

What is Claimed:

1. A method of providing a dynamic Card Verification Value (dCVV) to a user of a transaction instrument, the method comprising the steps of:

(a) a mobile device, associated with the user and with an account associated with the transaction instrument, initiating a non-payment communication between the mobile device and the transaction instrument by sending a first non-payment communication from the mobile device to the transaction instrument;

(b) the mobile device receiving a message from the transaction instrument in the non-payment communication, wherein the message received by the mobile device from the transaction instrument:

(i) is configured to cause the mobile device to open a module of application software, wherein the application software is programmed with the web address or IP address to which the prompt in step (c) is directed; or,

(ii) includes the web address or IP address to which the prompt in step (c) is directed;

(c) the mobile device transmitting a prompt to an IP address or web address over a global computer information network;

(d) the mobile device receiving a secure communication in response to the prompt, the communication containing the dCVV code;

(e) providing the dCVV code to the user; and

(f) the user of the transaction instrument supplying, from a cardholder transaction input device over the global computer information network, the dCVV code to a transaction portal as part of transaction information;

wherein the cardholder transaction input device is different from the mobile device and is not directly connected to the mobile device, wherein the transaction instrument includes a first memory for conducting card-present, physical payment transactions and a second memory for conducting non-payment transactions, and wherein the first memory is separate and discrete from the second memory.

2. The method of claim 1, wherein the transaction instrument is a transaction card.

3. The method of claim 1, wherein the non-payment communication is a near-field communication (NFC).

4. The method of claim 1, wherein the communication containing the dCVV code originates from a server associated with a dCVV generation processor that is configured to generate the dCVV code.

5. The method of claim 1, comprising providing the dCVV code to the user via the mobile device.

6. The method of claim 5, wherein the mobile device provides the dCVV code visually, audibly, or tactilely.

7. The method of claim 1, wherein the mobile device is connected to the Internet.

8. The method of claim 1, wherein the mobile device initiates the non-payment communication after an interaction between the mobile device and the transaction instrument.

9. The method of claim 8, wherein the interaction between the mobile device and the transaction instrument is a tap on the mobile device.

10. The method of claim 1, wherein the mobile device initiates the non-payment communication via a user interface of a module of application software.

11. The method of claim 1, wherein the mobile device receives a prompt from a web page, generated by the web page in response to entry of information on the web page, wherein the prompt from the web page causes the mobile device to send the non-payment communication.

12. The method of claim 1, further comprising the step of:

(g) a transaction processor associated with the transaction portal communicating the transaction information, including the dCVV code, to a payment transaction clearinghouse.

13. The method of claim 12, further comprising the step of:

(h) the payment transaction clearinghouse authenticating the transaction, wherein authenticating includes verifying the dCVV code supplied by the cardholder matches the dCVV code generated by dCVV-generation processor.

14. A system for processing a transaction using a transaction instrument, the system comprising:

a transaction instrument having an instrument passive communication interface, an instrument memory, an instrument processor, and instructions embodied in the instrument memory, readable by the instrument processor, and configured to cause the instrument passive communication interface, when prompted by a first non-payment communication initiated by sending the first non-payment payment communication from the mobile device to the transaction instrument, to return a message via a second non-payment communication, wherein the transaction instrument includes a first memory for conducting card-present, physical payment transactions and a second memory for conducting non-payment transactions, and wherein the first memory is separate and discrete from the second memory;

a mobile device having a mobile device memory, a mobile device processor, a mobile device user interface, a mobile device communication interface configured for communication with the passive communication interface of the transaction instrument, a telecommunications interface configured to connect to a global computer information network, the mobile device memory having instructions embodied therein and readable by the mobile device processor, configured to cause the mobile device to:

- (a) initiate the first non-payment communication from the mobile device to the transaction instrument;
- (b) receive the message from the transaction instrument via the second non-payment communication from the transaction instrument to the mobile device, wherein the message received by the mobile device from the transaction instrument:
 - (i) is configured to cause the mobile device to open a module of application software, wherein the application software is programmed with the web address or IP address to which the prompt in step (c) is directed; or,
 - (ii) includes the web address or IP address to which the prompt in step (c) is directed; and
- (c) transmit a prompt from the telecommunications interface to an IP address or web address over the global computer information network in response to receipt of the message from the transaction instrument;

a computer server connected to or in communication with the IP address or web address and connected to a dCVV-code-generating processor, the computer server configured to, in response to receipt of the prompt from the mobile device, cause the dCVV-code-generating processor to generate a dynamic Card Verification Value (dCVV) code, the computer server further configured to send a secure communication containing the dynamic CVV code to the mobile device over the global computer information network; and

a cardholder transaction input device supplying, over the global computer information network, the dCVV code to a transaction portal as part of transaction information, wherein the cardholder transaction input device is different from the mobile device and is not directly connected to the mobile device.

