

CLAIMS

What is claimed is:

1. A communication method, wherein the method comprises:

sending, by a radio unit, a service idleness request to a baseband unit; and

5 receiving, by the radio unit, a service idleness allow response sent by the baseband unit, wherein the service idleness allow response indicates that a first resource is an idle resource.

2. The method according to claim 1, wherein the method further comprises:

executing, by the radio unit, a first component processing task using the first resource, wherein the first component processing task comprises one or more of the following: a task for
10 calibrating a radio frequency channel of the radio unit, a task for calibrating an antenna of the radio unit, or a task for detecting a component in the radio unit.

3. The method according to claim 1 or 2, wherein the first resource comprises a first radio frequency channel, a first time resource, and a first frequency resource, and the first radio frequency channel is a radio frequency channel on the radio unit.

15 4. The method according to claim 3, wherein the service idleness allow response comprises first information, and the first information indicates the first resource.

5. The method according to claim 4, wherein the first information comprises one or more of the following information:

a channel identifier of the first radio frequency channel, a start time of the first time resource,
20 duration of the first time resource, a start location of the first frequency resource, or a resource size of the first frequency resource; or

the first information comprises one or more of the following information:

a channel identifier of the first radio frequency channel, a start time of the first time resource,
duration of the first time resource, or an identifier of at least one frequency in the first frequency
25 resource.

6. The method according to any one of claims 1 to 5, wherein the service idleness request comprises second information and/or a task identifier of the first component processing task, the second information indicates a second resource, and the first component processing task comprises one or more of the following: the task for calibrating the radio frequency channel of the radio unit,
30 the task for calibrating the antenna of the radio unit, or the task for detecting the component in the radio unit.

7. The method according to claim 6, wherein the second resource comprises the first radio frequency channel, a second time resource, and a second frequency resource, and the first radio frequency channel is a radio frequency channel on the radio unit.

8. The method according to claim 7, wherein the second information comprises one or more of the following information:

the channel identifier of the first radio frequency channel, a start time of the second time resource, duration of the second time resource, a start location of the second frequency resource, or a resource size of the second frequency resource; or

the second information comprises one or more of the following information:

the channel identifier of the first radio frequency channel, a start time of the second time resource, duration of the second time resource, or an identifier of at least one frequency in the second frequency resource.

9. A communication method, wherein the method comprises:

receiving, by a baseband unit, a service idleness request sent by a radio unit;

determining, by the baseband unit, a first resource based on the service idleness request; and

sending, by the baseband unit, a service idleness allow response to the radio unit, wherein the service idleness allow response indicates that the first resource is an idle resource.

10. The method according to claim 9, wherein the first resource comprises a first radio frequency channel, a first time resource, and a first frequency resource, and the first radio frequency channel is a radio frequency channel on the radio unit.

11. The method according to claim 10, wherein the service idleness allow response comprises first information, and the first information indicates the first resource.

12. The method according to claim 11, wherein the first information comprises one or more of the following information:

a channel identifier of the first radio frequency channel, a start time of the first time resource, duration of the first time resource, a start location of the first frequency resource, or a resource size of the first frequency resource; or

the first information comprises one or more of the following information:

a channel identifier of the first radio frequency channel, a start time of the first time resource, duration of the first time resource, or an identifier of at least one frequency in the first frequency resource.

13. The method according to any one of claims 10 to 12, wherein the method further comprises:

stopping, by the baseband unit in the period of time corresponding to the first time resource, transmitting a first service using the first frequency resource, wherein the first service is a service of the radio unit.

14. The method according to any one of claims 9 to 13, wherein the service idleness request comprises second information and/or a task identifier of a first component processing task, the

second information indicates a second resource, and the first component processing task comprises one or more of the following: a task for calibrating a radio frequency channel of the radio unit, a task for calibrating an antenna of the radio unit, or a task for detecting a component in the radio unit.

15. The method according to claim 14, wherein the second resource comprises the first radio frequency channel, a second time resource, and a second frequency resource, and the first radio frequency channel is a radio frequency channel on the radio unit.

16. The method according to claim 15, wherein the second information comprises one or more of the following information:

the channel identifier of the first radio frequency channel, a start time of the second time resource, duration of the second time resource, a start location of the second frequency resource, or a resource size of the second frequency resource; or

the second information comprises one or more of the following information:

the channel identifier of the first radio frequency channel, a start time of the second time resource, duration of the second time resource, or an identifier of at least one frequency in the second frequency resource.

17. The method according to any one of claims 14 to 16, wherein the method further comprises:

determining, by the baseband unit based on service information of the first service, whether transmission of the first service can be suspended, wherein the first service is a service of the radio unit; and

the determining, by the baseband unit, a first resource based on the service idleness request comprises:

when determining that transmission of the first service can be suspended, determining, by the baseband unit, the first resource based on the service idleness request.

18. A communication apparatus, comprising at least one processor, wherein the at least one processor is configured to: be coupled to a memory, and read and execute instructions in the memory, to implement the method according to any one of claims 1 to 17.

19. A communication system, comprising a radio unit and a baseband unit, wherein the radio unit is configured to perform the method according to any one of claims 1 to 8, and the baseband unit is configured to perform the method according to any one of claims 9 to 17.

20. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a computer, the method according to any one of claims 1 to 17 is implemented.