

allocation, thereby avoiding a confusion in behavior of the UE.

[00121] FIG. 4 is a block diagram illustrating an apparatus for indicating information according to an example. The apparatus may be located in a base station. As shown in FIG. 4, the apparatus includes a generating module 41 and a sending module 42.

5 **[00122]** The generating module 41 is configured to generate a resource allocation informing format. The resource allocation informing format includes a first informing format or a second informing format. The first informing format indicates that each of reserve statuses in a PRB resource assignment field is configured for indicating a resource allocation scheme. The second informing format indicates that one or more of the reserve statuses in the PRB resource assignment field is
10 configured for indicating an early termination of uplink transmission while each of remaining reserve statuses is configured for indicating the resource allocation scheme.

[00123] The sending module 42 is configured to send the resource allocation informing format generated by the generating module 41 to UE.

[00124] The resource allocation informing format may be sent to the UE after being generated.

15 **[00125]** In the above embodiments, by generating the resource allocation informing format and transmitting it to the UE, the UE can interpret a received current reserve status correctly even if the UE is configured simultaneously with two functions comprising an early termination of uplink transmission and a flexible resource allocation, thereby avoiding a confusion in behavior of the UE.

[00126] FIG. 5 is a block diagram illustrating another apparatus for indicating information
20 according to an example. As shown in FIG. 5, on a basis of the above embodiment shown in FIG. 4, the generating module 41 may include a first generating submodule 411 or the second generating submodule 412.

[00127] The first generating submodule 411 is configured to generate the second informing format when the UE is configured with a function for the early termination of uplink transmission.

25 **[00128]** The second generating submodule 412 is configured to generate the first informing format when the UE is not configured with the function for the early termination of uplink transmission.

[00129] In one or more embodiments, the resource allocation informing format may be generated based on the function configured in the UE. For example, the second informing format may be generated when the UE is configured with the function for the early termination of uplink
30 transmission, and the first informing format may be generated when the UE is not configured with the function for the early termination of uplink transmission.

[00130] In some embodiments, the generated first informing format may be as shown in Table 43:

Table 31. The meanings of the PBR resource assignment field in the first informing format

PRB resource assignment field	Physical meaning
00000 (0) -10100(20)	indicating a PRB resource allocation scheme within NB
reserve statuses 10101(21)-11111 (31)	indicating a resource allocation scheme

[00131] In some embodiments, the generated second informing format may be as shown in Table 24:

Table 24. The meanings of the PBR resource assignment field in the second informing format

PRB resource assignment field	Physical meaning
00000 (0) -10100(20)	indicating a PRB resource allocation scheme within NB
reserve statuses 10101(21)-11110 (30)	indicating a resource allocation scheme
reserve status 11111 (31)	indicating an early termination of uplink transmission

[00132] It should be noted that the foregoing Table 31 and Table 24 are only examples. In practical applications, the meanings of the PBR resource assignment field indicated by the first informing format and the second informing format may be varied.

[00133] In the above embodiments, how to generate the resource allocation informing format is flexible and diverse.

[00134] FIG. 6 is a block diagram illustrating another apparatus for indicating information according to an example. As shown in FIG. 6, on a basis of the embodiment shown in FIG. 4, the generating module 41 may include a third generating submodule 413, a fourth generating submodule 414, or the fifth generating submodule 415.

[00135] The third generating submodule 413 is configured to generate the second informing format when the UE is configured with a function for the early termination of uplink transmission and is currently performing an uplink transmission.

[00136] The fourth generating submodule 414 is configured to generate the first informing format when the UE is configured with the function for the early termination of uplink transmission but is not currently performing the uplink transmission.

[00137] The fifth generating submodule 415 is configured to generate the first informing format when the UE is not configured with the function for the early termination of uplink transmission.

[00138] In one or more embodiments, the resource allocation informing format may be generated based on both the function configured in the UE and whether the UE is currently performing the

CLAIMS

1. A method of indicating information, being applicable to a base station, comprising:

generating a resource allocation informing format that comprises ~~a first informing format or a second informing format, wherein~~

~~the first informing format indicates that each of reserve statuses in a physical resource block (PRB) resource assignment field is configured for indicating a resource allocation scheme;~~

~~the second informing format indicates that one or more of the reserve statuses in the a physical resource block (PRB) resource assignment field is configured for indicating an early termination of uplink transmission while each of remaining reserve statuses is configured for indicating the resource allocation scheme; and~~

sending the resource allocation informing format to user equipment (UE);

wherein the PRB resource assignment field is a 5-bits bitmap, and the reserve status 11111 is configured for indicating the early termination of uplink transmission;

wherein each of the reserve statuses 10101 -11110 is configured for indicating the resource allocation scheme;

wherein each of statuses 00000 -10100 is configured for indicating a PRB resource allocation scheme within a narrowband (NB).

