WHAT IS CLAIMED IS:

1. A power adaptor, comprising a power conversion unit and a charging interface, the charging interface comprising a power line, the power conversion unit being configured to charge a terminal via the power line, wherein,

the power adaptor further comprises a communication unit, the charging interface further comprises a data line, and the communication unit is configured to communicate with the terminal via the data line when the power adaptor is coupled to the terminal;

during a procedure of outputting a charging current to the terminal by the power adaptor, the communication unit is configured to keep communication with the terminal via the data line; and

during the procedure of outputting the charging current to the terminal by the power adaptor, the communication unit is configured to receive a first message from the terminal via the data line, the first message indicates a value of a current battery voltage of the terminal;

the power adaptor is further configured to adjust the charging current according to the value of the current battery voltage.

2. The power adaptor according to claim 1, wherein, the communication unit is configured to negotiate with the terminal on a charging mode of the terminal before the terminal is charged, and the charging mode comprises a quick-charging mode and a common charging mode.

3. The power adaptor according to claim 2, wherein, the communication unit is configured to negotiate with the terminal on the charging mode of the terminal by acts of:

sending, by the communication unit, a handshake request message to the terminal;

receiving, by the communication unit, a handshake response message from the terminal, wherein the handshake response message indicates that the terminal supports the quick-charging mode;

determining, by the communication unit, to charge the terminal with accordance to the quick-charging mode according to the handshake response message; and

determining, by the communication unit, to charge the terminal with accordance to the common charging mode when a handshake response message sent by the terminal is not received.

4. The power adaptor according to claim 2, wherein, the communication unit is configured to negotiate with the terminal on the charging mode of the terminal by acts of:

sending, by the communication unit, a handshake request message to the terminal;

receiving, by the communication unit, a handshake response message from the terminal, wherein the handshake response message comprises a charging mode supported by the terminal and a current state parameter of the terminal;

determining, by the communication unit, to charge the terminal with accordance to the quick-charging mode when both of the power adaptor and the terminal support the quick-charging mode and the current state parameter of the terminal satisfies a quick-charging condition; and

determining, by the communication unit, to charge the terminal with accordance to the common charging mode when both of the power adaptor and the terminal support the quick-charging mode and the current state parameter of the terminal does not satisfy a quick-charging condition.

5. The power adaptor according to any one of claims 1 to 4, wherein, the communication unit is configured to negotiate with the terminal on a charging parameter before the terminal is charged, and the charging parameter comprises at least one of following parameters: a charging voltage and a charging current.

6. The power adaptor according to claim 5, wherein, the communication unit is configured to negotiate with the terminal on the charging parameter by acts of:

sending, by the communication unit, a handshake request message to the terminal;

receiving, by the communication unit, a handshake response message from the terminal, wherein the handshake response message comprises at least one of following information: a version of the terminal, an identifier of the terminal, a value of battery temperature of the terminal, a maximum value of the charging voltage supported by the terminal and a maximum value of the charging current supported by the terminal; and

determining, by the communication unit, the charging parameter according to information in the handshake response message.

7. The power adaptor according to any one of claims 1 to 6, wherein, during the procedure of outputting the charging current to the terminal by the power adaptor, the communication unit is configured to send a second message to the terminal via the data

line, the second message indicates a current value or a voltage value output by the power adaptor.

8. The power adaptor according to any one of claims 1 to 7, wherein, during the procedure of outputting the charging current to the terminal by the power adaptor, the communication unit is configured to receive a third message from the terminal via the data line, the third message indicates a current value or a voltage value received from the power adaptor by the terminal.

9. The power adaptor according to any one of claims 1 to 8, wherein, during the procedure of outputting the charging current to the terminal by the power adaptor, the communication unit is configured to send a fourth message to the terminal via the data line, the fourth message indicates an output overvoltage or an output overcurrent of the power adaptor.

10. The power adaptor according to any one of claims 1 to 9, wherein, during the procedure of outputting the charging current to the terminal by the power adaptor, the communication unit is configured to receive a fifth message from the terminal via the data line, the fifth message indicates an overvoltage or an overcurrent received from the power adaptor by the terminal.

