wherein the fund transfer information includes a funding amount and a virtual account number;

generating, by the payment service provider device in response to receiving the request for fund transfer information, the virtual account number; and

associating, by the payment service provider device, the virtual account number with the electronic wallet account;

providing, by the payment service provider device over the network to the payer device, a routing number that is associated with the payment service provider and ~~a~~ the virtual account number that is associated with the ~~user~~ electronic wallet account;

receiving, from the payer device, the routing number and the fund transfer information to a payer financial account that is provided to the payer device by a financial institution device;

receiving, by the payment service provider device over the network from ~~a~~ the financial institution device, the fund transfer information ~~about a funds transfer~~ to a payment service provider account that is provided to a payment service provider by ~~a~~ the financial institution~~, wherein the information about the funds transfer includes a funding amount and the virtual account number~~; and

allocating, by the payment service provider device, the funding amount to the ~~user~~ electronic wallet account using the virtual account number.

~~8. The method of claim 7, further comprising:~~

~~generating, by the payment service provider device in response to receiving the request for fund transfer information, the virtual account number; and~~

~~associating, by the payment service provider device, the virtual account number with the user account.~~

~~9~~7. The method of claim ~~8~~6, further comprising:

disassociating, by the payment service provider device, the virtual account number and the ~~user~~ electronic wallet account following the allocating of the funding amount to the ~~user~~ electronic wallet account.

~~10~~8. The method of claim ~~7~~6, wherein the routing number is an Automated Clearing House (ACH) routing number that identifies the payment service provider.

~~11~~9. The method of claim ~~7~~6, further comprising

providing, by the payment service provider device through a website associated with the payer, an authentication credentials request screen; and

receiving, over the network and through the authentication credentials request screen by the payment service provider device, authentication credentials for the ~~user~~ electronic wallet account, wherein the routing number and the virtual account number are provided in response to authenticating the authentication credentials for the ~~user~~ electronic wallet account.

~~12~~10. The method of claim ~~7~~6, wherein the ~~user~~ electronic wallet account is linked with a plurality of different financial institution accounts that are associated with the user.

~~13~~11. The method of claim ~~12~~10, wherein the plurality of different financial institution accounts do not include a banking financial institution account.

~~14~~12. A non-transitory machine-readable medium ~~comprising a plurality of~~having stored thereon machine-readable instructions ~~which, when executed by one or more processors, are adapted~~ executable to cause ~~the one or more processors~~ a machine to perform ~~a method~~ operations comprising:

receiving, from a payer, a request for fund transfer information for an ~~user~~ electron wallet account, wherein the fund transfer information includes a funding amount and a virtual account number;

generating, in response to receiving the request for fund transfer information, the virtual account number;

associating the virtual account number with the electronic wallet account;

providing, to the payer, a routing number that is associated with a payment service provider and a virtual account number that is associated with the ~~user~~ electronic wallet account;

receiving, from the payer, the routing number and the fund transfer information to a payer financial account that is provided to the payer by a financial institution;

receiving, from ~~a~~ the financial institution, the fund transfer information ~~about a funds transfer~~ to a payment service provider account that is provided to the payment service provider by the financial institution~~, wherein the information about the funds transfer includes a funding amount and the virtual account number~~; and

allocating the funding amount to the ~~user~~ electronic wallet account using the virtual account number.

~~15. The non-transitory machine-readable medium of claim 14, wherein the method further comprises:~~

~~generating, in response to receiving the request for fund transfer information, the virtual account number; and~~

~~associating the virtual account number with the user account.~~

~~16~~13. The non-transitory machine-readable medium of claim ~~15~~12, wherein the ~~method~~ operations further comprise~~s~~:

disassociating the virtual account number and the ~~user~~ electronic wallet account following the allocating of the funding amount to the ~~user~~ electronic wallet account.

~~17~~14. The non-transitory machine-readable medium of claim ~~14~~12, wherein the routing number is an Automated Clearing House (ACH) routing number that identifies the payment service provider.

~~18~~15. The non-transitory machine-readable medium of claim ~~14~~12, wherein the ~~method~~ operations further comprise~~s~~:

providing, through a website associated with the payer, an authentication credentials request screen; and

receiving, through the authentication credentials request screen, authentication credentials for the ~~user~~ electronic wallet account, wherein the routing number and the virtual account number are provided in response to authenticating the authentication credentials for the ~~user~~ electronic wallet account.

~~19~~16. The non-transitory machine-readable medium of claim ~~14~~11, wherein the ~~user~~ electronic wallet account is linked with a plurality of different financial institution accounts that are associated with the user.

~~20~~17. The non-transitory machine-readable medium of claim ~~19~~16, wherein the plurality of different financial institution accounts do not include a banking financial institution account.