

CLAIMS

1. A method for transmitting signals, comprising:

5 determining, by a first device, according to an operating frequency band for transmitting signals, a subcarrier spacing for transmitting signals;

determining, by the first device according to the subcarrier spacing, a transmission number N of the signals; wherein the signals comprise a Physical Broadcast Channel, PBCH, and the operating frequency band is transmitting frequency band of PBCH; and

10 transmitting, by the first device, N signals to a second device according to the transmission number N;

wherein the transmission number N and a number of beams for transmitting the signals are in one-to-one association;

15 wherein the transmission number N of the signals is selected from one of the following that:

the transmission number N of the signals is 4 when the subcarrier spacing is 15 kHz;

the transmission number N of the signals is 8 when the subcarrier spacing is 30 kHz;

20 the transmission number N of the signals is 8 when the subcarrier spacing is 60 kHz;

the transmission number N of the signals is 16 when the subcarrier spacing is 120 kHz; or

25 the transmission number N of the signals is 32 when the subcarrier spacing is 240 kHz.

2. The method of claim 1, wherein determining, by the first device according to the subcarrier spacing, the transmission number N of the signals comprises:

30 determining, by the first device according to the subcarrier spacing and a predefined association, the transmission number N, wherein the predefined association is an association between the subcarrier spacing and the transmission number N.

3. The method of claim 1 or 2, wherein transmitting, by the first device, the N signals to the second device comprises:

determining, by the first device according to the transmission number N, physical resources or sequence resources corresponding to the transmission number

5 N; and

transmitting, by the first device, the N signals to the second device by adopting the physical resources or the sequence resources.

4. The method of any one of claims 1-3, wherein the first device is a network device,
10 and the second device is a terminal device.

5. A device for transmitting signals, the device being a first device and comprising:

a first determination unit, configured to determine, according to an operating frequency band for transmitting signals, a subcarrier spacing for transmitting signals;
15 and determine, according to the subcarrier spacing, a transmission number N of the signals; wherein the signals comprise a Physical Broadcast Channel, PBCH, and the operating frequency band is transmitting frequency band of PBCH; and

a transmission unit, configured to transmit N signals to a second device according to the transmission number N;

20 wherein the transmission number N and a number of beams for transmitting the signals are in one-to-one association;

wherein the transmission number N of the signals is selected from one of the following that:

the transmission number N of the signals is 4 when the subcarrier spacing is
25 15 kHz;

the transmission number N of the signals is 8 when the subcarrier spacing is 30 kHz;

the transmission number N of the signals is 8 when the subcarrier spacing is 60 kHz;

30 the transmission number N of the signals is 16 when the subcarrier spacing is 120 kHz; or

the transmission number N of the signals is 32 when the subcarrier spacing is 240 kHz.

6. The device of claim 5, wherein the first determination unit is configured to:

determine the transmission number N according to the subcarrier spacing and a predefined association, wherein the predefined association is an association between

5 the subcarrier spacing and the transmission number N.

7. The device of claim 5 or 6, wherein the transmission unit is configured to:

determine, according to the transmission number N, physical resources or sequence resources corresponding to the transmission number N; and

10 transmit the N signals to the second device by adopting the physical resources or the sequence resources.

8. The device of any one of claims 5-7, wherein the first device is a network device, and the second device is a terminal device.

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9. A method for receiving signals, comprising:

receiving, by a second device, N signals transmitted on a Physical Broadcast Channel, PBCH from a first device; wherein a transmission number N of the signals is determined according to a subcarrier spacing for PBCH, the subcarrier spacing is determined according to an operating frequency band for PBCH, the transmission number N and a number of beams for transmitting the signals are in one-to-one association, and the transmission number N of the signals is selected from one of the following that: the transmission number N of the signals is 4 when the subcarrier spacing is 15 kHz, the transmission number N of the signals is 8 when the subcarrier spacing is 30 kHz, the transmission number N of the signals is 8 when the subcarrier spacing is 60 kHz, the transmission number N of the signals is 16 when the subcarrier spacing is 120 kHz, or the transmission number N of the signals is 32 when the subcarrier spacing is 240 kHz; and

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25 processing, by the second device, the received N signals.

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10. The method of claim 9, wherein the first device is a network device, and the second device is a terminal device.

11. A device for receiving signals, the device being a second device, comprising:

a processor;

a memory, configured to store instructions executable by the processor; and

a transceiver;

5 wherein the processor is configured to:

control the transceiver to receive N signals transmitted on a Physical Broadcast Channel, PBCH from a first device; wherein a transmission number N of the signals is determined according to a subcarrier spacing for PBCH, the subcarrier spacing is determined according to an operating frequency band for PBCH, the transmission number N and a number of beams for transmitting the signals are in one-to-one association, and the transmission number N of the signals is selected from one of the following that: the transmission number N of the signals is 4 when the subcarrier spacing is 15 kHz, the transmission number N of the signals is 8 when the subcarrier spacing is 30 kHz, the transmission number N of the signals is 8 when the subcarrier spacing is 60 kHz, the transmission number N of the signals is 16 when the subcarrier spacing is 120 kHz, or the transmission number N of the signals is 32 when the subcarrier spacing is 240 kHz; and

process the received N signals.

20 12. The device of claim 11, wherein the first device is a network device, and the second device is a terminal device.