2. The method according to claim 1, wherein generating the resource allocation informing format comprises:

~~generating the second informing format as the resource allocation informing format in response to that the UE is configured with a function for the early termination of uplink transmission; or~~

~~generating the first informing format as the resource allocation informing format in response to that the UE is not configured with the function for the early termination of uplink transmission.~~

3. The method according to claim 1, wherein generating the resource allocation informing format comprises:

~~generating the second informing format as the resource allocation informing format in response to that the UE is configured with a function for the early termination of uplink transmission and is currently performing an uplink transmission; or~~

~~generating the first informing format as the resource allocation informing format in response to that the UE is configured with the function for the early termination of uplink transmission and is not currently performing the uplink transmission; or~~

~~generating the first informing format as the resource allocation informing format in response to that the UE is not configured with the function for the early termination of uplink transmission.~~

4. A method of interpreting information, being applicable to user equipment (UE), comprising:

receiving a resource allocation informing format sent by a base station, wherein the resource allocation informing format comprises

~~a first informing format indicating that each of reserve statuses in a physical resource block (PRB) resource assignment field is configured for indicating a resource allocation scheme, or~~

~~a second informing format indicating that one or more of the reserve statuses in the a physical resource block (PRB) resource assignment field is configured for indicating an early termination of uplink transmission while each of remaining reserve statuses is configured for indicating the resource allocation scheme;~~

~~determining an current interpreting scheme for interpreting the PRB resource assignment field based on a current state, wherein the interpreting scheme comprises a first interpreting scheme corresponding to the first informing format or a second interpreting scheme corresponding to the second informing format~~resource allocation informing format;

~~interpreting a received current reserve status based on the current determined interpreting scheme; and~~

performing an operation based on an interpreted result;

wherein the PRB resource assignment field is a 5-bits bitmap, and the reserve status 11111 is configured for indicating the early termination of uplink transmission;

wherein each of the reserve statuses 10101 -11110 is configured for indicating the resource allocation scheme;

wherein each of statuses 00000 -10100 is configured for indicating a PRB resource allocation scheme within a narrowband (NB).

5. The method according to claim 4, wherein in response to determining that the current state comprises a current configuration, determining the ~~current~~ interpreting scheme for interpreting the PRB resource assignment field based on the current state comprises:

determining the ~~second interpreting scheme as the current interpreting scheme~~ in response to that the UE is configured with a function for the early termination of uplink transmission;~~or~~

~~determining the first interpreting scheme as the current interpreting scheme in response to that the UE is not configured with the function for the early termination of uplink transmission.~~

6. The method according to claim 4, wherein in response to determining that the current state comprises a current configuration and a current operation, determining the ~~current~~ interpreting scheme for interpreting the PRB resource assignment field based on the current state comprises:

determining the ~~second interpreting scheme as the current interpreting scheme~~ in response to that the UE is configured with a function for the early termination of uplink transmission and is currently performing an uplink transmission;~~or~~

~~determining the first interpreting scheme as the current interpreting scheme in response to that the UE is configured with the function for the early termination of uplink transmission but is not currently performing the uplink transmission; or~~

~~determining the first interpreting scheme as the current interpreting scheme in response to that the UE is not configured with the function for the early termination of uplink transmission.~~

7. The method according to any one of claims 4-6, wherein performing the operation based on the interpreted result comprises:

terminating an ongoing repetition transmission of uplink data in response to that the interpreted result is the current reserve status indicating the early termination of uplink transmission;~~or~~

~~operating with one or more allocated resources in response to that the interpreted result is the current reserve status indicating an identifier of the one or more allocated resources.~~

8. An apparatus for indicating information, being applicable to a base station, comprising: a generating module, configured to generate a resource allocation informing format that comprises a first informing format or a second informing format, wherein

the first informing format indicates that each of reserve statuses in a physical resource block (PRB) resource assignment field is configured for indicating a resource allocation scheme, or

~~the second informing format indicates that one or more of the reserve statuses in the PRB resource assignment field is configured for indicating an early termination of uplink transmission while each of remaining reserve statuses is configured for indicating the resource allocation scheme; and~~

~~5 a sending module, configured to send the resource allocation informing format generated by the generating module to user equipment (UE).~~

~~9. The apparatus according to claim 8, wherein the generating module comprises:~~

~~10 a first generating submodule, configured to generate the second informing format as the resource allocation informing format in response to that the UE is configured with a function for the early termination of uplink transmission; or~~

~~a second generating submodule, configured to generate the first informing format as the resource allocation informing format in response to that the UE is not configured with the function of the early termination of uplink transmission.~~

~~15 10. The apparatus according to claim 8, wherein the generating module comprises:~~

~~20 a third generating submodule, configured to generate the second informing format as the resource allocation informing format in response to that the UE is configured with a function for the early termination of uplink transmission and is currently performing an uplink transmission; or~~

~~a fourth generating submodule, configured to generate the first informing format as the resource allocation informing format in response to that the UE is configured with the function for the early termination of uplink transmission and is not currently performing the uplink transmission; or~~

~~25 a fifth generating submodule, configured to generate the first informing format as the resource allocation informing format in response to that the UE is not configured with the function for the early termination of uplink transmission.~~

~~30 11. An apparatus for interpreting information, being applicable to user equipment (UE), comprising:~~

