

CLAIMS

5 1. A method for transmitting a reference signal, comprising:

determining, by a network device, a target resource configured to transmit a reference signal, the target resource being part of transmission resources available for transmission of the reference signal and the target resource comprising at least one of a frequency-domain resource, a time-domain resource or a space-domain resource;

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transmitting, by the network device, the reference signal to a terminal device on the target resource.

2. The method of claim 1, wherein determining, by the network device, the target resource configured to transmit the reference signal comprises:

determining, by the network device, a reference identifier, the reference identifier comprising a cell identifier or a beam identifier; and

determining, by the network device, the target resource configured to transmit the reference signal according to the reference identifier and a correspondence between a reference identifier and a resource identifier, the resource identifier corresponding to the target resource one to one.

3. The method of claim 1, further comprising:

transmitting, by the network device, indication information to the terminal device, the indication information comprising resource indication information configured to indicate the target resource.

4. The method of claim 1, further comprising:

transmitting, by the network device, indication information to the terminal device, the indication information comprising identifier indication information configured to indicate the resource identifier and the resource identifier corresponding to the target resource one to one.

5. The method of claim 4, wherein the resource identifier comprises at least one of

the following identifiers:

a frequency-domain resource identifier configured to indicate the frequency-domain resource, a time-domain resource identifier configured to indicate the time-domain resource and a time-domain resource period, a space-domain resource
5 identifier configured to indicate the space-domain resource or a combined resource identifier configured to indicate at least two resources in the frequency-domain resource, the time-domain resource and the space-domain resource.

6. The method of any one of claims 3-5, wherein transmitting, by the network device,
10 the indication information to the terminal device comprises:

transmitting, by the network device, the indication information carried in high-layer signaling, physical-layer signaling or a Media Access Control (MAC)-layer notification to the terminal device.

15 7. The method of claim 1-6, when the target resource comprises the time-domain resource, the time-domain resource comprises at least one time bucket and/or at least one time point and, the at least one time bucket and/or the at least one time point are/is periodically distributed.

20 8. A method for transmitting a reference signal, comprising:

determining, by a terminal device, a target resource configured to transmit a reference signal, the target resource being part of transmission resources available for transmission of the reference signal and the target resource comprising at least one of a frequency-domain resource, a time-domain resource or a space-domain resource;

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receiving, by the terminal device, the reference signal sent by a network device on the target resource.

9. The method of claim 8, wherein determining, by the terminal device, the target
30 resource configured to transmit the reference signal comprises:

determining, by the terminal device, a reference identifier, the reference identifier comprising a cell identifier or a beam identifier; and

determining, by the terminal device, the target resource configured to transmit

the reference signal according to the reference identifier and a correspondence between a reference identifier and a resource identifier, the resource identifier corresponding to the target resource one to one.

5 10. The method of claim 8, wherein determining, by the terminal device, the target resource configured to transmit the reference signal comprises:

receiving, by the terminal device, indication information sent by the network device, the indication information comprising resource indication information configured to indicate the target resource.

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11. The method of claim 8, wherein determining, by the terminal device, the target resource configured to transmit the reference signal comprises:

receiving, by the terminal device, indication information sent by the network device, the indication information comprising identifier indication information
15 configured to indicate a resource identifier; and

determining, by the terminal device, the target resource corresponding to the resource identifier one to one according to the identifier indication information.

20 12. The method of claim 11, wherein the resource identifier comprises at least one of the following identifiers:

a frequency-domain resource identifier configured to indicate the frequency-domain resource, a time-domain resource identifier configured to indicate the time-domain resource and a time-domain resource period, a space-domain resource identifier configured to indicate the space-domain resource or a combined resource
25 identifier configured to indicate at least two resources in the frequency-domain resource, the time-domain resource and the space-domain resource.

13. The method of any one of claims 10-12, wherein receiving, by the terminal device, the indication information sent by the network device comprises:

30 receiving, by the terminal device, the indication information carried in high-layer signaling, physical-layer signaling or a Media Access Control (MAC)-layer notification from the network device.

14. The method of any one of claims 8-13, when the target resource comprises the time-domain resource, the time-domain resource comprises at least one time bucket and/or at least one time point and, the at least one time bucket and/or the at least one time point are/is periodically distributed.

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15. A Terminal device, comprising:

a determination module, configured to determine a target resource configured to transmit a reference signal, the target resource being part of transmission resources available for transmission of the reference signal and the target resource comprising at least one of a frequency-domain resource, a time-domain resource or a space-domain resource; and

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a receiving module, configured to receive the reference signal sent by a network device on the target resource determined by the determination module.

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16. The terminal device of claim 15, wherein the determination module is specifically configured to:

determine a reference identifier, the reference identifier comprising a cell identifier or a beam identifier; and

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determine the target resource configured to transmit the reference signal according to the reference identifier and a correspondence between a reference identifier and a resource identifier, the resource identifier corresponding to the target resource one to one.

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17. The terminal device of claim 15, wherein the receiving module is further configured to:

receive indication information sent by the network device, the indication information comprising resource indication information configured to indicate the target resource.

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18. The terminal device of claim 15, wherein the receiving module is further configured to:

receive indication information sent by the network device, the indication information comprising identifier indication information configured to indicate a

resource identifier; and

the determination module is further configured to determine the target resource corresponding to the resource identifier one to one according to the identifier indication information.

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19. The terminal device of claim 18, wherein the resource identifier comprises at least one of the following identifiers:

10 a frequency-domain resource identifier configured to indicate the frequency-domain resource, a time-domain resource identifier configured to indicate the time-domain resource and a time-domain resource period, a space-domain resource identifier configured to indicate the space-domain resource or a combined resource identifier configured to indicate at least two resources in the frequency-domain resource, the time-domain resource and the space-domain resource.

15 20. The terminal device of any one of claims 17-19, wherein the receiving module is specifically configured to:

receive the indication information carried in high-layer signaling, physical-layer signaling or a Media Access Control (MAC)-layer notification from the network device.