

CLAIMS

1. A downlink channel receiving method, comprising:

receiving, by a terminal device, first downlink authorization information and second downlink authorization information that are sent by a network device, wherein the first
5 downlink authorization information is used to indicate that the terminal device receives a first physical downlink shared channel PDSCH in a first time unit, the second downlink authorization information is used to indicate that the terminal device receives a second PDSCH in a second time unit, and at least one symbol of the first time unit and at least one symbol of the second time unit overlap in a time domain; ~~and~~

10 ~~determining~~decoding, by the terminal device, according to a radio network temporary identifier RNTI used to scramble the first downlink authorization information and the second downlink authorization information, ~~a PDSCH that is preferentially decoded from the first PDSCH and the second PDSCH,~~

wherein the first downlink authorization information is downlink authorization
15 information scrambled with a system information-radio network temporary identifier SI-RNTI and the second downlink authorization information is downlink authorization information scrambled with a random access-radio network temporary identifier RA-RNTI or a temporary cell-radio network temporary identifier TC-RNTI; and

wherein the terminal device is a terminal device in an idle state.

20 ~~2. The method of claim 1, wherein the first downlink authorization information is downlink information scrambled with a system information radio network temporary identifier SI-RNTI, and the second downlink authorization information is downlink information scrambled with a paging radio network temporary identifier P-RNTI,~~

~~the determining, by the terminal device, a PDSCH that is preferentially decoded from the~~
25 ~~first PDSCH and the second PDSCH, comprises:~~

~~determining, by the terminal device, to preferentially decode the first PDSCH corresponding to the SI-RNTI in case that the terminal device determines that system information is changed; and~~

determining, by the terminal device, to preferentially decode the second PDSCH corresponding to the P-RNTI in case that the terminal device determines that the system information is unchanged.

32. The method of claim 1, wherein the first downlink authorization information is downlink authorization information scrambled with an SI-RNTI, and the second downlink authorization information is downlink authorization information scrambled with a random access radio network temporary identifier RA-RNTI or a temporary cell radio network temporary identifier TC-RNTI,

the determining decoding, by the terminal device, a PDSCH that is preferentially decoded from the first PDSCH and the second PDSCH, comprises:

determining, by the terminal device, to preferentially decode, with a higher priority, the first PDSCH corresponding to the SI-RNTI in case that the terminal device determines that system information is changed; and

determining, by the terminal device, to preferentially decode, with a higher priority, the second PDSCH corresponding to the RA-RNTI or the second PDSCH corresponding to the TC-RNTI in case that the terminal device determines that the system information is unchanged.

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

receiving, by the terminal device, third downlink authorization information that is sent by the network device, wherein the third downlink authorization information is downlink authorization information scrambled with the P-RNTI; and

determining, by the terminal device, that the system information is changed according to the third downlink authorization information.

5. The method of claim 1, wherein the first downlink authorization information is downlink authorization information scrambled with a P-RNTI, and the second downlink authorization information is downlink authorization information scrambled with an RA-RNTI or a TC-RNTI,

the determining, by the terminal device, a PDSCH that is preferentially decoded from the first PDSCH and the second PDSCH, comprises:

determining, by the terminal device, to preferentially decode the second PDSCH

corresponding to the RA-RNTI or the second PDSCH corresponding to the TC-RNTI.

6. The method of claim 1, wherein the first downlink authorization information is downlink authorization information scrambled with a P-RNTI, and the second downlink authorization information is downlink authorization information scrambled with an RA-RNTI or a TC-RNTI,

the determining, by the terminal device, a PDSCH that is preferentially decoded from the first PDSCH and the second PDSCH, comprises:

determining, by the terminal device, to preferentially decode the second PDSCH corresponding to the RA-RNTI in case that the second downlink authorization information is the downlink authorization information scrambled with the RA-RNTI; and

determining, by the terminal device, to preferentially decode the first PDSCH corresponding to the P-RNTI in case that the second downlink authorization information is the downlink authorization information scrambled with the TC-RNTI.

73. The method of claim 1, wherein a first symbol in the first time unit is earlier than a first symbol in the second time unit in the time domain, and

the determining decoding, by the terminal device, a PDSCH that is preferentially decoded from the first PDSCH and the second PDSCH, comprises:

determining, by the terminal device, to preferentially decode, with a higher priority, the first PDSCH.

