[Name of Document] CLAIMS

[Claim 1]

A device that is configured to be electrically coupled to a plurality of terminals of a liquid accommodation container mounted on an accommodation section of a printing apparatus including a printing head, a liquid introduction portion that introduces a liquid to the printing head, the accommodation section provided with the liquid introduction portion, and a plurality of apparatus-side terminals provided at the accommodation section, wherein

the device is configured to satisfy I, II, III, and IV as follows,

I: the device outputs a first signal containing a first low voltage and a second signal containing a second low voltage and a second high voltage higher than the second low voltage to a first terminal provided in the plurality of terminals,

II: the first signal and the second signal are used when the printing apparatus determines that the first terminal does not have a short circuit with other terminals other than the first terminal among the plurality of terminals and that the liquid accommodation container is being mounted in the printing apparatus,

III: the device outputs the first signal to the first terminal, and

after the device outputs the first signal, the device outputs the second signal to the first terminal, and

IV: a clock signal in which a low voltage and a high voltage alternately repeat with a predetermined period is input to a second terminal provided in the other terminals,

the device outputs the first low voltage to the first terminal at a first timing in a period in which a voltage input to the second terminal is the high voltage,

after the device outputs the first low voltage, the device outputs the second high voltage to the first terminal at a second timing in a period in which the voltage input to the second terminal is the low voltage, and

after the device outputs the second high voltage, the device outputs the second low voltage to the first terminal at a third timing in a period in which the voltage input to the second terminal is the high voltage.

[Claim 2]

The device according to Claim 1, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal, the device outputs the first low voltage to the first terminal before the first timing in the period of the high voltage.

[Claim 3]

The device according to Claim 1 or 2, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal, the device outputs the second high voltage to the first terminal before the second timing in the period of the low voltage.

[Claim 4]

The device according to any one of Claims 1 to 3, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal, the device outputs the second low voltage to the first terminal before the third timing in the period of the high voltage.

[Claim 5]

The device according to any one of Claims 1 to 4, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal,

the device outputs the second high voltage to the first terminal when the voltage input to the second terminal changes from the high voltage to the low voltage, and

the device outputs the second low voltage to the first terminal when the voltage input to the second terminal changes from the low voltage to the high voltage.

[Claim 6]

The device according to any one of Claims 1 to 5, wherein

when the first terminal does not have a short circuit with the other terminals, and when the voltage input to the second terminal changes from the low voltage to the high voltage, the device outputs the first low voltage to the first terminal.

[Claim 7]

The device according to any one of Claims 1 to 6, wherein

III and IV are performed a plurality of number of times.

[Claim 8]

The device according to any one of Claims 1 to 7, wherein

when the printing apparatus receives a second printing instruction during printing based on a first printing instruction, the device outputs the first signal and the second signal to the first terminal before printing based on the second printing instruction is started after the printing based on the first printing instruction is ended.

[Claim 9]

The device according to any one of Claims 1 to 8, wherein

when the printing apparatus receives a cleaning

instruction of the printing head, the device outputs the first signal and the second signal to the first terminal before the cleaning is performed.

[Claim 10]

The device according to any one of Claims 1 to 9, wherein

the device outputs the first signal and the second signal to the first terminal when the accommodation section is located at a replacement position at which replacement of the liquid accommodation container is possible, and

when the accommodation section moves from the replacement position to a standby position at which the replacement of the liquid accommodation container is not possible, the device outputs the first signal and the second signal to the first terminal.

[Claim 11]

The device according to any one of Claims 1 to 10, wherein

the first terminal is a data terminal,

the second terminal is a clock terminal,

the first signal is a first response signal as a response to the printing apparatus, and

the second signal is a second response signal as a response to the printing apparatus.

[Claim 12]

The device according to any one of Claims 1 to 11, wherein

the device stores information regarding a liquid accommodated in the liquid accommodation container.

[Claim 13]

The device according to any one of Claims 1 to 12, wherein

a reset signal containing a low voltage and a high voltage is input to a third terminal provided in the other terminals, and

a power source voltage is input to a fourth terminal provided in the other terminals.

