

CLAIMS

1. A parameter determining method, applied to a terminal device, wherein the method comprises:

5 in a case that a first preset condition is met, determining, based on parameter information of a specified object, a target parameter used in transmitting a PUCCH on a target physical uplink control channel PUCCH resource; wherein

the specified object comprises one of a specified resource, a specified channel, and a specified signal, and the target parameter comprises a power control parameter,

10 wherein the determining, based on parameter information of a specified object, a target parameter used in transmitting a PUCCH on a target physical uplink control channel PUCCH resource comprises:

determining a power control parameter of a target object based on second target information of the specified object; and

15 using the power control parameter of the target object as a target power control parameter used in transmitting the PUCCH on the target PUCCH resource; wherein

the second target information comprises one of TCI state information, QCL information, and spatial relation information, and the target object comprises at least one of the target PUCCH resource and a PUCCH resource group to which the target PUCCH resource belongs,

20 wherein

the first preset condition comprises:

that first downlink control information, DCI, is received from one transmission reception point, TRP, wherein the first DCI is used to indicate transmitting the PUCCH on the target PUCCH resource; or

25

that multiple DCIs are received from multiple TRPs, wherein the multiple DCIs are used to indicate transmitting the PUCCH on the target PUCCH resource;
or

that an occasion for transmitting the PUCCH by using the target PUCCH resource is reached, wherein the target PUCCH resource is a periodic resource or a semi-persistent resource.

2. The method according to claim 1, wherein the determining a power control parameter of a target object based on second target information of the specified object comprises:

10 determining a first power control parameter of the target object based on a reference signal or a source reference signal in the second target information of the specified object, wherein the first power control parameter is a pathloss reference signal.

3. The method according to claim 2, wherein the determining a power control parameter of a target object based on second target information of the specified object further comprises:

determining that a second power control parameter of the target object is a preset value, wherein the second power control parameter is a power control parameter other than the first power control parameter.

20 4. The method according to claim 2, wherein the determining a first power control parameter of the target object based on a reference signal or a source reference signal in the second target information of the specified object comprises:

in a case that a second preset condition is met, determining the first power control parameter of the target object based on the reference signal or source reference signal in the second target information of the specified object, wherein

25 the second preset condition comprises that a network device has not configured the spatial relation information of the target object for the terminal device, and the network device has configured the first power control parameter of the target object for the terminal device; or

the second preset condition comprises that a network device has not configured the spatial relation information and the first power control parameter of the target object for the terminal device; or

5 the second preset condition comprises that a network device has configured the spatial relation information of the target object for the terminal device, and the network device has not configured the first power control parameter of the target object for the terminal device.

10 5. The method according to claim 3, wherein the determining a power control parameter of a target object based on second target information of the specified object further comprises:

determining that a second power control parameter of the target object is a preset value, wherein the second power control parameter is a power control parameter other than the first power control parameter.

15 6. The method according to any one of claims 1 to 5, wherein when the first preset condition comprises that the first DCI is received from one TRP, wherein

the specified object comprises one of the following objects:

a channel in which the first DCI is located;

a control resource set in which the first DCI is located; and

20 one of a specified resource, a specified channel, and a specified signal that correspond to the TRP.

7. The method according to claim 6, wherein

the specified object further comprises a control resource set having a specified index value and corresponding to the TRP.

25 8. The method according to claim 7, wherein

the specified index value comprises at least one of a largest index value, a smallest index value, and an index value 0.

9. The method according to claim 6, wherein the method further comprises:

30 transmitting, on the target PUCCH resource by using the target parameter, the PUCCH to the TRP.

10. The method according to any one of claims 1 to 5, wherein
when the first preset condition comprises that the multiple DCIs are received
from the multiple TRPs, wherein

the specified object comprises one of the following objects:

5 a specified control resource set, wherein the specified control resource set is
a control resource set whose index value meets a third preset condition in multiple
control resource sets in which the multiple DCIs are located;

one of a specified resource, a specified channel, and a specified signal that
correspond to a specified TRP, wherein the specified TRP is a TRP whose index
10 value meets a fourth preset condition in the multiple TRPs; and

one of a specified resource, a specified channel, and a specified signal that
correspond to a specified control resource set group, wherein the specified control
resource set group is a control resource set group whose index value meets a fifth
preset condition in multiple control resource set groups in which the multiple DCIs
15 are located.