~~a receiving module, configured to receive a resource allocation informing format sent by a base station, wherein the resource allocation informing format comprises—~~

~~35 a first informing format indicating that each of reserve statuses in a physical resource block (PRB) resource assignment field is configured for indicating a resource allocation scheme; or~~

a second informing format indicating that one or more of the reserve statuses in the PRB resource assignment field is configured for indicating an early termination of uplink transmission while each of remaining reserve statuses is configured for indicating the resource allocation scheme;

a determining module, configured to determine a current interpreting scheme for interpreting the PRB resource assignment field based on a current state, wherein the interpreting scheme comprises a first interpreting scheme corresponding to the first informing format received by the receiving module or a second interpreting scheme corresponding to the second informing format received by the receiving module; and

an interpreting and operating module, configured to interpret a current reserve status based on the current interpreting scheme determined by the determining module corresponding to the received resource allocation informing format, and perform an operation based on an interpreted result.

12. The apparatus according to claim 11, wherein in response to determining that the current state comprises a current configuration, the determining module comprises:

a first determining submodule, configured to determine the second interpreting scheme as the current interpreting scheme in response to that the UE is configured with a function for the early termination of uplink transmission; or

a second determining submodule, configured to determine the first interpreting scheme as the current interpreting scheme in response to that the UE is not configured with the function for the early termination of uplink transmission.

13. The apparatus according to claim 11, wherein in response to determining that the current state comprises a current configuration and a current operation, the determining module comprises:

a third determining submodule, configured to determine the second interpreting scheme as the current interpreting scheme in response to that the UE is configured with a function for the early termination of uplink transmission and is currently performing an uplink transmission; or

a fourth determining submodule, configured to determine the first interpreting scheme as the current interpreting scheme in response to that the UE is configured with the function for the early termination of uplink transmission but is not currently performing the uplink transmission; or

~~a fifth determining submodule, configured to determine the first interpreting scheme as the current interpreting scheme in response to that the UE is not configured with the function for the early termination of uplink transmission.~~

5 ~~14. The apparatus according to any one of claims 11-13, wherein the interpreting and operating module comprises:~~

~~a first operating submodule, configured to terminate an ongoing repetition transmission of uplink data in response to that the interpreted result is the current reserve status indicating the early termination of uplink transmission; or~~

10 ~~a second operating submodule, configured to operate with one or more allocated resources in response to that the interpreted result is the current reserve status indicating an identifier of the one or more allocated resources.~~

~~158. A base station, comprising:~~

15 a processor; and

a memory for storing instructions executable by the processor;

wherein the processor is configured to:

generate a resource allocation informing format that comprises

20 ~~a first informing format indicating that each of reserve statuses in a physical resource block (PRB) resource assignment field is configured for indicating a resource allocation scheme, or~~

~~a second informing format indicating that one or more of the reserve statuses in the a physical resource block (PRB) resource assignment field is configured for indicating an early termination of uplink transmission while each of remaining reserve statuses is configured for~~
25 indicating the resource allocation scheme; and

send the resource allocation informing format to user equipment (UE);

wherein the PRB resource assignment field is a 5-bits bitmap, and the reserve status 11111 is configured for indicating the early termination of uplink transmission;

30 wherein each of the reserve statuses 10101 -11110 is configured for indicating the resource allocation scheme;

wherein each of statuses 00000 -10100 is configured for indicating a PRB resource allocation scheme within a narrowband (NB).

~~169. A user equipment, comprising:~~

35 a processor; and

a memory for storing instructions executable by the processor;

wherein the processor is configured to:

receive a resource allocation informing format sent by a base station, wherein the resource allocation informing format comprises

5 ~~a first informing format indicating that each of reserve statuses in a physical resource block (PRB) resource assignment field is configured for indicating a resource allocation scheme, or~~

10 ~~a second informing format indicating that one or more of the reserve statuses in the a physical resource block (PRB) resource assignment field is configured for indicating an early termination of uplink transmission while each of remaining reserve statuses is configured for indicating the resource allocation scheme;~~

15 ~~determine an—current interpreting scheme for interpreting the PRB resource assignment field based on a current state, wherein the interpreting scheme comprises a first interpreting scheme corresponding to the first informing format or a second interpreting scheme corresponding to the second informing format~~resource allocation informing format;

interpret a received current reserve status based on the ~~current—determined~~ interpreting scheme; and

perform an operation based on an interpreted result;

20 wherein the PRB resource assignment field is a 5-bits bitmap, and the reserve status 11111 is configured for indicating the early termination of uplink transmission;

wherein each of the reserve statuses 10101 -11110 is configured for indicating the resource allocation scheme;

25 wherein each of statuses 00000 -10100 is configured for indicating a PRB resource allocation scheme within a narrowband (NB).

30 ~~17. A computer readable storage medium having computer instructions stored thereon, when the instructions are executed by a processor, the steps of the method of indicating information according to any one of claims 1-3 are implemented.~~

~~18. A computer readable storage medium having computer instructions stored thereon, when the instructions are executed by a processor, the steps of the method of interpreting information according to any one of claims 4-7 are implemented.~~