11. A terminal, comprising a battery and a charging interface, the charging interface comprising a power line, the terminal being configured to introduce a charging current from a power adaptor via the power line to charge the battery, wherein,

the terminal further comprises a communication unit, the charging interface further comprises a data line, and the communication unit is configured to communicate with the power adaptor via the data line when the terminal is coupled to the power adapter;

during a procedure of receiving a charging current from the power adaptor by the terminal, the communication unit is configured to keep communication with the power adapter via the data line; and

during the procedure of receiving the charging current from the power adaptor by the terminal, the communication unit is configured to send a first message to the power adaptor via the data line, the first message indicates a value of a current battery voltage of the terminal; and

the charging current is adjusted according to the value of the current battery voltage.

12. The terminal according to claim 11, wherein, the communication unit is configured to negotiate with the power adaptor on a charging mode of the terminal before the terminal is charged, and the charging mode comprises a quick-charging mode and a common charging mode.

13. The terminal according to claim 12, wherein, the communication unit is configured to negotiate with the power adaptor on the charging mode of the terminal by acts of:

receiving, by the communication unit, a handshake request message from the power adaptor, wherein the handshake request message indicates that the power adaptor supports the quick-charging mode; and

sending, by the communication unit, a handshake response message to the power adaptor, wherein the handshake response message indicates the power adaptor to charge the terminal with accordance to the quick-charging mode.

14. The terminal according to claim 12 or 13, wherein, the communication unit is configured to negotiate with the power adapter on the charging mode of the terminal by acts of:

receiving, by the communication unit, a handshake request message from the power adaptor, wherein the handshake request message indicates that the power adaptor supports the quick-charging mode;

sending, by the communication unit, a handshake response message to the power adaptor when a current state parameter of the terminal satisfies a quick-charging condition, wherein the handshake response message indicates the power adaptor to charge the terminal with accordance to the quick-charging mode; and

sending, by the communication unit, a handshake response message to the power adaptor when a current state parameter of the terminal does not satisfy a quick-charging condition, wherein the handshake response message indicates the power adaptor to charge the terminal with accordance to the common charging mode.

15. The terminal according to any one of claims 11 to 14, wherein, the communication unit is configured to negotiate with the power adaptor on a charging parameter before the terminal is charged, and the charging parameter comprises at least one of following parameters: a charging voltage and a charging current.

16. The terminal according to claim 15, wherein, the communication unit is configured to negotiate with the power adapter on the charging parameter by acts of:

receiving, by the communication unit, a handshake request message from the power adaptor, wherein the handshake request message comprises at least one of following information: a version of the power adaptor, an identifier of the power adaptor, a working state of the power adaptor, a maximum value of an output voltage supported by the power adaptor and a maximum value of an output current supported by the power adaptor;

determining, by the communication unit, the charging parameter according to information in the handshake request message; and

sending, by the communication unit, a handshake response message to the power adaptor, wherein the handshake response message indicates the power adaptor to charge the terminal with accordance to the charging parameter.

17. The terminal according to claim 11, wherein, during the procedure of receiving the charging current from the power adaptor by the terminal, the communication unit is configured to receive a second message from the power adaptor via the data line, the second message indicates a current value or a voltage value output by the power adaptor.

18. The terminal according to any one of claims 11 to 17, wherein, during the procedure of receiving the charging current from the power adaptor by the terminal, the communication unit is configured to send a third message to the power adaptor via the

data line, the third message indicates a current value or a voltage value received from the power adaptor by the terminal.

19. The terminal according to any one of claims 11 to 18, wherein, during the procedure of receiving the charging current from the power adaptor by the terminal, the communication unit is configured to receive a fourth message from the power adaptor via the data line, the fourth message indicates an output overvoltage or an output overcurrent of the power adaptor.

20. The power adaptor according to any one of claims 11 to 19, wherein, during the procedure of receiving the charging current from the power adaptor by the terminal, the communication unit is configured to send a fifth message to the power adaptor via the data line, the fifth message indicates an overvoltage and an overcurrent received from the power adaptor.

21. A charging system, comprising a power adaptor according to any one of claims 1 to 10 and a terminal according to any one of claims 11 to 20.