[Claim 14]

The device according to Claim 13, wherein

after the power source voltage is input to the fourth terminal, the high voltage is input to the third terminal by the reset signal changing from the low voltage to the high voltage,

after the high voltage of the reset signal is input to the third terminal, the clock signal is input to the second terminal, and

after the high voltage of the reset signal is input to the third terminal, the first signal is input to the first terminal.

[Claim 15]

The device according to Claim 13 or 14, wherein

the power source voltage supplied to the fourth terminal is used to drive the device.

[Claim 16]

The device according to any one of Claims 13 to 15, wherein

the third terminal is a reset terminal, and

the fourth terminal is a power source terminal.

[Claim 17]

A board that is mounted in a printing apparatus and is configured to come into contact with a plurality of apparatus-side terminals, the printing apparatus including a printing head, a liquid introduction portion that introduces a liquid to the printing head, an accommodation section that accommodates a liquid accommodation container and is provided with the liquid introduction portion, and the plurality of apparatus-side terminals provided at the accommodation section, the board comprising:

a base member;

a device provided at the base member; and

a plurality of terminals that are provided at the base member and are electrically coupled to the device, wherein

the plurality of terminals include a first terminal and other terminals including a second terminal, and

the board is configured to satisfy I, II, III, and IV

as follows,

I: the device outputs a first signal containing a first low voltage and a second signal containing a second low voltage and a second high voltage higher than the second low voltage, from the first terminal to the printing apparatus,

II: the first signal and the second signal are used when the printing apparatus determines that the first terminal does not have a short circuit with the other terminals and that the board is being mounted in the printing apparatus,

III: the device outputs the first signal to the first terminal, and then outputs the second signal to the first terminal, and

IV: when the first terminal does not have a short circuit with the other terminals,

a clock signal in which a low voltage and a high voltage alternately repeat with a predetermined period is input from the printing apparatus to the second terminal,

the device outputs the first low voltage as a first expected value from the first terminal to the printing apparatus at a first timing in a period in which a voltage input to the second terminal is the high voltage,

after the device outputs the first low voltage, the device outputs the second high voltage as a second expected value from the first terminal to the printing apparatus at a

second timing in a period in which the voltage input to the second terminal is the low voltage, and

after the device outputs the second high voltage, the device outputs the second low voltage as a third expected value from the first terminal to the printing apparatus at a third timing in a period in which the voltage input to the second terminal is the high voltage.

[Claim 18]

The board according to Claim 17, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal, the device outputs the first low voltage to the first terminal before the first timing in the period of the high voltage.

[Claim 19]

The board according to Claim 17 or 18, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal, the device outputs the second high voltage to the first terminal before the second timing in the period of the low voltage.

[Claim 20]

The board according to any one of Claims 17 to 19, wherein

when the first terminal does not have a short circuit

with the other terminals, in one cycle of the clock signal, the device outputs the second low voltage to the first terminal before the third timing in the period of the high voltage.

[Claim 21]

The board according to any one of Claims 17 to 20, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal,

the device outputs the second high voltage to the first terminal when the voltage input to the second terminal changes from the high voltage to the low voltage, and

the device outputs the second low voltage to the first terminal when the voltage input to the second terminal changes from the low voltage to the high voltage.

[Claim 22]

The board according to any one of Claims 17 to 21, wherein

when the first terminal does not have a short circuit with the other terminals, and when the voltage input to the second terminal changes from the low voltage to the high voltage, the device outputs the first low voltage to the first terminal.

[Claim 23]

The board according to any one of Claims 17 to 22,

wherein

when the first terminal and the second terminal have a short circuit,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 24]

The board according to any one of Claims 17 to 23, wherein

when the first terminal and the second terminal have a short circuit in a period before the second timing after the first timing,

at the first timing, the device outputs a voltage having a value equal to the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage

having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 25]

The board according to any one of Claims 17 to 24, wherein

when the first terminal and the second terminal have a short circuit in a period before the third timing after the second timing,

at the first timing, the device outputs a voltage having a value equal to the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 26]

The board according to any one of Claims 17 to 25, wherein

when a short circuit between the first terminal and the second terminal is eliminated in a period before the second timing after the first timing,

at the first timing, the device outputs a voltage having a value different from the first expected value from

the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 27]

The board according to any one of Claims 17 to 26, wherein

when a short circuit between the first terminal and the second terminal is eliminated in a period before the third timing after the second timing,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 28]

The board according to any one of Claims 17 to 27, wherein

the first terminal is a data terminal,

the second terminal is a clock terminal,

the first signal is a first response signal as a response to the printing apparatus, and

the second signal is a second response signal as a response to the printing apparatus.

