WE CLAIM

1. A method of communicating application data between an NFC terminal and an integrated circuit card (ICC), the method including:

designating a first memory location on the ICC and a second memory location on the ICC, the first memory location designated for storing a one command application data unit (C-APDU), the second memory location designated for storing one response application data unit (R-APDU);

writing, by the application on the NFC terminal, a first C-APDU to the first memory location, the first C-APDU containing a first sequence number;

reading, by the application on the NFC terminal from the second memory location, a first R-APDU, the first R-APDU containing a second sequence number, the second sequence number greater than the first sequence number;

responsive to the second sequence number in the R-ADPU being greater than the first sequence number, processing the R-APDU at the application on the NFC terminal;

generating, by the application on the NFC terminal, a subsequent C-APDU;

writing, by the application on the NFC terminal, the subsequent C-APDU to the first memory location on the ICC;

reading the second memory location on the ICC via the application on the NFC terminal after writing the subsequent C-APDU to the first memory location of the ICC;

comparing a contents of the second memory location to the first R-APDU; and

repeating the steps of reading the contents of the second memory location on the ICC and comparing the contents of the second memory to the first R-APDU until the contents of the second memory do not equal the first R-APDU;

processing the contents of the second memory as a second R-APDU; and

completing communication between the application on the NFC terminal and an applet on the ICC using successive data transfers via the first

memory location for data for C-APDU data sent from the NFC terminal to the ICC and the second memory location for R-APDU data read from the ICC.

2. The method of claim 1, further comprising generating the first sequence number at the NFC terminal prior to generating the first C-APDU to send to the ICC.

3. The method of claim 1, further comprising:

reading data the first memory location via the applet on the ICC;

evaluating the data as a C-APDU as part of a payment process;

processing the R-APDU responsive to requirements associated with the C-APDU; and

writing the R-APDU to the second memory location, overwriting any existing data in the second memory location.

4. The method of claim 1, further comprising:

encrypting the first C-APDU prior to writing to the first C-APDU to the first memory location.

5. The method of claim 1, wherein writing, by the application on the NFC terminal, the first C-APDU to the first memory location comprises writing the first C-APDU using a NFC Type 4 tag write memory command.

6. The method of claim 1, wherein reading the first R-APDU by the application on the NFC terminal comprises reading the first R-APDU using a NFC Type 4 tag read memory command.

~~7. The method of claim 1, further comprising:~~

~~reading the second memory location on the ICC via the application on the NFC terminal after writing the first C-APDU to the first memory location of the ICC;~~

~~comparing a contents of the second memory location to the first R-APDU; and~~

~~repeating the steps of reading the contents of the second memory location on the ICC and comparing the contents of the second memory to the~~

~~first R-APDU until the contents of the second memory do not equal the first R-APDU;~~

~~processing the contents of the second memory as a second R-APDU.~~

~~7~~8. A system for transferring application session data during an application session between an NFC terminal and an integrated circuit card (ICC), comprising:

a first memory location on the ICC that stores data accessible to both the ICC and the NFC terminal, the first memory location used by convention for storing a command application data unit (C-APDU);

a second memory location on the ICC that stores data accessible to both the ICC and the NFC terminal, the second memory location used by convention for storing a response application data unit (R-APDU);

the NFC terminal executing an application, the application performing steps:

generating a unique number associated with the application session;

generating a first C-APDU;

writing the first C-APDU to the first memory location;

reading the second memory location;

determining that the second memory location contains an R-APDU ; and

processing the R-APDU~~.~~, and

an applet on the ICC, the applet performing the steps:

checking the first memory location for a change from a previous value;

responsive to a new value at the first memory location, processing the contents of the first memory location as a C-APDU;

generating an R-APDU responsive to the C-APDU; and

writing the R-APDU to the second memory location on the ICC, overwriting any previous data in the second memory location.

~~9. The system of claim 8, further comprising an applet on the ICC, the applet performing the steps:~~

~~checking the first memory location for a change from a previous value;~~

~~responsive to a new value at the first memory, processing the contents of the first memory as a C-APDU;~~

~~generating an R-APDU responsive to the C-APDU; and~~

~~writing the R-APDU to the second memory location on the ICC, overwriting any previous data in that location.~~

8~~10~~. The system of claim ~~9~~7, wherein the applet contains a payment function and an NDEF function, the NDEF function responsive to a trigger caused by data being written to the first memory location and a payment function performing transaction-related processing for responding to C-APDUs related to a payment request.

9~~11~~. The system of claim ~~9~~7, further comprising launching the applet on the ICC responsive to an NFC Data Exchange Format (NDEF) message being written to the first memory.

10~~12~~. The system of claim ~~8~~7, wherein the unique number is a nonce, the method further comprising writing a tag memory location with the nonce, wherein determining that the second memory location contains an R-APDU comprises determining that the tag memory has a new nonce.

11~~13~~. The system of claim ~~8~~7, wherein the unique number is a sequence number that is incremented for each message transmission, the sequence number included in the C-APDU.

12~~14~~. The system of claim ~~8~~7, wherein the unique number is a sequence number that is incremented for each message transmission, the sequence number included in the R-APDU.

13~~15~~. The system of claim ~~8~~7, wherein the R-APDU contains a personal account number associated with the ICC, the ICC being a bank payment card.

14~~16~~. A method of communicating application protocol data between an NFC terminal and an integrated circuit card (ICC), the method including:

reserving a first memory location on the ICC for receiving data from the NFC terminal;

reserving a second memory location on the ICC for sending data to the NFC terminal;

activating a payment applet on the ICC responsive to data being written to the first memory location, wherein activating the payment applet on the ICC comprises setting a flag on the first memory location to activate the payment applet responsive to receipt of data at the first memory location;

i) responsive to determining a contents of the first memory location is different from a previous contents of the first memory location, parsing the memory contents of the first memory location into a command application protocol data unit (C-APDU);

ii) processing the C-APDU via the payment applet to generate a response application protocol data unit (R-APDU); and

writing the R-APDU to the second memory location, wherein the steps i and ii are repeated to a programmatic end of a data processing function of the applet with the NFC terminal.

15~~17~~. The method of claim ~~16~~14, wherein the ICC is a payment card.

16~~18~~. The method of claim ~~16~~14, wherein a protocol used to read and write data to the first and second memory locations is an NFC data exchange (NDEF) protocol.

~~19. The method of claim 16, wherein activating the payment applet on the ICC comprises setting a flag on the first memory location to activate the payment applet responsive to receipt of data at the first memory location.~~

17~~20~~. The method of claim ~~16~~14, wherein the R-APDU is an error message responsive to the C-APDU being unparsable.