8. The method of any one of claims 1 to 7, wherein the terminal device is a terminal device in an idle state.

94. A terminal device, comprising:

a transceiver unit, configured to receive first downlink authorization information and second downlink authorization information that are sent by a network device, wherein the first downlink authorization information is used to indicate that the terminal device receives a first physical downlink shared channel PDSCH in a first time unit, the second downlink authorization information is used to indicate that the terminal device receives a second PDSCH in a second time unit, and at least one symbol of the first time unit and at least one symbol of the second time unit overlap in a time domain; and

a determining unit, configured to determine decode, according to a radio network

temporary identifier RNTI used to scramble the first downlink authorization information and the second downlink authorization information received by the transceiver unit, ~~a PDSCH that is preferentially decoded from the first PDSCH and the second PDSCH₂~~

wherein the first downlink authorization information is downlink authorization information scrambled with a system information-radio network temporary identifier SI-RNTI and the second downlink authorization information is downlink authorization information scrambled with a random access-radio network temporary identifier RA-RNTI or a temporary cell-radio network temporary identifier TC-RNTI; and

wherein the terminal device is a terminal device in an idle state.

~~10. The terminal device of claim 9, wherein the first downlink authorization information is downlink information scrambled with a system information-radio network temporary identifier SI-RNTI, and the second downlink authorization information is downlink information scrambled with a paging-radio network temporary identifier P-RNTI,~~

~~the determining unit is specifically configured to:~~

~~determine to preferentially decode the first PDSCH corresponding to the SI-RNTI in case that the system information is determined to be changed; and~~

~~determine to preferentially decode the second PDSCH corresponding to the P-RNTI in case that the system information is determined to be unchanged.~~

~~11. The terminal device of claim 9, wherein the first downlink authorization information is downlink information scrambled with an SI-RNTI, and the second downlink authorization information is downlink authorization information scrambled with a random access-radio network temporary identifier RA-RNTI or a temporary cell-radio network temporary identifier TC-RNTI,~~

~~the determining unit is specifically configured to:~~

~~determine to preferentially decode, with a higher priority, the first PDSCH corresponding to the SI-RNTI in case that the system information is determined to be changed; and~~

~~determine to preferentially decode, with a higher priority, the second PDSCH corresponding to the RA-RNTI or the second PDSCH corresponding to the TC-RNTI in case that the system information is determined to be unchanged.~~

~~12. The terminal device of claim 10 or 11, wherein the transceiver unit is further~~

configured to:

~~receive third downlink authorization information that is sent by the network device, wherein the third downlink authorization information is downlink authorization information scrambled with the P-RNTI;~~

5 ~~the determining unit is further configured to:~~

~~determine that the system information is changed according to the third downlink authorization information.~~

10 ~~13. The terminal device of claim 9, wherein the first downlink authorization information is downlink authorization information scrambled with a P-RNTI, and the second downlink authorization information is downlink authorization information scrambled with an RA-RNTI or a TC-RNTI,~~

~~the determining unit is specifically configured to:~~

~~determine to preferentially decode the second PDSCH corresponding to the RA-RNTI or the second PDSCH corresponding to the TC-RNTI.~~

15 ~~14. The terminal device of claim 9, wherein the first downlink authorization information is downlink authorization information scrambled with a P-RNTI, and the second downlink authorization information is downlink authorization information scrambled with an RA-RNTI or a TC-RNTI,~~

~~the determining unit is specifically configured to:~~

20 ~~determine, by the terminal device, to preferentially decode the second PDSCH corresponding to the RA-RNTI in case that the second downlink authorization information is the downlink authorization information scrambled with the RA-RNTI; and~~

25 ~~determine, by the terminal device, to preferentially decode the first PDSCH corresponding to the P-RNTI in case that the second downlink authorization information is the downlink authorization information scrambled with the TC-RNTI.~~

~~156. The terminal device of claim 94, wherein a first symbol in the first time unit is earlier than a first symbol in the second time unit in the time domain, and~~

~~the determining unit is specifically configured to: determine to preferentially decode, with a higher priority, the first PDSCH.~~

30 ~~16. The terminal device of any one of claims 9 to 15, wherein the terminal device is a~~

~~terminal device in an idle state.~~

47. A terminal device, comprising a processor configured to call an instruction stored in a memory to perform the method of any one of claims 1 to ~~8~~3.

5 48. A storage medium having a computer program stored thereon, wherein the computer program, when executed by a computing device, causes the storage medium to implement the method of any one of claims 1 to ~~8~~3.

49. A chip, comprising a processor configured to call and run a computer program from a memory, such that a device on which the chip is mounted performs the ~~signal transmission~~ method of any one of claims 1 to ~~8~~3.