[Claim 29]

The board according to any one of Claims 17 to 28, wherein

the other terminals include a third terminal and a fourth terminal,

a reset signal containing a low voltage and a high voltage is input to the third terminal, and

a power source voltage is input to the fourth terminal.

[Claim 30]

The board according to Claim 29, wherein

in at least one of a case where the first terminal and the third terminal have a short circuit and a case where the first terminal and the fourth terminal have a short circuit,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 31]

The board according to Claim 29 or 30, wherein

in a period before the second timing after the first timing, in at least one of a case where the first terminal and the third terminal have a short circuit and a case where the first terminal and the fourth terminal have a short circuit,

at the first timing, the device outputs a voltage having a value equal to the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 32]

The board according to any one of Claims 29 to 31, wherein

in a period before the third timing after the second timing, in at least one of a case where the first terminal and the third terminal have a short circuit and a case where

the first terminal and the fourth terminal have a short circuit,

at the first timing, the device outputs a voltage having a value equal to the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 33]

The board according to any one of Claims 29 to 32, wherein

in a period before the second timing after the first timing, when a short circuit between the first terminal and the third terminal is eliminated and a short circuit between the first terminal and the fourth terminal is eliminated,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage

having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 34]

The board according to any one of Claims 29 to 33, wherein

in a period before the third timing after the second timing, when a short circuit between the first terminal and the third terminal is eliminated and a short circuit between the first terminal and the fourth terminal is eliminated,

at the first timing, the device outputs a signal having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a signal having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a signal having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 35]

The board according to any one of Claims 29 to 34, wherein

after the power source voltage is input to the fourth terminal, the high voltage is input to the third terminal by the reset signal changing from the low voltage to the high voltage,

after the high voltage of the reset signal is input to the third terminal, the clock signal is input to the second terminal, and

after the high voltage of the reset signal is input to the third terminal, the first signal is input to the first terminal.

[Claim 36]

The board according to any one of Claims 29 to 35, wherein

the power source voltage supplied to the fourth terminal is used to drive the device.

[Claim 37]

The board according to any one of Claims 29 to 36, wherein

the third terminal is a reset terminal, and

the fourth terminal is a power source terminal.

[Claim 38]

The board according to any one of Claims 17 to 37, wherein

III and IV are performed a plurality of number of times in a case of at least one of (i) to (iii),

(i) case where, at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

(ii) case where, at the second timing, the device

outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

(iii) case where, at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 39]

The board according to any one of Claims 17 to 38, wherein

when the printing apparatus receives a second printing instruction in the middle of performing printing based on a first printing instruction, the device outputs the first signal and the second signal to the first terminal before printing based on the second printing instruction is started after the printing based on the first printing instruction is ended.

[Claim 40]

The board according to any one of Claims 17 to 39, wherein

when the printing apparatus receives a cleaning instruction of the printing head, the device outputs the first signal and the second signal to the first terminal before cleaning is performed.

[Claim 41]

The board according to any one of Claims 17 to 40, wherein

the device outputs the first signal and the second signal to the first terminal when the accommodation section is located at a replacement position at which replacement of the liquid accommodation container is possible, and

when the accommodation section moves from the replacement position to a standby position at which the replacement of the liquid accommodation container is not possible, the device outputs the first signal and the second signal to the first terminal.

[Claim 42]

The board according to any one of Claims 17 to 41, wherein

the device stores information regarding a liquid accommodated in the liquid accommodation container.

