CLAIMS

1. A coordinated communication method, comprising:

receiving, by a first device, a first frame from a second device on a first link, wherein the first device uses a non-simultaneous transmit and receive (NSTR) link pair, the NSTR link pair comprises the first link and a second link, the first link is a secondary link of the first device, the second link is a primary link of the first device, the first frame indicates that the second device shares a first time-frequency resource on the first link with the first device, a time domain position of the first time-frequency resource is within a current first transmit opportunity (TXOP), and the first TXOP is a transmit opportunity of the second device on the first link; and

when a first condition is met, sending, by the first device, a second frame to the second device on the first link, wherein the second frame is an acknowledgment frame of the first frame, and the first condition comprises:

the first device determines that the first link is currently in an idle state; and

the first device determines that the second link is currently in a busy state, or the first device is capable of sending data on the second link.

2. The method according to claim 1, wherein that the first device determines that the second link is currently in the busy state comprises:

the first device determines that non-intra basic service set (BSS) transmission currently exists on the second link.

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

determining, by the first device, first time, wherein the first time is end time of non-intra BSS transmission; and

before the first time, stopping, by the first device, using the first time-frequency resource.

4. The method according to any one of claims 1 to 3, wherein that the first device is capable of sending data on the second link comprises:

the first device completes backoff on the second link; or

the second device shares a second time-frequency resource on the second link with the first device, the second device uses the NSTR link pair, the second link is a secondary link of the second device, a time domain position of the second time-frequency resource is within a second TXOP, and the second TXOP is a transmit opportunity of the second device on the second link.

5. The method according to claim 4, wherein that the second device shares the second time-frequency resource on the second link with the first device comprises:

the first device receives a third frame from the second device on the second link, wherein the

third frame indicates that the second device shares the second time-frequency resource with the first device; and

when the first device determines that the second link is idle, the first device sends a fourth frame to the second device on the second link, wherein the fourth frame is an acknowledgment frame of the third frame.

6. The method according to claim 5, wherein the first frame and the third frame are multi-user request to send (MU-RTS) frames, and the second frame and the fourth frame are clear to send (CTS) frames.7. A coordinated communication method, comprising:

obtaining, by a second device, a first transmit opportunity (TXOP) on a first link;

sending, by the second device, a first frame to a first device on the first link, wherein the first device uses a non-simultaneous transmit and receive (NSTR) link pair, the NSTR link pair comprises the first link and a second link, the first link is a secondary link of the first device, the first frame indicates that the second device shares a first time-frequency resource on the first link with the first device, and a time domain position of the first time-frequency resource is within the first TXOP; and

receiving, by the second device, a second frame from the first device on the first link, wherein the second frame is an acknowledgment frame of the first frame.

8. The method according to claim 7, wherein the second device uses the NSTR link pair, the first link is a primary link of the second device, the second link is a secondary link of the second device, and the second link is a primary link of the first device; and

the method further comprises:

obtaining, by the second device, a second TXOP on the second link;

sending, by the second device, a third frame to the first device on the second link, wherein the third frame indicates that the second device shares a second time-frequency resource on the second link with the first device, and a time domain position of the second time-frequency resource is within the second TXOP; and

receiving, by the second device, a fourth frame from the first device on the second link, wherein the fourth frame is an acknowledgment frame of the third frame.

9. The method according to claim 8, wherein before obtaining, by the second device, the second TXOP on the second link, the method further comprises:

determining, by the second device, that non-intra BSS transmission currently exists on the first link.

10. The method according to claim 9, wherein the method further comprises:

determining, by the second device, second time, wherein the second time is end time of non-intra BSS transmission; and

before the second time, stopping, by the second device, using the second TXOP.

11. The method according to any one of claims 8 to 10, wherein the first frame and the third frame are multi-user request to send (MU-RTS) frames, and the second frame and the fourth frame are clear to send (CTS) frames.

12. A coordinated communication method, comprising:

receiving, by a first device, a third frame from a second device on a second link, wherein the second device uses a non-simultaneous transmit and receive (NSTR) link pair, the NSTR link pair comprises a first link and the second link, the second link is a secondary link of the second device, the third frame indicates that the second device shares a second time-frequency resource on the second link with the first device, a time domain position of the second time-frequency resource is within the second TXOP, and the second TXOP is a transmit opportunity of the second device on the second link; and

when the first device determines that the second link is idle, sending, by the first device, a fourth frame to the second device on the second link, wherein the fourth frame is an acknowledgment frame of the third frame.

13. A coordinated communication method, comprising:

determining, by a second device, that a first link is in a busy state, wherein the second device uses a non-simultaneous transmit and receive (NSTR) link pair, the NSTR link pair comprises the first link and a second link, and the first link is a primary link of the second device;

obtaining, by the second device, a second transmit opportunity (TXOP) on the second link, wherein the second link is a secondary link of the second device;

sending, by the second device, a third frame to a first device on the second link, wherein the third frame indicates that the second device shares a second time-frequency resource on the second link with the first device, and a time domain position of the second time-frequency resource is within the second TXOP; and

receiving, by the second device, a fourth frame from the first device on the second link, wherein the fourth frame is an acknowledgment frame of the third frame.

14. The method according to claim 13, wherein determining, by the second device, that the first link is in the busy state comprises:

determining, by the first device, that non-intra BSS transmission exists on the second link.

15. The method according to claim 13 or 14, wherein the method further comprises:

determining, by the second device, second time, wherein the second time is end time of non-intra BSS transmission; and

before the second time, stopping, by the second device, using the second TXOP.

16. The method according to claim 15, wherein end time of the second time-frequency

resource is not earlier than the second time.

17. The method according to any one of claims 13 to 16, wherein the third frame is a multi-user request to send (MU-RTS) frame, and the fourth frame is a clear to send (CTS) frame.

18. A communication apparatus, comprising:

a processor, configured to execute computer instructions stored in a memory, to enable the communication apparatus to perform the method according to any one of claims 1 to 6, the method according to any one of claims 7 to 11, the method according to claim 12, or the method according to any one of claims 13 to 17.

19. A computer-readable storage medium, configured to store a computer program, wherein the computer program comprises instructions used to implement the method according to any one of claims 1 to 6, instructions used to implement the method according to any one of claims 7 to 11, instructions used to implement the method according to claim 12, or instructions used to implement the method according to any one of claims 13 to 17.

20. A computer program, wherein the computer program comprises instructions used to implement the method according to any one of claims 1 to 6, instructions used to implement the method according to any one of claims 7 to 11, instructions used to implement the method according to claim 12, or instructions used to implement the method according to any one of claims 13 to 17.