CLAIMS

~~What is claimed is:~~

1. A communication method, comprising:

receiving, by a receive device, a data unit from a transmit device through a link; and

if the data unit meets a preset condition, sending, by the receive device, receiving status information of the data unit to the transmit device through the link, wherein

the preset condition comprises: an acknowledge policy corresponding to the data unit is not set to no acknowledge, and a sequence number, SN of the data unit is greater than or equal to a start sequence number, SSN in a block acknowledge, BA frame; and the receiving status information of the data unit is carried in the BA frame.

2. The communication method according to claim 1, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU.

3. A communication method, comprising:

receiving, by a receive device, a data unit from a transmit device through a link; and

if a sequence number, SN of the data unit falls within a bitmap range of a scoreboard, sending, by the receive device, receiving status information of the data unit to the transmit device through the link, wherein

the scoreboard corresponds to the link, and the receiving status information of the data unit is carried in a block acknowledge, BA frame.

4. The communication method according to claim 3, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU.

~~5. A communication method, comprising:~~

~~receiving, by a receive device, a first data unit from a transmit device through a first link; and~~

~~sending, by the receive device, receiving status information of the first data unit to the transmit device through the first link, unless the first data unit meets any one of a first preset condition, wherein~~

~~the first preset condition comprises: correctly received information of the first data unit is~~

fed back through another link, or an acknowledge policy corresponding to the first data unit is no acknowledge.

6. The communication method according to claim 5, wherein the method further comprises:

if the acknowledge policy of the first data unit is not set to no acknowledge, sending, by the receive device, the receiving status information of the first data unit to the transmit device through a second link.

7. The communication method according to claim 5, wherein if the acknowledge policy of the first data unit is a block acknowledge, the sending, by the receive device, receiving status information of the first data unit to the transmit device through the first link comprises:

if a sequence number SN of the first data unit is greater than or equal to a start sequence number SSN in a first block acknowledge BA frame, sending, by the receive device, the receiving status information of the first data unit to the transmit device through the first link, wherein

the receiving status information of the first data unit is carried in the first BA frame.

8. The communication method according to claim 5, wherein if the acknowledge policy of the first data unit is a block acknowledge, the sending, by the receive device, receiving status information of the first data unit to the transmit device through the first link comprises:

if an SN of the first data unit falls within a bitmap range of a first scoreboard, sending, by the receive device, the receiving status information of the first data unit to the transmit device through the first link, wherein

the first scoreboard corresponds to the first link, and the receiving status information of the first data unit is carried in a second BA frame.

9. The communication method according to any one of claims 5 to 8, wherein the first data unit is a medium access control service data unit MSDU or an aggregated medium access control service data unit A-MSDU.

10. A communication method, comprising:

receiving, by a receive device, a first data unit from a transmit device through a first link; and

if an acknowledge policy of the first data unit is a normal acknowledge or implicit block acknowledge request, sending, by the receive device, receiving status information of the first data unit to the transmit device through a first link.

~~11. The communication method according to claim 10, wherein the first data unit is a medium access control service data unit MSDU or an aggregated medium access control service data unit A-MSDU.~~

~~12. The communication method according to claim 10 or 11, wherein the method further comprises:~~

~~receiving, by the receive device, a second data unit from the transmit device through a second link; and~~

~~if an acknowledge policy of the second data unit is a block acknowledge, and a sequence number SN of the second data unit is greater than or equal to a start sequence number SSN in a first block acknowledge BA frame, sending, by the receive device, receiving status information of the second data unit to the transmit device through the second link, wherein~~

~~the receiving status information of the second data unit is carried in the first BA frame.~~

~~13. The communication method according to claim 12, wherein the second data unit is a medium access control service data unit MSDU or an aggregated medium access control service data unit A-MSDU.~~

~~14~~5. A receive device~~communications apparatus~~, comprising:

an interface module, configured to receive a data unit from a transmit device through a link; and

a processing module, configured to determine that the data unit meets a preset condition, wherein the preset condition comprises: an acknowledge policy corresponding to the data unit is not set to no acknowledge, and a sequence number, SN of the data unit is greater than or equal to a start sequence number, SSN in a block acknowledge, BA frame; and receiving status information of the data unit is carried in the BA frame, wherein

the interface module is further configured to: when the processing module determines that the data unit meets the preset condition, send the receiving status information of the data unit to the transmit device through the link.