11. The method according to claim 10, wherein

the specified object is the specified control resource set; wherein

the third preset condition comprises one of the following: an index value of
the control resource set being the largest, an index value of the control resource
20 set being the smallest, and an index value of the control resource set being a
specified value;

or, wherein

the specified object is one of the following specified resources corresponding
to the specified TRP:

25 a control resource set having a specified index value and corresponding to the
specified TRP; and

a control resource set in which target DCI of the specified TRP is located,
wherein the target DCI is a DCI, in the multiple DCIs, that is transmitted by the
specified TRP;

30 or, wherein

the specified object is one of the following specified resources corresponding to the specified control resource set group:

a control resource set having a specified index value in the specified control resource set group; and

5 a control resource set in which target DCI is located in the specified control resource set group, wherein the target DCI is a DCI, in the multiple DCIs, that is transmitted on a control resource set in the specified control resource set group.

12. The method according to claim 11, wherein

10 the fifth preset condition comprises one of the following: an index value of the control resource set being the largest, an index value of the control resource set being the smallest, and an index value of the control resource set being a specified value.

13. The method according to any one of claims 1 to 5, wherein

15 when the first preset condition comprises that the occasion for transmitting the PUCCH by using the target PUCCH resource is reached, wherein the specified object comprises one of the following objects:

a most recent transmission;

one of a specified resource, a specified channel, and a specified signal of a TRP corresponding to a most recent transmission; and

20 one of a specified resource, a specified channel, and a specified signal that correspond to a control resource set group corresponding to a most recent transmission.

14. The method according to claim 13, wherein

25 the specified object is a control resource set having a specified index value in a control resource set of a TRP corresponding to the most recent transmission;

or, wherein

the specified object is a control resource set having a specified index value in a control resource set group corresponding to the most recent transmission.

15. The method according to claim 13, wherein

the most recent transmission comprises one of any most recent transmission, any most recent downlink transmission, any most recent uplink transmission, a most recent specified channel transmission, and a most recent specified signal transmission.

5 16. The method according to any one of claims 1 to 5, wherein before the determining, based on parameter information of a specified object, a target parameter used in transmitting a PUCCH on a target PUCCH resource, the method further comprises:

receiving first information from the network device; and

10 determining, based on the first information, the PUCCH resource group to which the target PUCCH resource belongs.

17. A terminal device, comprising:

15 a first parameter determining module, configured to: in a case that a first preset condition is met, determine, based on parameter information of a specified object, a target parameter used in transmitting a PUCCH on a target PUCCH resource; wherein

the specified object comprises one of a specified resource, a specified channel, and a specified signal, and the target parameter comprises a power control parameter,

20 the first parameter determining module is further configured to:

determine a power control parameter of a target object based on second target information of the specified object; and

use the power control parameter of the target object as a target power control parameter used in transmitting the PUCCH on the target PUCCH resource;

25 wherein

the second target information comprises one of TCI state information, QCL information, and spatial relation information, and the target object comprises at least one of the target PUCCH resource and a PUCCH resource group to which the target PUCCH resource belongs,

30 wherein

the first preset condition comprises:

that first downlink control information, DCI, is received from one transmission reception point, TRP, wherein the first DCI is used to indicate transmitting the PUCCH on the target PUCCH resource; or

5 that multiple DCIs are received from multiple TRPs, wherein the multiple DCIs are used to indicate transmitting the PUCCH on the target PUCCH resource; or

10 that an occasion for transmitting the PUCCH by using the target PUCCH resource is reached, wherein the target PUCCH resource is a periodic resource or a semi-persistent resource.

18. The terminal device according to claim 17, the first parameter determining module is further configured to:

15 determine a first power control parameter of the target object based on a reference signal or a source reference signal in the second target information of the specified object, wherein the first power control parameter is a pathloss reference signal.

19. The terminal device according to claim 18, the first parameter determining module is further configured to:

20 determine that a second power control parameter of the target object is a preset value, wherein the second power control parameter is a power control parameter other than the first power control parameter.

20. The terminal device according to claim 18, the first parameter determining module is further configured to:

25 in a case that a second preset condition is met, determine the first power control parameter of the target object based on the reference signal or source reference signal in the second target information of the specified object, wherein

30 the second preset condition comprises that a network device has not configured the spatial relation information of the target object for the terminal device, and the network device has configured the first power control parameter of the target object for the terminal device; or

the second preset condition comprises that a network device has not configured the spatial relation information and the first power control parameter of the target object for the terminal device; or

- 5 the second preset condition comprises that a network device has configured the spatial relation information of the target object for the terminal device, and the network device has not configured the first power control parameter of the target object for the terminal device.