CLAIMS

What is claimed is:

1. An access method, wherein the method comprises:

receiving at least one piece of first information, wherein the at least one piece of first information indicates first access permission, the first access permission indicates whether access of a first-type reduced capability terminal device is allowed; and

determining whether access of the first-type reduced capability terminal device is allowed; wherein the at least one piece of first information comprises one or more bits, different bit states of the at least one piece of first information indicates the following:

access of the first-type reduced capability terminal device is not allowed;

in response to that access of the first-type reduced capability terminal device is allowed, the first-type reduced capability terminal device receives information based on a first resource; and

in response to that access of the first-type reduced capability terminal device is allowed, the first-type reduced capability terminal device receives information based on a second resource, wherein the first resource and the second resource are different control resource sets, random access resources, or synchronization information resources.

2. The method according to claim 1, wherein at least one bit state of the at least one piece of first information indicates one or more of time domain position information, frequency domain position information, code domain position information, a resource index, a time domain resource offset, a frequency domain resource offset, a code domain resource offset, a power configuration, or a beam resource of the first resource or the second resource.

3. The method according to claim 1 or 2, wherein the first resource and the second resource have different resource information, and the resource information is at least one of the following: the time domain position information, the frequency domain position information, the code domain position information, the resource index, the power configuration, the beam resource, the time domain resource offset value, the frequency domain resource offset value, or the code domain resource offset value.

4. The method according to any one of claims 1 to 3, wherein the different bit states of the at least one piece of first information further indicates the following:

access of a second-type reduced capability terminal device is not allowed;

in response to that access of the second-type reduced capability terminal device is allowed, the second-type reduced capability terminal device receives information based on the first resource; and

in response to that access of the second-type reduced capability terminal device is allowed, the second-type reduced capability terminal device receives information based on the second resource.

5. The method according to claim 4, wherein

the second-type reduced capability terminal device and the first-type reduced capability terminal device have different first features, the first feature comprises one or more of the following:

a quantity of resources supported or configured by the terminal device, a quantity of transmit antenna ports, a quantity of receive antenna ports, a quantity of radio frequency channels, a quantity of HARQ processes, a supported peak rate, an application scenario, a latency requirement, or a processing capability.

6. The method according to claim 4 or 5, wherein

a quantity of radio frequency channels of the first-type reduced capability terminal device is 1, a quantity of radio frequency channels of the second-type reduced capability terminal device is 2.

7. The method according to any one of claims 1 to 6, wherein the at least one piece of first information is comprised in a master information block MIB, the at least one piece of first information is comprised in downlink control information DCI, or the at least one piece of first information is comprised in a system information block SIB.

8. The method according to claim 7, wherein a communication frequency between the first-type reduced capability terminal device and a network device is within a frequency range 1, and the at least one piece of first information is comprised in the master information block MIB; or

a communication frequency between the first-type reduced capability terminal device and a network device is within a frequency range 2, and the at least one piece of first information is comprised in the downlink control information DCI or the system information block SIB.

9. The method according to any one of claims 1 to 6, wherein one piece of first information in the at least one piece of first information is comprised in a master information block MIB, and another piece of first information in the at least one piece of first information is comprised in

downlink control information or a system information block.

10. The method according to claim 9, wherein a communication frequency between the first-type reduced capability terminal device and the network device is within a frequency range 2.

11. The method according to any one of claims 1 to 10, wherein

the at least one piece of first information comprises one piece of first information, and the one piece of first information indicates a first access capability and the first access permission; or

the at least one piece of first information comprises two pieces of first information, one piece of first information indicates a first access capability, and the other piece of first information indicates the first access permission,

wherein the first access capability indicates whether access of the first-type reduced capability terminal device is supported.

12. The method according to any one of claims 1 to 11, wherein the receiving at least one piece of first information, comprising:

receiving at least one piece of first information from a network device

13. An access method, wherein the method comprises:

determining whether access of a first-type reduced capability terminal device is allowed; and

sending at least one piece of first information, wherein the at least one piece of first information indicates first access permission, the first access permission indicates whether access of the first-type reduced capability terminal device is allowed, wherein the at least one piece of first information comprises one or more bits, different bit states of the at least one piece of first information indicates the following:

access of the first-type reduced capability terminal device is not allowed;

in response to that access of the first-type reduced capability terminal device is allowed, the first-type reduced capability terminal device receives information based on a first resource; and

in response to that access of the first-type reduced capability terminal device is allowed, the first-type reduced capability terminal device receives information based on a second resource, wherein the first resource and the second resource are different control resource sets, random access resources, or synchronization information resources.

