CLAIMS

1. A communication apparatus comprising:

generation means for generating a MAC frame including an HT Control field, which complies with an IEEE 802.11 series standard, wherein the HT Control field is formed to include an A-Control subfield by each of first 2 bits being set to 1 and the MAC frame is formed to further include a variable-length extended field for extending the A-Control subfield included in the MAC frame; and

transmission means for transmitting the MAC frame generated by the generation means,

wherein the extended field includes a control subfield including a control ID field and a subfield indicating whether the control subfield is the end of the extended field or another control subfield follows the control subfield.

2. The communication apparatus according to claim 1, wherein the MAC frame is formed to further include the extended field by a control ID subfield included in the A-Control subfield being set to a specific value.

3. The communication apparatus according to claim 2, wherein the A-Control subfield includes the control ID subfield and a length subfield indicating a length of the extended field.

4. The communication apparatus according to claim 2 or 3, wherein the control subfield in the extended field further includes a control information subfield storing control information added to the MAC frame corresponding to the control ID field.

5. The communication apparatus according to claim 4, wherein

the A-Control subfield includes the control ID subfield and a length subfield indicating a length of the extended field, and

the length subfield indicates a number of control subfields included in the

extended field.

6. The communication apparatus according to claim 2, wherein

the A-Control subfield and the extended field are formed to include the control ID subfield and at least one control subfield, and

each of the at least one control subfield includes a control information subfield storing control information added to the MAC frame and an additional control ID subfield storing an ID corresponding to the control information.

7. The communication apparatus according to claim 6, wherein the A-Control subfield and the extended field are formed to further include a length subfield indicating a length of the extended field.

8. The communication apparatus according to claim 2, wherein

the A-Control subfield is formed to include the control ID subfield and an additional control ID subfield, and

the MAC frame is formed to store control information added to the MAC frame in the extended field and store an ID corresponding to the control information in the additional control ID subfield.

9. A communication apparatus comprising:

reception means for receiving a MAC frame including an HT Control field, which complies with an IEEE 802.11 series standard; and

analysis means for analyzing the MAC frame received by the reception means, wherein the HT Control field is formed to include an A-Control subfield by each of first 2 bits being set to 1 and the MAC frame is formed to further include a variable-length extended field for extending the A-Control subfield included in the MAC frame,

wherein the extended field includes a control subfield including a control ID field and a subfield indicating whether the control subfield is the end of the extended field or another control subfield follows the control subfield.

10. The communication apparatus according to claim 9, wherein the MAC frame is formed to further include the extended field by a control ID subfield included in the A-Control subfield being set to a specific value.

11. The communication apparatus according to claim 10, wherein the A-Control subfield includes the control ID subfield and a length subfield indicating a length of the extended field.

12. The communication apparatus according to claim 10 or 11, wherein the control subfield in the extended field further includes a control information subfield storing control information added to the MAC frame corresponding to the control information.

13. The communication apparatus according to claim 12, wherein

the A-Control subfield includes the control ID subfield and a length subfield indicating a length of the extended field, and

the length subfield indicates a number of control subfields included in the extended field.

14. The communication apparatus according to claim 10, wherein

the A-Control subfield and the extended field are formed to include the control ID subfield and at least one control subfield, and

each of the at least one control subfield includes a control information subfield storing control information added to the MAC frame and an additional control ID subfield storing an ID corresponding to the control information.

15. The communication apparatus according to claim 14, wherein the A-Control subfield and the extended field are formed to further include a length subfield indicating a length of the extended field.

16. The communication apparatus according to claim 10, wherein

the A-Control subfield is formed to include the control ID subfield and an additional control ID subfield, and

the MAC frame is formed to store control information added to the MAC frame in the extended field and store an ID corresponding to the control information in the additional control ID subfield.

17. A control method for a communication apparatus, comprising:

generating a MAC frame including an HT Control field, which complies with an IEEE 802.11 series standard, wherein the HT Control field is formed to include an A-Control subfield by each of first 2 bits being set to 1 and the MAC frame is formed to further include a variable-length extended field for extending the A-Control subfield included in the MAC frame; and

transmitting the MAC frame generated in the generating,

wherein the extended field includes a control subfield including a control ID field and a subfield indicating whether the control subfield is the end of the extended field or another control subfield follows the control subfield.

18. A control method for a communication apparatus, comprising:

receiving a MAC frame including an HT Control field, which complies with an IEEE 802.11 series standard; and

analyzing the MAC frame received in the receiving, wherein the HT Control field is formed to include an A-Control subfield by each of first 2 bits being set to 1 and the MAC frame is formed to further include a variable-length extended field for extending the A-Control subfield included in the MAC frame,

wherein the extended field includes a control subfield including a control ID field and a subfield indicating whether the control subfield is the end of the extended field or another control subfield follows the control subfield.

19. A program for causing a computer to execute each step of a control method for a communication apparatus according to any one of claims 17 to 18.