CLAIMS

1. An accessing method applied by a terminal apparatus or applied by a chip in the terminal apparatus, wherein the method comprises:

receiving a system information block type 1, SIB1, from a network device, wherein the SIB1 comprises first information indicating whether a reduced capability REDCAP terminal is allowed to access the network device, and the REDCAP terminal comprises a first-type REDCAP terminal and a second-type REDCAP terminal, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a same frequency range, the first information comprises first indication information and second indication information, wherein the first indication information indicates whether the first-type REDCAP terminal is allowed to access the network device, and the second indication information indicates whether the second-type REDCAP terminal is allowed to access the network device, and a number of receive antennas of the second-type REDCAP terminal is less than that of the first-type REDCAP terminal;

determining based on the first information, whether to access the network device, wherein the terminal apparatus is the first-type REDCAP terminal or the second-type REDCAP terminal; and

wherein when the first information indicates that the first-type REDCAP terminal and the second-type REDCAP terminal are allowed to access the network device, the method further comprises:

sending second information to the network device, wherein the second information indicates that the terminal apparatus is a REDCAP terminal; and

sending third information to the network device, wherein the third information indicates that the terminal apparatus is the first-type REDCAP terminal or the second-type REDCAP terminal.

2. The method according to claim 1, wherein the second information is carried on a PRACH, a resource of the PRACH corresponds to the REDCAP terminal, and the resource of the PRACH comprises at least one of the following: a time domain resource of the PRACH, a frequency domain resource of the PRACH, or a code domain resource of the PRACH, or the second information is carried on a Msg3 or Msg A; and

the third information is carried in a RRC signaling.

3. The method according to claim 2, wherein resources of the PRACH configured by the

network device comprises the resource of PRACH corresponding to a REDCAP terminal and a resource of PRACH corresponding to a common terminal, the resource of PRACH corresponding to a REDCAP terminal is for the first-type REDCAP terminal and the second-type REDCAP terminal.

4. The method according to any one of claims 1 to 3, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a frequency range 1, FR1, wherein the frequency range of FR1 is less than 6 GHz.

5. The method according to any one of claims 1-4, wherein the number of receive antennas of the second-type REDCAP terminal is 1, the number of receive antennas of the first-type REDCAP terminal is 2.

6. An accessing method applied by a network device or applied by a chip in the network device, wherein the method comprises:

determining a system information block type 1, SIB1, wherein the SIB1 comprises first information indicating whether a reduced capability REDCAP terminal is allowed to access the network device, and the REDCAP terminal comprises a first-type REDCAP terminal and a second-type REDCAP terminal, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a same frequency range, the first information comprises first indication information and second indication information, wherein the first indication information indicates whether the first-type REDCAP terminal is allowed to access the network device, and the second indication information indicates whether the second-type REDCAP terminal is allowed to access the network device, and a number of receive antennas of the second-type REDCAP terminal is less than that of the first-type REDCAP terminal;

sending the first information to a terminal apparatus; and

wherein when the first information indicates that the first-type REDCAP terminal and the second-type REDCAP terminal are allowed to access the network device; the method further comprises:

receiving second information from the terminal apparatus, wherein the second information indicates that the terminal apparatus is a REDCAP terminal; and

receiving third information from the terminal apparatus, wherein the third information indicates that the terminal apparatus is the first-type REDCAP terminal or the second-type REDCAP terminal.

7. The method according to claim 6, wherein the second information is carried on a PRACH, a resource of the PRACH corresponds to the REDCAP terminal, and the resource of the PRACH comprises at least one of the following: a time domain resource of the PRACH, a frequency domain resource of the PRACH, or a code domain resource of the PRACH, or the second information is carried on a Msg3 or Msg A; and

the third information is carried in a RRC signaling.

8. The method according to claim 7, wherein resources of the PRACH configured by the network device comprises the resource of PRACH corresponding to a REDCAP terminal and a resource of PRACH corresponding to a common terminal, the resource of PRACH corresponding to a REDCAP terminal is for the first-type REDCAP terminal and the second-type REDCAP terminal.

9. The method according to any one of claims 6 to 8, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a frequency range 1, FR1, wherein the frequency range of FR1 is less than 6 GHz.

10. The method according to any one of claims 6 to 9, wherein the number of receive antennas of the second-type REDCAP terminal is 1, the number of receive antennas of the first-type REDCAP terminal is 2.

