

CLAIMS

WHAT IS CLAIMED IS:

1. A signal processing method, performed by an access point device, comprising:
 - sending a target radio frame, wherein the target radio frame comprises a restricted target wake time (rTWT) element and a quiet element corresponding to the rTWT element;
 - wherein the rTWT element comprises at least one of first indication information and second indication information;
 - wherein the first indication information indicates that a service corresponding to the target radio frame comprises a low latency service;
 - the second indication information indicates that the service corresponding to the target radio frame comprises an uplink service or a downlink service.
2. The signal processing method according to claim 1, wherein the target radio frame comprises one or more rTWT elements and quiet element corresponding to the one or more rTWT elements, and the rTWT elements and the quiet elements are arranged by at least one of:
 - in the target radio frame, a first ranking order of a first quiet element in the quiet element is the same as a second ranking order of a first rTWT element in the rTWT element; the first rTWT element being an rTWT element corresponding to the first quiet element; or
 - the quiet element comprises a time offset value; wherein a second rTWT element carrying a time offset subfield, and the time offset subfield comprises a time offset value of a target quiet element corresponding to the rTWT element.
3. The signal processing method according to any of claims 1-2, wherein the access point device comprises a single-link device or a multi-link device.
4. The signal processing method according to any of claims 1-3, wherein, in a case where the access point device comprises a multi-link device, sending the target radio frame comprises at least one of:
 - sending a target radio frame corresponding to each communication link under each communication link with a station; or
 - sending radio frame information of each communication link under at least one communication link with the station;

wherein the radio frame information comprises the target radio frame and identification information of each target communication link corresponding to the target radio frame, and the identification information comprises at least one of a link identifier (ID) and a link ID set bitmap.

5. The signal processing method according to any of claims 1 to 4, wherein before sending the target radio frame, the method comprises:

determining the target radio frame.

6. The signal processing method according to any of claims 1 to 5, wherein the target radio frame comprises at least one of a beacon frame, a probe response frame, a multi-link (ML) probe response frame, an association response frame, and a reassociation response frame.

7. A signal processing method, performed by a station, comprising:

receiving a target radio frame, wherein the target radio frame comprises a restricted target wake time (rTWT) element and a quiet element corresponding to the rTWT element;

wherein the rTWT element comprises at least one of first indication information and second indication information;

wherein the first indication information indicates that a service corresponding to the target radio frame comprises a low latency service;

the second indication information indicates that the service corresponding to the target radio frame comprises an uplink or a downlink service.

8. The signal processing method according to claim 7, wherein the target radio frame comprises one or more rTWT elements and quiet element corresponding to the one or more rTWT elements, and the rTWT elements and the quiet elements are arranged by at least one of:

in the target radio frame, a first ranking order of a first quiet element in the quiet element is the same as a second ranking order of a first rTWT element in the rTWT element; the first rTWT element being an rTWT element corresponding to the first quiet element; or

the quiet element comprises a time offset value; wherein a second rTWT element carrying a time offset subfield, and the time offset subfield comprises a time offset value of a target quiet element corresponding to the rTWT element.

9. The signal processing method according to any of claims 7 to 8, wherein the station comprises a single-link device or a multi-link device.

10. The signal processing method according to any of claims 7 to 9, wherein, in a case where the station comprises a multi-link device, receiving the target radio frame comprises at least one of:

receiving a target radio frame corresponding to each communication link under each communication link with an access point;

receiving radio frame information of each communication link under at least one communication link with the access point;

wherein the radio frame information comprises the target radio frame and identification information of each target communication link corresponding to the target radio frame, and the identification information comprises at least one of a link identifier (ID) and a link ID set bitmap.

11. The signal processing method according to any of claims 7 to 10, wherein the target radio frame comprises at least one of a beacon frame, a probe response frame, a multi-link (ML) probe response frame, an association response frame, and a reassociation response frame.

12. An access point device, comprising:

a sending module, configured to send a target radio frame, wherein the target radio frame comprises a restricted target wake time (rTWT) element and a quiet element corresponding to the rTWT element;

wherein the rTWT element comprises at least one of first indication information and second indication information;

wherein the first indication information indicates that a service corresponding to the target radio frame comprises a low latency service;

the second indication information indicates that the service corresponding to the target radio frame comprises an uplink or a downlink service.

13. A station, comprising:

a receiving module, configured to receive a target radio frame, wherein the target radio frame comprises a restricted target wake time (rTWT) element and a quiet element corresponding to the rTWT element;

wherein the rTWT element comprises at least one of first indication information and second indication information;

wherein the first indication information indicates that a service corresponding to the target radio frame comprises a low latency service;

the second indication information indicates that the service corresponding to the target radio frame comprises an uplink or a downlink service.

14. An access point device, comprising:

a processor; and

a memory having a computer program executable by the processor stored thereon, wherein the processor performs the method according to any of claims 1 to 11.

15. A computer-readable storage medium having a computer program stored thereon that, when executed by a processor, the method according to any of claims 1 to 11 is performed.