

CITATION LIST

PATENT DOCUMENT

[0004]

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SUMMARY OF THE INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

[0005]

Embodiments of the present invention provide an excellent communication device and communication method which are capable of performing an operation suitably with the basic service set belonging to the extended service set.

SOLUTIONS TO PROBLEMS

[0006]

According to a first aspect of the present invention, there is provided a communication device that notifies of first information identifying a BSS of the communication device and second information capable of specifying another BSS included in the same ESS.

[0007]

In an embodiment, the communication device according to the first aspect is configured to notify of BSS Color information of the communication device as the first information and notify of the second information capable of specifying the BSS Color information set in another access

point included in the same ESS.

[0008]

In an embodiment, the communication device according to the second aspect is configured to notify the second information capable of specifying the BSS Color information set in another access point included in the same ESS on the basis of the BSS Color information of the communication device.

[0009]

In an embodiment, the communication device according to the second aspect is configured to notify of ESS Color mask information expressing the BSS Color information of another access point set in the same ESS by a format of a bit mask for a bitmap indicating the BSS Color information of the communication device as the second information.

[0010]

In an embodiment, the communication device according to the first aspect is configured to store the first information and the second information in a physical header and notify of the first information and the second information.

[0011]

In an embodiment, the communication device according to the first aspect is configured to store the second information in an information element included in a predetermined frame and notify of the second information.

[0012]

According to a second aspect of the present invention, there is provided a communication method including a step of

notifying of first information identifying a BSS of an own device and second information capable of specifying another BSS included in the same ESS.

[0013]

According to a third aspect of the present invention, there is provided a communication device that manages first information identifying a BSS of the communication device and second information capable of specifying another BSS included in the same ESS, and identifies whether a reception signal is a signal of the same ESS or a signal from another ESS, using the second information.

[0014]

In an embodiment of the third aspect, the first information is BSS Color information, and second information is information capable of specifying the BSS Color information set in another access point included in the same ESS, and the communication device according to the eighth aspect is configured to identify the reception signal including the first information on the basis of the BSS Color information specified using the second information.

[0015]

In an embodiment of the third aspect, the second information is information capable of specifying the BSS Color information set in another access point included in the same ESS on the basis of the BSS Color information, and the communication device according to the ninth aspect is configured to identify the reception signal including the first

information on the basis of the BSS Color information specified from the first information using the second information.

[0016]

In an embodiment of the third aspect, the second information is ESS Color mask information expressing the BSS Color information of another access point set in the same ESS by a format of a bit mask for a bitmap indicating the BSS Color information of the communication device.

[0017]

In an embodiment of the third aspect, the communication device is configured to receive a signal in which the first information and the second information are stored in a physical header.

[0018]

In an embodiment of the third aspect, the communication device is configured to receive a predetermined frame including an information element storing the second information.

[0019]

In an embodiment of the third aspect, the communication device is configured to deal with the reception signal identified as the same ESS, in accordance with a signal of the BSS of the communication device.

[0020]

In an embodiment of the third aspect, the communication device is configured to identify the reception signal in accordance with whether or not the first information included in the reception signal is able to be identified from the second

information to be managed.

[0021]

In an embodiment of the third aspect, the communication device is configured to identify the reception signal in accordance with whether or not the first information to be managed is able to be identified from the second information included in the reception signal.

[0022]

In an embodiment of the third aspect, the communication device is configured to deal with the frame not to be received in accordance with a received field strength of the reception signal identified as another ESS.

[0023]

According to a fourth aspect of the present invention, there is provided a communication method, including: a step of managing first information identifying a BSS of an own device and second information capable of specifying another BSS included in the same ESS; and a step of identifying whether a reception signal is a signal of the same ESS or a signal from another ESS, using the second information.

EFFECTS OF THE INVENTION

[0024]

According to embodiments of the present invention, it is possible to provide an excellent communication device and communication method which are capable of performing an operation suitably with the basic service set belonging to

the extended service set.

[0025]

Further, the effect described in this specification is merely an example, and the effect as per embodiments of the present invention is not limited thereto. Further, embodiments of the present invention may further have an additional effect in addition to the above effect.

[0026]

Still other aspects, features, and advantages of the invention disclosed in this specification will become apparent from detailed description based on an embodiment to be described later or the appended drawings.

BRIEF DESCRIPTION OF DRAWINGS

[0027]

Fig. 1 is a diagram illustrating a configuration example of a wireless LAN network.

Fig. 2 is a diagram illustrating an example of a setting status of parameters of each access point in the network configuration example illustrated in Fig. 1.

Fig. 3 is a diagram illustrating a setting status of BSS Color information and ESS Color mask information.

Fig. 4 is a diagram illustrating a configuration example of a wireless communication device 400.

Fig. 5 is a diagram illustrating a specific configuration example of a wireless communication module 401.