[Claim 43]

A liquid accommodation container that is mounted on an accommodation section of a printing apparatus including a printing head, a liquid introduction portion that introduces a liquid to the printing head, the accommodation section provided with the liquid introduction portion, and a plurality of apparatus-side terminals provided at the accommodation section, the liquid accommodation container comprising:

a liquid accommodation body configured to accommodate a liquid;

a liquid supply portion that is mounted at the liquid introduction portion of the printing apparatus and includes a liquid supply port for supplying a liquid from the liquid accommodation body to the liquid introduction portion of the printing apparatus;

a device; and

a plurality of terminals that are electrically coupled to the device, wherein

the plurality of terminals include a first terminal and other terminals including a second terminal, and

the liquid accommodation container is configured to satisfy I, II, III, and IV as follows,

I: the device outputs a first signal containing a first low voltage and a second signal containing a second low voltage and a second high voltage higher than the second low voltage, from the first terminal to the printing apparatus,

II: the first signal and the second signal are used when the printing apparatus determines that the first terminal does not have a short circuit with the other terminals and that the liquid accommodation container is being mounted in the printing apparatus,

III: the device outputs the first signal from the first terminal to the printing apparatus, and then outputs the

second signal from the first terminal to the printing apparatus, and

IV: when the first terminal does not have a short circuit with the other terminals,

a clock signal in which a low voltage and a high voltage alternately repeat with a predetermined period is input from the printing apparatus to the second terminal,

the device outputs the first low voltage as a first expected value from the first terminal to the printing apparatus at a first timing in a period in which a voltage input to the second terminal is the high voltage,

after the device outputs the first low voltage, the device outputs the second high voltage as a second expected value from the first terminal to the printing apparatus at a second timing in a period in which the voltage input to the second terminal is the low voltage, and

after the device outputs the second high voltage, the device outputs the second low voltage as a third expected value from the first terminal to the printing apparatus at a third timing in a period in which the voltage input to the second terminal is the high voltage.

[Claim 44]

The liquid accommodation container according to Claim 43, wherein

when the first terminal does not have a short circuit

with the other terminals, in one cycle of the clock signal, the device outputs the first low voltage to the first terminal before the first timing in the period of the high voltage.

[Claim 45]

The liquid accommodation container according to Claim 43 or 44, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal, the device outputs the second high voltage to the first terminal before the second timing in the period of the low voltage.

[Claim 46]

The liquid accommodation container according to any one of Claims 43 to 45, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal, the device outputs the second low voltage to the first terminal before the third timing in the period of the high voltage.

[Claim 47]

The liquid accommodation container according to any one of Claims 43 to 46, wherein

when the first terminal does not have a short circuit with the other terminals, in one cycle of the clock signal,

the device outputs the second high voltage to the first terminal when the voltage input to the second terminal changes from the high voltage to the low voltage, and

the device outputs the second low voltage to the first terminal when the voltage input to the second terminal changes from the low voltage to the high voltage.

[Claim 48]

The liquid accommodation container according to any one of Claims 43 to 47, wherein

when the first terminal does not have a short circuit with the other terminals, and when the voltage input to the second terminal changes from the low voltage to the high voltage, the device outputs the first low voltage to the first terminal.

[Claim 49]

The liquid accommodation container according to any one of Claims 43 to 48, wherein

when the first terminal and the second terminal have a short circuit,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 50]

The liquid accommodation container according to any one of Claims 43 to 49, wherein

when the first terminal and the second terminal have a short circuit in a period before the second timing after the first timing,

at the first timing, the device outputs a voltage having a value equal to the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 51]

The liquid accommodation container according to any one of Claims 43 to 50, wherein

when the first terminal and the second terminal have a short circuit in a period before the third timing after the second timing,

at the first timing, the device outputs a voltage

having a value equal to the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 52]

The liquid accommodation container according to any one of Claims 43 to 51, wherein

when a short circuit between the first terminal and the second terminal is eliminated in a period before the second timing after the first timing,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 53]

The liquid accommodation container according to any one

of Claims 43 to 52, wherein

when a short circuit between the first terminal and the second terminal is eliminated in a period before the third timing after the second timing,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 54]

The liquid accommodation container according to any one of Claims 43 to 53, wherein

the first terminal is a data terminal,

the second terminal is a clock terminal,

the first signal is a first response signal as a response to the printing apparatus, and

the second signal is a second response signal as a response to the printing apparatus.