~~15~~6. The receive device~~communications apparatus~~ according to claim ~~14~~5, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU.

~~16~~7. A receive device~~communications apparatus~~, comprising:

an interface module, configured to receive a data unit from a transmit device through a link;

and

a processing module, configured to determine that a sequence number, SN of the data unit falls within a bitmap range of a scoreboard, wherein

the interface module is further configured to: when the processing module determines that the sequence number, SN of the data unit falls within the bitmap range of the scoreboard, send receiving status information of the data unit to the transmit device through the link, wherein

the scoreboard corresponds to the link, and the receiving status information of the data unit is carried in a block acknowledge, BA frame.

~~17~~8. The receive device~~communications apparatus~~ according to claim ~~16~~7, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU.

~~18. A communications apparatus, comprising:~~

~~an interface module, configured to receive a first data unit from a transmit device through a first link, wherein~~

~~the interface module is further configured to send receiving status information of the first data unit to the transmit device through the first link, unless a processing module determines that the first data unit meets any one of a first preset condition, wherein~~

~~the first preset condition comprises: correctly received information of the first data unit is fed back through another link, or an acknowledge policy corresponding to the first data unit is no acknowledge.~~

~~19. The communications apparatus according to claim 18, wherein~~

~~the processing module is further configured to determine that the acknowledge policy of the first data unit is not set to no acknowledge; and~~

~~the interface module is further configured to send the receiving status information of the first data unit to the transmit device through a second link.~~

~~20. The communications apparatus according to claim 18, wherein if the acknowledge policy of the first data unit is a block acknowledge,~~

~~the processing module is further configured to determine that a sequence number SN of the first data unit is greater than or equal to a start sequence number SSN in a first block acknowledge BA frame; and~~

~~the interface module is specifically configured to: if the processing module determines that~~

the sequence number SN of the first data unit is greater than or equal to the start sequence number SSN in the first block acknowledge BA frame, send the receiving status information of the first data unit to the transmit device through the first link, wherein

the receiving status information of the first data unit is carried in the first BA frame.

21. The communications apparatus according to claim 18, wherein if the acknowledge policy of the first data unit is a block acknowledge,

the processing module is further configured to determine that an SN of the first data unit falls within a bitmap range of a first scoreboard; and

the interface module is specifically configured to: if the processing module determines that the SN of the first data unit falls within the bitmap range of the first scoreboard, send the receiving status information of the first data unit to the transmit device through the first link, wherein

the first scoreboard corresponds to the first link, and the receiving status information of the first data unit is carried in a second BA frame.

22. The communications apparatus according to any one of claims 18 to 21, wherein the first data unit is a medium access control service data unit MSDU or an aggregated medium access control service data unit A-MSDU.

23. A communications apparatus, comprising:

an interface module, configured to receive a first data unit from a transmit device through a first link; and

a processing module, configured to determine that an acknowledge policy of the first data unit is a normal acknowledge or implicit block acknowledge request, wherein

the interface module is further configured to: if the processing module determines that the acknowledge policy of the first data unit is the normal acknowledge or implicit block acknowledge request, send receiving status information of the first data unit to the transmit device through the first link.

24. The communications apparatus according to claim 23, wherein the first data unit is a medium access control service data unit MSDU or an aggregated medium access control service data unit A-MSDU.

25. The communications apparatus according to claim 23 or 24, wherein

the interface module is further configured to receive a second data unit from the transmit

device through a second link;

the processing module is further configured to determine that an acknowledge policy of the second data unit is a block acknowledge, and a sequence number SN of the second data unit is greater than or equal to a start sequence number SSN in a first block acknowledge BA frame; and

the interface module is further configured to: when the processing module determines that the acknowledge policy of the second data unit is a block acknowledge, and the SN of the second data unit is greater than or equal to the SSN in the first BA frame, send receiving status information of the second data unit to the transmit device through the second link, wherein

the receiving status information of the second data unit is carried in the first BA frame.

