determined function comprises switching between accounts associated with the payment device, and wherein the payment device is further configured to provide a token representative of an account number associated with a selected account for a transaction.

[0005] In a second aspect, the present disclosure provides a method for controlling a payment device , the method comprising: determining acceleration data of the payment device using an accelerometer; determining based on the acceleration data whether the payment device is held or moved in a pre-determined way; and activating a pre-determined function of the payment device if it is determined that the payment device is held or moved in the pre-determined way; wherein the pre-determined function comprises switching between accounts associated with the payment device, and wherein the payment device is further configured to provide a token representative of an account number associated with a selected account for a transaction.

[0006] In a third aspect, the present disclosure provides a non-transitory computer-readable medium configured to storing instructions which, when executed by a processor, make the processor perform a method for controlling a payment device, the method comprising: determining acceleration data of the payment device using an accelerometer; determining based on the acceleration data whether the payment device is held or moved in a pre-determined way; and activating a pre-determined function of the payment device if it is determined that the payment device is held or moved in the pre-determined way; wherein the pre-determined function comprises switching between accounts associated with the payment device, and wherein the payment device is further configured to provide a token representative of an account number associated with a selected account for a transaction.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Embodiments of the invention will be better understood and readily apparent to one of ordinary skill in the art from the following written description, by way of example only, and in conjunction with the drawings, in which:

[0008] Figure 1A shows a payment device according to various embodiments;

[0009] Figure 1B shows a payment device according to various embodiments;

[0010] Figure 1C shows a flow diagram illustrating a method for controlling a payment device according to various embodiments

[0011] Figure 2 shows an illustration of an exemplary flow of a payment device locking / unlocking method according to various embodiments.

CLAIMS

1. A payment device comprising:

an accelerometer configured to determine acceleration data of the payment device;

a determination circuit configured to determine based on the acceleration data whether the payment device is held or moved in a pre-determined way; and

a function activation circuit configured to activate a pre-determined function of the payment device if it is determined that the payment device is held or moved in the pre-determined way;

wherein the pre-determined function comprises switching between accounts associated with the payment device, and wherein the payment device is further configured to provide a token representative of an account number associated with a selected account for a transaction.

2. The payment device of claim 1,

wherein the pre-determined way comprises at least one of:

tapping the payment device;

double tapping the payment device;

multiple tapping the payment device;

rotating the payment device;

moving the payment device in a circle;

tilting the payment device;

holding the payment device vertically;

holding the payment device horizontally; or

holding the payment device at an angle with respect to ground.

3. The payment device of any one of claims 1 to 2;

wherein the pre-determined function further comprises at least one of:

activating the payment device; or

de-activating the payment device.

4. The payment device of any one of claims 1 to 3, further comprising:

a contactless payment interface.

5. The payment device of claim 4;

wherein the pre-determined function comprises at least one of:

enabling the contactless payment interface; or

disabling the contactless payment interface.

6. The payment device of any one of claims 1 to 5, further comprising:

an indicator configured to indicate a status of the payment device.

7. The payment device of claim 6,

wherein the pre-determined function comprises indicating the status of the payment device.

8. The payment device of any one of claims 6 to 7,

wherein the status comprises at least one of:

an activated state;

a de-activated state; or

an account selected for use with the payment device.

9. The payment device of any one of claims 1 to 8, further comprising:

an energy source configured to provide energy to at least one of the accelerometer, the determination circuit or the function activation circuit.

10. The payment device of claim 9,

wherein the energy source comprises a battery.

11. The payment device of any one of claims 9 to 10,

wherein the energy source is configured to harvest energy.

12. The payment device of claim 11,

wherein the energy source is configured to harvest at least one of solar power, thermal energy, or kinetic energy.

13. The payment device of any one of claims 1 to 12, further comprising:

an interface to a device terminal, the interface configured to provide energy to at least one of the accelerometer, the determination circuit or the function activation circuit.

14. A method for controlling a payment device, the method comprising:

determining acceleration data of the payment device using an accelerometer;

determining based on the acceleration data whether the payment device is held or moved in a pre-determined way; and

activating a pre-determined function of the payment device if it is determined that the payment device is held or moved in the pre-determined way;

wherein the pre-determined function comprises switching between accounts associated with the payment device, and wherein the payment device is further configured to provide a token representative of an account number associated with a selected account for a transaction.

15. The method of claim 14,

wherein the pre-determined way comprises at least one of:

tapping the payment device;

double tapping the payment device;

multiple tapping the payment device;

rotating the payment device;

moving the payment device in a circle;

tilting the payment device;

holding the payment device vertically;

holding the payment device horizontally; or

holding the payment device at an angle with respect to ground.

16. The method of any one of claims 14 to 15;

wherein the pre-determined function further comprises at least one of:

activating the payment device; or

de-activating the payment device.

17. The method of any one of claims 14 to 16;

wherein the pre-determined function comprises at least one of:

enabling a contactless payment interface; or

disabling the contactless payment interface.

18. The method of any one of claims 14 to 17,

wherein the pre-determined function comprises indicating the status of the payment device.

19. The method of claim 18,

wherein the status comprises at least one of:

an activated state;

a de-activated state; or

an account selected for use with the payment device.

20. A non-transitory computer-readable medium configured to storing instructions which, when executed by a processor, make the processor perform a method for controlling a payment device, the method comprising:

determining acceleration data of the payment device using an accelerometer;

determining based on the acceleration data whether the payment device is held or moved in a pre-determined way; and

activating a pre-determined function of the payment device if it is determined that the payment device is held or moved in the pre-determined way;

wherein the pre-determined function comprises switching between accounts associated with the payment device, and wherein the payment device is further configured to provide a token representative of an account number associated with a selected account for a transaction.