Claims

[Claim 1]

A type determination apparatus of a wireless communication failure for performing type determination of a wireless communication failure on a basis of:

a radio field intensity of communication between a first device and a second device that perform wireless communication with each other;

presence or absence of reception of an ACK signal or a NACK signal indicating a success or failure of the wireless communication performed between the first device and the second device;

a number of occurrence of retries of signal transmission for establishing the wireless communication; and

a success or failure of wireless connection between the first device and the second device,

wherein it is determined that there is likely to be the wireless communication failure, when the radio field intensity is lower than or equal to a certain threshold, and

wherein it is determined that there is likely to be an abnormality of devices, when the radio field intensity is not lower than or equal to the certain threshold and the reception of the ACK signal or the NACK signal is absent.

[Claim 2]

The type determination apparatus according to claim 1, wherein it is determined that there is likely to be an erroneous initial setting, when the radio field intensity is not lower than or equal to the certain threshold, the reception of the ACK signal or the NACK signal is present, the number of occurrence of the retries is not higher than or equal to a certain threshold, and the wireless connection is not success.

[Claim 3]

The type determination apparatus according to claim 1,

wherein:

the radio field intensity is obtained from a physical layer of either one of the devices;

the presence or absence of the reception of the ACK signal or the NACK signal is obtained from a media access control layer of either one of the devices; and

the number of retries is obtained from a network layer of either one of the devices.

[Claim 4]

The type determination apparatus according to claim 1, wherein:

the radio field intensity is obtained from a physical layer or a baseband layer of either one of the devices; and

the presence or absence of the reception of the ACK signal or the NACK signal and the number of retires are obtained from a host controller interface layer, a link management layer, a data link layer, or a network layer of either one of the devices.

[Claim 5]

A type determination system comprising:

the type determination apparatus according to claim 1;

the first device and the second device; and

a remote controller for transmitting an instruction for the first device to the second device.

[Claim 6]

The type determination system according to claim 5, comprising a notification apparatus for making a notification of a result of the type determination.

[Claim 7]

The type determination system according to claim 5, comprising a recording apparatus for recording a result of the type determination.

[Claim 8]

The type determination system according to claim 5, wherein the type determination apparatus is included in any of the second devise and the recording apparatus.