CLAIMS

1. A method for determining frequency hopping for a channel, the method comprising:

determining, by a terminal, a first bandwidth size corresponding to a bandwidth part, wherein the first bandwidth size corresponding to the bandwidth part is less than or equal to a bandwidth size of a carrier;

determining, by the terminal based on the first bandwidth size corresponding to the bandwidth part, a frequency hopping step-size corresponding to an uplink channel; and

determining, by the terminal based on the frequency hopping step-size corresponding to the uplink channel, a frequency domain position used for transmitting the uplink channel,

wherein determining, by the terminal, the first bandwidth size corresponding to the bandwidth part comprises:

receiving, by the terminal, first configuration information, and determining, based on the first configuration information, the first bandwidth size corresponding to the bandwidth part,

wherein determining, by the terminal based on the first bandwidth size corresponding to the bandwidth part, the frequency hopping step-size corresponding to the uplink channel comprises:

determining, by the terminal based on the following formula, the frequency hopping step-size corresponding to the uplink channel: $W_H=nW$, wherein W_H is the frequency hopping step-size corresponding to the uplink channel, W is the first bandwidth size corresponding to the bandwidth part, n is a scale factor, n=1/m, and m is a positive integer greater than 1,

wherein determining, by the terminal based on the frequency hopping step-size corresponding to the uplink channel, the frequency domain position used for transmitting the uplink channel comprises:

determining, by the terminal, a frequency domain position of a second step of frequency hopping based on a frequency domain position of a first step of frequency hopping and the frequency hopping step-size corresponding to the uplink channel, wherein the frequency domain

position of the first step of frequency hopping and the frequency domain position of the second step of frequency hopping are frequency domain positions used for transmitting the uplink channel.

2. The method for determining frequency hopping for a channel according to claim 1, wherein the method further comprises:

receiving, by the terminal, third control signaling, and determining the frequency domain position of the first step of frequency hopping based on the third control signaling.

3. The method for determining frequency hopping for a channel according to claim 2, wherein the third control signaling is: DCI or a MAC CE.

4. The method for determining frequency hopping for a channel according to claim 1, wherein receiving, by the terminal, the first configuration information comprises:

receiving, by the terminal, radio resource control RRC signaling that carries the first configuration information; or

receiving, by the terminal, system information that carries the first configuration information.

5. The method for determining frequency hopping for a channel according to claim 1, wherein receiving, by the terminal, the first configuration information, and determining, based on the first configuration information, the first bandwidth size corresponding to the bandwidth part comprises:

determining, by the terminal based on one piece of first configuration information when receiving the one piece of first configuration information, the first bandwidth size corresponding to the bandwidth part; and

determining, by the terminal based on a plurality of pieces of first configuration information when receiving the plurality of pieces of first configuration information, a plurality of candidate first bandwidth sizes corresponding to the bandwidth part; and

selecting, from the plurality of candidate first bandwidth sizes, the first bandwidth size corresponding to the bandwidth part.

6. The method for determining frequency hopping for a channel according to claim 5,

wherein selecting, from the plurality of candidate first bandwidth sizes, the first bandwidth size corresponding to the bandwidth part comprises:

receiving, by the terminal, first control signaling, and selecting, from the plurality of candidate first bandwidth sizes based on the first control signaling, the first bandwidth size corresponding to the bandwidth part.

7. The method for determining frequency hopping for a channel according to claim 1, wherein m=2 or 4.

8. The method for determining frequency hopping for a channel according to claim 1 or 7, when W_H is determined based on the formula $W_H=nW$, $W_H=\lceil nW \rceil$ or $\lfloor nW \rfloor$, wherein

$\lceil nW \rceil$ represents a minimum integer greater than nW, and $\lfloor nW \rfloor$ represents a maximum integer less than nW.

9. An apparatus for determining frequency hopping for a channel, wherein the apparatus comprises:

a first determining unit, configured to determine a first bandwidth size corresponding to a bandwidth part, wherein the first bandwidth size corresponding to the bandwidth part is less than or equal to a bandwidth size of a carrier;

a second determining unit, configured to determine, based on the first bandwidth size corresponding to the bandwidth part, a frequency hopping step-size corresponding to an uplink channel; and

a third determining unit, configured to determine, based on the frequency hopping step-size corresponding to the uplink channel, a frequency domain position used for transmitting the uplink channel,

wherein the first determining unit comprises:

a first receiving subunit, configured to receive first configuration information; and

a first determining subunit, configured to determine, based on the first configuration information, the first bandwidth size corresponding to the bandwidth part,

wherein the second determining unit is specifically configured to determine, based on the following formula, the frequency hopping step-size corresponding to the uplink channel: $W_H=nW$, wherein W_H is the frequency hopping step-size corresponding to the uplink channel, W is the first bandwidth size corresponding to the bandwidth part, n is a scale factor, n=1/m, and m is a positive integer greater than 1,

wherein the third determining unit is specifically configured to determine a frequency domain position of a second step of frequency hopping based on a frequency domain position of a first step of frequency hopping and the frequency hopping step-size corresponding to the uplink channel, wherein the frequency domain position of the first step of frequency hopping and the frequency domain position of the second step of frequency hopping are frequency domain positions used for transmitting the uplink channel.

