

WHAT IS CLAIMED IS:

1. A portable electronic device which executes a command from an external device, the portable electronic device comprising:

5 a communication section which transmits and receives data with the external device; and

a control section;

10 wherein, when the control section transmits data collectively to the external device and receives a divided-message retransmission request which requests to divide message and to retransmit divided messages from the external device,

the control section performs to

divide the data to-transmitted to the external device into divided data portions,

give an error detection code to the divided data portion,

transmit the divided data portion to which the error detection code is given to

15 the external device by the communication section intermittently so as to make a predetermined non-transmission period,

detect an error notice showing a failure in receiving the divided data portion from the external device in the non-transmission period, and

retransmit the divided data portion to which the error detection code is given

20 transmitted last when the error notice is detecting.

2. The portable electronic device according to the claim 1, wherein the control section detects that a carrier wave transmitted from the external device is modulated as the error notice.

3. ~~The portable electronic device according to claim 1, wherein the control section divides the data after the communication section failed in transmitting the data to the external device.~~

4. ~~The portable electronic device according to the claim 1, wherein the control section divides the data when the communication section receives an instruction to divide the data to create divided data portions and to transmit the divided data portions from the external device.~~

35. An IC card processing device which transmits a command to an IC card, the IC card processing device comprising:

a communications section which transmit and receive data with the IC card in a noncontact manner; and

a control section;

wherein, when the control section receives data collectively transmitted from the IC card and fails in receiving the data collectively transmitted from the IC card,

the control section performs to

transmit a divided-message retransmission request which requests to divide message and to retransmit divided messages to the IC card,

receive divided data portion of the data which the control section has failed in receiving, to which an error detection code is given and which is transmitted intermittently so as to make a predetermined non-transmission period from the IC card through the communication section;

judge whether the divided data portion is received normally based on the error detection code given to the divided data portion received in the non-transmission period, and

transmit an error notice showing a failure in receiving the divided data portion to the IC card through the communication section when judging that the divided data portion is not received normally, in the non-transmission period, and receive the divided data portion not received normally retransmitted from the IC card.

46. The IC card processing device according to the claim 35, wherein the control section modulates a carrier wave to transmit to the IC card as the error notification.

~~7. The IC card processing device according to claim 5, wherein the control section further perform to transmit an instruction to divide the data to create divided data portions and to transmit the divided data portions, to the IC card.~~

~~8. The IC card processing device according to the claim 5, wherein the control section performs to transmit an instruction to divide the data to create divided data portions and to transmit the divided data portions, to the IC card, after the communication section failed in receiving the data from the IC card.~~

59. A portable electronic device which executes a command from an external device, the portable electronic device comprising:

a communication section which transmits and receives data with the external device in a noncontact manner, and

a control section;

wherein, when the control section receives data collectively transmitted from the external device and fails in receiving the data collectively transmitted from the external device,

5 the control section performs to

transmit a divided-message retransmission request which requests to divide message and to retransmit divided messages to the external device,

receive a divided data portion to which an error detection code is given and which is transmitted intermittently so as to make a predetermined non-transmission
10 period, from the external device through the communication section,

judge whether the divided data portion was normally received based on the error detection code given to the divided data portion received in the non-transmission period, and

transmit an error notice showing a failure in receiving the divided data portion
15 to the external device when judging that the divided data portion was not received normally, in the non-transmission period, and receive the divided data portion not received normally retransmitted from the external device.

640. The portable electronic device according to claim 59, wherein the
20 control section modulates a carrier wave which is transmitted to the external device as the error notice.

744. The portable electronic device according to claim 59, wherein the
control section transmits a second carrier wave to the external device as the error notice.

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12. ~~The portable electronic device according to claim 9, wherein the control section further transmits an instruction which instruct to divide and transmit the data, to the external device through the communication section.~~

13. ~~The portable electronic device according to claim 9, wherein the control section transmits the instruction which instructs to divide and transmit the data to the external device, after the communication section failed in receiving data from the external device.~~

814. A processing device which transmits a command to a portable electronic device, the processing device comprising:

a communication section which transmits and receives data with the portable electronic device; and

a control section;

wherein, when the control section transmits data collectively to the portable electronic device and receives a divided-message retransmission request which requests to divide message and to retransmit divided messages from the portable electronic device,

the control section performs to

divide the data to be transmitted to the portable electronic device into divided data portions,

give an error detection code to the divided data portion,

transmit the divided data portion to which the error detection code is given to the portable electronic device by the communication section intermittently so

as to make a predetermined non-transmission period,

detect an error notice showing a failure in receiving the divided data portion from the portable electronic device in the non-transmission period, and

retransmit the divided data portion to which the error detection code is given transmitted last when the error notice is detecting.