

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;

(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; and

(e) providing the dCVV code to the user.

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 message received by the mobile device from the transaction instrument 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.

9. The method of claim 1, wherein the message received by the mobile device from the transaction instrument includes the web address or IP address.

10. 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.

11. The method of claim 10, wherein the interaction between the mobile device and the transaction instrument is a tap on the mobile device.

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

5 13. 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.

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

10 (f) the user of the transaction instrument supplying, over the global computer information network, the dCVV code to a transaction portal as part of transaction information.

15. The method of claim 14, further comprising the step of:

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

16. The method of claim 15, further comprising the step of:

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

17. 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
25 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;

30 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
35 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; 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 card;

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.

18. The system of claim 17, wherein the transaction instrument comprises a transaction card.

19. The system of claim 17, wherein the passive communication interface comprises a near-field communication (NFC) interface, and the non-payment communications comprise NFC communications.

20. The system of claim 17, 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.

21. The system of claim 20, 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.

22. The system of claim 21, 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
5 the global computer information network.

23. The system of claim 17, wherein the message received by the mobile device from the transaction instrument is a message 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 prompt in step
10 (c) is directed.

24. The system of claim 17, wherein the message received by the mobile device from the transaction instrument includes the web address or IP address.

25. The system of claim 17, wherein the mobile device is configured to initiate the non-payment communication in response to an interaction between the
15 mobile device and the transaction instrument.

26. The system of claim 17, 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.

27. The system of claim 17, wherein the mobile device is configured
20 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.

28. The system of claim 17, 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
25 communication in response to entry of information on the web page.

29. A mobile device comprising:
a memory;
a processor;
a user interface;
30 a proximity coupling device interface;
a telecommunications interface configured to connect to a global computer information network;
at least one of: a display, an sound generator, and a haptic stimulus generator;

35 instructions embodied in the memory and readable by the processor, configured to cause the mobile device to perform the steps of:

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

5 (b) receiving a second non-payment communication from the transaction instrument containing a message;

(c) transmitting a prompt to an IP address or web address over a global computer information network in response to receipt of the message;

10 (d) receiving a secure communication from the IP address or web address, the secure communication including a dCVV code; and

(e) communicating the dCVV code visually via the display, audibly via the sound generator, or tactilely via the haptic stimulus generator.

15 30. The mobile device of claim 29, wherein the proximity coupling device comprises a near field communication (NFC) interface.

31. A transaction instrument, comprising:

a passive proximity circuit communication interface;

a memory;

a processor;

20 instructions embodied in the memory, readable by the processor, and configured to cause the passive proximity circuit communication interface, when prompted by a first non-payment communication sent from a mobile device to the transaction instrument, to return a message via a second non-payment communication, wherein the message comprises information selected from: an IP
25 address or web address, or instructions for causing a module of application software to open on the mobile device, wherein the application software is configured with the IP address or the web address.

30 32. The transaction instrument of claim 31, wherein the passive proximity circuit communication interface comprises a near field communication (NFC) interface.

33. The transaction instrument of claims 31 or 32, wherein the transaction instrument further comprises a contactless payment module.

34. The transaction instrument of claim 33, wherein the memory further contains instructions readable by the processor for causing the contactless
35 payment module to conduct one or more payment communications with a card reader.

35. The transaction instrument of claim 34, wherein the instrument comprises one or more of a first discrete memory or memory portion, a first discrete

processor or processing portion, and a first discrete interface configured to conduct the first and second non-payment communications, and one or more of a second discrete memory or memory portion, a second discrete processor or processing portion, and a second discrete interface configured to conduct the one or more payment communications.

36. The transaction instrument of any one of claims 31-35, wherein the transaction instrument comprises a transaction card.

37. The transaction instrument of claim 36, wherein the transaction instrument comprises a transaction card, and the contactless payment module comprises a dual interface (DI) module also comprising contacts for physical connection to a card reader.

38. The transaction instrument of claim 37, further comprising one or more of a magnetic stripe, a machine-readable code, and human-readable indicia comprising information required for conducting a payment transaction.

39. The transaction instrument of claim 38, wherein the human-readable indicia comprises embossed, printed, or laser-marked alphanumeric information.

40. The transaction instrument of any one of claims 36-39, wherein the transaction card comprises at least one layer comprising metal, ceramic, or glass.

41. A method for initiating a dynamic Card Verification Value (dCVV) code request, the method comprising the steps of:

(a) providing a transaction instrument of any one of claims 31-40;

(b) receiving the first non-payment communication from the mobile device to the transaction instrument; and

(c) returning the message via the second non-payment communication, wherein the IP address or web address has connected thereto a system configured to generate and return the dCVV in response to a prompt.

42. 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 card containing a message;

(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; and

(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.

43. The non-transitory computer memory media of claim 42, wherein the instructions comprise instructions for sending the first non-payment communication and the second non-payment communication as near field (NFC) communications.

44. The non-transitory computer memory media of claim 42, wherein at least a portion of the memory is embedded in the mobile device.

45. The non-transitory computer memory media of claim 42, wherein at least a portion of the memory is embedded in a server accessible to the mobile device over the global computer information network.

46. The non-transitory computer memory media of claim 42, wherein the instructions include instructions corresponding to application software configured to store the IP address or web address.

47. The non-transitory computer memory media of claim 42, wherein the instructions include instructions for initiating the non-payment communication in response to an interaction between the mobile device and the transaction instrument.

48. The non-transitory computer memory media of claim 47, 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.

49. The non-transitory computer memory media of claim 42, 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.