15. The system of claim 14, wherein the transaction instrument comprises a transaction card.

16. The system of claim 14, wherein the passive communication interface comprises a near-field communication (NFC) interface, and the non-payment communications comprise NFC communications.

17. The system of claim 14, further comprising:
a transaction portal accessible from the global computer information network and configured to receive transaction information, including the dynamic CVV, over the global computer information network.

18. The system of claim 17, further comprising:
a transaction processor in communication with the transaction portal and configured to process a payment transaction, the transaction processor configured to receive the transaction information, including the dynamic CVV code, from the transaction portal, and to communicate the transaction information to a payment transaction clearinghouse, over the global computer information network.

19. The system of claim 18, further comprising:
the payment transaction clearinghouse, connected to the global computer information network, in communication with the transaction processor and the computer server connected to the dCVV-code-generation processor, the payment transaction clearinghouse comprising a computer memory and a computer processor, the payment transaction clearinghouse configured to receive the transaction information from the transaction processor over the global computer information network, to authenticate the transaction by verifying the dCVV code supplied with the transaction information matches the dCVV code generated by dCVV-code-generation processor, and to send an authentication verification to the transaction processor over the global computer information network.

20. The system of claim 14, wherein the mobile device is configured to initiate the non-payment communication in response to an interaction between the mobile device and the transaction instrument.

21. The system of claim 14, wherein the mobile device is configured to initiate the non-payment communication in response to a tap of the transaction instrument on the mobile device.

22. The system of claim 14, wherein the mobile device is configured with instructions for causing the mobile device to initiate the first non-payment communication in response to receipt of a prompt from a user interface.

23. The system of claim 14, further comprising a web page embodying machine-readable instructions residing on a computer processor, the web page configured to prompt the mobile device to initiate the non-payment communication in response to entry of information on the web page.

24. Non-transitory computer memory media comprising instructions readable by a machine for causing a mobile device to perform the method steps of:

- (a) associating a transaction account and a transaction instrument with the mobile device;
- (b) initiating a first non-payment communication with the transaction instrument using a communication interface embedded in the mobile device by sending the first non-payment communication from the mobile device to the transaction instrument;
- (c) receiving a second non-payment communication from the transaction instrument containing a message, wherein the message received by the mobile device from the transaction instrument:
 - (i) is configured to cause the mobile device to open a module of application software, wherein the application software is programmed with the web address or IP address to which the prompt in step (d) is directed; or,
 - (ii) includes the web address or IP address to which the prompt in step (d) is directed;
- (d) transmitting a prompt to an IP address or web address over a global computer information network via a telecommunications interface of the mobile device;
- (e) receiving a secure communication from the IP address or web address, the secure communication including a dCVV code;
- (f) communicating the dCVV code visually via a display, audibly via a sound generator, or tactilely via a haptic stimulus generator embedded in the mobile device, and
- (g) a user of the transaction instrument supplying, from a cardholder transaction input device over the global computer information network, the dCVV code to a transaction portal as part of transaction information,

wherein the cardholder transaction input device is different from the mobile device and is not directly connected to the mobile device, wherein the transaction instrument includes a first memory for conducting card-present, physical payment transactions and a second memory for conducting non-payment transactions, and wherein the first memory is separate and discrete from the second memory.

25. The non-transitory computer memory media of claim 24, wherein the instructions comprise instructions for sending the first non-payment communication and the second non-payment communication as near field (NFC) communications.

26. The non-transitory computer memory media of claim 24, wherein at least a portion of the memory is embedded in the mobile device.

27. The non-transitory computer memory media of claim 24, wherein at least a portion of the memory is embedded in a server accessible to the mobile device over the global computer information network.

28. The non-transitory computer memory media of claim 24, wherein the instructions include instructions corresponding to application software configured to store the IP address or web address.

29. The non-transitory computer memory media of claim 24, wherein the instructions include instructions for initiating the non-payment communication in response to an interaction between the mobile device and the transaction instrument.

30. The non-transitory computer memory media of claim 29, wherein the instructions include instructions for initiating the first non-payment communication in response to a tap of the transaction instrument on the mobile device.

31. The non-transitory computer memory media of claim 24, wherein the instructions include instructions for causing the mobile device to initiate the non-payment communication in response to receipt of a prompt from a user interface.