14. The method according to claim 13, wherein at least one bit state of the at least one piece of first information indicates one or more of time domain position information, frequency domain position information, code domain position information, a resource index, a time domain resource

offset, a frequency domain resource offset, a code domain resource offset, a power configuration, or a beam resource of the first resource or the second resource.

15. The method according to claim 13 or 14, wherein the first resource and the second resource have different resource information, and the resource information is at least one of the following: the time domain position information, the frequency domain position information, the code domain position information, the resource index, the power configuration, the beam resource, the time domain resource offset value, the frequency domain resource offset value, or the code domain resource offset value.

16. The method according to any one of claims 13 to 15, wherein the different bit states of the at least one piece of first information further indicates the following:

access of the second-type reduced capability terminal device is not allowed;

in response to that access of the second-type reduced capability terminal device is allowed, the second-type reduced capability terminal device receives information based on a first resource; and

in response to that access of the second-type reduced capability terminal device is allowed, the second-type reduced capability terminal device receives information based on a second resource.

17. The method according to claim 16, wherein

the second-type reduced capability terminal device and the first-type reduced capability terminal device have different first features, the first feature comprises one or more of the following:

a quantity of resources supported or configured by the terminal device, a quantity of transmit antenna ports, a quantity of receive antenna ports, a quantity of radio frequency channels, a quantity of HARQ processes, a supported peak rate, an application scenario, a latency requirement, or a processing capability.

18. The method according to claim 16 or 17, wherein

a quantity of radio frequency channels of the first-type reduced capability terminal device is 1, a quantity of radio frequency channels of the second-type reduced capability terminal device is 2.

19. The method according to any one of claims 13 to 18, wherein the at least one piece of first information is comprised in a master information block MIB, the at least one piece of first

information is comprised in downlink control information DCI, or the at least one piece of first information is comprised in a system information block SIB.

20. The method according to claim 19, wherein a communication frequency between the first terminal-type reduced capability device and the network device is within a frequency range 1, and the at least one piece of first information is comprised in the master information block MIB; or a communication frequency between the first-type reduced capability terminal device and the network device is within a frequency range 2, and the at least one piece of first information is comprised in the downlink control information DCI or the system information block SIB.

21. The method according to any one of claims 13 to 18, wherein one piece of first information in the at least one piece of first information is comprised in a master information block MIB, and another piece of first information in the at least one piece of first information is comprised in downlink control information or a system information block.

22. The method according to claim 21, wherein a communication frequency between the first-type reduced capability terminal device and the network device is within a frequency range 2.

23. The method according to any one of claims 13 to 22, wherein the at least one piece of first information comprises one piece of first information, and the one piece of first information indicates a first access capability and the first access permission; or

the at least one piece of first information comprises two pieces of first information, one piece of first information indicates a first access capability, and the other piece of first information indicates the first access permission,

wherein the first access capability indicates whether access of the first-type reduced capability terminal device is supported.

24. The method according to any one of claims 13 to 23, wherein the sending at least one piece of first information, comprising:

sending at least one piece of first information to the first-type reduced capability terminal device.

25. A communication apparatus, comprising at least one processor and an interface circuit, wherein the interface circuit is configured to provide input or output of instructions and/or data for the at least one processor, and when the at least one processor executes the instructions, the apparatus is enabled to implement the method according to any one of claims 1 to 12.

26. A communication apparatus, comprising at least one processor and an interface circuit,

wherein the interface circuit is configured to provide input or output of instructions and/or data for the at least one processor, and when the at least one processor executes the instructions, the apparatus is enabled to implement the method according to any one of claims 13 to 24.

27. A computer-readable storage medium, comprising a program or instructions, wherein when the program or the instructions are run on a computer, the method according to any one of claims 1 to 12 is performed.

28. A computer-readable storage medium, comprising a program or instructions, wherein when the program or the instructions are run on a computer, the method according to any one of claims 13 to 24 is performed.

29. A communication apparatus, wherein the communication apparatus is configured to perform the method according to any one of claims 1 to 12.

30. A communication apparatus, wherein the communication apparatus is configured to perform the method according to any one of claims 13 to 24.