

CLAIMS

What is claimed is:

1. A physical layer protocol data unit PPDU transmission method, comprising:

generating a PPDU; and

sending the PPDU, wherein

the PPDU comprises a plurality of resource unit allocation subfields, and the plurality of resource unit allocation subfields meet at least one of the following:

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield corresponding to a multiple resource unit MRU, the resource unit allocation subfield corresponding to the MRU indicates that a 242-tone RU corresponding to the resource unit allocation subfield belongs to the MRU, and a number of resource unit allocation subfields corresponding to the MRU in a resource unit allocation subfield corresponding to each 80 MHz subblock in a plurality of 80 MHz subblocks in a bandwidth for transmitting the PPDU is for determining a type of the MRU;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating two first MRUs, a 240 MHz bandwidth to which the two first MRUs belong is consecutive 240 MHz in a bandwidth for transmitting the PPDU, and frequency locations, in the 240 MHz bandwidth, of a 996-tone RU and a 484-tone RU that form each of the first RUs are set according to a standard;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU and a resource unit allocation subfield indicating a second MRU, and frequency locations, in a bandwidth for transmitting the PPDU, of a 996-tone RU and a 484-tone RU that form the first RU and a 2*996-tone RU and a 484-tone RU that form the second MRU are set according to a standard; or

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU, the first MRU consists of a 996-tone RU and a 484-tone RU, and a frequency location of a 160 MHz subblock to which the first MRU belongs in a bandwidth for transmitting the PPDU is a frequency location that is set according to a standard or is a frequency location indicated by indication information sent by an AP.

2. A PPDU transmission method, comprising:

receiving a PPDU, wherein the PPDU comprises a plurality of resource unit allocation subfields; and

parsing at least a part of resource unit allocation subfields in the plurality of resource unit

allocation subfields, to determine RUs that form an MRU, wherein

the plurality of resource unit allocation subfields meet at least one of the following:

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield corresponding to the MRU, the resource unit allocation subfield corresponding to the MRU indicates that a 242-tone RU corresponding to the resource unit allocation subfield belongs to the MRU, and a number of resource unit allocation subfields corresponding to the MRU in a resource unit allocation subfield corresponding to each 80 MHz subblock in a plurality of 80 MHz subblocks in a bandwidth for transmitting the PPDU is for determining a type of the MRU;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating two first MRUs, a 240 MHz bandwidth to which the two first MRUs belong is consecutive 240 MHz in a bandwidth for transmitting the PPDU, and frequency locations, in the 240 MHz bandwidth, of a 996-tone RU and a 484-tone RU that form each of the first RUs are set according to a standard;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU and a resource unit allocation subfield indicating a second MRU, and frequency locations, in a bandwidth for transmitting the PPDU, of a 996-tone RU and a 484-tone RU that form the first RU and a 2*996-tone RU and a 484-tone RU that form the second MRU are set according to a standard; or

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU, the first MRU consists of a 996-tone RU and a 484-tone RU, and a frequency location of a 160 MHz subblock to which the first MRU belongs in a bandwidth for transmitting the PPDU is a frequency location that is set according to a standard or is a frequency location indicated by indication information sent by an AP.

3. A PPDU transmission apparatus, comprising:

a processing unit, configured to generate a PPDU; and

a sending unit, configured to send the PPDU, wherein

the PPDU comprises a plurality of resource unit allocation subfields, and the plurality of resource unit allocation subfields meet at least one of the following:

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield corresponding to an MRU, the resource unit allocation subfield corresponding to the MRU indicates that a 242-tone RU corresponding to the resource unit allocation subfield belongs to the MRU, and a number of resource unit allocation subfields corresponding to the MRU in a resource unit allocation subfield corresponding to each 80 MHz subblock in a plurality of 80 MHz subblocks in a bandwidth for transmitting the PPDU is for determining a type of the MRU;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating two first MRUs, a 240 MHz bandwidth to which the two first MRUs belong is consecutive 240 MHz in a bandwidth for transmitting the PPDU, and frequency locations, in the 240 MHz bandwidth, of a 996-tone RU and a 484-tone RU that form each of the first RUs are set according to a standard;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU and a resource unit allocation subfield indicating a second MRU, and frequency locations, in a bandwidth for transmitting the PPDU, of a 996-tone RU and a 484-tone RU that form the first RU and a 2*996-tone RU and a 484-tone RU that form the second MRU are set according to a standard; or

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU, the first MRU consists of a 996-tone RU and a 484-tone RU, and a frequency location of a 160 MHz subblock to which the first MRU belongs in a bandwidth for transmitting the PPDU is a frequency location that is set according to a standard or is a frequency location indicated by indication information sent by an AP.

4. A PPDU transmission apparatus, comprising:

a receiving unit, configured to receive a PPDU, wherein the PPDU comprises a plurality of resource unit allocation subfields; and

a processing unit, configured to parse at least a part of resource unit allocation subfields in the plurality of resource unit allocation subfields, to determine RUs that form an MRU, wherein

the plurality of resource unit allocation subfields meet at least one of the following:

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield corresponding to the MRU, the resource unit allocation subfield corresponding to the MRU indicates that a 242-tone RU corresponding to the resource unit allocation subfield belongs to the MRU, and a number of resource unit allocation subfields corresponding to the MRU in a resource unit allocation subfield corresponding to each 80 MHz subblock in a plurality of 80 MHz subblocks in a bandwidth for transmitting the PPDU is for determining a type of the MRU;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating two first MRUs, a 240 MHz bandwidth to which the two first MRUs belong is consecutive 240 MHz in a bandwidth for transmitting the PPDU, and frequency locations, in the 240 MHz bandwidth, of a 996-tone RU and a 484-tone RU that form each of the first RUs are set according to a standard;

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU and a resource unit allocation subfield indicating a second MRU, and

frequency locations, in a bandwidth for transmitting the PPDU, of a 996-tone RU and a 484-tone RU that form the first MRU and a 2*996-tone RU and a 484-tone RU that form the second MRU are set according to a standard; or

the plurality of resource unit allocation subfields comprise a resource unit allocation subfield indicating a first MRU, the first MRU consists of a 996-tone RU and a 484-tone RU, and a frequency location of a 160 MHz subblock to which the first MRU belongs in a bandwidth for transmitting the PPDU is a frequency location that is set according to a standard or is a frequency location indicated by indication information sent by an AP.

5. A communication apparatus, configured to transmit a PPDU, wherein the communication apparatus comprises a processor and a transceiver; and when the processor executes a computer program or instructions in a memory, the method according to claim 1 or 2 is performed.

6. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions, and the computer instructions indicate a communication apparatus to perform the method according to claim 1 or 2.

7. A computer program product comprising instructions, wherein when the instructions are run on a computer, the computer is enabled to perform the method according to claim 1 or 2.