

[0029] In a fifth aspect, there is provided a terminal device, including: a processor, a transceiver, and a memory. The processor, the transceiver, and the memory communicate with each other through an internal connection path. The memory is for storing instructions. The processor is for executing instructions stored by the memory. When the processor executes the instructions stored by the memory, the execution causes the terminal device to perform the method in the first aspect or any possible implementations of the first aspect, or the execution causes the terminal device to implement the terminal provided by the third aspect.

[0030] In a sixth aspect, there is provided a network device, including: a processor, a transceiver, and a memory. The processor, the transceiver, and the memory communicate with each other through an internal connection path. The memory is for storing instructions. The processor is for executing instructions stored by the memory. When the processor executes the instructions stored by the memory, the execution causes the network device to perform the method in the second aspect or any possible implementations of the second aspect, or the execution causes the network device to implement the network device provided by the fourth aspect.

[0031] In a seventh aspect, there is provided a computer readable storage medium. The computer readable storage medium stores a program causing a network device to perform the method of first aspect and any of its various implementations described above.

[0032] In an eighth aspect, there is provided a computer readable storage medium. The computer readable storage medium stores a program causing a network device to perform the method of second aspect and any of its various implementations described above.

[0033] In a ninth aspect, there is provided a system chip. The system chip includes an input interface, an output interface, a processor, and a memory. The processor is configured to

embodiment of the present application.

[0043] Fig. 9 is a schematic block diagram of a network device according to an embodiment of the present application.

[0044] Fig. 10 is a schematic structural diagram of a terminal device according to an embodiment of the present application.

[0045] Fig. 11 is a schematic structural diagram of a network device according to an embodiment of the present application.

[0046] Fig. 12 is a schematic structural diagram of a system chip according to an embodiment of the present application.

DETAILED DESCRIPTION

[0047] The technical solutions in the embodiments of the present disclosure will be described in the following with reference to the accompanying drawings.

[0048] It should be understood that, the technical solutions of the embodiments of the present disclosure may be applied to various communication systems, for example, Global System of Mobile communication (“GSM”) system, Code Division Multiple Access (“CDMA”) System, Wideband Code Division Multiple Access (“WCDMA”) system, Long Term Evolution (“LTE”) system, LTE Frequency Division Duplex (“FDD”) system, LTE Time Division Duplex (“TDD”), Universal Mobile Telecommunication System (“UMTS”), and a future 5G communication system, or the like.

[0049] The present application describes various embodiments in connection with a terminal device. The terminal device may also refer to User Equipment (UE), an access terminal, a subscriber unit, a subscriber station, a mobile radio station, a mobile station, a remote station, a remote terminal, a mobile device, a user terminal, a terminal, and a wireless communication device, a user agent or a user device. The access terminal may be a cellular

access signals and the beam.

[00119] Optionally, the terminal device further includes a receiving unit, configured to: before the determining unit determines beam information about N groups of random access signals, receive indication information sent by the network device, wherein the indication information is used to indicate N and/or M.

[00120] Optionally, if the indication information is used to indicate N, M is equal to a preset value; or if the indication information is used to indicate M, N is equal to a preset value.

[00121] Optionally, at least one of a time domain resource for transmitting the M random access signals, a frequency domain resource for transmitting the M random access signals, and a sequence used by the M random access signals is identical, or all of them are different.

[00122] Optionally, a time-frequency resource for transmitting the M random access signals satisfies a preset hopping mode.

[00123] Optionally, a time-frequency resource for transmitting the M random access signals is continuous or discontinuous in a time domain.

[00124] It should be understood that the terminal device 400 may correspond to the terminal device in the method embodiment, and the corresponding functions of the terminal device may be implemented. For brevity, details are not described herein again.

[00125] Fig. 9 is a schematic block diagram of a network device 500 in accordance with an embodiment of the present application. As shown in Fig. 9, the network device 500 includes a sending unit 510 and a receiving unit 520.

[00126] In the embodiment, the sending unit 510 is configured to: if the network device does not successfully receive N groups of random access signals sent by a terminal device according to beam information about the N groups of random access signals, prohibit sending a response message for the N groups of random access signals to the terminal device, wherein

[00153]The memory 630 may include read only memory and random access memory and provides instructions and data to the processor 610. A portion of the memory 630 may also include a non-volatile random access memory. For example, the memory 630 may also store information of the device type.

[00154]In the implementation process, each step of the foregoing method may be completed by an integrated logic circuit of hardware in the processor 610 or an instruction in a form of software. The steps of the positioning method disclosed in combination with the embodiment of the present application may be directly implemented by the hardware processor, or may be performed by a combination of hardware and software modules in the processor 610. The software module may be located in a conventional storage medium such as random access memory, flash memory, read only memory, programmable read only memory or electrically erasable programmable memory, register, and the like. The storage medium is located in the memory 630, and the processor 610 reads the information in the memory 630 and completes the steps of the above method in combination with its hardware. To avoid repetition, it will not be described in detail herein.

[00155]The terminal device 600 according to the embodiment of the present application may correspond to the terminal device for performing the method 200 in the foregoing method 200, and the terminal device 400 according to the embodiment of the present application. Each unit or module in the terminal device 600 is used for performing operations or processes performed by the terminal device in the above method 200 respectively. Herein, in order to avoid redundancy, detailed description thereof will be omitted.

[00156]Fig. 11 is a schematic structural diagram of a network device 700 according to an embodiment of the present application. As shown in Fig. 11, the network device includes a processor 710, a transceiver 720, and a memory 730. The processor 710, the transceiver 720, and the memory 730 communicate with each other through an internal connection path. The

value.

28. The terminal device according to any one of claims 21 to 27, wherein at least one of a time domain resource for transmitting the M random access signals, a frequency domain resource for transmitting the M random access signals, and a sequence used by the M random access signals is identical, or all of them are different.

29. The terminal device according to any one of claims 21 to 28, wherein a time-frequency resource for transmitting the M random access signals satisfies a preset hopping mode.

30. The terminal device according to any one of claims 21 to 29, wherein a time-frequency resource for transmitting the M random access signals is continuous or discontinuous in a time domain.