11. A communication apparatus, wherein the communication apparatus comprises a transceiver module and a processing module, wherein

the transceiver module is configured to receive a system information block type 1, SIB1, wherein the SIB1 comprises first information indicating whether a reduced capability REDCAP terminal is allowed to access a network device, and the REDCAP terminal comprises a first-type REDCAP terminal and a second-type REDCAP terminal, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a same frequency range, the first information comprises first indication information and second indication information, wherein the first indication information indicates whether the first-type REDCAP terminal is allowed to access the network device, and the second indication information indicates whether the second-type REDCAP terminal is allowed to access the network device, and a number of receive antennas of the second-type REDCAP terminal is less than that of the first-type REDCAP terminal; and

the processing module is configured to determine, based on the first information, whether to access the network device, wherein the communication apparatus belongs to the first-type

REDCAP terminal or the second-type REDCAP terminal, and

wherein when the first information indicates that the first-type REDCAP terminal and the second-type REDCAP terminal are allowed to access the network device,

the transceiver module is configured to send second information to the network device, wherein the second information indicates that the terminal apparatus is a REDCAP terminal, and send third information to the network device, wherein the third information indicates that the terminal apparatus is the first-type REDCAP terminal or the second-type REDCAP terminal.

12. The communication apparatus according to claim 11, wherein the second information is carried on a PRACH, a resource of the PRACH corresponds to the REDCAP terminal, and the resource of the PRACH comprises at least one of the following: a time domain resource of the PRACH, a frequency domain resource of the PRACH, or a code domain resource of the PRACH, or the second information is carried on a Msg3 or Msg A; and

the third information is carried in a RRC signaling.

13. The communication apparatus according to claim 12, wherein resources of the PRACH configured by the network device comprises the resource of PRACH corresponding to a REDCAP terminal and a resource of PRACH corresponding to a common terminal, the resource of PRACH corresponding to a REDCAP terminal is for the first-type REDCAP terminal and the second-type REDCAP terminal.

14. The apparatus according to any one of claims 11 to 13, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a frequency range 1, FR1, wherein the frequency range of FR1 is less than 6 GHz.

15. The communication apparatus according to any one of claims 11 to 14, wherein the number of receive antennas of the second-type REDCAP terminal is 1, the number of receive antennas of the first-type REDCAP terminal is 2.

16. A communication apparatus, wherein the communication apparatus comprises a processing module and a transceiver module, wherein

the processing module is configured to determine a system information block type 1, SIB1, wherein the SIB1 comprises first information indicating whether a reduced capability REDCAP terminal is allowed to access the communication apparatus, and the REDCAP terminal comprises a first-type REDCAP terminal and a second-type REDCAP terminal, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a same frequency range, the

first information comprises first indication information and second indication information, wherein the first indication information indicates whether the first-type REDCAP terminal is allowed to access the network device, and the second indication information indicates whether the second-type REDCAP terminal is allowed to access the network device, and a number of receive antennas of the second-type REDCAP terminal is less than that of the first-type REDCAP terminal;

the transceiver module is configured to send the first information to a terminal apparatus; and

wherein the first information indicates that the first-type REDCAP terminal and the second-type REDCAP terminal are allowed to access the communication apparatus; and

the transceiver module is further configured to receive second information from the terminal apparatus, wherein the second information indicates that the terminal apparatus is a REDCAP terminal; and

the transceiver module is further configured to receive third information from the terminal apparatus, wherein the third information indicates that the terminal apparatus is the first-type REDCAP terminal or the second-type REDCAP terminal.

17. The communication apparatus according to claim 16, wherein the second information is carried on a PRACH, a resource of the PRACH corresponds to the REDCAP terminal, and the resource of the PRACH comprises at least one of the following: a time domain resource of the PRACH, a frequency domain resource of the PRACH, or a code domain resource of the PRACH, or the second information is carried on a Msg3 or Msg A; and

the third information is carried in a RRC signaling.

18. The communication apparatus according to claim 17, wherein resources of the PRACH configured by the network device comprises the resource of PRACH corresponding to a REDCAP terminal and a resource of PRACH corresponding to a common terminal, the resource of PRACH corresponding to a REDCAP terminal is for the first-type REDCAP terminal and the second-type REDCAP terminal.

19. The apparatus according to any one of claims 16 to 18, wherein the first-type REDCAP terminal and the second-type REDCAP terminal operate in a frequency range 1, FR1, wherein the frequency range of FR1 is less than 6 GHz.

20. The communication apparatus according to any one of claims 16 to 19, wherein the number of receive antennas of the second-type REDCAP terminal is 1, the number of receive antennas of the first-type REDCAP terminal is 2.

21. A communication apparatus, comprising a processor, wherein the processor is coupled to a memory, and the memory is configured to store a program or instructions; and when the program or the instructions are executed by the processor, the apparatus is enabled to perform the method according to any one of claims 1 to 5 or the method according to any one of claims 6 to 10.

22. A computer-readable medium comprising instructions which, when executed by a processor of an apparatus, cause the apparatus to carry out the method according to any one of claimss 1 to 5 or any one of claims 6 to 10.

23. A communication system, comprising the apparatus according to any one of claims 11 to 14 and/or the apparatus according to any one of claims 16 to 20.

24. A computer program product which, when the program is executed by a processor of a terminal apparatus, causes the terminal apparatus to carry out the method of any one of claims 1 to 5 or the method according to any one of claims 6 to 10.