10. The apparatus for determining frequency hopping for a channel according to claim 9, wherein the third determining unit comprises:

a fifth receiving subunit, configured to receive third control signaling; and

a third determining subunit, configured to determine the frequency domain position of the first step of frequency hopping based on the third control signaling.

11. The apparatus for determining frequency hopping for a channel according to claim 10, wherein the third control signaling is: DCI or a MAC CE.

12. The apparatus for determining frequency hopping for a channel according to claim 9, wherein the first receiving subunit is specifically configured to receive RRC signaling that carries the first configuration information; or receive system information that carries the first configuration information.

13. The apparatus for determining frequency hopping for a channel according to claim 9, wherein the first determining subunit is specifically configured to:

determine, based on one piece of first configuration information when the one piece of first configuration information is received, the first bandwidth size corresponding to the bandwidth

part;

determine, based on a plurality of pieces of first configuration information when the plurality of pieces of first configuration information is received, a plurality of candidate first bandwidth sizes corresponding to the bandwidth part; and

select, from the plurality of candidate first bandwidth sizes, a first bandwidth size corresponding to the bandwidth part.

14. The apparatus for determining frequency hopping for a channel according to claim 13, wherein the first determining unit further comprises:

a second receiving subunit, configured to receive first control signaling; and

the first determining subunit is further configured to select, from the plurality of candidate first bandwidth sizes based on the first control signaling, the first bandwidth size corresponding to the bandwidth part.

15. The apparatus for determining frequency hopping for a channel according to claim 9, wherein m=2 or 4.

16. The apparatus for determining frequency hopping for a channel according to claim 9 or 15, when W_H is determined based on the formula $W_H=nW$, $W_H=\lceil nW \rceil$ or $\lfloor nW \rfloor$, wherein

$\lceil nW \rceil$ represents a minimum integer greater than nW, and $\lfloor nW \rfloor$ represents a maximum integer less than nW.

17. A computer system, comprising:

one or more processors; and

one or more memories for storing computer-readable instructions that, upon execution by the one or more processors, configure the computer system to:

determine, by a terminal, a first bandwidth size corresponding to a bandwidth part, wherein the first bandwidth size corresponding to the bandwidth part is less than or equal to a bandwidth size of a carrier;

determine, by the terminal based on the first bandwidth size corresponding to the bandwidth part, a frequency hopping step-size corresponding to an uplink channel; and

determine, by the terminal based on the frequency hopping step-size corresponding to the uplink channel, a frequency domain position used for transmitting the uplink channel,

wherein the determining, by a terminal, a first bandwidth size corresponding to a bandwidth part comprises:

receiving, by the terminal, first configuration information, and determining, based on the first configuration information, the first bandwidth size corresponding to the bandwidth part,

wherein the determining, by the terminal based on the first bandwidth size corresponding to the bandwidth part, a frequency hopping step-size corresponding to an uplink channel comprises:

determining, by the terminal based on the following formula, the frequency hopping step-size corresponding to the uplink channel: $W_H=nW$, wherein W_H is the frequency hopping step-size corresponding to the uplink channel, W is the first bandwidth size corresponding to the bandwidth part, n is a scale factor, n=1/m, and m is a positive integer greater than 1,

wherein the determining, by the terminal based on the frequency hopping step-size corresponding to the uplink channel, a frequency domain position used for transmitting the uplink channel comprises:

determining, by the terminal, a frequency domain position of a second step of frequency hopping based on a frequency domain position of a first step of frequency hopping and the frequency hopping step-size corresponding to the uplink channel, wherein the frequency domain position of the first step of frequency hopping and the frequency domain position of the second step of frequency hopping are frequency domain positions used for transmitting the uplink channel.

18. The computer system of claim 17, wherein receiving, by the terminal, first configuration information comprises:

receiving, by the terminal, radio resource control RRC signaling that carries the first configuration information; or

receiving, by the terminal, system information that carries the first configuration information.

19. The computer system of claim 17, wherein m=2 or 4.

20. The computer system of claim 17 or 19, wherein W_H is determined based on the formula $W_H=nW$, $W_H=\lceil nW \rceil$ or $\lfloor nW \rfloor$, wherein

$\lceil nW \rceil$ represents a minimum integer greater than nW, and $\lfloor nW \rfloor$ represents a maximum integer less than nW.