[Claim 55]

The liquid accommodation container according to any one of Claims 43 to 54, wherein

the other terminals include a third terminal and a fourth terminal,

a reset signal containing a low voltage and a high voltage is input to the third terminal, and

a power source voltage is input to the fourth terminal.

[Claim 56]

The liquid accommodation container according to Claim 55, wherein

in at least one of a case where the first terminal and the third terminal have a short circuit and a case where the first terminal and the fourth terminal have a short circuit,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 57]

The liquid accommodation container according to Claim 55 or 56, wherein

in a period before the second timing after the first timing, in at least one of a case where the first terminal

and the third terminal have a short circuit and a case where the first terminal and the fourth terminal have a short circuit, the liquid accommodation container

at the first timing, the device outputs a voltage having a value equal to the first expected value, from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value, from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value, from the first terminal to the printing apparatus.

[Claim 58]

The liquid accommodation container according to any one of Claims 55 to 57, wherein

in a period before the third timing after the second timing, in at least one of a case where the first terminal and the third terminal have a short circuit and a case where the first terminal and the fourth terminal have a short circuit,

at the first timing, the device outputs a voltage having a value equal to the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the

first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 59]

The liquid accommodation container according to any one of Claims 55 to 58, wherein

in a period before the second timing after the first timing, when a short circuit between the first terminal and the third terminal is eliminated and a short circuit between the first terminal and the fourth terminal is eliminated,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 60]

The liquid accommodation container according to any one of Claims 55 to 59, wherein

in a period before the third timing after the second timing, when a short circuit between the first terminal and

the third terminal is eliminated and a short circuit between the first terminal and the fourth terminal is eliminated,

at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

at the second timing, the device outputs a voltage having a value equal to the second expected value from the first terminal to the printing apparatus, and

at the third timing, the device outputs a voltage having a value equal to the third expected value from the first terminal to the printing apparatus.

[Claim 61]

The liquid accommodation container according to any one of Claims 55 to 60, wherein

after the power source voltage is input to the fourth terminal, the high voltage is input to the third terminal by the reset signal changing from the low voltage to the high voltage,

after the high voltage of the reset signal is input to the third terminal, the clock signal is input to the second terminal, and

after the high voltage of the reset signal is input to the third terminal, the first signal is input to the first terminal.

[Claim 62]

The liquid accommodation container according to Claims 55 to 61, wherein

the power source voltage supplied to the fourth terminal is used to drive the device.

[Claim 63]

The liquid accommodation container according to any one of Claims 55 to 62, wherein

the third terminal is a reset terminal, and

the fourth terminal is a power source terminal.

[Claim 64]

The liquid accommodation container according to any one of Claims 43 to 63, wherein

III and IV are performed a plurality of number of times in a case of at least one of (i) to (iii),

(i) case where, at the first timing, the device outputs a voltage having a value different from the first expected value from the first terminal to the printing apparatus,

(ii) case where, at the second timing, the device outputs a voltage having a value different from the second expected value from the first terminal to the printing apparatus, and

(iii) case where, at the third timing, the device outputs a voltage having a value different from the third expected value from the first terminal to the printing apparatus.

[Claim 65]

The liquid accommodation container according to any one of Claims 43 to 64, wherein

when the printing apparatus receives a second printing instruction in the middle of performing the device outputs printing based on a first printing instruction, the first signal and the second signal to the first terminal before printing based on the second printing instruction is started after the printing based on the first printing instruction is ended.

[Claim 66]

The liquid accommodation container according to any one of Claims 43 to 65, wherein

when the printing apparatus receives a cleaning instruction of the printing head, the device outputs the first signal and the second signal to the first terminal before cleaning is performed.

[Claim 67]

The liquid accommodation container according to any one of Claims 43 to 66, wherein

the device outputs the first signal and the second signal to the first terminal when the accommodation section is located at a replacement position at which replacement of the liquid accommodation container is possible, and

when the accommodation section moves from the

replacement position to a standby position at which the replacement of the liquid accommodation container is not possible, the device outputs the first signal and the second signal to the first terminal.

[Claim 68]

The liquid accommodation container according to any one of Claims 43 to 67, wherein

the device stores information regarding a liquid accommodated in the liquid accommodation container.