

CLAIMS

1. A communication method, wherein the method comprises:

determining X sub-BWPs in a bandwidth part BWP of a terminal device, wherein X is an integer greater than or equal to 1, a bandwidth of the sub-BWP is less than or equal to a maximum bandwidth supported by the terminal device for baseband processing, the BWP is used for transmission of at least one of the following: a control channel, a data channel, or a reference signal, and the X sub-BWPs are used for transmission of a data channel; and

performing transmission of a first data channel with a network device on Y sub-BWPs in the X sub-BWPs, wherein Y is an integer greater than 0 and not greater than X.

2. The method according to claim 1, wherein a total bandwidth of the Y sub-BWPs is less than or equal to the maximum bandwidth supported by the terminal device for baseband processing.

3. The method according to claim 1 or 2, wherein the method further comprises:

receiving first information from the network device, wherein the first information is used for configuring the X sub-BWPs in the BWP.

4. The method according to claim 3, wherein

the first information is used for configuring a value of X;

the first information is used for configuring the bandwidth of the sub-BWP;

the first information is used for configuring a start location and a bandwidth of each of the X sub-BWPs;

the first information is used for configuring an end location and a bandwidth of each of the X sub-BWPs; or

the first information is used for configuring a start location and an end location of each of the X sub-BWPs.

5. The method according to any one of claims 1 to 4, wherein the method further comprises:

receiving second information from the network device, wherein the second information is used for activating the Y sub-BWPs.

6. The method according to claim 5, wherein the receiving second information from the network device comprises:

receiving first signaling from the network device, wherein the first signaling comprises one or more of the following signaling: a system information block, radio resource control, and a multimedia access control control element, and the first signaling carries the second information.

7. The method according to claim 5, wherein the receiving second information from the network device comprises:

receiving downlink control information from the network device, wherein the downlink control information is used for scheduling a data channel, and the downlink control information carries the second information.

8. The method according to claim 7, wherein at least one time domain unit is separated between a time domain resource carrying the downlink control information and a time domain resource of the data channel scheduled by using the downlink control information.

9. The method according to claim 7 or 8, wherein a time domain unit corresponding to the Y sub-BWPs starting to take effect is a start time unit of the time domain resource of the data channel scheduled by using the downlink control information; or

a time domain unit corresponding to the Y sub-BWPs starting to take effect is a time domain unit that is after the time domain resource carrying the downlink control information and that is separated by M time domain units from the time domain resource carrying the downlink control information.

10. The method according to any one of claims 7 to 9, wherein the second information is carried in at least one reserved bit in the downlink control information;

the second information is carried in at least one bit in a downlink assignment indicator field in the downlink

control information;

the second information is carried in a first indicator field in the downlink control information, wherein the first indicator field indicates an active sub-BWP in the BWP;

the second information is carried in a second indicator field in the downlink control information, wherein the second indicator field indicates an active BWP; or

the second information is carried in at least one bit in a frequency domain resource allocation indicator field in the downlink control information.

11. The method according to any one of claims 7 to 10, wherein the downlink control information comprises the frequency domain resource allocation indicator field, the frequency domain resource allocation indicator field indicates a location of a frequency domain resource of the data channel scheduled by using the downlink control information, and the location of the frequency domain resource is a relative location in the BWP, or the location of the frequency domain resource is a relative location in the Y sub-BWPs.

12. The method according to any one of claims 7 to 11, wherein the method further comprises:

communicating with the network device on a time domain resource between the time domain resource carrying the downlink control information and the time domain resource of the data channel scheduled by using the downlink control information.

13. A communication method, wherein the method comprises:

determining X sub-BWPs in a bandwidth part BWP of a terminal device, wherein X is an integer greater than or equal to 1, a bandwidth of the sub-BWP is less than or equal to a maximum bandwidth supported by the terminal device for baseband processing, the BWP is used for transmission of at least one of the following: a control channel, a data channel, or a reference signal, and the X sub-BWPs are used for transmission of a data channel; and

performing transmission of a first data channel with the terminal device on Y sub-BWPs in the X sub-BWPs, wherein Y is an integer greater than 0 and not greater than X.

14. The method according to claim 13, wherein a total bandwidth of the Y sub-BWPs is less than or equal to the maximum bandwidth supported by the terminal device for baseband processing.

15. The method according to claim 13 or 14, wherein the method further comprises:

sending first information, wherein the first information is used for configuring the X sub-BWPs in the BWP.

16. The method according to claim 15, wherein

the first information is used for configuring a value of X;

the first information is used for configuring the bandwidth of the sub-BWP;

the first information is used for configuring a start location and a bandwidth of each of the X sub-BWPs;

the first information is used for configuring an end location and a bandwidth of each of the X sub-BWPs; or

the first information is used for configuring a start location and an end location of each of the X sub-BWPs.

17. The method according to any one of claims 13 to 16, wherein the method further comprises:

sending second information, wherein the second information is used for activating the Y sub-BWPs.

18. The method according to claim 17, wherein the sending second information comprises:

sending first signaling, wherein the first signaling comprises one or more of the following signaling: a system information block, radio resource control, and a multimedia access control control element, and the first signaling carries the second information.

19. The method according to claim 17, wherein the sending second information comprises:

sending downlink control information, wherein the downlink control information is used for scheduling a data channel, and the downlink control information carries the second information.

20. A computer-readable storage medium, wherein the computer-readable storage medium stores computer-readable instructions, and when the computer-readable instructions are run on a communication apparatus, the method according to any one of claims 1 to 12 is performed, or the method according to any one of claims 13 to 19 is performed.

5 21. A communication apparatus, comprising at least one processor and an interface circuit, wherein the interface circuit is configured to input or output instructions and/or data for the at least one processor, and when the at least one processor executes the instructions, the apparatus implements the method according to any one of claims 1 to 19.