26. The communications apparatus according to claim 25, wherein the second data unit is a medium access control service data unit MSDU or an aggregated medium access control service data unit A-MSDU.

27. A communications apparatus, comprising a processor, configured to invoke a program in a memory, to perform the communications apparatus the communication method according to claim 1 or 2.

28. A communications apparatus, comprising a processor and an interface circuit, wherein the interface circuit is configured to communicate with another apparatus, and the processor is configured to perform the communication method according to claim 1 or 2.

29. A communications apparatus, comprising a processor, configured to invoke a program in a memory, to perform the communications apparatus the communication method according to claim 3 or 4.

30. A communications apparatus, comprising a processor and an interface circuit, wherein the interface circuit is configured to communicate with another apparatus, and the processor is configured to perform the communication method according to claim 3 or 4.

31. A communications apparatus, comprising a processor, configured to invoke a program in a memory, to perform the communications apparatus the communication method according to any one of claims 5 to 9.

32. A communications apparatus, comprising a processor and an interface circuit, wherein the interface circuit is configured to communicate with another apparatus, and the processor is configured to perform the communication method according to any one of claims 5 to 9.

33. A communications apparatus, comprising a processor, configured to invoke a program in

~~a memory, to perform the communications apparatus the communication method according to any one of claims 10 to 13.~~

~~34. A communications apparatus, comprising a processor and an interface circuit, wherein the interface circuit is configured to communicate with another apparatus, and the processor is configured to perform the communication method according to any one of claims 10 to 13.~~

~~35~~9. A computer-readable storage medium, wherein the computer-readable storage medium stores a program, and when the program is invoked by a processor, ~~the~~ a communication method ~~according to claim 1 or 2~~ is performed, the communication method, comprising:

receiving a data unit from a transmit device through a link; and

if the data unit meets a preset condition, sending receiving status information of the data unit to the transmit device through the link, wherein

the preset condition comprises: an acknowledge policy corresponding to the data unit is not set to no acknowledge, and a sequence number, SN of the data unit is greater than or equal to a start sequence number, SSN in a block acknowledge, BA frame; and the receiving status information of the data unit is carried in the BA frame.

10. The computer-readable storage medium according to claim 9, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU. ~~or the communication method according to claim 3 or 4 is performed, or the communication method according to any one of claims 5 to 9 is performed, or the communication method according to any one of claims 10 to 13 is performed.~~

11. A computer-readable storage medium, wherein the computer-readable storage medium stores a program, and when the program is invoked by a processor, a communication method is performed, the communication method, comprising:

receiving a data unit from a transmit device through a link; and

if a sequence number, SN of the data unit falls within a bitmap range of a scoreboard, sending receiving status information of the data unit to the transmit device through the link, wherein the scoreboard corresponds to the link, and the receiving status information of the data unit is carried in a block acknowledge, BA frame.

12. The computer-readable storage medium according to claim 11, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU.

~~36~~13. A computer program, wherein when the program is invoked by a processor, ~~the~~ a communication method ~~according to claim 1 or 2~~ is performed, the communication method, comprising:

receiving a data unit from a transmit device through a link; and

if the data unit meets a preset condition, sending receiving status information of the data unit to the transmit device through the link, wherein

the preset condition comprises: an acknowledge policy corresponding to the data unit is not set to no acknowledge, and a sequence number, SN of the data unit is greater than or equal to a start sequence number, SSN in a block acknowledge, BA frame; and the receiving status information of the data unit is carried in the BA frame.

14. The computer program according to claim 13, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU.~~or the communication method according to claim 3 or 4 is performed, or the communication method according to any one of claims 5 to 9 is performed, or the communication method according to any one of claims 10 to 13 is performed.~~

15. A computer program, wherein when the program is invoked by a processor, a communication method is performed, the communication method, comprising:

receiving a data unit from a transmit device through a link; and

if a sequence number, SN of the data unit falls within a bitmap range of a scoreboard, sending receiving status information of the data unit to the transmit device through the link, wherein the scoreboard corresponds to the link, and the receiving status information of the data unit is carried in a block acknowledge BA frame.

16. The computer program according to claim 15, wherein the data unit is a medium access control service data unit, MSDU or an aggregated medium access control service data unit, A-MSDU.