

CLAIMS

1. A method comprising:

receiving, by a terminal device, a first indication of first one or more resources for transmission,

wherein the first indication comprises at least three of first time domain information, first frequency domain information, first spatial domain information, or first power domain information of the first one or more resources; and

wherein the first indication is indicative of a first beam which is an uplink (UL) beam, and the method further comprises:

receiving information indicating that a second signal associated with a second beam is quasi co-located (QCLed) with a first signal associated with the first beam with regard to a QCL type, wherein the second beam is a downlink (DL) beam, and the QCL type indicates that transmission of the first signal via the first beam and reception of the second signal via the second beam are performed simultaneously.

2. The method of claim 1, further comprising:

receiving, by the terminal device, a second indication of second one or more resources for reception,

wherein the second indication comprises at least three of second time domain information, second frequency domain information, second spatial domain information, or second power domain information of the second one or more resources.

3. The method of claim 2, wherein at least one of the following:

the first time domain information and the second time domain information are the same or different;

the first frequency domain information and the second frequency domain information are the same or different;

or

the first spatial domain information and the second spatial domain information are the same or different.

4. The method of claim 2 or 3, wherein:

the first time domain information and the second time domain information are the same;

the first frequency domain information and the second frequency domain information are the same; and

the first spatial domain information and the second spatial domain information are different.

5. The method of any of claims 1-4, wherein:

the first indication is indicative of a first resource and a second resource;

the time domain information comprises first time domain information for the first resource and second time domain information for the second resource, and the first time domain information and the second time domain information are the same or different;

the frequency domain information comprises first frequency domain information for the first resource and second frequency domain information for the second resource, and the first frequency time domain information and the second frequency domain information are the same or different; and

the spatial domain information comprises first spatial domain information for the first resource and second spatial domain information for the second resource, and the first spatial domain information and the second spatial domain information are the same or different.

6. The method of any of claims 1-5, wherein the first power domain information indicates at least one power control parameter of the first one or more resources, and the second power domain information indicates at least one power control parameter of the second one or more resources.

7. A method comprising:

determining, at a network device, first one or more resources for a terminal device to perform transmission; and

transmitting, to the terminal device, a first indication of the first one or more resources, wherein the first indication comprises at least three of first time domain information, first frequency domain information, first spatial domain information, or first power domain information of the first one or more resources; and

wherein the first indication is indicative of a first beam which is an uplink (UL) beam, and the method further comprises:

determining that reception of a first signal via the first beam and of a transmission second signal via a second beam are to be performed simultaneously, wherein the second beam is a DL beam; and

transmitting, to the terminal device, information indicating that the second signal associated with the second beam is quasi co-located (QCLed) with the first signal associated with the first beam with regard to a QCL type, and the QCL type indicates that reception of the first signal via the first beam and transmission of the second signal via the second beam are performed simultaneously at the terminal device.

8. The method of claim 7, further comprising:

determining, at the network device, second one or more resources for the terminal device to perform reception; and

transmitting, to the terminal device, a second indication of the second one or more resources, wherein the second indication comprises at least three of second time domain information, second frequency domain information, second spatial domain information, or second power domain information of the second one or more resources.

9. The method of claim 8, wherein at least one of the following:

the first time domain information and the second time domain information are the same or different;

the first frequency domain information and the second frequency domain information are the same or different;

or

the first spatial domain information and the second spatial domain information are the same or different.

10. The method of claim 8 or 9, wherein:

the first time domain information and the second time domain information are the same;

the first frequency domain information and the second frequency domain information are the same; and

the first spatial domain information and the second spatial domain information are different.

11. The method of any of claims 7-10, wherein:

the first indication is indicative of a first resource and a second resource;

the time domain information comprises first time domain information for the first resource and second time domain information for the second resource, and the first time domain information and the second time domain information are the same or different;

the frequency domain information comprises first frequency domain information for the first resource and second frequency domain information for the second resource, and the first frequency time domain information and the second frequency domain information are the same or different; and

the spatial domain information comprises first spatial domain information for the first resource and second spatial domain information for the second resource, and the first spatial domain information and the second spatial domain information are the same or different.

12. The method of any of claims 7-11, wherein the first power domain information indicates at least one power control parameter of the first one or more resources, and the second power domain information indicates at least one power control parameter of the second one or more resources.

13. An apparatus comprising means to perform the method of any one of claims 1 to 6.

14. An apparatus comprising means to perform the method of any one of claims 7 to 12.

15. A computer program product comprising computer-executable instructions which, when executed, cause an apparatus to perform the method of any of claims 1-12.